Quarterly Chartbook

Q1 2025

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About the Quarterly Chartbook

The Quarterly Chartbook is constructed to provide you with information around the global economy, equities, sources of income, commodities, and asset allocation opportunities. These charts can provide a visual framework to help support conversations with your clients.

We have created this chartbook in collaboration with the investment professionals from Schwab Asset Management® and the market strategists at the Schwab Center for Financial Research. Released at the beginning of Q1, this chartbook contains the latest available data as of the end of Q4 2024.

We hope it will help illuminate what is happening in the economy and provide insights to support market discussions with your clients.

Q4 Market summary | Total returns

Market commentary

- Large-cap equities continued to rise in Q4. Although gains were soft, they were still stronger than small caps' return. The mega-cap-dominated sectors (Tech, Communication Services, Consumer Discretionary) outperformed decisively, with Consumer Discretionary seeing the sharpest increase (given strong gains from the largest two members).
- U.S. bond yields, represented by the Bloomberg U.S. Aggregate Bond Index, rose in the fourth quarter due to stronger than expected economic growth and expectations for fewer rate cuts going forward. The 10-year Treasury yield rose sharply, ending the quarter near 4.5%.
- International bond yields generally rose in the fourth quarter, although the increases were modest. The yield differential between U.S. and international bonds widened sharply, while the rising dollar weighed on the performance of local currency bonds.
- Commodities ticked higher in Q4 as natural gas rallied and crude oil nudged higher, lifting the heavyweight energy component, while metals dipped due to global growth sluggishness. REITs came under pressure given spiking interest rates.

	BENCHMARK	Q4 2024	1-Year	3-Year	5-Year	10-Year
U.S. Large-Cap Stocks	S&P 500® Index	2.4%	25.0%	8.9%	14.5%	13.1%
U.S. Small-Cap Stocks	Russell 2000® Index	0.3%	11.5%	1.2%	7.4%	7.8%
International Developed Stocks	MSCI EAFE Index	-8.1%	4.3%	2.1%	5.2%	5.7%
Emerging Market Stocks	MSCI Emerging Markets Index	-7.9%	7.9%	-1.6%	2.0%	4.0%
U.S. Bonds	Bloomberg US Aggregate Bond Index	-3.1%	1.3%	-2.4%	-0.3%	1.3%
Treasury Inflation Protected Securities	Bloomberg US Treasury Inflation Protected Securities (TIPS) Index	-2.9%	1.8%	-2.3%	1.9%	2.2%
High Yield Bonds	Bloomberg US Corporate High Yield Bond Index	0.2%	8.2%	2.9%	4.2%	5.2%
International Developed Bonds	Bloomberg Global Treasury ex-US Index	-8.0%	-6.0%	-7.0%	-4.1%	-1.2%
Commodities	S&P GSCI Index	3.8%	9.2%	9.6%	7.1%	1.2%
REITS	Dow Jones U.S. Select REIT Index	-5.9%	8.1%	-3.0%	3.4%	4.9%

Note: Returns are annualized for periods over one year. Total return includes the reinvestment of dividends, interest, and other cash flows. Source: Bloomberg as of 12/31/2024. Indexes are unmanaged, do not incur management fees, costs, and expenses, and cannot be invested in directly. For more information on indexes, please see Schwab.com/IndexDefinitions. Investing involves risk, including loss of principal. **Past performance is no guarantee of future results. For illustrative purposes only.**

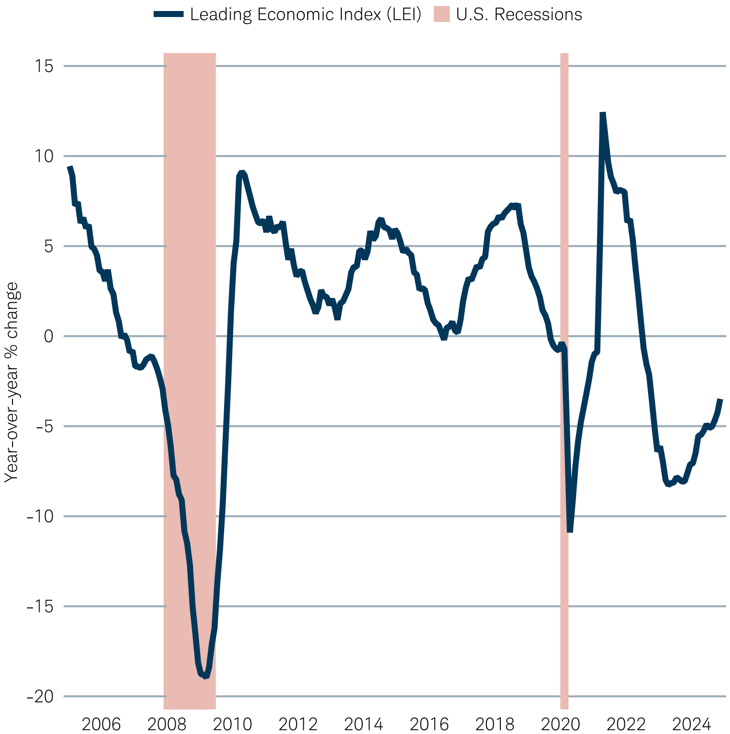
Overview

Economy	The U.S. economy continued to grow at a solid pace in the fourth quarter—supported by a relatively resilient consumer and healthy business spending. Inflation continued to moderate, but some signs of firmness were still present, especially in the services sector. Goods deflation was less pronounced and in fact is showing signs of ending, which means goods price growth might start contributing to firmer headline inflation looking ahead. The unemployment rate ticked up throughout the quarter, but payroll growth remained positive. Effects from the hurricanes and worker strikes dissipated; and while the rebound in employment was weaker than expected, overall labor trends remained solid.
Equities	U.S. stocks moved higher, adding to gains from the prior quarter. There was significant volatility, however, especially around the U.S. election. Stocks soared in the immediate aftermath of the election, mostly because of how quick and decisive the results were. Much of that trend eased in the following month, though, with investors again favoring the Magnificent 7 at the expense of the rest of the market. There continued to be significant churn under the surface; and in fact, in the month following the election, the average member's maximum drawdown in the S&P 500 reached -11%. It was even steeper for the NASDAQ at -24%.
Income	The Federal Reserve continued to cut rates in the fourth quarter, lowering the Fed funds rate to the 4.25% to 4.5% range after cuts of 25 basis points at both the November and December meetings. Projections from the Federal Reserve suggest a shallower path of rate cuts going forward as inflation remains elevated. Long-term Treasury yields rose sharply given a higher-than-expected "terminal" Fed funds rate, and the 3-month/10-year Treasury yield curve finally un-inverted after initially inverting in late 2022. Investors should favor a benchmark or below average duration, since yields may drift higher as proposed policies in Washington D.C. could keep inflation above target. We continue to favor highly-rated bonds, such as investment grade corporate or municipal bonds, as the extra yield offered by riskier investments is very low.
Commodities	An ongoing rally in natural gas prices was complemented by a modest increase in crude oil prices to lift the heavyweight energy component of the commodities complex and the S&P GSCI Index. Resilient U.S. economic growth and a boost from surging demand for artificial intelligence (AI) data-center energy sources buoyed the oil and natural gas sectors. Metals prices came under pressure as the industrial outlook for demand was hamstrung by China's continued economic stagnation, exacerbated by a rallying U.S. dollar. REITs took a breather as interest rates rose when market expectations for the level of Fed rate cuts were dampened. Geopolitical developments, the greenback, global economic growth—particularly China—and the path of Fed interest rate policy are key variables in the equation determining where commodities go from here.
Asset allocation	We believe proper asset allocation and diversification in line with investors' risk tolerance and time horizon are important when constructing a portfolio. Diversification is important both across and within asset classes. Historically, fixed income, especially high-quality bonds, and international investments have provided diversification when compared to an all-equity portfolio. Investors can help increase their chances of achieving their goals by focusing on time in the market rather than timing the market, investing in a tax-efficient manner, ignoring outside noise such as politics, and regularly monitoring their investments.

Source: Schwab Center for Financial Research. Commentary as of 12/31/2024. Investing involves risk, including loss of principal. Diversification and asset allocation strategies do not ensure a profit and cannot protect against losses in a declining market. **Past performance is no guarantee of future results.** Basis points ("BPS") – one basis point is equal to one one-hundredth of one percent.

A view of the U.S. economy

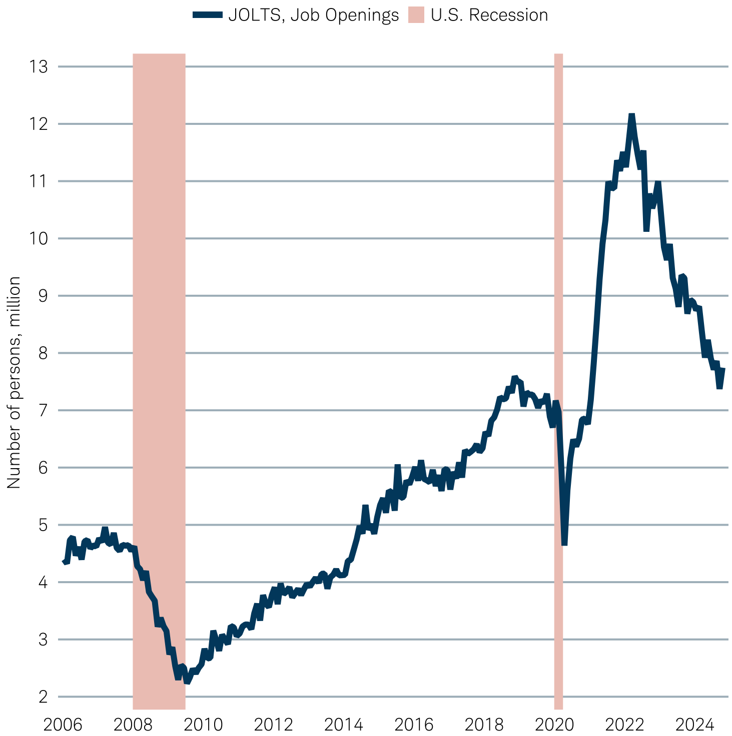
Segments of the economy—like manufacturing—that fell into recessionary territory last year have started to show hints of bottoming out, although it's too soon to say if we're looking at an uptrend. The positive offset has been resilience in areas like the services sector, although there are lingering cracks.

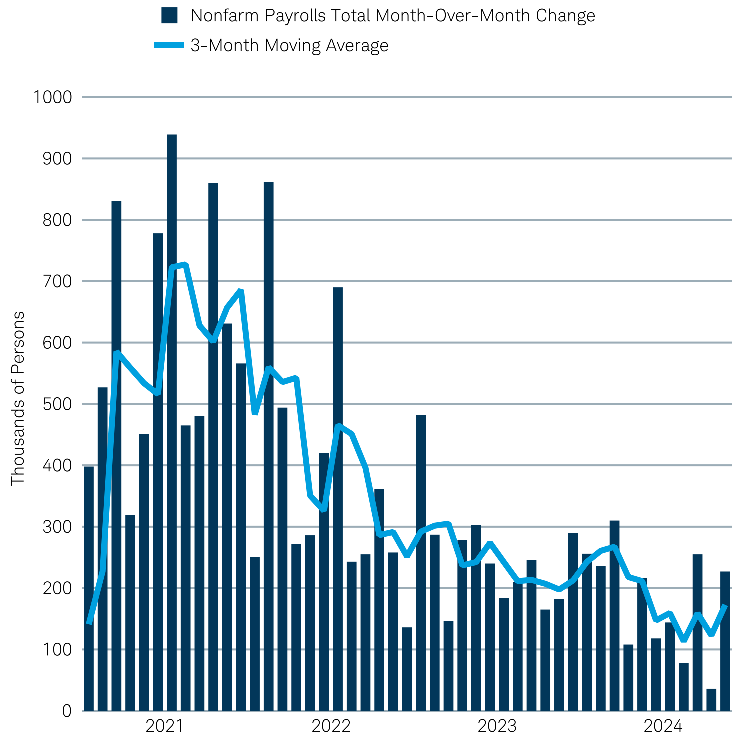


Bars represent National Bureau of Economic Research defined recession periods.
Source: Macrobond as of 12/31/2024. LEI is a composite average of leading indicators designed to signal peaks and troughs in the business cycle. ISM Manufacturing index monitors employment production inventories, new orders, and supplier deliveries and is based on surveys of more than 300 manufacturing firms. ISM Non-manufacturing index monitors employment, prices, and new orders in non-manufacturing industries and is based on surveys of more than 400 non-manufacturing firms.

Labor demand has cooled

Job openings have come down markedly from their cycle high, underscoring the fact that demand for labor continues to cool at a brisk pace. Payroll growth has also softened, with the three-month average of job gains still near a cycle low.

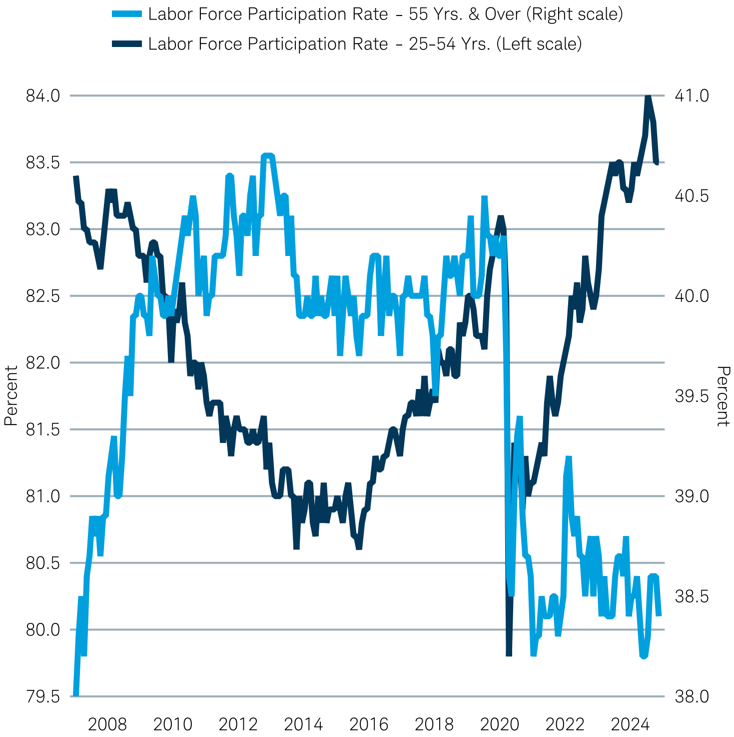


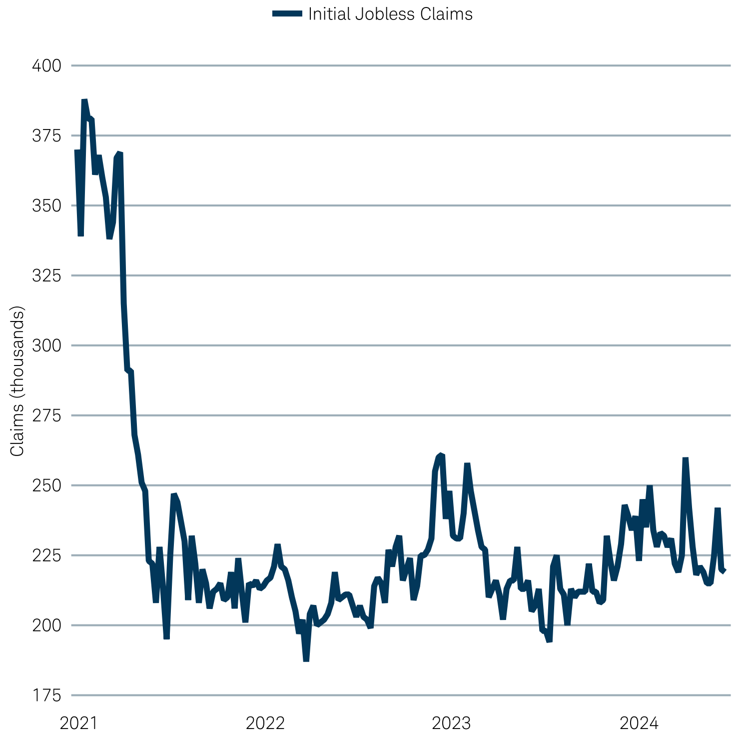


Bars represent National Bureau of Economic Research defined recession periods.
Source: Charles Schwab, Macrobond as of 12/31/2024. Job Openings and Labor Turnover Survey (JOLTS) is a survey conducted by the Bureau of Labor Statistics of the U.S. Department of Labor. It involves the monthly collection, processing, and dissemination of job openings and labor turnover data. The data, collected from sampled establishments on a voluntary basis, include employment, job openings, hires, quits, layoffs and discharges, and other separations.

Labor supply still healthy

A key tenet of the labor market's resilience over the past few years has been the recovery in the prime-age labor force participation rate. Additionally, initial jobless claims have remained low, given that most layoff activity has (for now) been concentrated in higher-paying sectors.

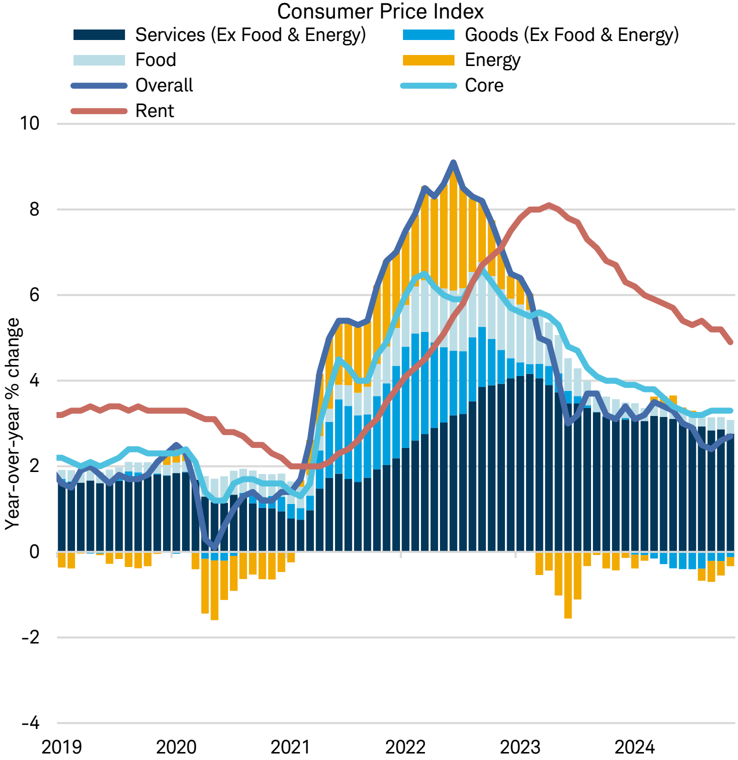




Source: Macrobond as of 12/31/2024.

Services sector driving bulk of inflation

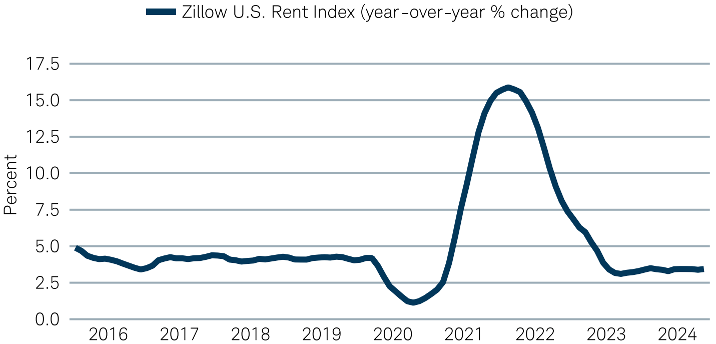
The services sector remains responsible for the bulk of inflationary pressure in the current cycle. Core goods deflation is expected to end, which means disinflation pressure at the headline level will likely fade.

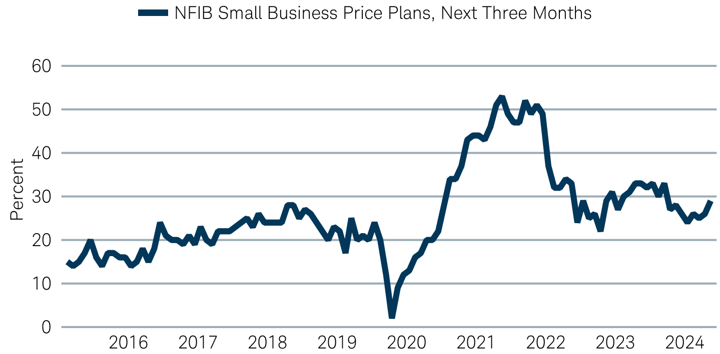


Source: Bloomberg, U.S. Bureau of Labor Statistics. Table 7. Consumer Price Index for All Urban Consumers (CPI-U) and selected categories: U.S. city average, by expenditure category, November 2024, 12-month analysis table. Selected categories are as follows: "Overall" does not exclude any services or goods, "Core" excludes energy and food from the overall number, and remaining categories look at each component of the CPI individually. Macrobond, as of 12/31/2024. The 5-year breakeven inflation rate is a measure of what the market expects inflation to be in the next 5 years on average. **Past performance is no guarantee of future results.**

Inflation watch

Across several metrics, inflation is on a downtrend. Perception differs, however, depending on which segment of the economy is analyzed. For workers, wage growth is still quite strong relative to history. For new renters, price increases are not as egregious as they were a couple of years ago.

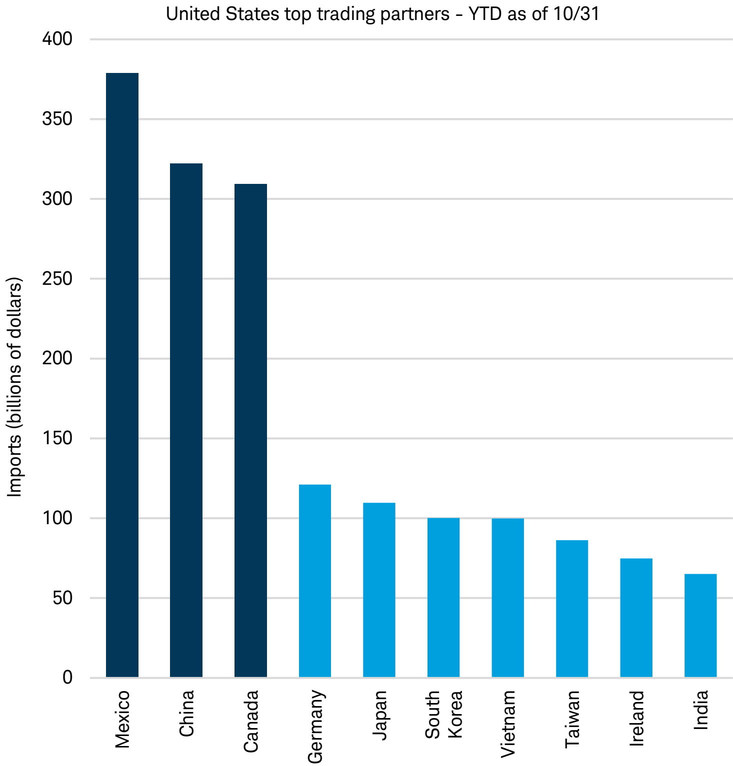


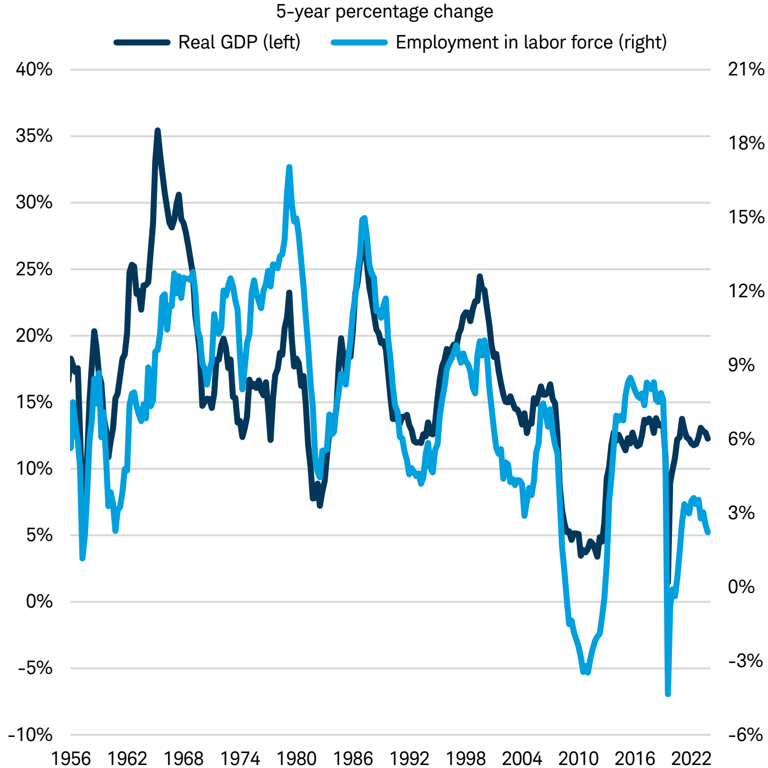


Source: Charles Schwab, Macrobond, using monthly data available as of 12/31/2024.

Trade and immigration

Trade and immigration policy are very much in focus for 2025. Prices on imported goods may rise significantly if higher tariffs are implemented. In addition to weaker labor force growth (via deportations or a significant curb on immigration), growth might weaken.

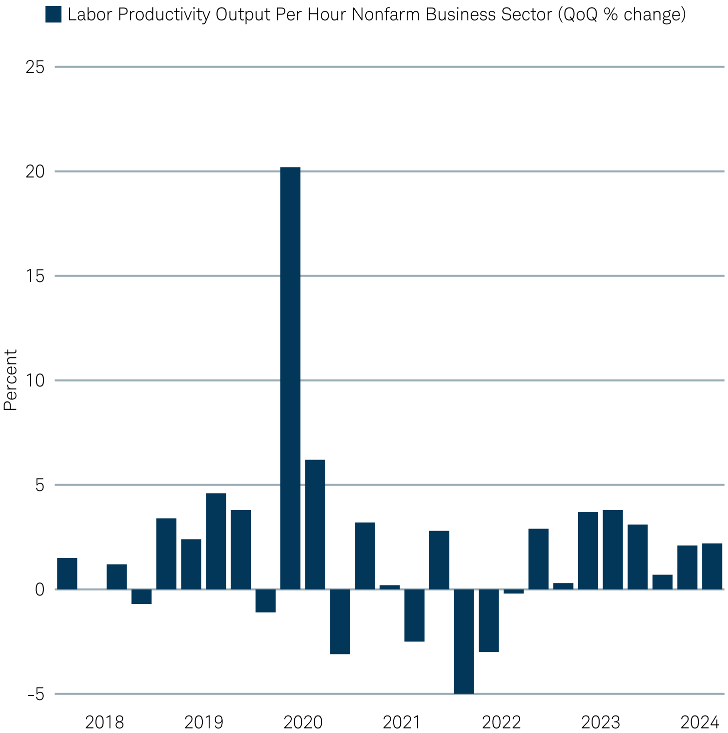


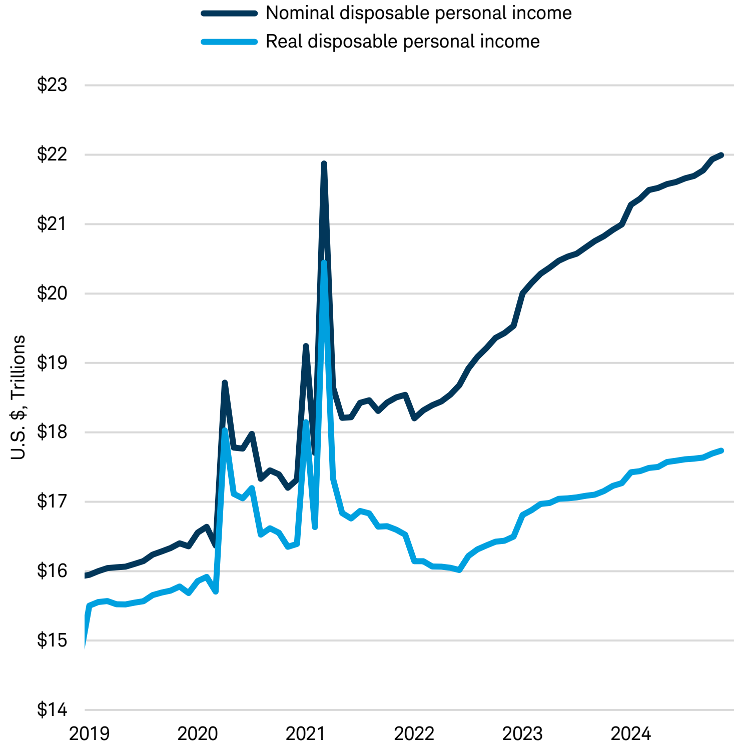


Source: Charles Schwab. Left: United States Census Bureau as of 10/31/2024. Right: Bloomberg as of 9/30/2024.

Productivity and income

A rebound in productivity over the past year has been a key support in the battle against inflation, although this doesn't mean inflation isn't still an issue—given that the spread between nominal and real disposable personal income continues to widen.

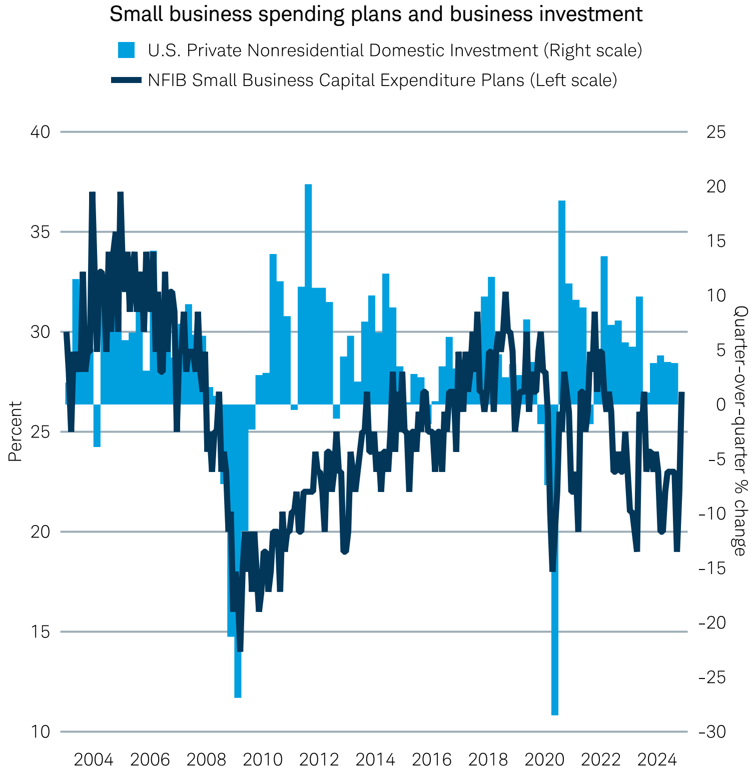


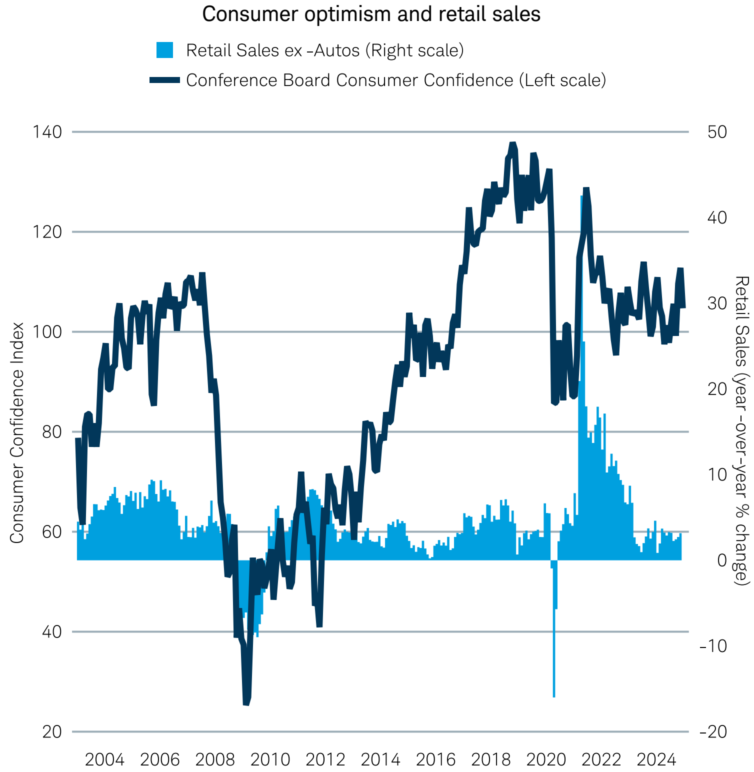


Source: Left: Macrobond as of 12/31/2024. Labor productivity tracks the total output that can be produced with a given input of labor. Right: Bloomberg as of 11/30/2024.

Business and consumer confidence

Small business capital spending plans haven't yet signaled a firm expansion in business investment. Retail sales growth has softened this year as consumer sentiment has chopped around in a wide range—held down by softer income growth.

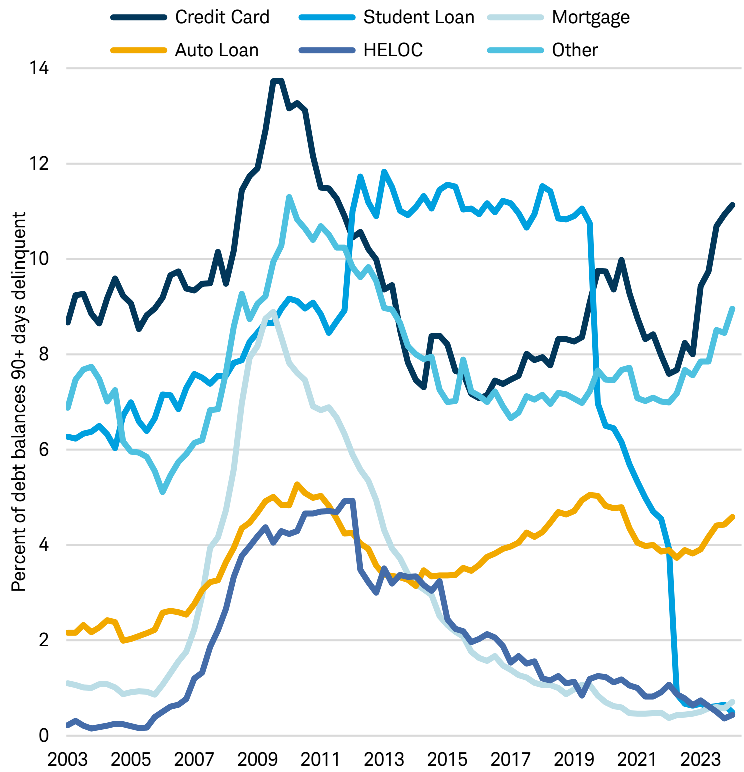




Source: Charles Schwab, Macrobond as of 12/31/2024.

Consumer spending

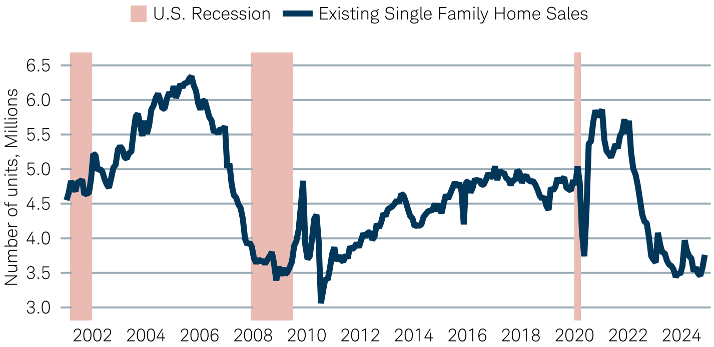
Consumer spending has been supported by a dramatic decline in the savings rate over the past few years and a subsequent increase in credit card debt. Serious delinquency rates have picked up sharply this cycle, particularly for credit cards.

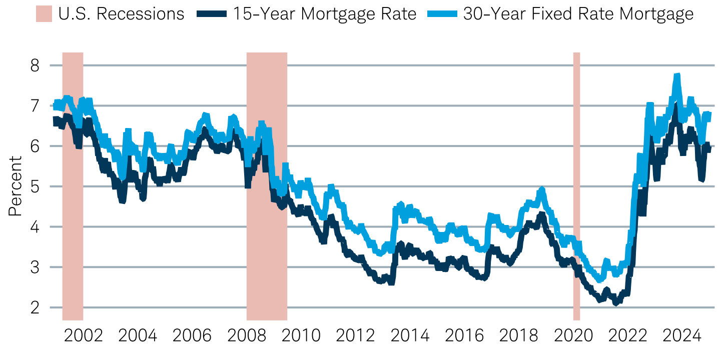


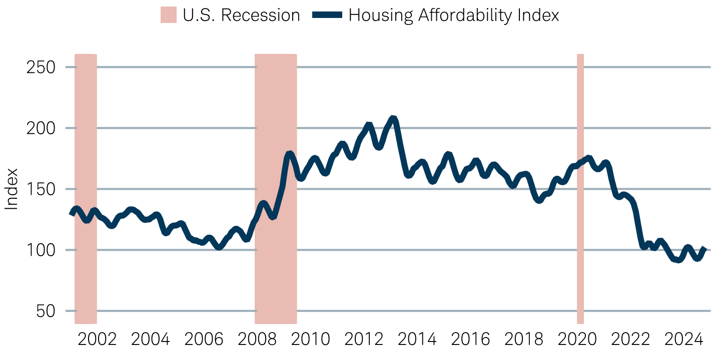
Source: Charles Schwab, Macrobond, Bloomberg, as of 9/30/2024. Household debt service ratio measures household debt payments divided by disposable personal income.

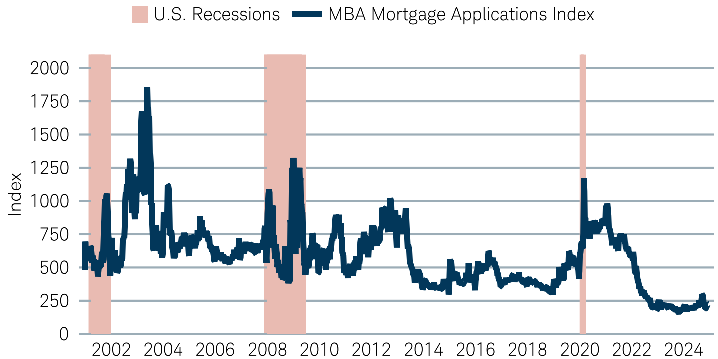
Housing update

Housing affordability has tumbled due to stubbornly high home prices and elevated mortgage rates. Leading indicators are still struggling to confirm a sustainable rebound—evidenced by the sluggish recovery in homebuilder sentiment and the lack of pickup in mortgage applications.





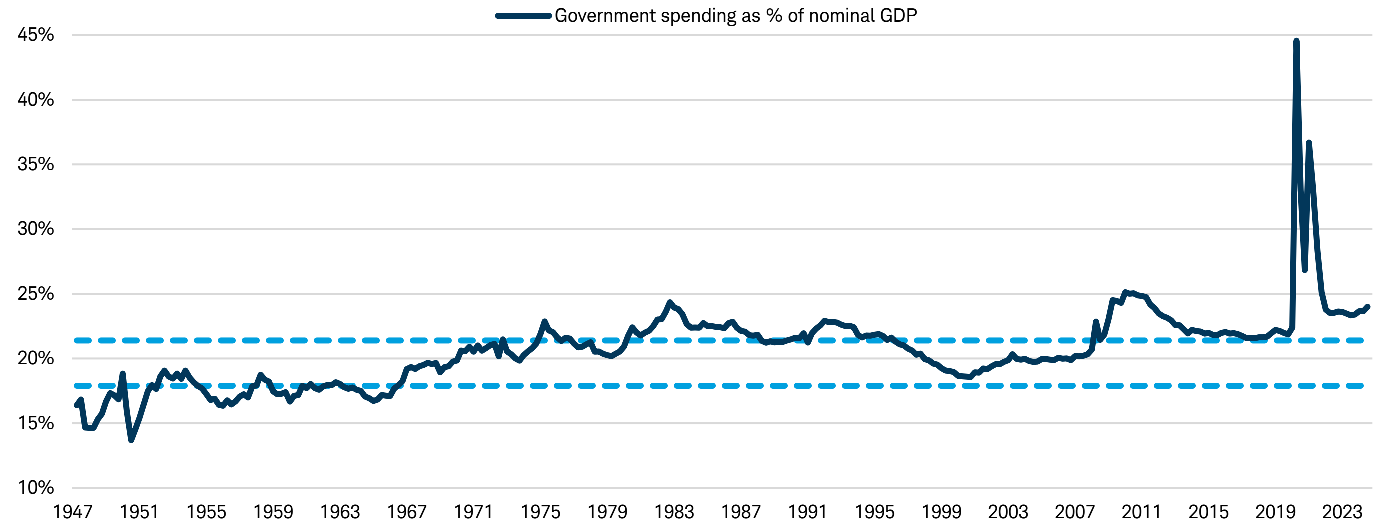




Bars represent National Bureau of Economic Research defined recession periods.
Source: Charles Schwab, Bloomberg, Macrobond as of 12/31/2024.

Government spending

As a percentage of nominal GDP, government spending remains elevated relative to history. The current share is consistent with slower growth, investment, and job creation.

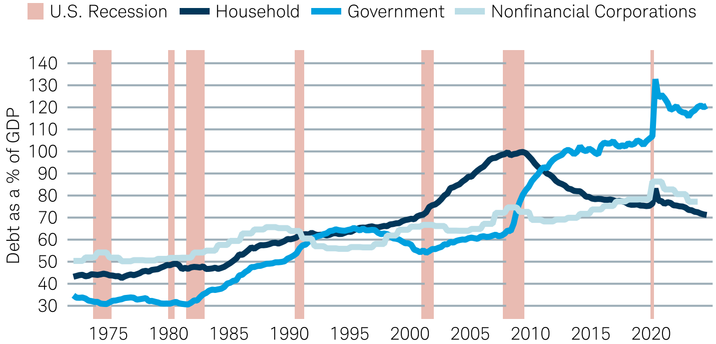


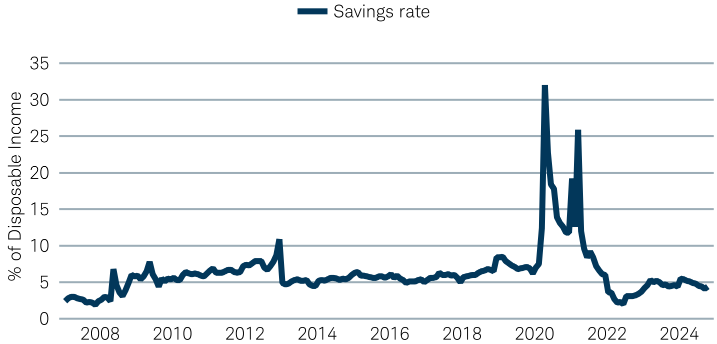
Government spending as % of nominal GDP	Annualized gain (3/31/1947 – 9/30/2024)			
	Nonfarm payrolls	Real non-residential investment	Real GDP	CPI inflation
Above 21.4%	1.4%	4.0%	2.7%	3.3%
17.9% to 21.4%	1.8%	4.5%	3.1%	4.2%
Below 17.9%	2.1%	4.9%	4.0%	2.6%

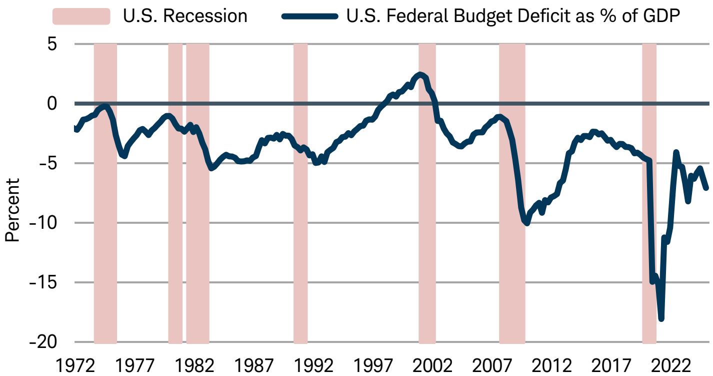
Source: Charles Schwab, Bloomberg, Federal Reserve, Ned Davis Research, as of 9/30/2024.

U.S. debt and taxes

The fiscal impulse remains strong, evidenced by the fact that the federal deficit as a percent of GDP is stretched relative to history. In addition, investment has picked up—especially in the green energy and semiconductor sectors—but direct aid to households has waned.







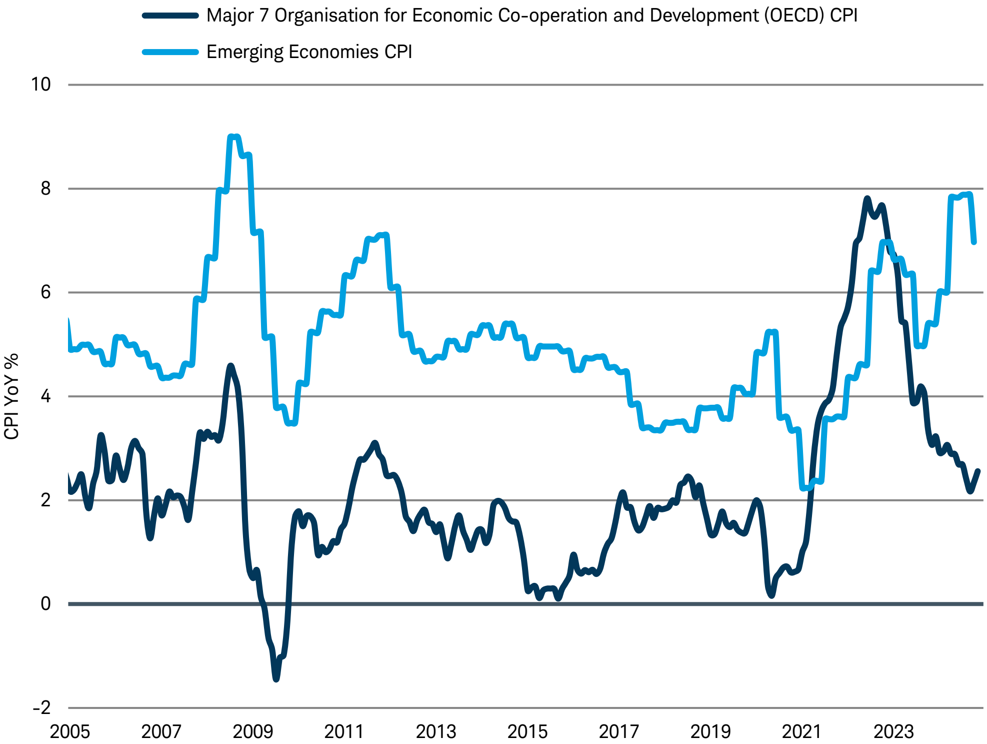
Married Filing Jointly | Qualifying Widow(er) 2025 IRS Brackets

Tax rate	Taxable income bracket	Capital gains bracket	Long-term capital gains and qualified dividends
10%	\$0 to \$23,850	\$0 to \$96,700	0%
12%	\$23,851 to \$96,950	\$96,701 to \$600,050	15%
22%	\$96,951 to \$206,700	\$600,051 or more	20%
24%	\$206,701 to \$394,600		
32%	\$394,601 to \$501,050		
35%	\$501,051 to \$751,600		
37%	\$751,601 or more		

Bars represent National Bureau of Economic Research defined recession periods.
Source: Schwab Center for Financial Research, Bloomberg as of 12/31/2024. Tax table source: IRS. The information and content provided herein is general in nature and is for informational purposes only. It is not intended, and should not be construed, as a specific recommendation, individualized tax, legal, or investment advice. Tax laws are subject to change, either prospectively or retroactively. Where specific advice is necessary or appropriate, individuals should contact their own professional tax and investment advisors or other professionals (CPA, Financial Planner, Investment Manager) to help answer questions about specific situations or needs prior to taking any action based upon this information.

Global inflation

Global inflation pressures have receded, although the disinflationary process is expected to be choppy, especially as some countries continue to face tight labor markets and the effects associated with higher interest rates.

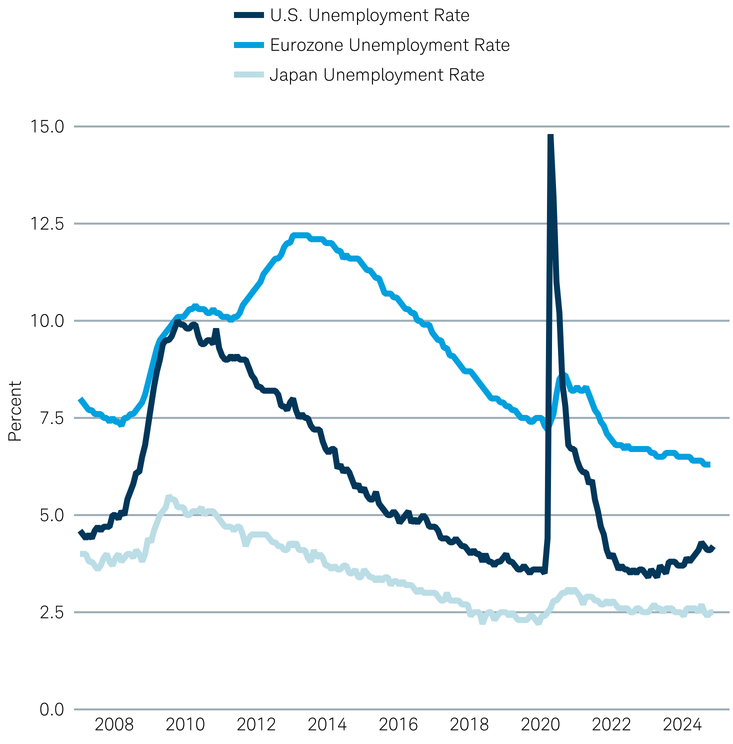


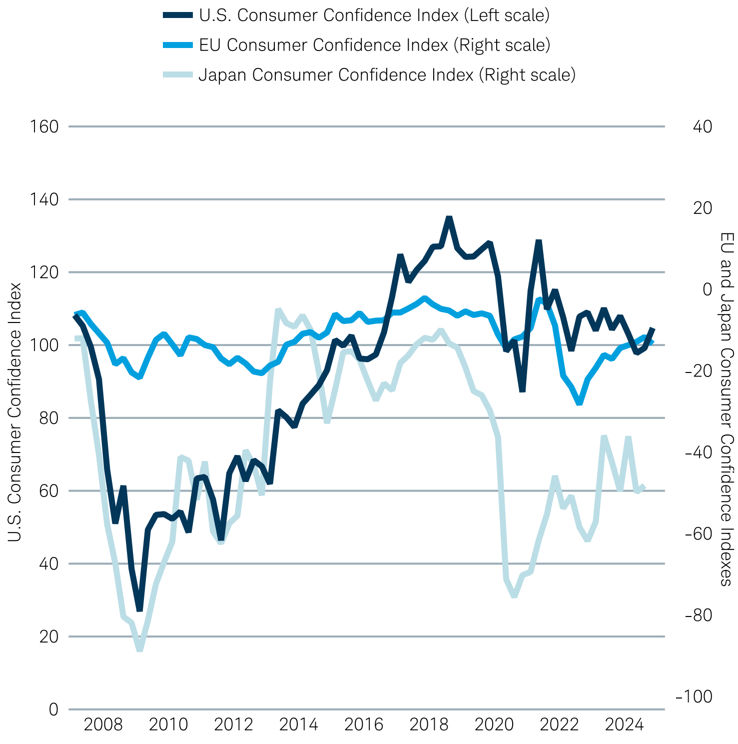
Consumer Price Index year-over-year %	
Russia	8.9
India	5.5
Brazil	4.9
Japan	2.9
United States	2.7
United Kingdom	2.6
Eurozone	2.2
Germany	2.2
Canada	1.9
South Korea	1.5
France	1.3
Italy	1.3
China	0.2

Source: Charles Schwab, Bloomberg Major 7 data as of 11/30/2024. Emerging economies data as of 9/30/2024. Major 7 refers to the seven major countries as defined by the OECD: Canada, the U.S., Japan, France, Germany, Italy, and the U.K. **Past performance is no guarantee of future results.**

Global unemployment and consumer confidence

Labor markets around the globe are no longer universally tight; this is notably true in the United States as the unemployment rate has continued to tick higher. Consumer confidence metrics have started to find some stable footing, but recoveries have been uneven—as evidenced in Japan over the past year.

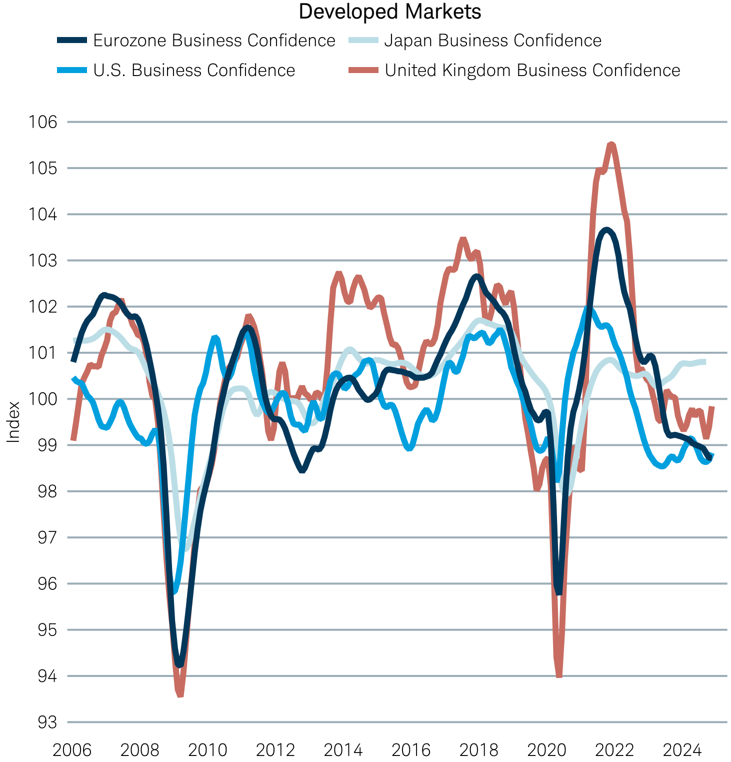




Source: Charles Schwab, Macrobond as of 12/31/2024.

Global business sentiment

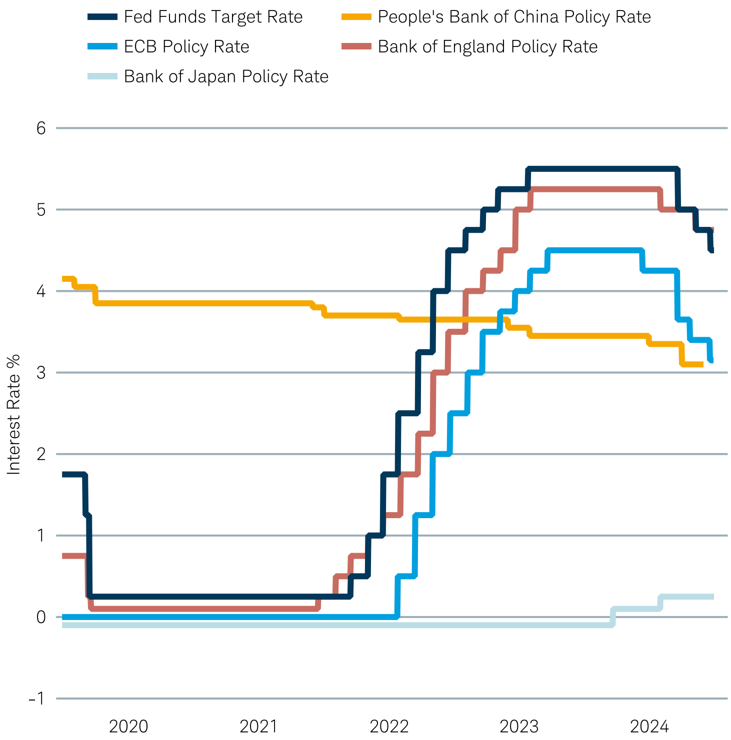
Global leading economic indicators and business confidence metrics have not yet confirmed broad-based expansion for economies across the world. While there are signs of stabilization, durable recoveries have yet to take hold.

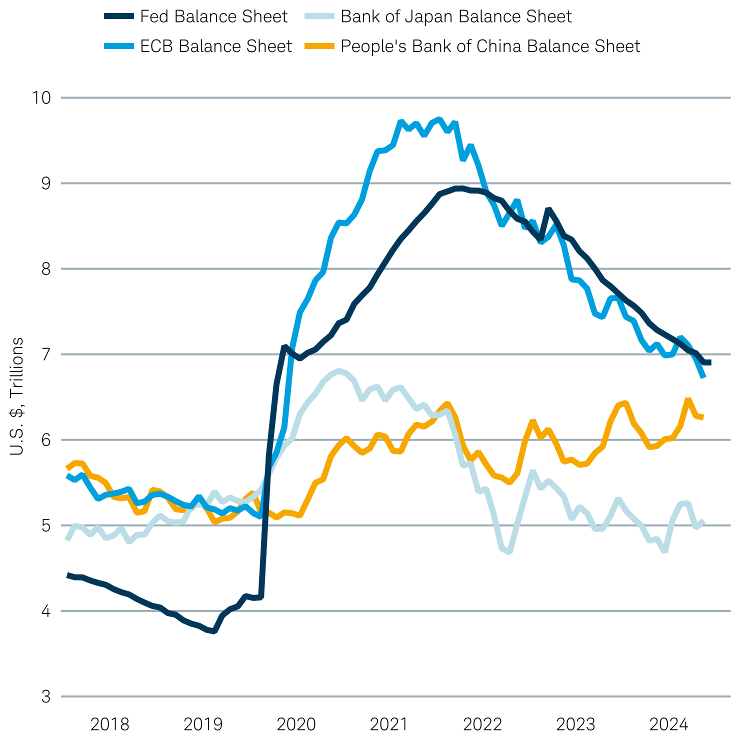


Source: Charles Schwab, Macrobond as of 12/31/2024. Business Confidence, released by the OECD, provides information on future developments, based upon opinion surveys on developments in production, orders, and stocks of finished goods in the industry sector. Numbers above 100 suggest an increased confidence in near future business performance, and numbers below 100 indicate pessimism towards future performance.

Global central banks

The global cutting cycle is not in sync, given some central banks have opted for a pause or, at least, signaled one is coming. Global policy remains relatively restrictive, but the path of inflation is crucial for determining how much banks can cut rates.

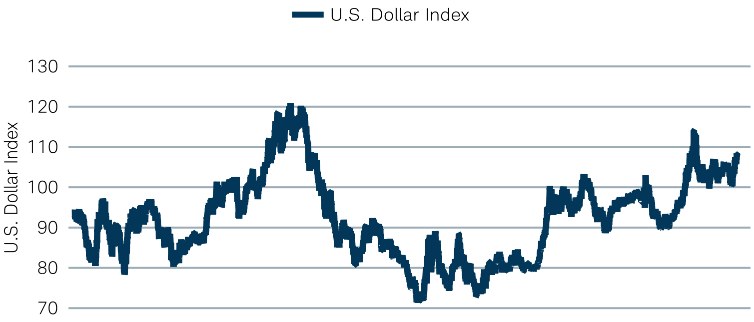


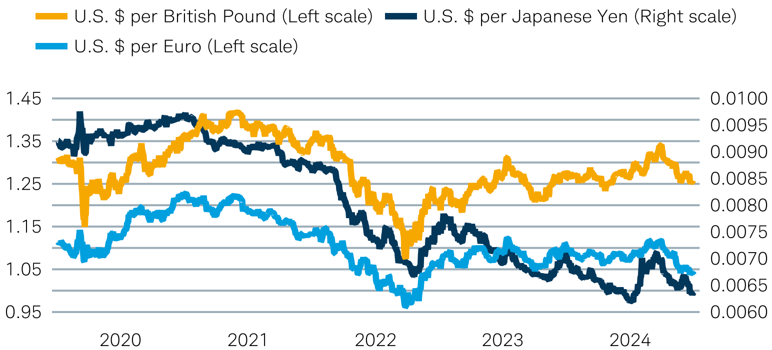


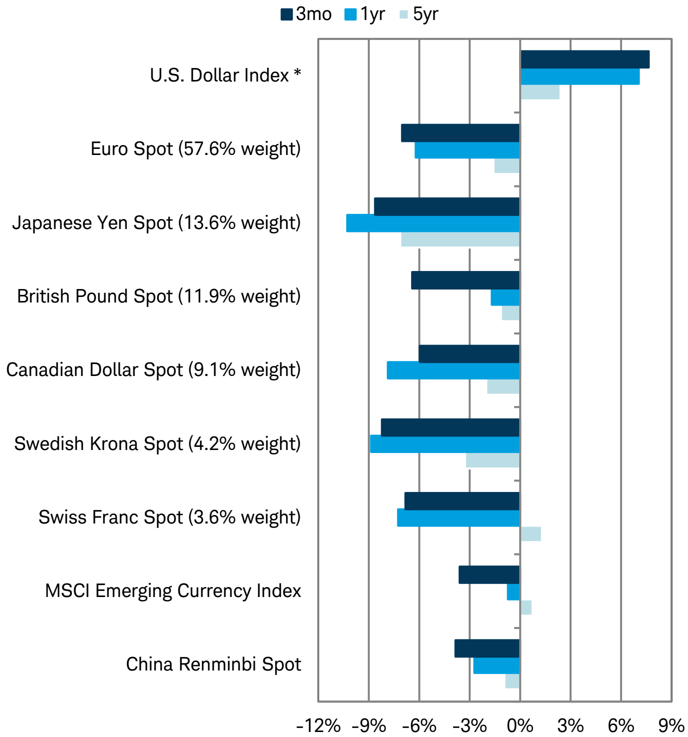
Source: Charles Schwab, Bloomberg, Macrobond as of 12/31/2024.

Global currencies

The U.S. dollar remains quite resilient. Volatility will likely be driven by a mix of growth and rate differentials around the world, especially as a result of the recent moves by the Bank of Japan and the Federal Reserve.





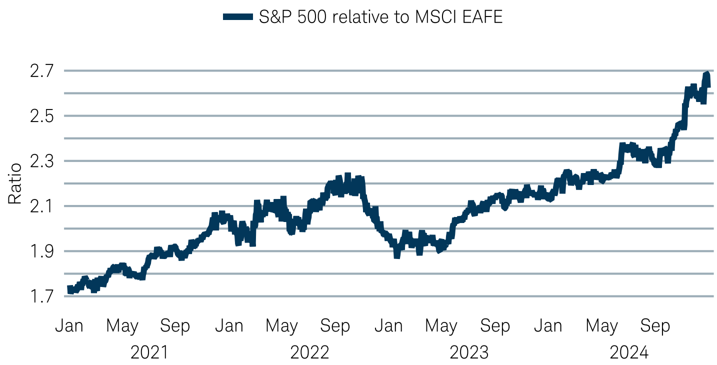


Source: Charles Schwab, Bloomberg, Macrobond as of 12/31/2024.
*The U.S. Dollar Index is a measure of the value of the dollar relative to a basket of U.S. trade partners' currencies. It is a weighted geometric mean of the dollar's value relative to other currencies. Weights of those currencies are shown in parentheses. Currencies are speculative, very volatile and are not suitable for all investors. MSCI Emerging Currency Index measures the total return of 25 emerging market currencies relative to the U.S. Dollar. **Past performance is no guarantee of future results**.

Global equity market summary

Total returns as of 12/31/2024

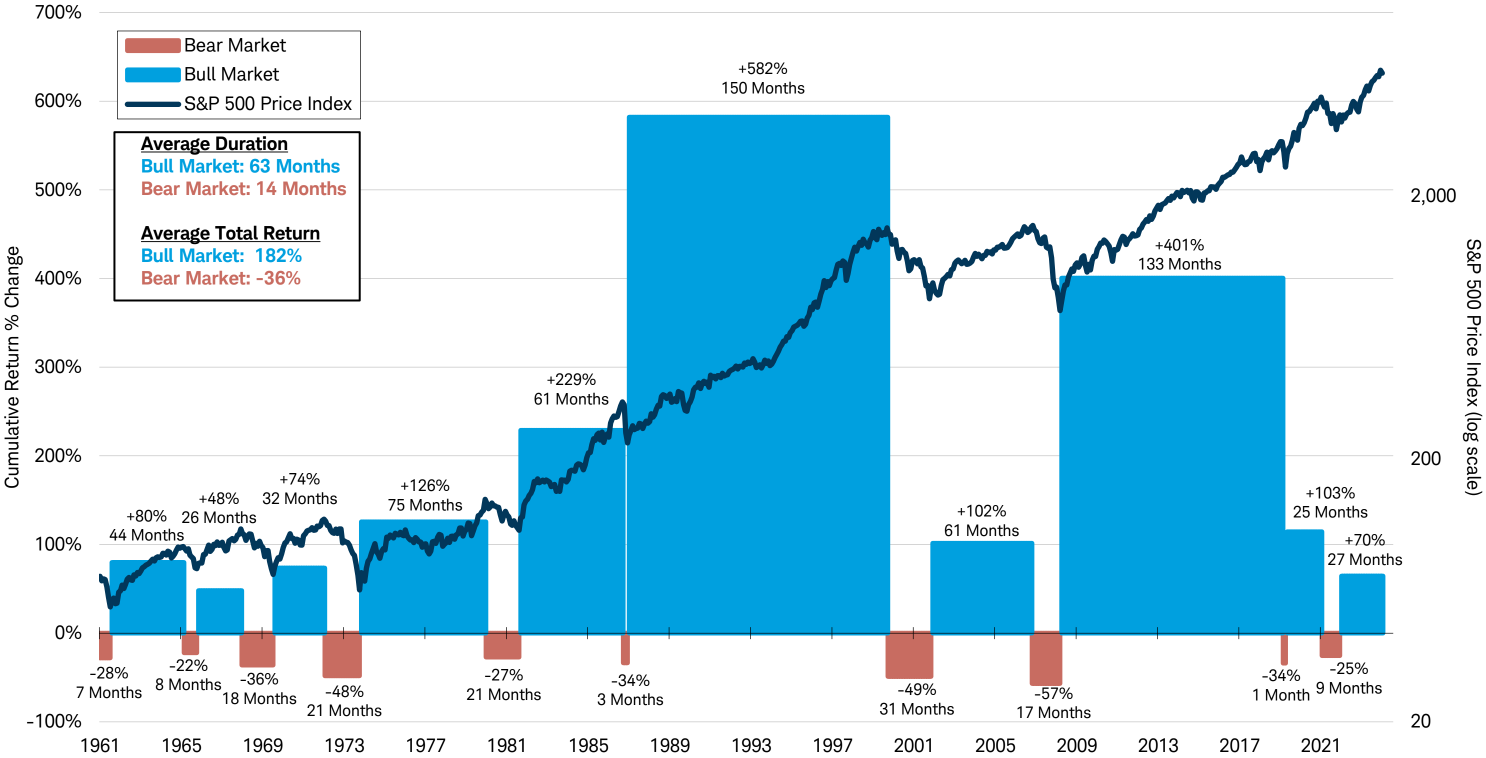
Global	Price	3-month	1-year	3-year	5-year	10-year
MSCI All Country World Index	841	-0.9%	18.0%	5.9%	10.6%	9.8%
Americas						
USA Dow Jones Index	42,544	0.9%	15.0%	7.6%	10.6%	11.6%
USA S&P 500 Index	5,882	2.4%	25.0%	8.9%	14.5%	13.1%
USA NASDAQ Index	19,311	6.4%	29.6%	8.2%	17.5%	16.3%
Canada S&P/TSX Index	24,728	3.8%	21.7%	8.6%	11.1%	8.7%
MSCI Latin America Index	1,853	-15.8%	-26.2%	2.4%	-3.1%	0.5%
EMEA						
Europe Euro Stoxx 50 Index	4,884	-1.8%	11.8%	8.0%	8.7%	8.0%
UK FTSE 100 Index	8,236	-0.2%	9.6%	7.2%	5.3%	6.2%
France CAC 40 Index	7,340	-3.2%	0.9%	4.2%	7.2%	8.8%
Germany DAX Index	19,951	3.0%	18.8%	7.8%	8.5%	7.3%
Spain IBEX 35 Index	11,592	-1.5%	19.1%	13.8%	7.0%	4.4%
Italy MIB Index	34,161	1.4%	18.9%	13.1%	12.2%	10.0%
Asia/Pacific						
Japan Nikkei 225 Index	39,895	5.3%	21.3%	13.8%	13.2%	10.7%
Hong Kong Hang Seng Index	20,060	-4.9%	22.9%	-1.3%	-3.3%	1.9%
China CSI 300 Index	3,935	-1.7%	18.2%	-4.9%	1.5%	3.3%
Australia S&P/ASX 200 Index	8,159	-0.8%	11.4%	7.4%	8.0%	8.5%



Returns are annualized for periods over one year.
Source: Charles Schwab, Bloomberg, Macrobond, FTSE, STOXX, S&P Dow Jones indexes, Nikkei Inc., MSCI. Total return includes the reinvestment of dividends, interest, and other cash flows. Indexes are unmanaged, do not incur management fees, costs and expenses and cannot be invested in directly. Investing involves risk, including loss of principal. **Past performance is no guarantee of future results**. A number greater/less than one for the S&P 500 and MSCI Emerging Markets indexes within the charts indicates better/worse performance of the respective performance of the MSCI EAFE and MSCI World indexes.

U.S. bull and bear markets

With the S&P 500 still up considerably over the past year, it is notable that bull markets have generally been longer in duration and greater in magnitude than bear markets, resulting in gains over time.



Source: Bloomberg as of 12/31/2024. Bull and bear markets as defined by Yardeni Research. Cumulative return is the total change in the investment over a set period of time. Logarithmic (log) scale is a way of displaying a wide range of data in a compact way by increasing the numbers exponentially. Indexes are unmanaged, do not incur management fees, costs and expenses, and cannot be invested in directly. For illustrative purposes only. Investing involves risk, including loss of principal. **Past performance is no guarantee of future results.**

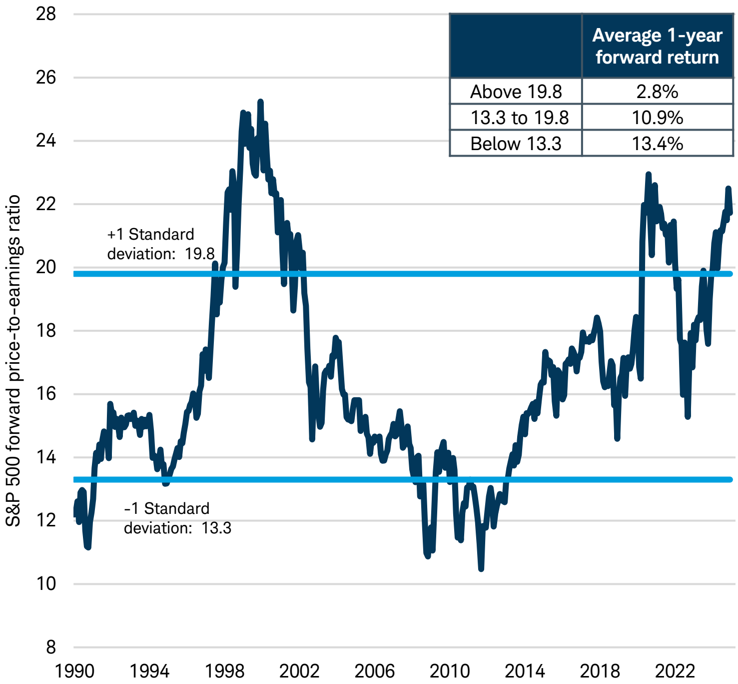
Comparing large- and small-cap profitability

The small-cap universe—proxied by the Russell 2000—has a much higher percentage of companies without profits. Historically, and in the current cycle, the S&P 500 has a much better track record when it comes to the share of profitable constituents.

Source: Bloomberg, the Schwab Center for Financial Research as of 12/31/2024. Profitability is based on trailing 12-month earnings per share as of month-end. Indexes are unmanaged, do not incur management fees, costs, and expenses, and cannot be invested in directly. Investing involves risk, including loss of principal. **Past performance is no guarantee of future results.**

S&P 500 Index valuations and earnings expectations

Several valuation metrics continue to suggest that stocks remain overvalued, although valuation is often in the eye of the beholder. Fortunately, disinflation has alleviated pressure on multiples; however, earnings also need to rise sustainably for valuations to look attractive.



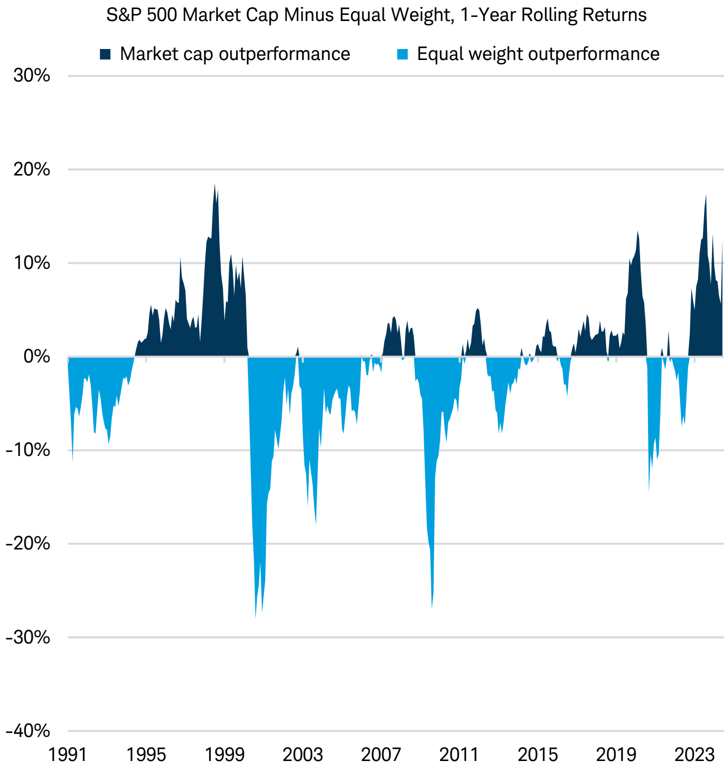
	Average 1-year forward return
Above 19.8	2.8%
13.3 to 19.8	10.9%
Below 13.3	13.4%

Valuation	
Metric	**Current percentile ranking (relative to history)**
S&P 500 forward P/E	Very Expensive
S&P 500 trailing P/E	Very expensive
S&P 500 5-year normalized P/E	Very expensive
S&P 500 price/book value ratio	Very expensive
S&P 500 price/cash flow	Very expensive
S&P 500 dividend yield	Very expensive
Shiller's CAPE (cyclically adjusted P/E)	Very expensive
Rule of 20	Very expensive
Equity risk premium (10-year Treasury yield)	Expensive
Equity risk premium (Baa corporate bond yield)	Expensive
Fed Model	Expensive
Tobin's Q	Very expensive
Market cap/GDP	Very expensive

Source: Charles Schwab, the Schwab Center for Financial Research, Bloomberg, as of 12/31/2024. Indexes are unmanaged, do not incur management fees, costs, and expenses, and cannot be invested in directly. **Past performance is no guarantee of future results.** Source: Charles Schwab, Bloomberg, The Leuthold Group, as of 12/31/2024. For illustrative purposes only. Investing involves risk, including loss of principal. Due to data limitations, start dates for each metric vary and are as follows: CAPE: 1900; Dividend yield: 1928; Normalized P/E: 1946; Market cap/GDP, Tobin's Q: 1952; Forward P/E, trailing P/E, price/book, price/cash flow, rule of 20, equity risk premium, Fed Model: 1995. "Very expensive" refers to 80-100th percentile rankings; "expensive" refers to 60-80th percentile rankings; "fairly valued" refers to 40-60th percentile rankings; "inexpensive" refers to 20-40th percentile rankings; and "cheap" refers to 0-20th percentile rankings. Standard deviation, commonly used as a measurement of risk, is a statistical measure that calculates the degree to which returns have fluctuated over a given time period. A higher standard deviation indicates a higher level of variability in returns.

Market concentration

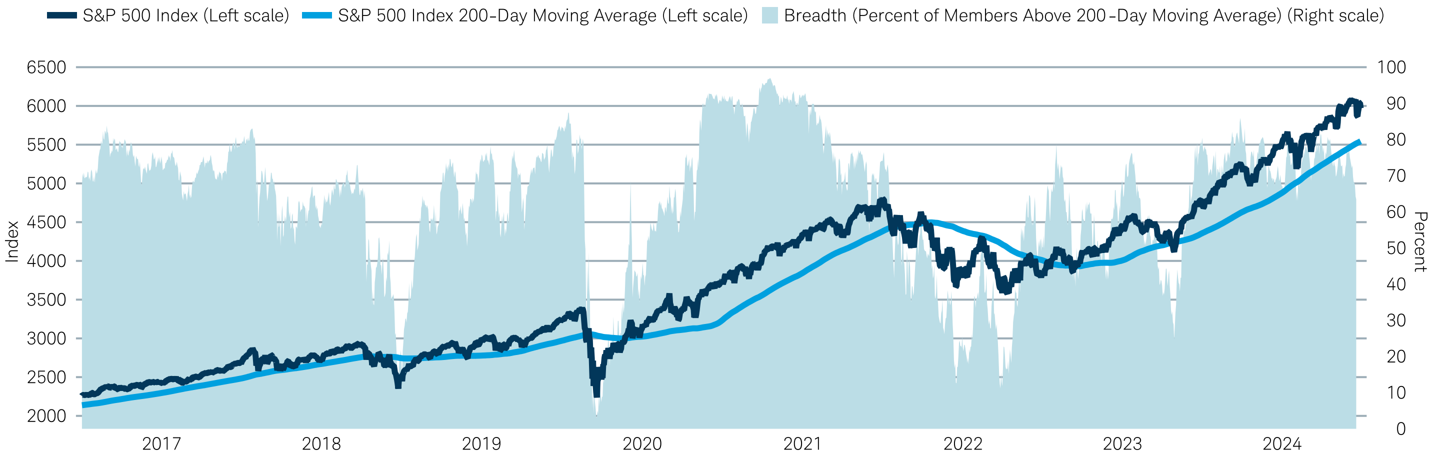
Just five companies account for over 25% of the S&P 500's market cap. Concentration remained a risk in the fourth quarter.



Source: Charles Schwab, Bloomberg, Macrobond as of 12/31/2024. Top 5 stocks in the S&P 500 are Apple, NVIDIA, Microsoft, Amazon, and Meta. Performance does not include the effects of taxes, commissions, or fees. Indexes are unmanaged, do not incur management fees, costs, and expenses, and cannot be invested in directly. Investing involves risk, including loss of principal. All corporate names and market data shown above are for illustrative purposes only and are not a recommendation, offer to sell, or a solicitation of an offer to buy any security. Schwab does not recommend the use of technical analysis as a sole means of investment research. **Past performance is no guarantee of future results.**

Technical indicators

The S&P 500 Index remained above its major moving averages by the end of the quarter. There was a decline in the percentage of members trading above their 50-day moving average, but not as significant of a decline in the percentage of members trading above their 200-day moving average.

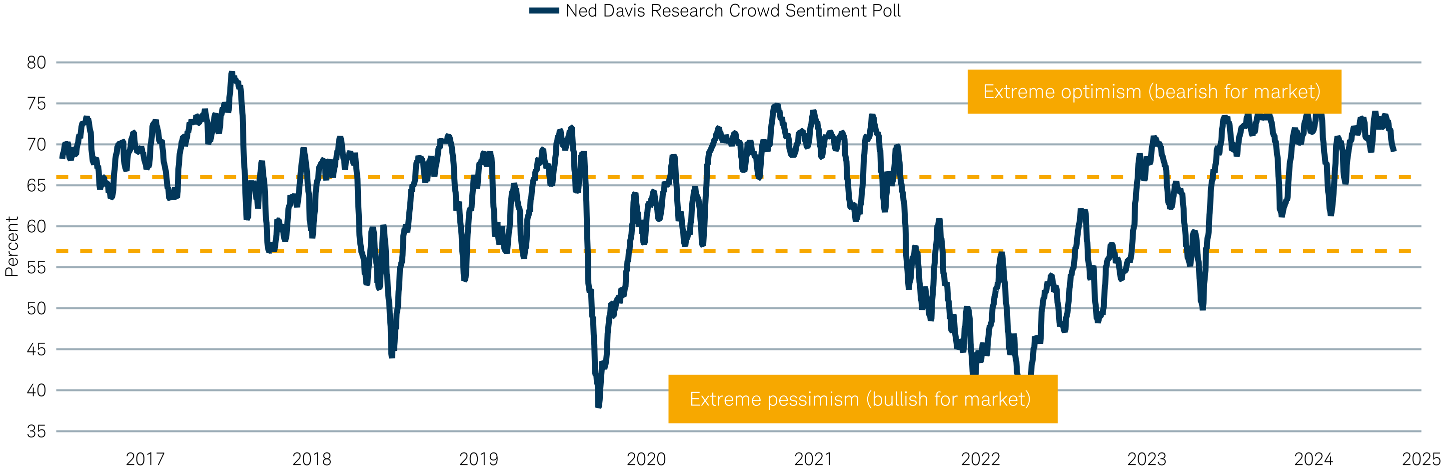


	2024			
Index	**2024 return**	**Index maximum drawdown from 2024 high**	**Average member maximum drawdown from 2024 high**	**Index return from 2024 low**
S&P 500	23%	-8%	-21%	25%
NASDAQ	29%	-13%	-49%	33%
Russell 2000	10%	-10%	-38%	17%
Dow Jones	13%	-6%	-18%	14%

Source: Charles Schwab, Bloomberg, Macrobond, Ned Davis Research, Inc. as of 12/31/2024. Indexes are unmanaged, do not incur management fees, costs, and expenses, and cannot be invested in directly. Some members excluded from year-to-date return columns given additions to indices were after January 2024. Returns shown are price returns. Price return does not include the effects of reinvested cash flows. Schwab does not recommend the use of technical analysis as a sole means of investment research. Investing involves risk, including loss of principal. **Past performance is no guarantee of future results**.

Investor sentiment indicators

Volatility around the December Fed meeting helped wring out some of the froth in investor sentiment. The Crowd Sentiment Poll from Ned Davis Research has rolled over from its recent highs, although there is still a wide degree of optimism.

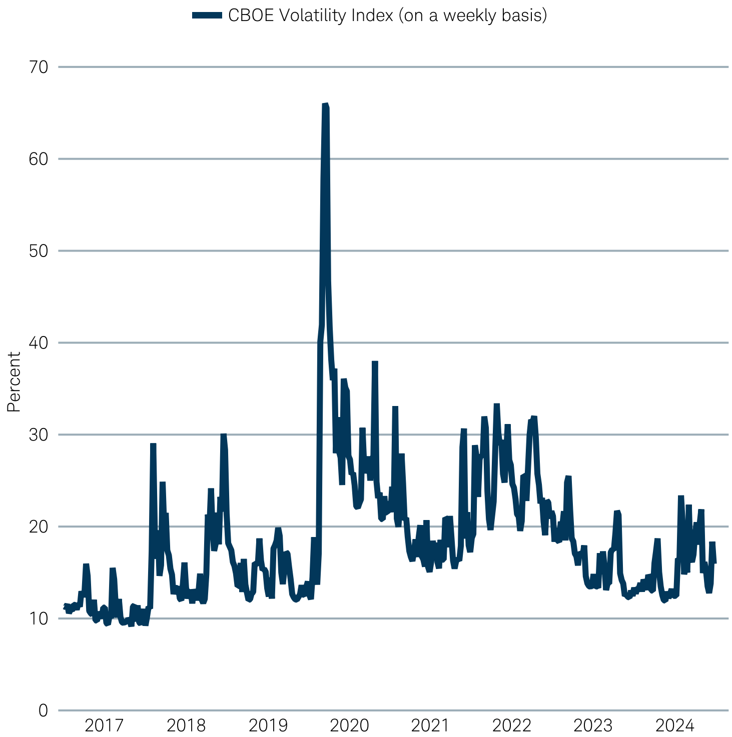


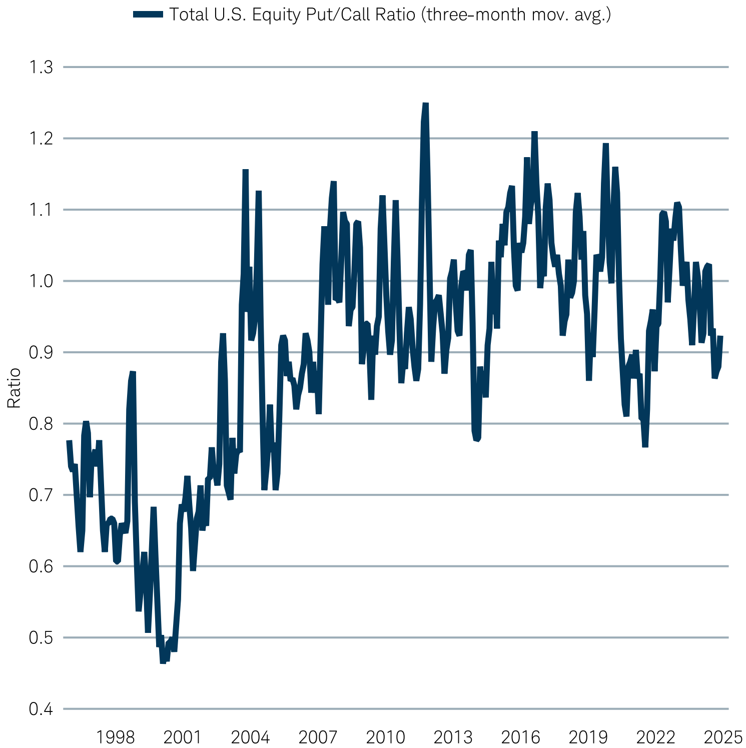
Ned Davis Research Crowd Sentiment Poll	S&P 500 annualized gain (12/01/1995-12/31/2024)	Percent of time
Above 66	1.36%	29.31%
57-66 from above	4.24%	17.24%
57-66 from below	19.80%	17.78%
Below 57	10.82%	35.30%

Source: Charles Schwab, Ned Davis Research, Inc. as of 12/31/2024. See NDR Disclaimer at www.ndr.com/copyright.html. Further distribution prohibited without prior permission. All Rights Reserved. For data vendor disclaimers refer to www.ndr.com/vendorinfo. Investing involves risk, including loss of principal. Schwab does not recommend the use of technical analysis as a sole means of investment research. **Past performance is no guarantee of future results**.

Equity market volatility

The Volatility Index hasn't climbed to levels consistent with prior bear market panics. The put/call ratio has remained subdued relative to history—reflecting an improvement in investor optimism.





Source: Charles Schwab, Macrobond as of 12/31/2024. Equity put/call ratio measures the ratio of put options sold divided by call options sold for a given time period. A higher ratio indicates the market is more bearish, while a lower ratio indicates the market is more bullish. Options carry a high level of risk and are not suitable for all investors. Certain requirements must be met to trade options through Schwab. Please read the options disclosure document titled "Characteristics and Risks of Standardized Options" before considering any option transaction by CLICKING HERE [https://www.theocc.com/Company-Information/Documents-and-Archives/Options-Disclosure-Document]. Call Schwab at 1-800-435-4000 for a current copy. Schwab does not recommend the use of technical analysis as a sole means of investment research. For illustrative purposes only. **Past performance is no guarantee of future results.**

U.S. equity sector returns and valuations

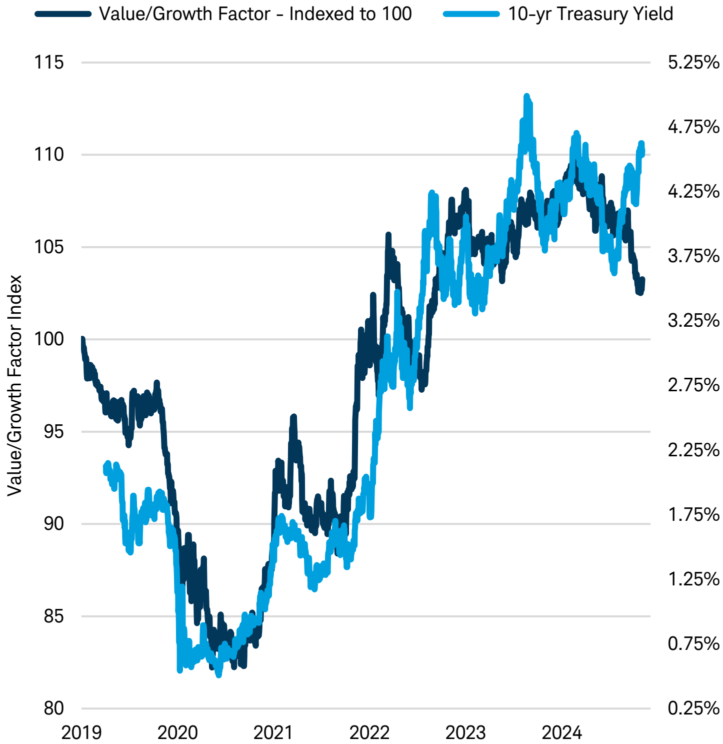
Data as of 12/31/2024

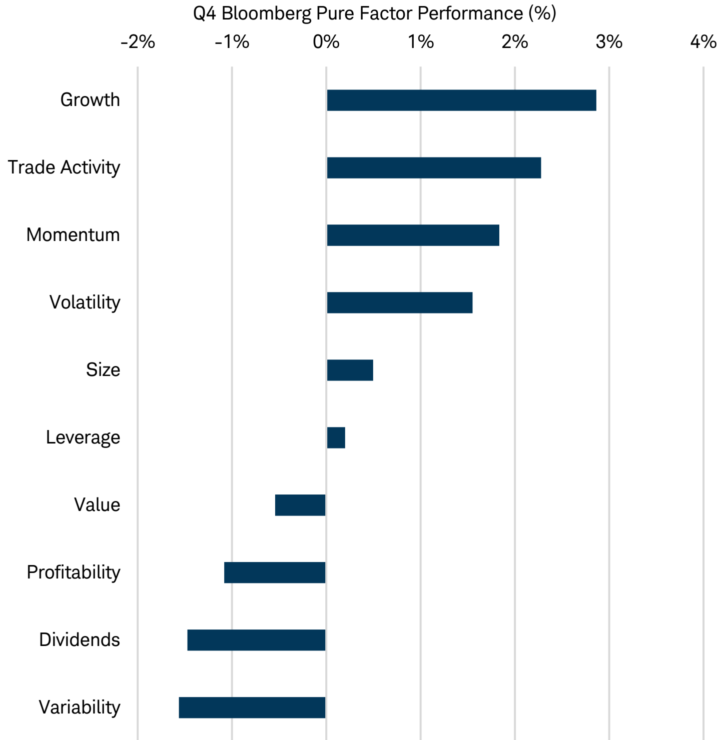
S&P 500 Sectors								
Index	S&P Weight	3-month Total Return	1-year Total Return	Total Return since last market peak (1/2022)	Total Return since last market low (10/2022)	Forward P/E	Median Forward P/E since 1990	Dividend Yield
S&P 500 Index	100.0%	2.4%	25.0%	28.4%	70.1%	21.7	15.8	1.3%
Information Technology	32.5%	4.8%	36.6%	53.3%	129.9%	28.9	17.9	0.6%
Financials	13.6%	7.1%	30.5%	29.2%	66.4%	17.0	13.1	1.5%
Consumer Discretionary	11.3%	14.3%	30.1%	13.5%	70.2%	27.5	18.9	0.6%
Health Care	10.1%	-10.3%	2.6%	3.7%	17.2%	16.7	16.5	1.7%
Communication Services	9.4%	8.9%	40.2%	30.6%	116.4%	18.9	15.5	0.8%
Industrials	8.2%	-2.4%	17.3%	32.0%	61.2%	21.8	16.2	1.5%
Consumer Staples	5.5%	-3.3%	14.9%	14.8%	28.4%	20.8	17.2	2.5%
Energy	3.2%	-2.4%	5.7%	67.2%	14.7%	13.6	15.1	3.4%
Utilities	2.3%	-5.5%	23.4%	17.6%	32.6%	17.3	14.6	3.0%
Real Estate	2.1%	-7.9%	5.2%	-11.8%	30.0%	35.6	n/a	3.4%
Materials	1.9%	-12.4%	0.0%	0.1%	28.4%	18.6	15.9	2.0%

Source: Bloomberg. Total return includes the reinvestment of dividends, interest, and other cash flows. Sectors listed are S&P 500 sector indexes according to GICS classification. Indexes are unmanaged, do not incur management fees, costs, and expenses, and cannot be invested in directly. Returns assume reinvestment of dividends and interest. Investing involves risk, including loss of principal. **Past performance is no guarantee of future results.**

Equity investment styles and factors

Value tends to outperform growth when interest rates rise. Beyond growth and value, there are several factors, including profitability and momentum, that can help explain overall market performance.

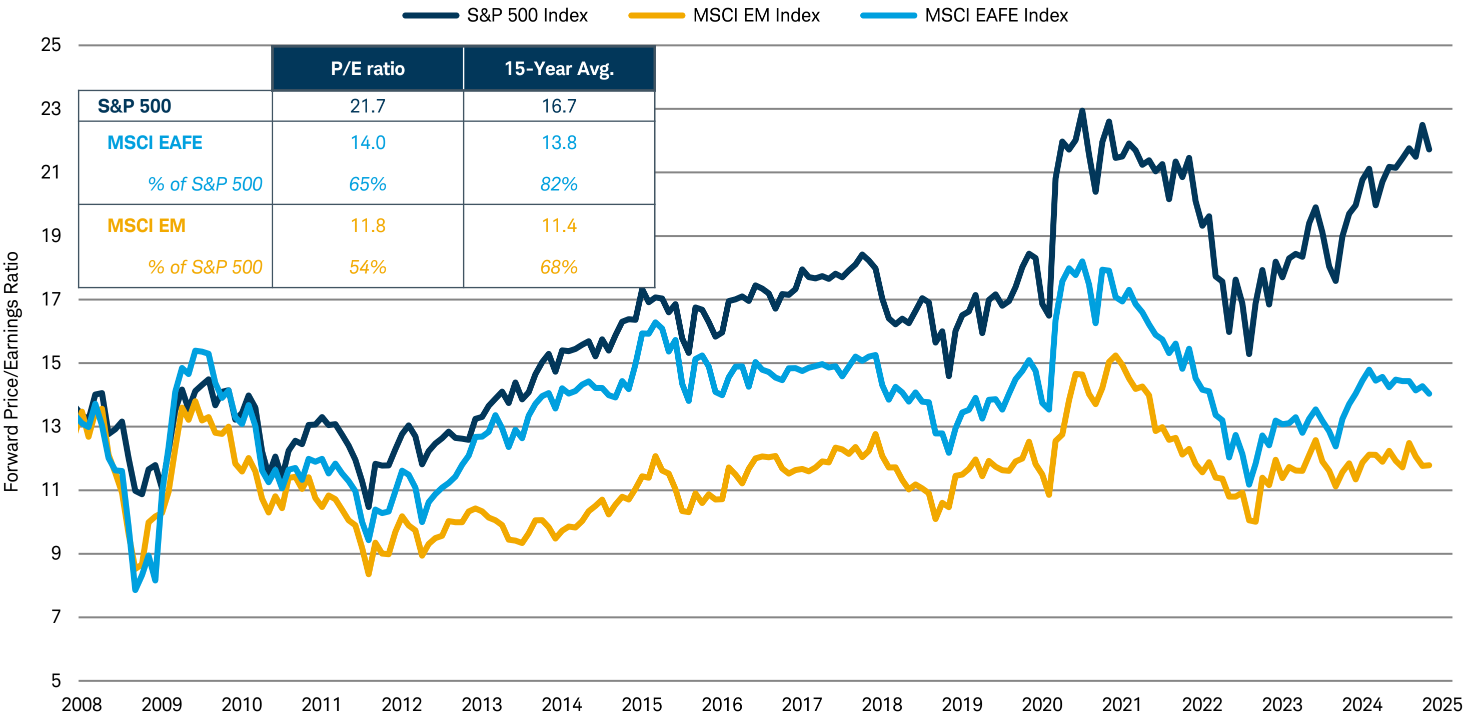




Source: Charles Schwab, Bloomberg as of 12/31/2024. Value/growth factor performance is based on Bloomberg pure factor indexes. Value factor attempts to differentiate "rich" and "cheap" stocks. Growth factor aims to capture companies' historical and forward-looking growth. Ten-year generic U.S. Treasury rate. Indexes are unmanaged, do not incur management fees, costs, and expenses, and cannot be invested in directly. Investing involves risk, including loss of principal. **Past performance is no guarantee of future results.**

Global equity valuations

International equity valuations are less expensive than U.S. valuations, both currently and historically. However, China's sluggish growth has weighed on emerging market valuations.

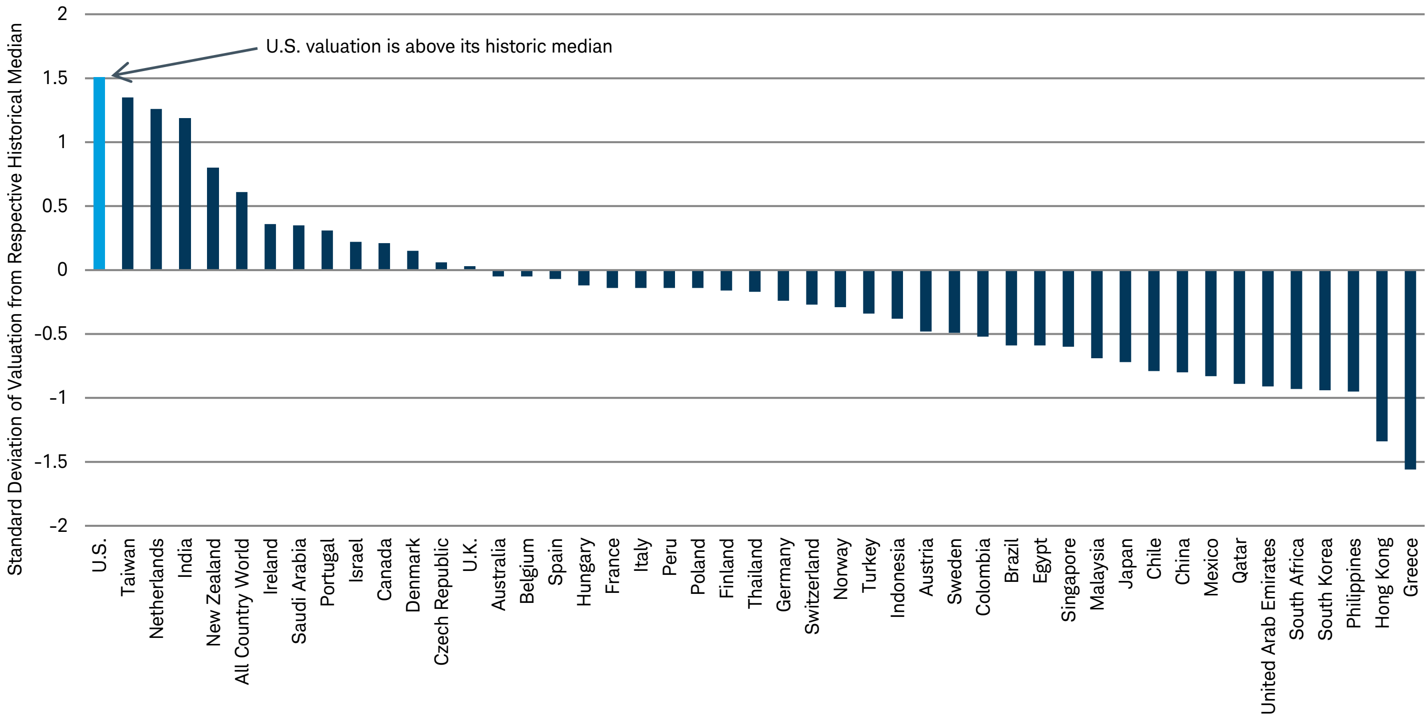


	P/E ratio	15-Year Avg.
S&P 500	21.7	16.7
MSCI EAFE	14.0	13.8
% of S&P 500	*65%*	*82%*
MSCI EM	11.8	11.4
% of S&P 500	*54%*	*68%*

Source: Bloomberg, the Schwab Center for Financial Research as of 12/31/2024. Indexes are unmanaged, do not incur management fees, costs, and expenses, and cannot be invested in directly. Investing involves risk, including loss of principal. **Past performance is no guarantee of future results.**

Comparing valuations around the globe

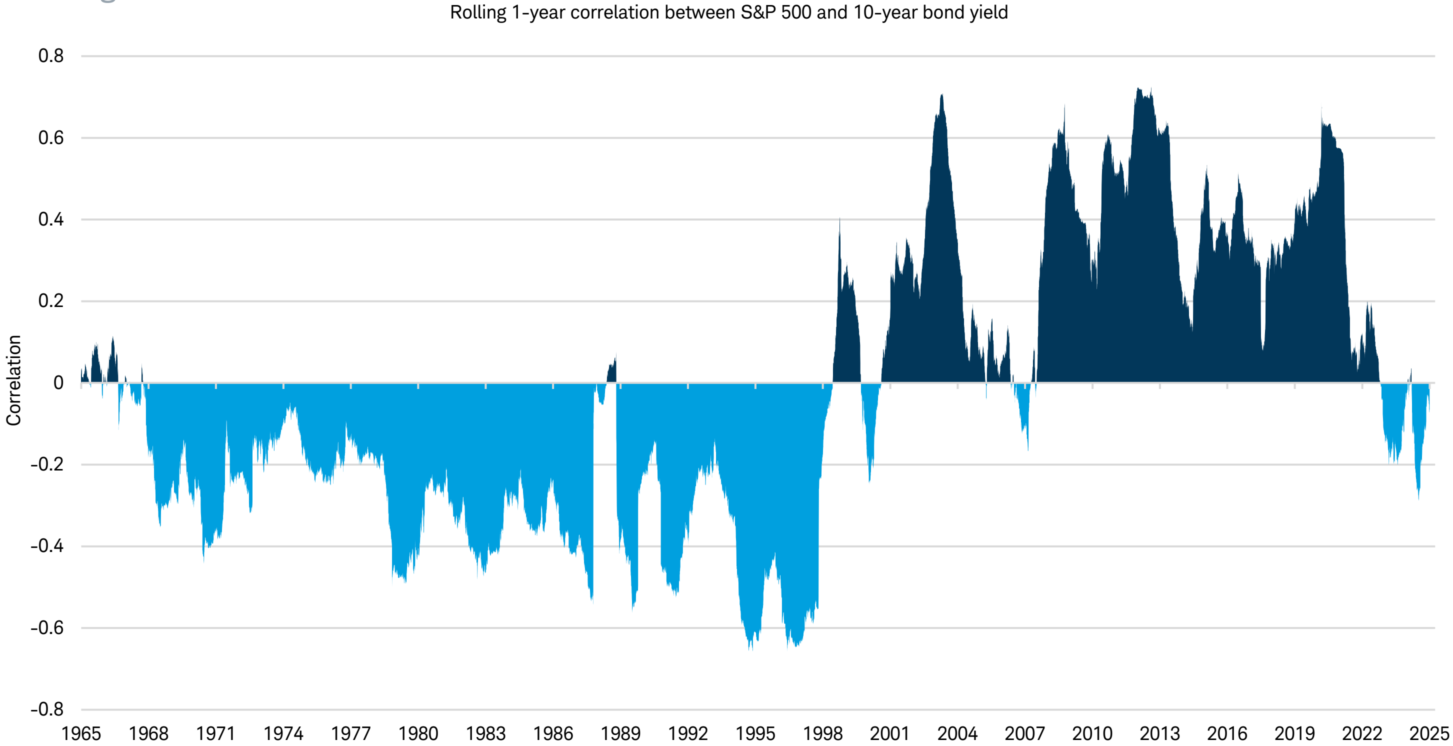
In this alternative metric, the cyclically adjusted measure of valuations is based on long-term earnings. Many markets have more attractive valuations than the U.S. market. This helps support the case for global diversification.



Source: Ned Davis Research. Data as of 12/31/2024. Chart shows the number of standard deviations each market's valuation currently is from its historical median. A value above zero indicates the market is above its historical valuation, and a value below zero indicates a market is below its historical valuation. Valuation is measured by the Cyclically Adjusted Price/Earnings (P/E). Cyclically Adjusted P/E = MSCI Country Price Index/10-Year average earnings per share (inflation adjusted). Median based on 1980-present period, based on data availability. All countries shown above are represented by their respective MSCI index. Investing involves risk, including loss of principal. Diversification strategies do not ensure a profit and do not protect against losses in declining markets. These countries named are for informational purposes only and are not to be construed as a recommendation. For illustrative purposes only.

Stock market and bond yields

The correlation between changes in bond yields and stock prices remains in negative territory—painting a similar backdrop to what was considered normal from the mid-1960s to the mid-1990s, although not as extreme.



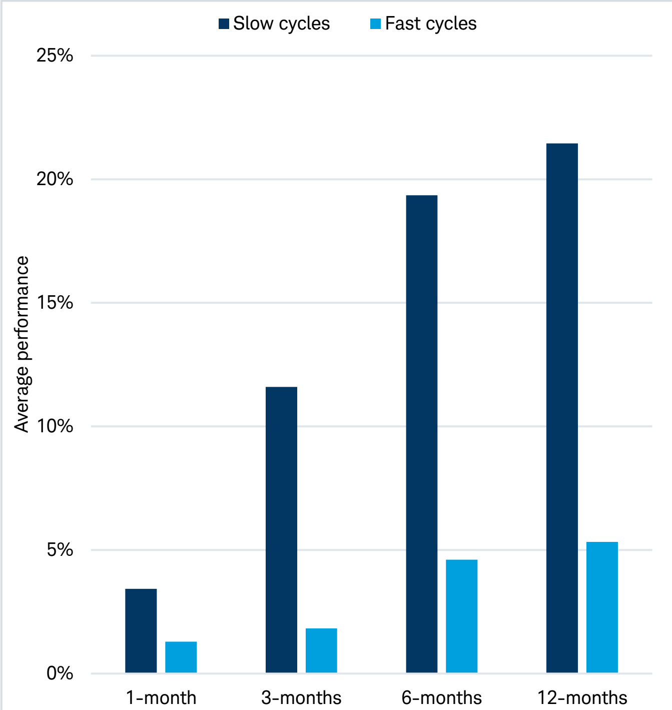
Source: Charles Schwab, Bloomberg as of 12/31/2024. Treasury yield is represented by the U.S. Generic 10-year Treasury Yield (USGG10YR INDEX). Diversification strategies do not ensure a profit and do not protect against losses in declining markets. Investing involves risk, including loss of principal. Indexes are unmanaged, do not incur management fees, costs and expenses, and cannot be invested in directly. For illustrative purposes only. **Past performance is no guarantee of future results.**

Rate cut cycle

Historically, the S&P 500 tends to experience less downside when the Fed is engaged in a slow rate-cutting cycle. Fast rate-cutting cycles are typically associated with recessions and bear markets.

S&P 500 performance following first rate cut

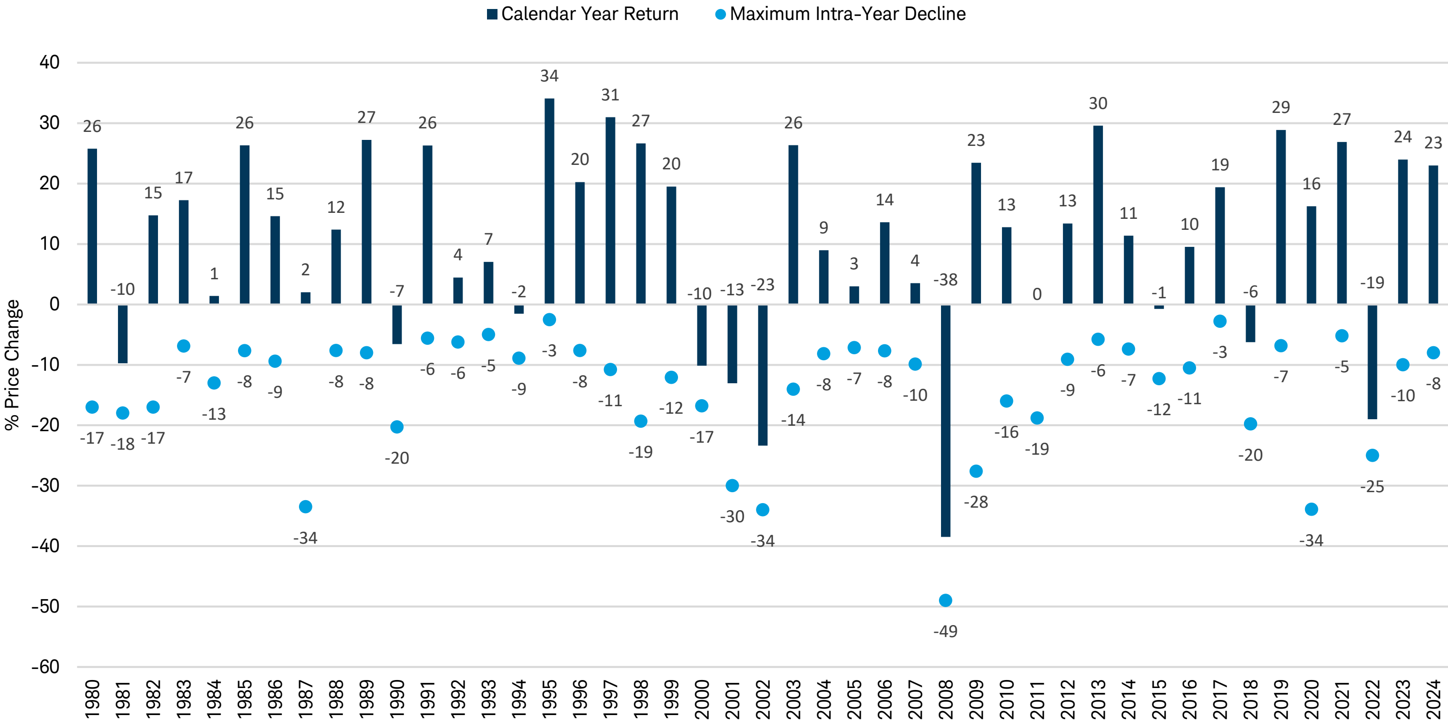
First rate cut	Fast or slow cycle	1-month	3-months	6-months	12-months
11/19/1971	Slow	9.44%	14.92%	18.96%	26.07%
12/9/1974	Fast	8.49%	28.51%	39.04%	33.08%
5/30/1980	Slow	2.70%	10.01%	26.32%	19.19%
11/2/1981	Fast	0.39%	-4.98%	-6.25%	10.70%
11/21/1984	Slow	0.60%	9.52%	15.27%	22.42%
6/6/1989	Fast	-0.83%	7.71%	7.50%	12.56%
7/6/1995	Slow	0.89%	5.14%	11.32%	18.67%
9/29/1998	Slow	3.52%	18.38%	24.89%	20.91%
1/3/2001	Fast	0.14%	-17.89%	-8.39%	-13.53%
9/18/2007	Fast	1.34%	-4.26%	-12.44%	-20.61%
7/31/2019	Fast	-1.81%	1.92%	8.23%	9.76%



Source: Charles Schwab, Morningstar, and Ned Davis Research as of 12/31/2024. Fast cycles are defined as 5 or more 25 basis point cuts in a 12-month period. Slow cycles are defined as less than 5 cuts within a 12-month period. Returns shown are price returns. Price return does not include the effects of reinvested cash flows. For illustrative purposes only. Investing involves risk, including loss of principal. **Past performance is no guarantee of future results.**

Stocks can rise despite drawdowns during the year

While we've seen large intra-year declines, annual performance has managed to be positive most of the time, with two of the three biggest intra-year drawdowns accompanying yearly gains in 1987 and 2020.



Source: Schwab Center for Financial Research with data provided by Morningstar, Inc. Data as of 12/31/2024. Shown in the chart are annual price returns for the S&P 500 Index and do not include reinvestment of dividends, interest, or the effects of taxes. Intra-year declines are the largest stock market drops during the year, representing a peak-to-trough change in index value. The annual return for 2011 was -0.32%. Indexes are unmanaged, do not incur management fees, costs, and expenses, and cannot be invested in directly. Investing involves risk, including loss of principal. **Past performance is no guarantee of future results.**

Income index returns

Total returns of income-generating investments as of 12/31/2024

Core Bonds					
	3-month	1-year	3-year	5-year	10-year
Bloomberg U.S. Aggregate	-3.1%	1.3%	-2.4%	-0.3%	1.3%
Treasuries	-3.2%	0.7%	-2.9%	-0.7%	0.8%
Municipal Bonds	-1.2%	1.1%	-0.6%	1.0%	2.3%
Mortgage Backed	-3.2%	1.2%	-2.1%	-0.7%	0.9%
Agency Bonds	-1.1%	3.2%	0.0%	0.8%	1.6%
Investment Grade Corporate	-2.8%	2.8%	-2.0%	0.5%	2.5%
Commercial Mortgage Backed	-1.4%	5.0%	-0.5%	1.0%	2.2%
Asset Backed	-0.1%	5.0%	2.0%	2.0%	2.1%
Aggressive Income					
High-Yield Bonds	0.2%	8.2%	2.9%	4.2%	5.2%
Bank Loans	2.3%	9.0%	7.0%	5.9%	5.1%
Preferred Stock	-2.6%	9.2%	-0.3%	2.7%	4.2%
Convertible Bonds	2.6%	10.1%	0.3%	9.9%	9.6%

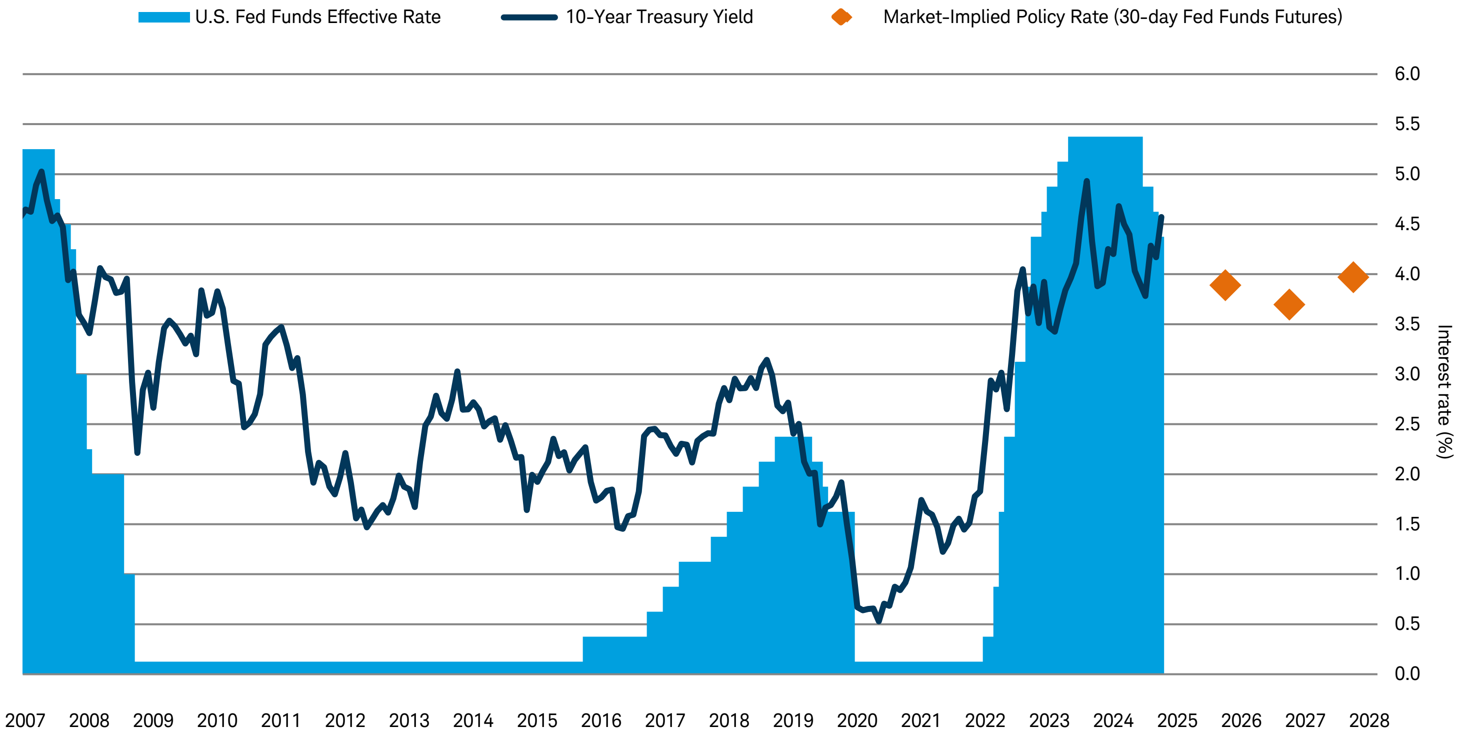
International					
	3-month	1-year	3-year	5-year	10-year
International Treasuries	-8.0%	-6.0%	-7.0%	-4.1%	-1.2%
International Investment Grade	-4.2%	0.7%	-3.0%	-0.5%	1.3%
Emerging Market Bonds (USD)	-2.3%	6.2%	-1.3%	-0.1%	3.0%
Emerging Market Bonds (Local)	-6.7%	-2.4%	-0.9%	-1.8%	0.1%
Dividend Equity					
U.S. Dividend Stocks	-2.2%	11.7%	4.2%	11.1%	11.1%

Returns are annualized for periods over one year.

Source: Bloomberg. Indexes are unmanaged, do not incur management fees, costs and expenses, and cannot be invested in directly. Returns assume reinvestment of dividends and interest. Indexes are: Bloomberg U.S. Agg Total Return (U.S. Aggregate Bond), ICE U.S. Treasury Core Bond Total Return (Treasuries), Bloomberg Municipal Index (Municipal Bonds), Bloomberg U.S. MBS Index (Mortgage Backed), Bloomberg U.S. Aggregate Agency Bond Index (Agency Bonds), ICE BofA U.S. Corporate Index (Investment Grade Corporate), Bloomberg CMBS Investment Grade Total Return Index Value Unhedged USD (Commercial Mortgage Backed), Bloomberg U.S. Agg ABS Total Return Value Unhedged USD (Asset Backed), Bloomberg U.S. Corporate High Yield Bond (High Yield Bonds), Morningstar LSTA Leveraged Loan Total Return Index (Bank Loans), S&P U.S. Preferred Stock Total Return Index (Preferred Stock), Bloomberg U.S. Convertibles Liquid Bond Index TR Unhedged USD (Convertible Bonds), Bloomberg Global Treasury ex-U.S. Capped TR Index Value Unhedged USD (International Treasuries), Bloomberg Global Agg Credit Total Return Index Value Unhedged USD (International Investment Grade), J.P. Morgan EMBI Index (Emerging Market Bonds [USD]) J.P. Morgan GBI-EM Index (Emerging Market Bonds [Local]), Dow Jones U.S. Dividend 100 Total Return Index (U.S. Dividend Stocks). Investing involves risk, including loss of principal. **Past performance is no guarantee of future results.** For illustrative purposes only. See additional information on the disclosures page.

Federal funds rate path

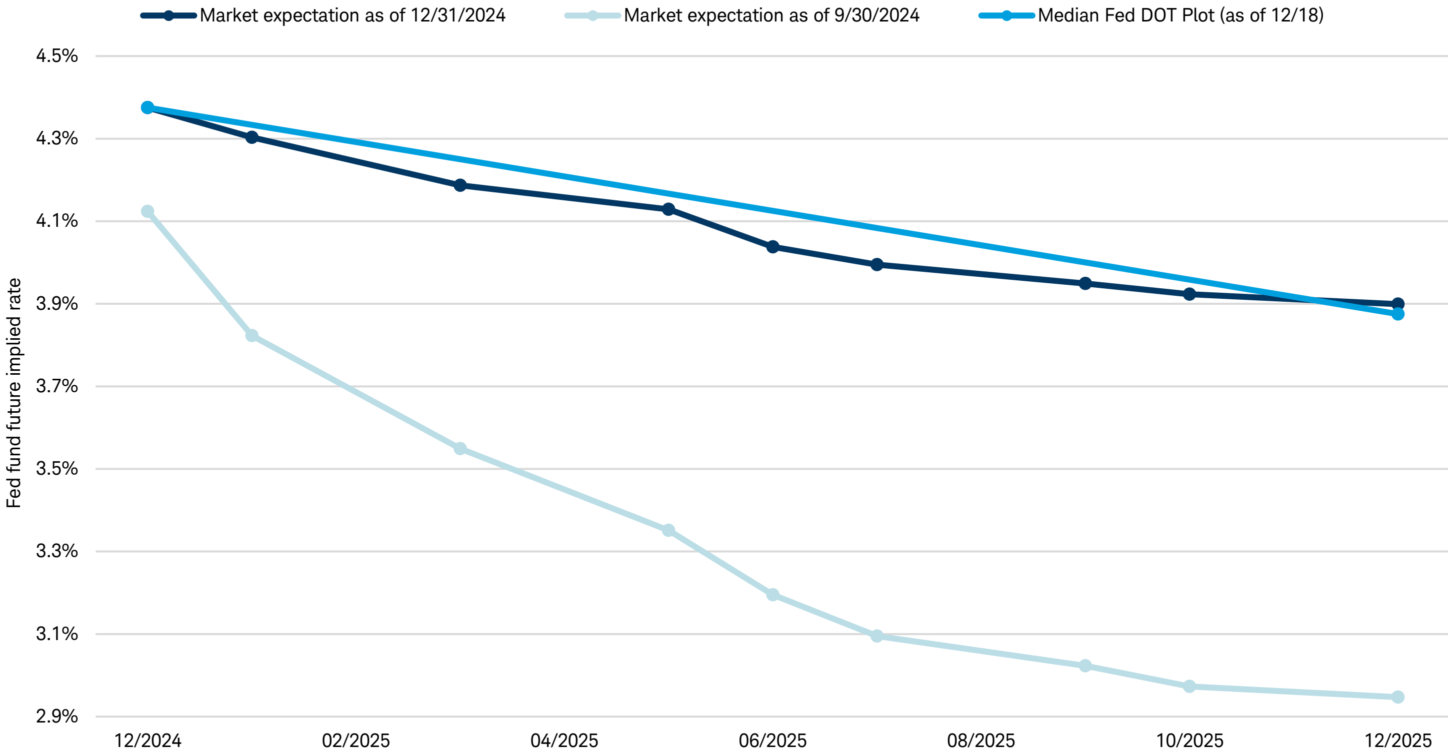
FOMC projections suggest additional interest rate cuts in 2025 and 2026, but the pace and magnitude of the cuts will likely slow as inflation remains above target.



Source: Bloomberg as of 12/31/2024. Market-implied policy rates for 12/2025, 12/2026 and 12/2027. For illustrative purposes only. Futures and futures options trading involves substantial risk and is not suitable for all investors. Please read the Risk Disclosure Statement for Futures and Options [https://www.schwab.com/Futures_RiskDisclosure] prior to trading futures products.
Past performance is no guarantee of future results.

Market expectations on rate cuts

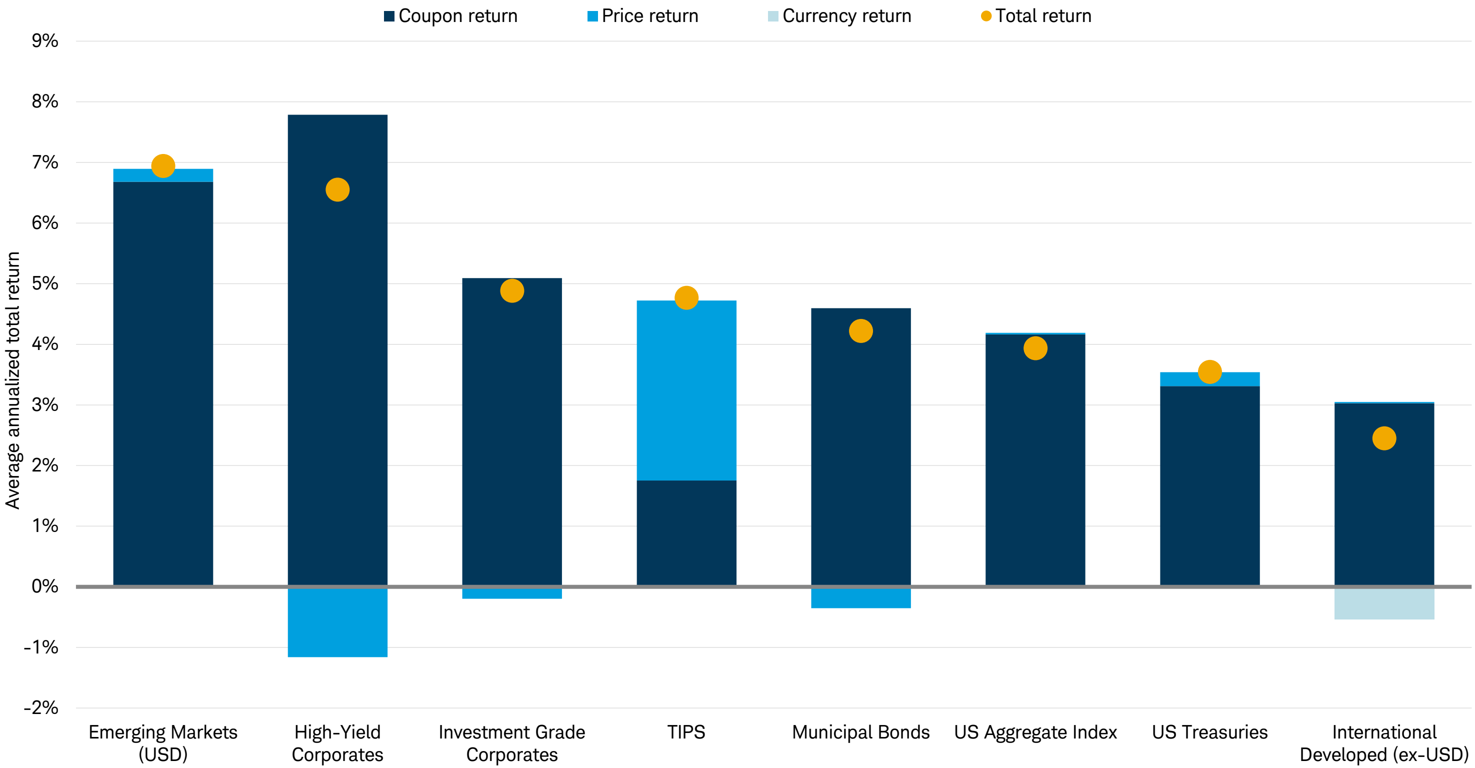
Both the market and Fed officials have revised their expectations for the number of Fed rate cuts in the coming years. At the end of the fourth quarter, the Fed funds futures market was implying just one or two rate cuts during 2025; at the end of the third quarter, it was implying 5 or 6 additional rate cuts.



Source: Bloomberg, Federal Reserve as of 12/31/2024. Market-implied policy rates. For illustrative purposes only. Futures and futures options trading involves substantial risk and is not suitable for all investors. Please read the Risk Disclosure Statement for Futures and Options [https://www.schwab.com/Futures_RiskDisclosure] prior to trading futures products. Basis points ("BPS") – one basis point is equal to one one-hundredth of one percent. **Past performance is no guarantee of future results.**

Components of bond total returns

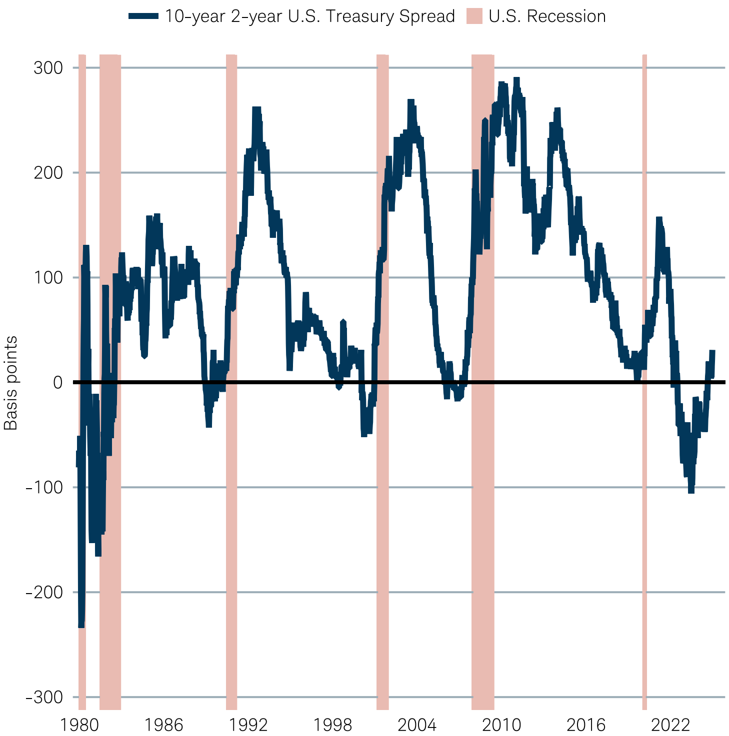
Coupon payments have been the key driver of most bond total returns over time. Buy-and-hold investors, or investors with long investing horizons, should consider the high yields that bonds offer.

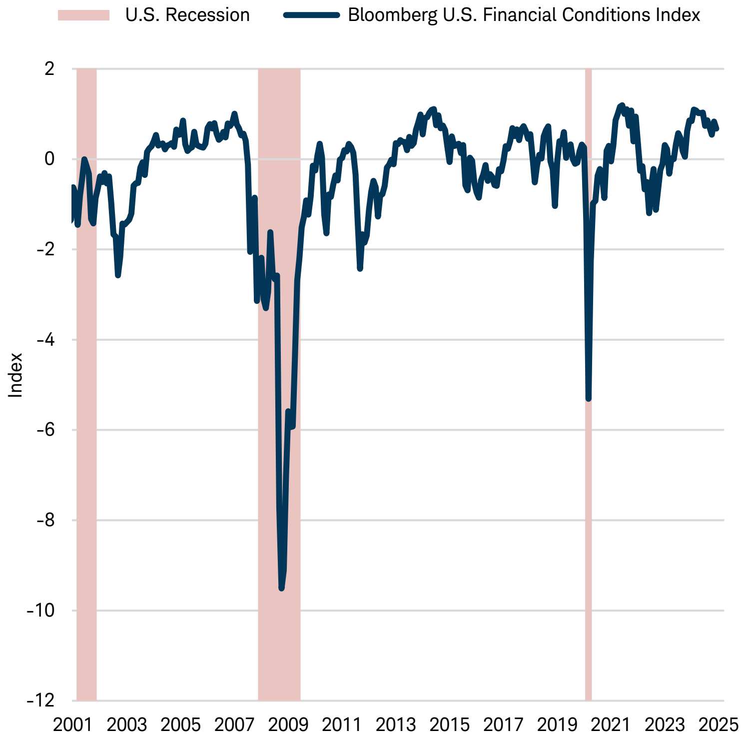


Source: Charles Schwab, Bloomberg. Total return date range 1/31/2000 to 12/31/2024. Indexes represented are: Emerging Markets (USD) = Bloomberg Emerging Market USD Aggregate Index; High-Yield Corporates = Bloomberg U.S. Corporate High-Yield Bond Index; Investment Grade Corporates = Bloomberg U.S. Corporate Bond Index; TIPS = Bloomberg US Treasury Inflation Linked Bond Index; Municipal Bonds = Bloomberg U.S. Municipal Bond Index; US Aggregate Index = Bloomberg US Aggregate Bond Index; US Treasuries = Bloomberg U.S. Treasury Index; International Developed (ex-USD) = Bloomberg Global Aggregate ex-USD Index. Indexes are unmanaged, do not incur management fees, costs and expenses, and cannot be invested in directly. **Past performance is no guarantee of future results.**

Yield curve slope and recessions

The spread between the 2-year and 10-year Treasury yields continued to steepen in the fourth quarter. We expect that trend to continue as the Fed cuts rates, with short-term yields declining more than longer-term yields.

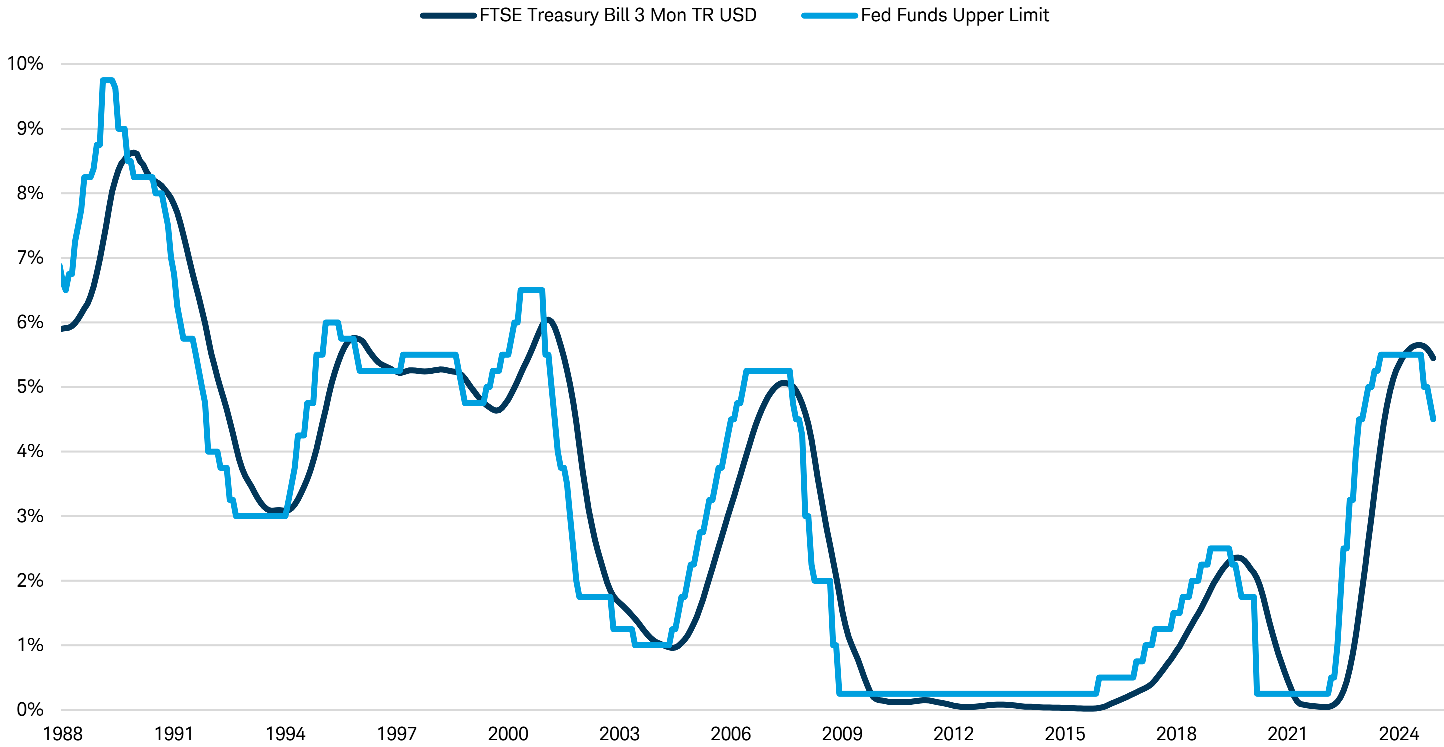




Bars represent National Bureau of Economic Research defined recession periods.
Source: Charles Schwab, Bloomberg, and Macrobond as of 12/31/2024. Schwab does not recommend the use of technical analysis as a sole means of investment research. Investing involves risk, including loss of principal. **Past performance is no guarantee of future results**. Basis points ("BPS") – one basis point is equal to one one-hundredth of one percent. Bloomberg Financial Conditions Index is a measure of the overall level of financial stress in the U.S. money, bond, and equity markets to help assess the availability and cost of credit. A positive value indicates accommodative financial conditions, while a negative value indicates tighter financial conditions.

Cash and interest rates

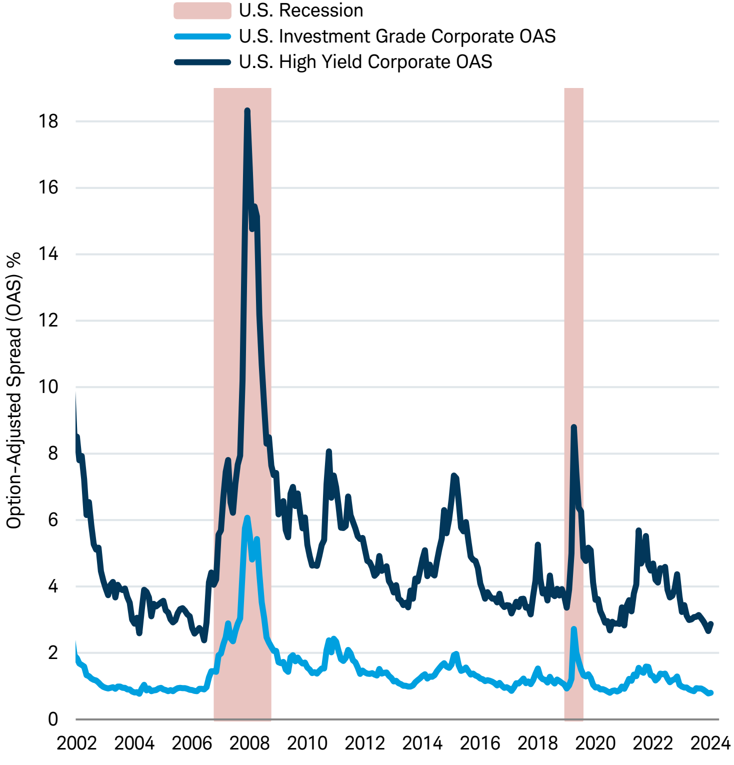
Reinvestment risk is here. We expect yields for short-term investments, like cash and cash alternatives, to decline as the Fed cuts rates. Investors with large cash allocations should consider adding some intermediate-term bonds to lock in yields rather than risk earning lower yields later.

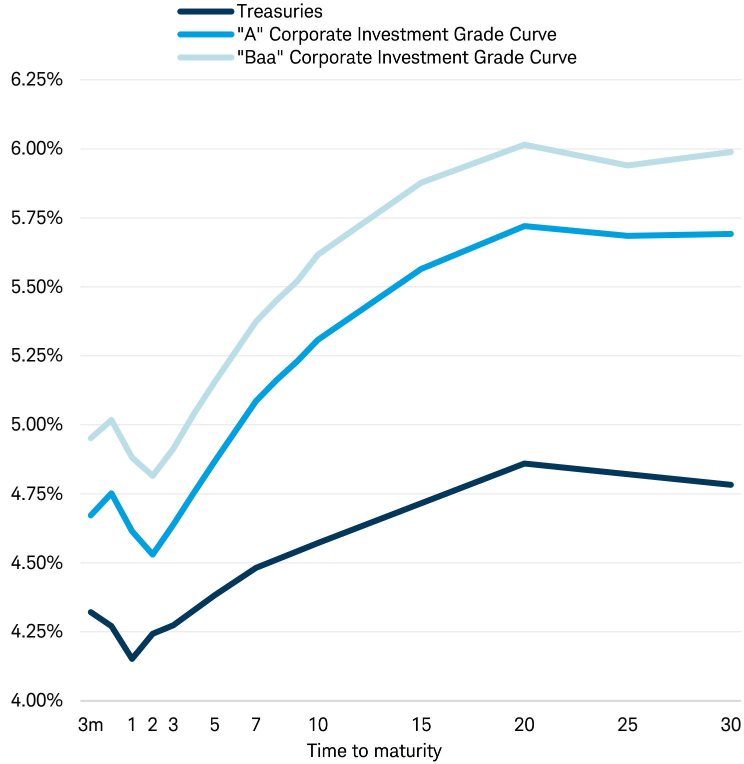


Source: Charles Schwab, Bloomberg, Morningstar, Inc. as of 12/31/2024. Total returns include the reinvestment of dividends, interest, and other cash flows. Indexes are unmanaged, do not incur management fees, costs, and expenses and cannot be invested in directly. For illustrative purposes only. **Past performance is no guarantee of future results**. The information here is for general informational purposes only and should not be considered an individualized recommendation or personalized investment advice. The type of securities and investment strategies mentioned may not be suitable for everyone. Each investor needs to review a security transaction for his or her own particular situation.

Corporate bond spreads

Bond spreads represent the extra yield that corporate bonds offer above comparable Treasury yields. Spreads fell in the fourth quarter, touching multiyear lows as the economy proved resilient. Corporate bond curves are more positively-sloped than the Treasury curve.

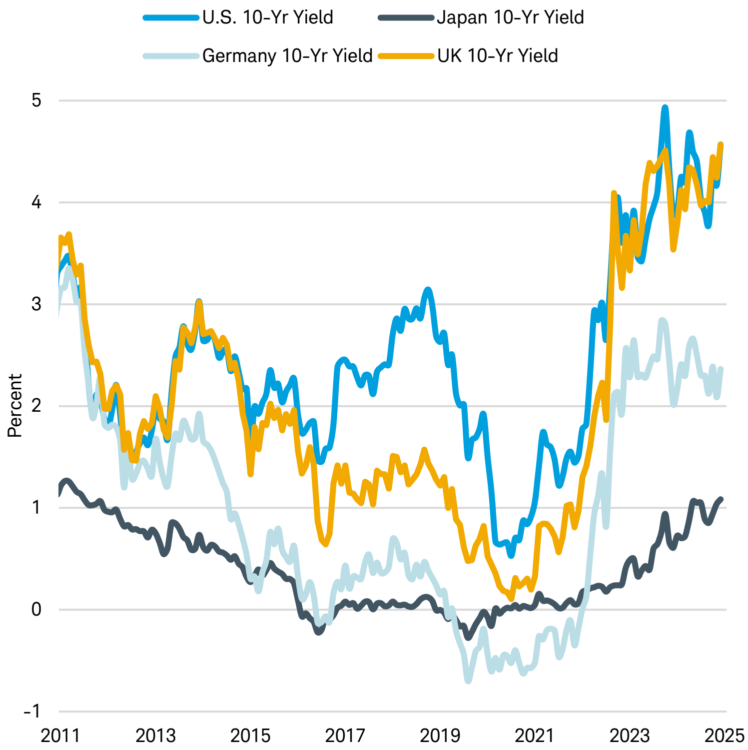


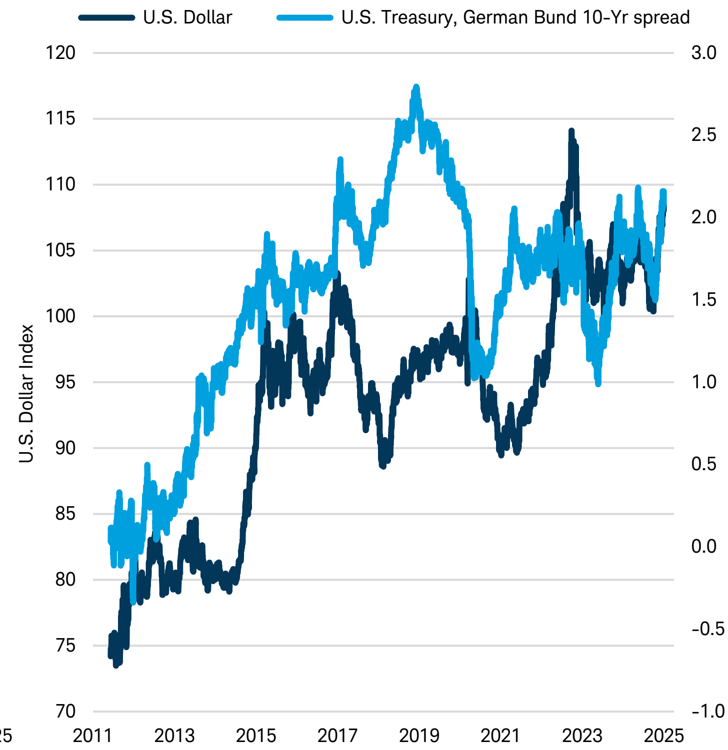


Bars represent National Bureau of Economic Research defined recession periods.
Source: Charles Schwab, Bloomberg as of 12/31/2024. Option-adjusted spreads (OAS) are quoted as a fixed spread, or differential, over U.S. Treasury issues. OAS is a method used in calculating the relative value of a fixed income security containing an embedded option, such as a borrower's option to prepay a loan. Investing involves risk, including loss of principal. **Past performance is no guarantee of future results.**

Global yields

Interest rate differentials can influence the value of currencies. Yields in the U.S. are higher than most other developed market government bond yields, and that gap widened in the fourth quarter.

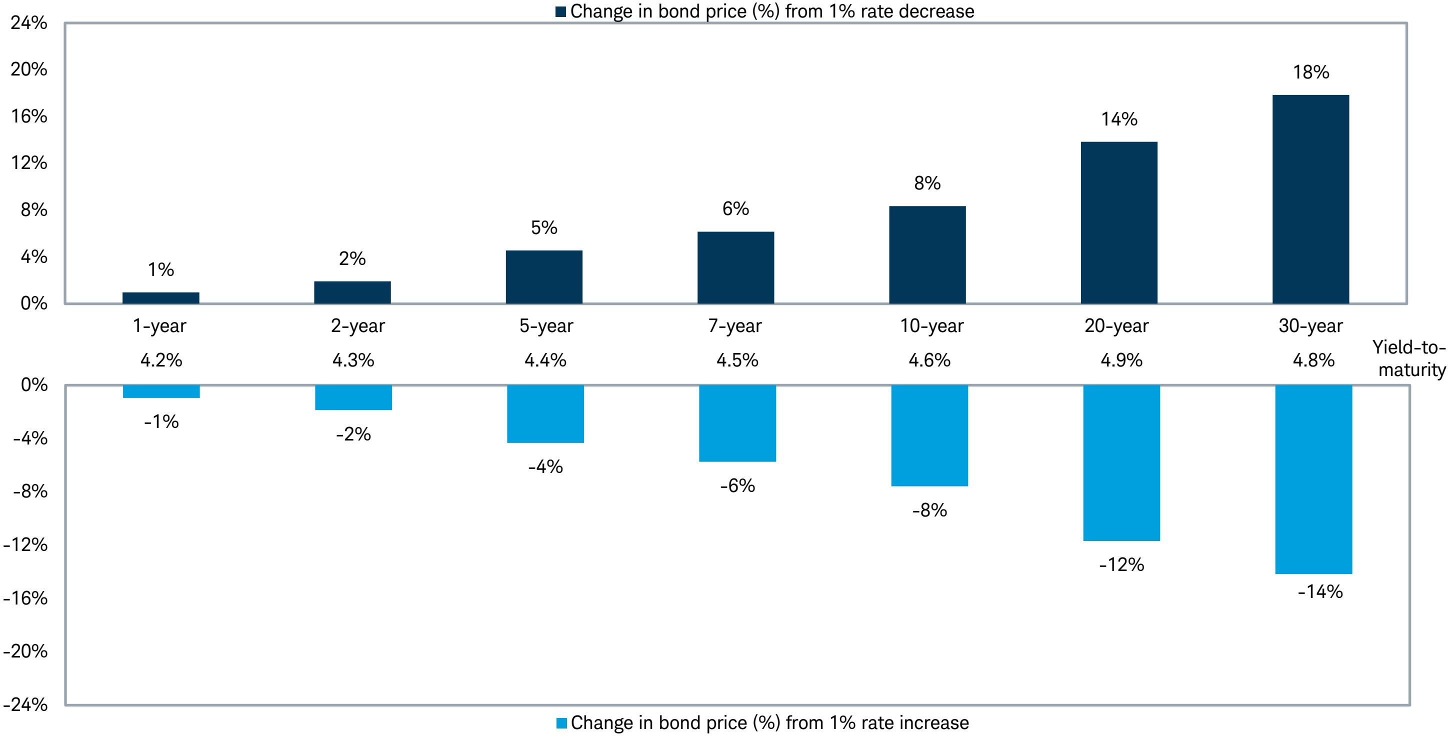




Source: Charles Schwab, Bloomberg as of 12/31/2024. Spread shown in the right chart is the 10-Yr Treasury yield minus the 10-Yr German Bund yield. Currencies are speculative, very volatile and are not suitable for all investors. **Past performance is no guarantee of future results.**

Interest rates and bond prices

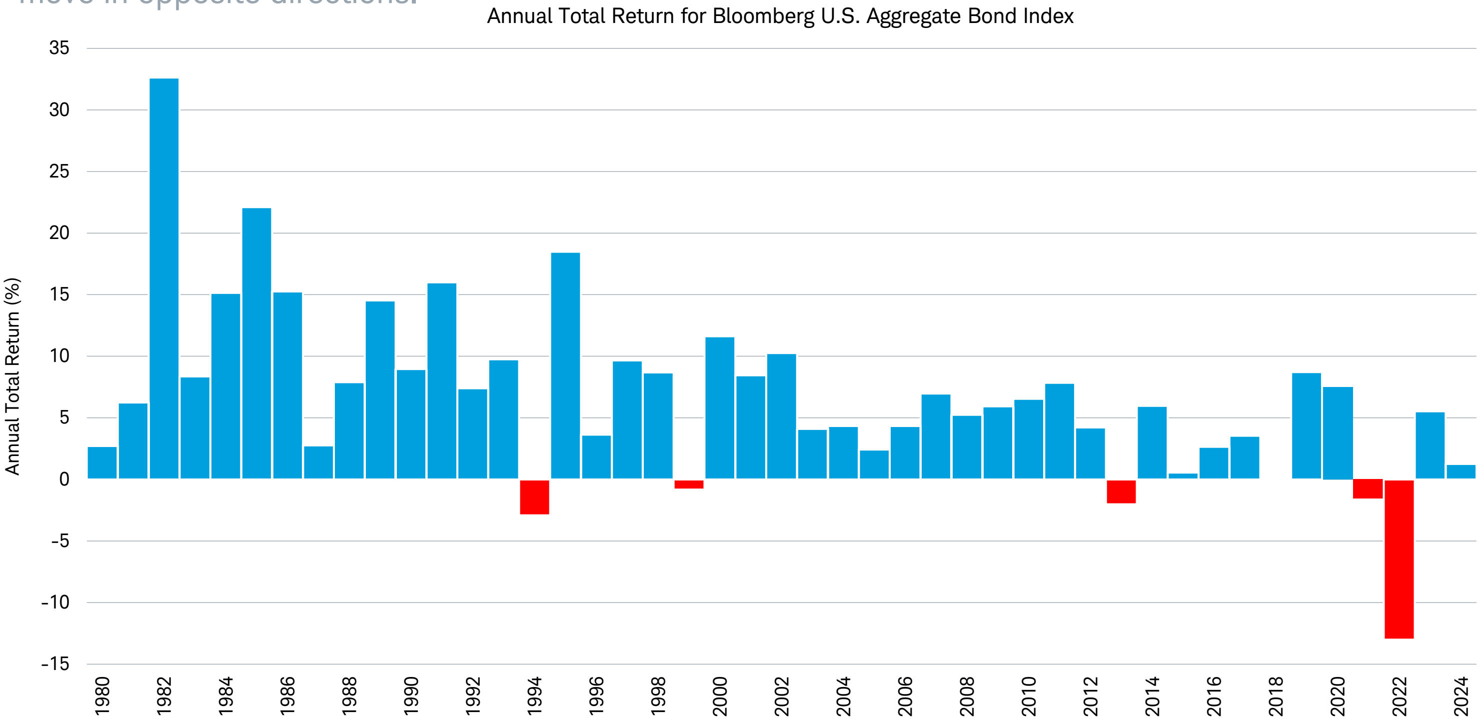
Bond prices and yields move in opposite directions, and the magnitude of the price change generally depends on the bond's maturity. Long-term bonds tend to be the most sensitive to yield changes.



Source: Charles Schwab and Federal Reserve, using yields as of 12/31/2024. Yield-to-maturity is based on the daily Treasury par yield curve for each maturity shown. This chart assumes a "parallel" upward and downward shift in yields from current rates by 1%. There is no single interest rate, and a rise in the short-term Fed Funds rate does not always result in a corresponding rise in longer-term Treasury rates. Investing involves risk, including loss of principal. For illustrative purposes only. **Past performance is no guarantee of future results.**

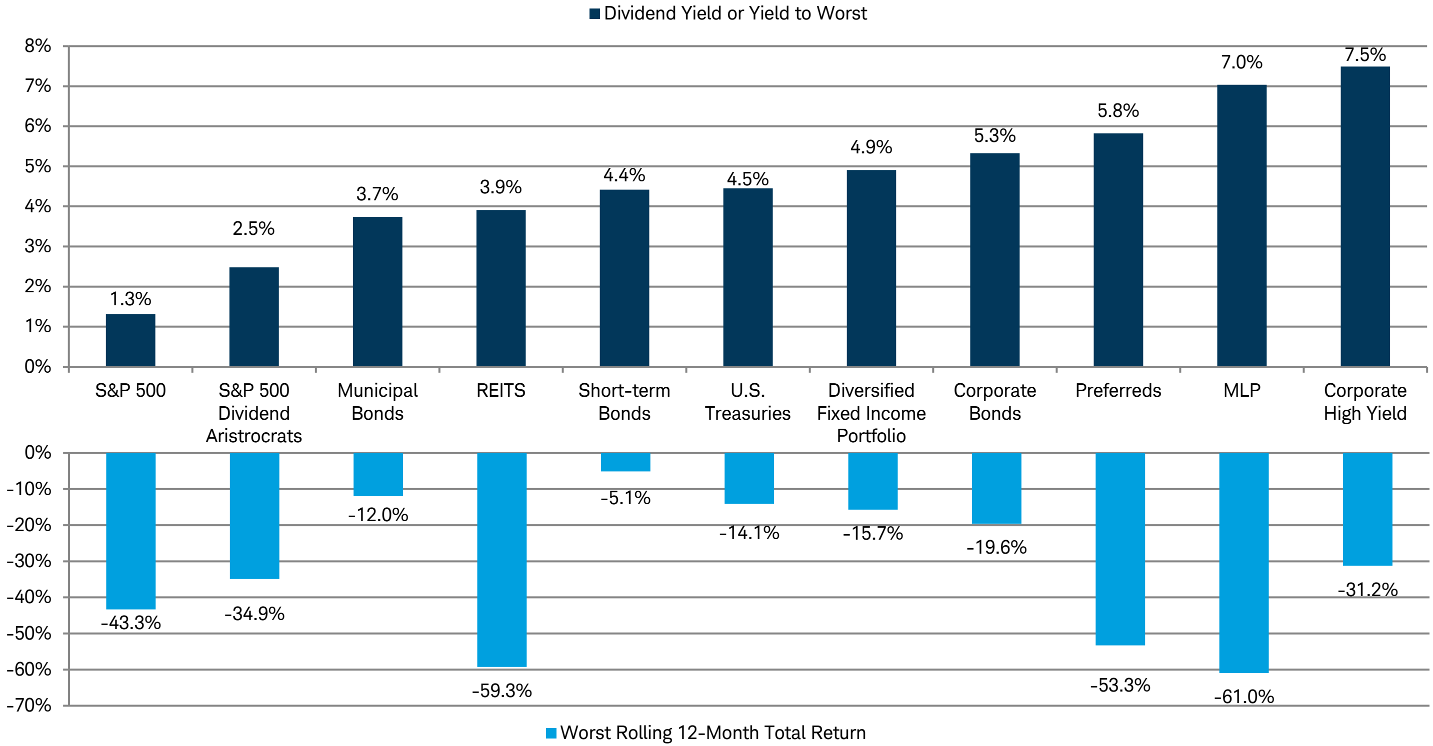
Negative returns have been uncommon in a diversified bond portfolio

After the worst year in the U.S. Aggregate's history, total returns were positive in 2023. The index posted another gain in 2024, but the rise in yields weighed on performance, as bond prices and yields move in opposite directions.



Source: Bloomberg as of 12/31/2024. Shown in the chart are annual total returns including price change and income for the Bloomberg U.S. Aggregate Bond Index. Returns include reinvestment of interest. Indexes are unmanaged, do not incur management fees, costs, and expenses, and cannot be invested in directly. Investing involves risk, including loss of principal. **Past performance is no guarantee of future results. Diversification strategies do not ensure a profit and do not protect against losses in declining markets.**

Higher yields usually come with higher risks



Diversified Fixed Income Portfolio is represented by the Bloomberg U.S. Aggregate Bond Index. Dividend yield on the S&P 500 Index (S&P 500), S&P 500 Dividend Aristocrats Index (S&P 500 Dividend Aristocrats), S&P U.S. REIT Index (REITs), and Alerian MLP Index (MLPs). Yield to worst on the Bloomberg U.S. Aggregate Bond Index (Diversified Fixed Income Portfolio), Bloomberg U.S. Aggregate 1-3 Year Index (Short-term Bonds), BofA Fixed Rate Preferred Securities Index (Preferreds), Bloomberg U.S. Corporate High Yield Index (Corporate High Yield), Bloomberg U.S. Treasury Index (U.S. Treasuries), Bloomberg Municipal Bond Index (Municipal Bonds), and Bloomberg Corporate Bond Index (Corporate Bonds). Indexes are unmanaged, do not incur management fees, costs, and expenses, and cannot be invested in directly. Investing involves risk, including loss of principal.

Source: Dividend yield or yield to worst data obtained from Bloomberg as of 12/31/2024. Worst rolling 12-month total returns are from 12/31/1999 to 12/31/2024 using monthly data. Returns assume reinvestment of dividends and interest. **For illustrative purposes only. Past performance is no guarantee of future results.**

Municipal bond index returns and yields

Data as of 12/31/2024

Fixed Income	Total returns			
	1-month	3-month	6-month	12-month
Municipal	-1.46%	-1.22%	1.46%	1.05%
Municipal High Yield	-1.66%	-1.08%	2.09%	6.32%
Taxable Municipal	-2.46%	-3.57%	1.65%	1.57%
By Maturity				
1 Year (1-2)	-0.02%	0.12%	1.76%	2.71%
3 Year (2-4)	-0.35%	-0.42%	1.96%	2.04%
5 Year (4-6)	-0.74%	-1.04%	1.98%	1.17%
7 Year (6-8)	-0.98%	-1.30%	1.86%	0.51%
10 Year (8-12)	-1.17%	-1.34%	1.27%	-0.33%
15 Year (12-17)	-1.72%	-1.42%	0.98%	0.79%
20 Year (17-22)	-2.01%	-1.29%	1.39%	1.36%
Long Bond (22+)	-2.49%	-1.65%	1.32%	1.40%
Quality				
Aaa	-1.57%	-1.32%	1.43%	0.33%
Aa	-1.36%	-1.18%	1.47%	0.79%
A	-1.47%	-1.19%	1.45%	1.78%
Baa	-1.94%	-1.32%	1.56%	2.87%
Municipal High Yield	-1.66%	-1.08%	2.09%	6.32%

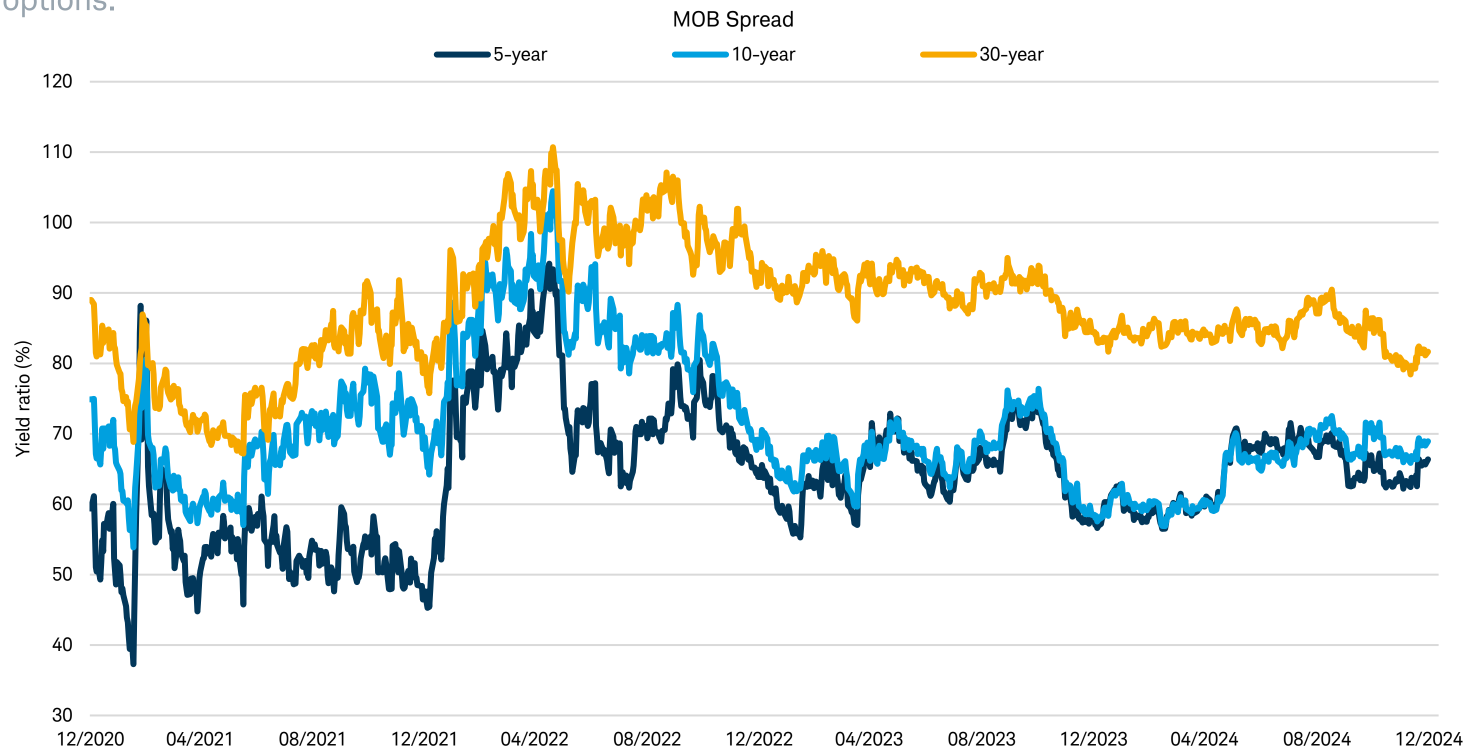
Fixed Income		Tax-equivalent yield		
	Current	CA Resident*	NY Resident†	National‡
Municipal	3.74%	8.15%	7.43%	6.90%
Municipal High Yield	5.52%	12.02%	10.95%	10.18%
Taxable Municipal	5.21%	5.21%	5.21%	5.21%
By Maturity				
1 Year (1-2)	3.17%	6.91%	6.29%	5.85%
3 Year (2-4)	3.18%	6.93%	6.31%	5.87%
5 Year (4-6)	3.29%	7.17%	6.53%	6.07%
7 Year (6-8)	3.41%	7.44%	6.78%	6.30%
10 Year (8-12)	3.53%	7.69%	7.01%	6.51%
15 Year (12-17)	3.84%	8.37%	7.62%	7.09%
20 Year (17-22)	4.15%	9.04%	8.24%	7.65%
Long Bond (22+)	4.32%	9.42%	8.58%	7.97%
Quality				
Aaa	3.60%	7.83%	7.14%	6.63%
Aa	3.61%	7.86%	7.16%	6.65%
A	3.99%	8.69%	7.92%	7.36%
Baa	4.49%	9.77%	8.90%	8.28%
Municipal High Yield	5.52%	12.02%	10.95%	10.18%

*CA assumes a 37% federal tax, 13.3% state tax, and 3.8% ACA tax
†NY assumes a 37% federal tax, 8.82% state tax, and 3.8% ACA tax
‡National assumes a 37% federal tax, 5% state tax, and 3.8% ACA tax

Source: Charles Schwab, Bloomberg. Yields do not include a local tax. Indexes shown are variations of the Bloomberg U.S. Municipal Bond Index. Indexes are unmanaged, do not incur management fees, costs, and expenses, and cannot be invested in directly. Tax-exempt bonds are not necessarily a suitable investment for all persons. Information related to a security's tax-exempt status (federal and in-state) is obtained from third parties and Charles Schwab & Co., Inc. does not guarantee its accuracy. Tax-exempt income may be subject to the Alternative Minimum Tax (AMT). Capital appreciation from bond funds and discounted bonds may be subject to state or local taxes. Capital gains are not exempt from federal income tax. Investing involves risk, including loss of principal. For illustrative purposes only. **Past performance is no guarantee of future results.**

Municipal bonds: Relative yields

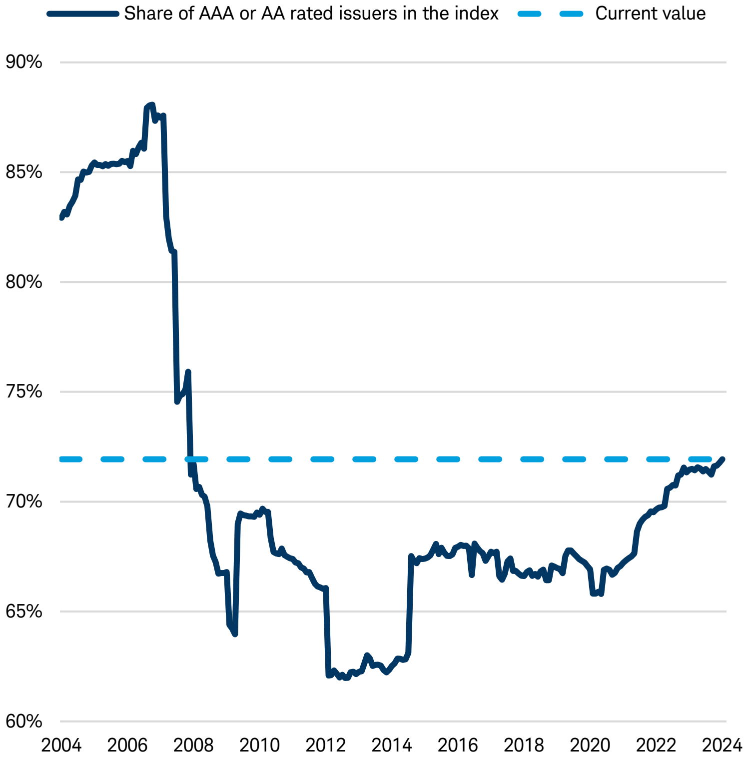
Relative to Treasuries, municipal bond yields traded in a tight range in the fourth quarter. High quality munis appear attractive for investors in higher tax brackets looking for more conservative income options.



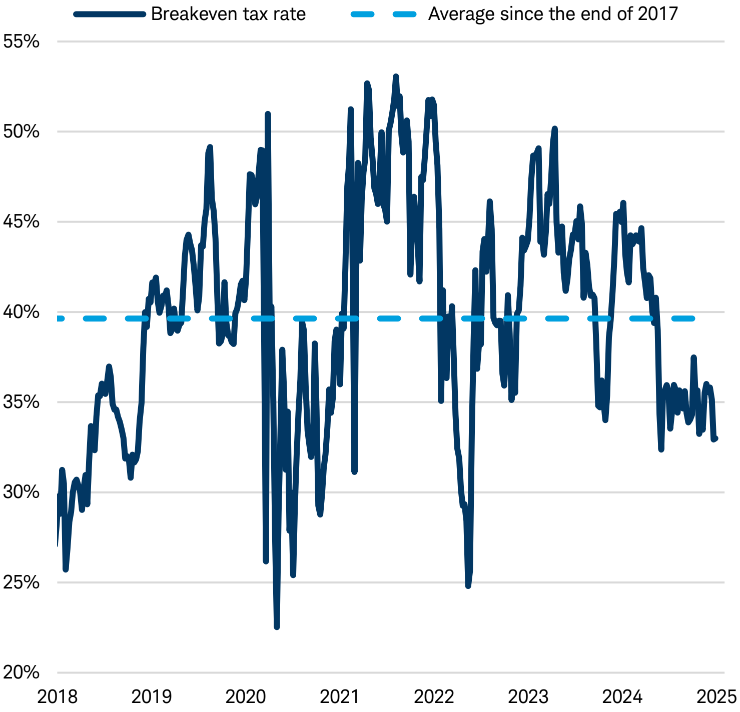
Source: Bloomberg. Daily data as of 12/31/2024. Yield ratio (municipal-over-bond spread) is the ratio of the yield of a AAA-rated municipal bond compared to the yield on a Treasury bond of a similar maturity. The information and content provided herein is general in nature and is for informational purposes only. It is not intended, and should not be construed as a specific recommendation, individualized tax, legal, or investment advice. Tax laws are subject to change, either prospectively or retroactively. Where specific advice is necessary or appropriate, individuals should contact their own professional tax and investment advisors or other professionals (CPA, Financial Planner, Investment Manager) to help answer questions about specific situations or needs prior to taking any action based upon this information. **Past performance is no guarantee of future results.** Investing involves risk, including loss of principal. For illustrative purposes only.

Municipals: Credit ratings and breakeven rate

The average credit quality of the muni market continued to improve in the fourth quarter and is now the highest since the great financial crisis. Munis look attractive relative to corporates since the tax rate that would result in the same after-tax yield is well below its longer-term average.



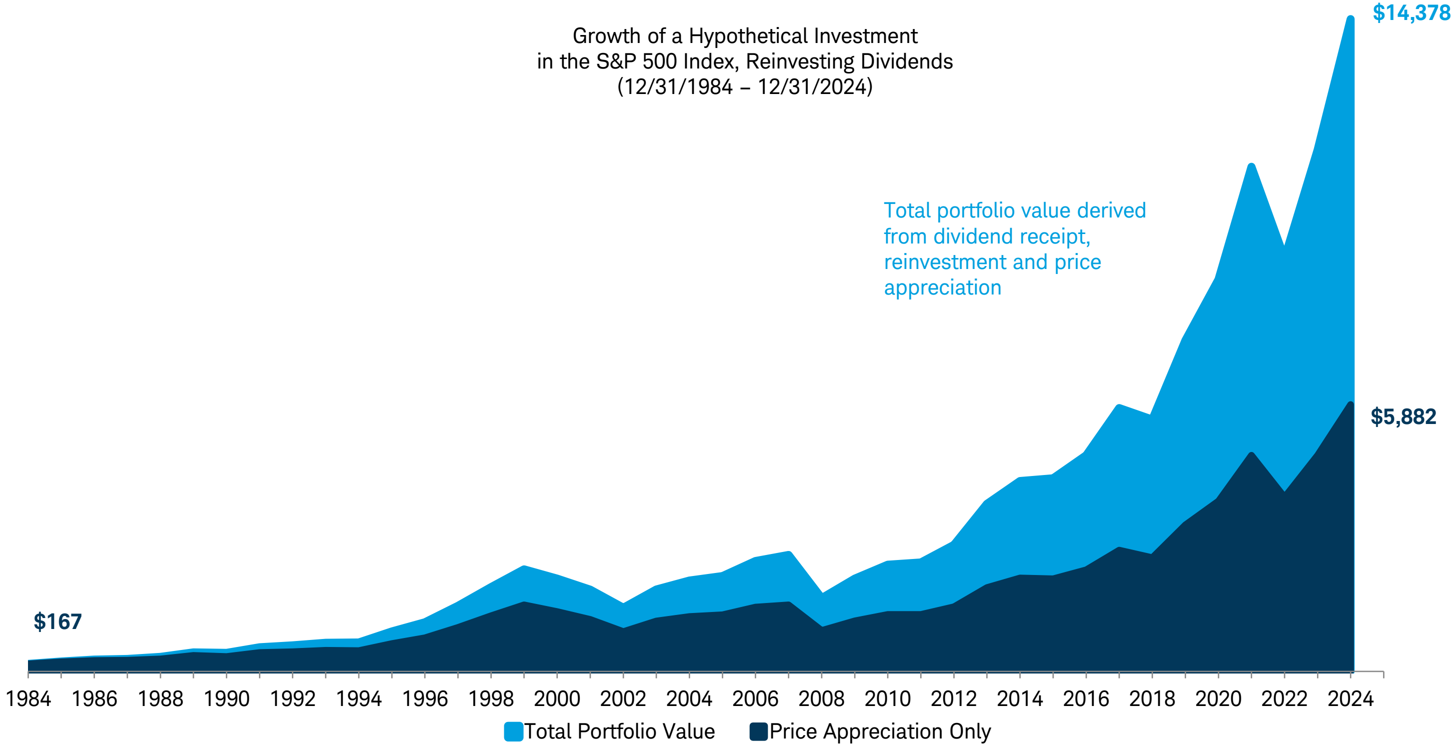
Tax rate that would result in the same after-tax yield as corporate bonds



Source: Bloomberg as of 12/31/2024. Left: Composition of the Bloomberg Municipal Bond Index, using monthly data. Right: Bloomberg Municipal Bond 7 Year (6-8) Index and Bloomberg Intermediate Corporate Bond Index, using weekly data. Indexes are unmanaged, do not incur management fees, costs, and expenses, and cannot be invested in directly. Investing involves risk, including loss of principal. **Past performance is no guarantee of future results**.

Impact of dividends on total return

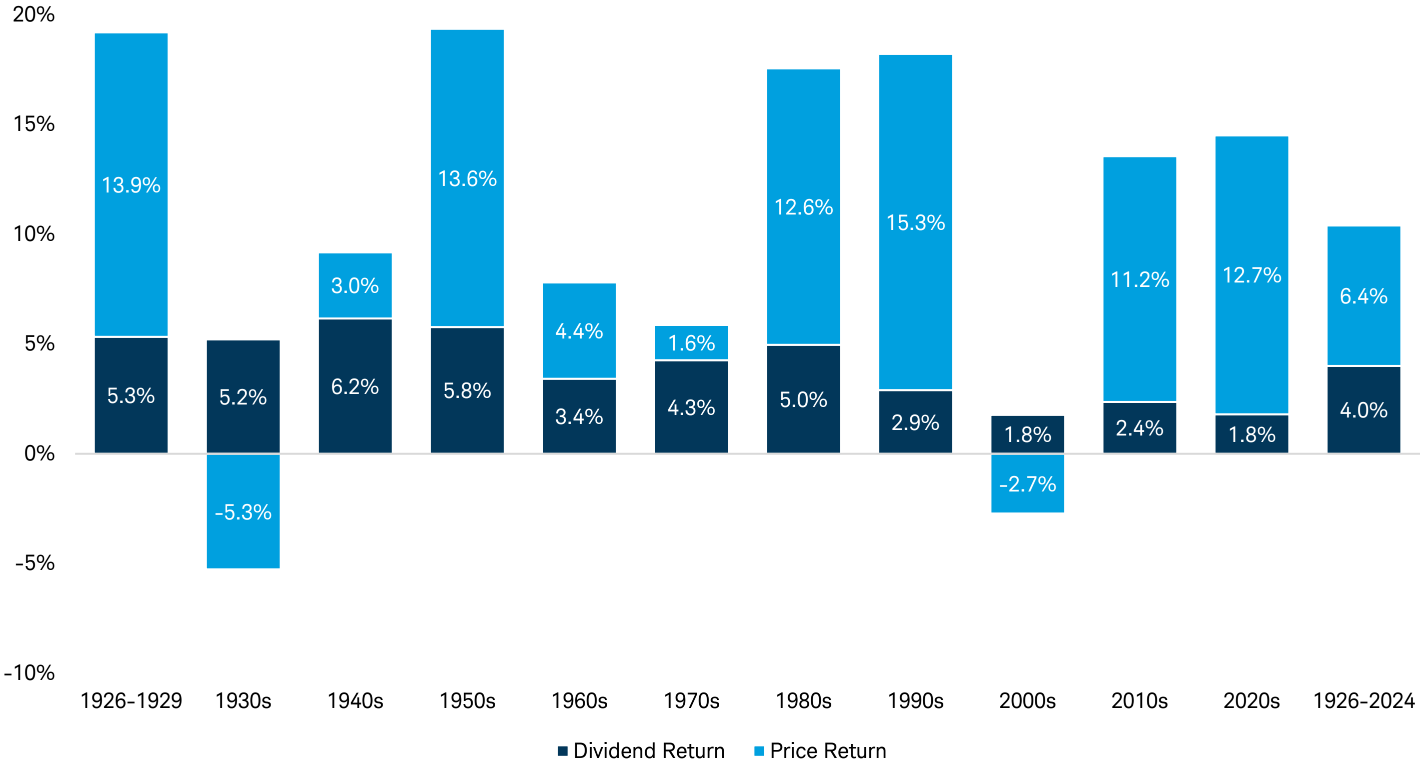
Dividend-paying stocks can be an income-generating security.



Growth of the S&P 500 Total Return Index assumes reinvestment of dividends, includes capital gains, and does not reflect the effect of taxes and fees. The $167 is the S&P 500 Index price on 12/31/1984. The example is hypothetical and provided for illustrative purposes only. It is not intended to represent a specific investment product. Source: S&P Global Indices and Bloomberg as of 12/31/2024. Indexes are unmanaged, do not incur management fees, costs and expenses, and cannot be invested in directly. Investing involves risk, including loss of principal. There are risks associated with investing in dividend paying stocks, including but not limited to the risk that stocks may reduce or stop paying dividends. **Past performance is no guarantee future results.**

Contribution of dividends to S&P 500 Index total return

From 1926–2024, dividends have been a meaningful part of total return.

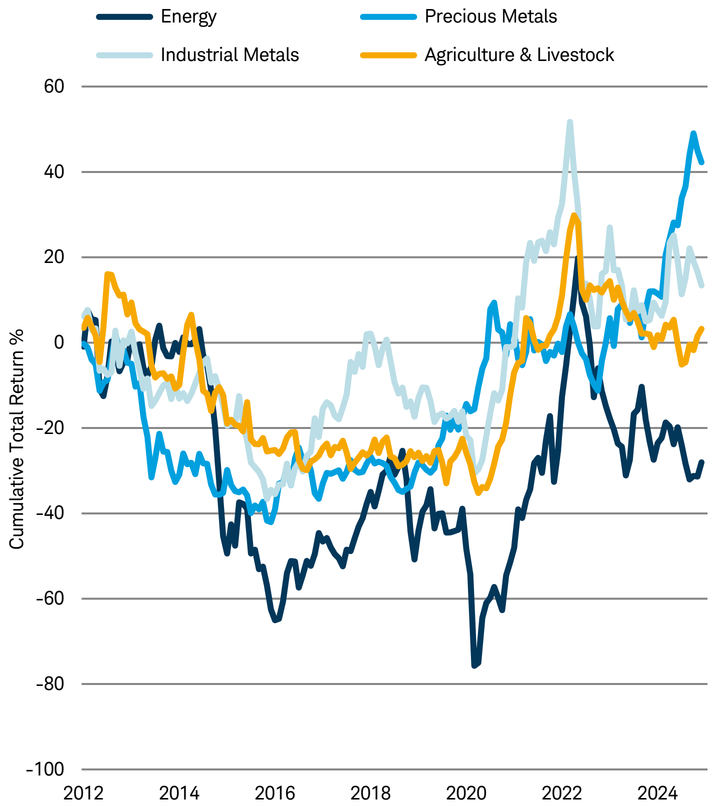


Source: 2019 Stocks, Bonds, Bills & Inflation® (SBBI®) Yearbook (1926-2018); Bloomberg (2019 - 2024). The S&P 500® Total Return Index assumes reinvestment of dividends, includes capital gains and does not reflect the effect of taxes and fees. Indexes are unmanaged, do not incur management fees, costs, and expenses, and cannot be invested in directly. Investing involves risk, including loss of principal. There are risks associated with investing in dividend paying stocks, including but not limited to the risk that stocks may reduce or stop paying dividends. For illustrative purposes only. **Past performance is no guarantee of future results.**

Commodities

Price returns as of 12/31/2024

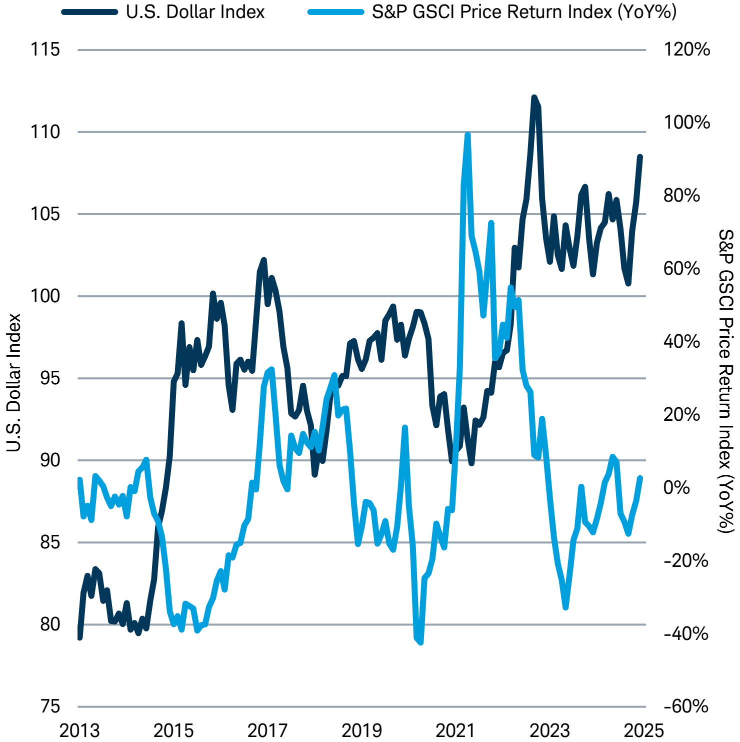
Energy						
	Price	3-month	1-year	3-year	5-year	10-year
WTI Crude Oil Futures	71.72	5.2%	0.1%	-1.6%	3.3%	3.0%
Brent Crude Oil Futures	74.64	4.0%	-3.1%	-1.4%	2.5%	2.7%
Gasoline Futures	200.15	2.0%	-4.8%	-3.5%	3.3%	3.4%
NY Harbor ULSD Futures	232.06	8.9%	-9.1%	-0.1%	2.7%	2.3%
Sulphur Gasoil Futures	695.25	4.7%	-7.4%	1.4%	2.5%	3.1%
Natural Gas Futures	3.63	24.3%	44.5%	-0.9%	10.7%	2.3%
Metals						
Gold Spot $/Oz	2,624.50	-0.4%	27.2%	12.8%	11.6%	8.3%
Silver Spot $/Oz	28.90	-7.2%	21.5%	7.4%	10.1%	6.3%
Platinum Spot $/Oz	907.55	-7.6%	-8.5%	-2.2%	-1.3%	-2.8%
Palladium Spot $/Oz	912.63	-9.0%	-17.1%	-21.8%	-14.0%	1.4%
LME Aluminum 3MO ($)	2,551.50	-2.3%	7.0%	-3.1%	7.1%	3.3%
LME COPPER 3MO ($)	8,768.00	-10.8%	2.4%	-3.4%	7.3%	3.4%
Agriculture						
Corn Futures	458.50	7.9%	-2.7%	-8.2%	3.4%	1.5%
Wheat Futures	551.50	-5.6%	-12.2%	-10.6%	-0.3%	-0.7%
Soybean Futures	998.25	-5.6%	-22.8%	-9.1%	1.1%	-0.2%
Coffee Futures	319.75	18.3%	69.8%	12.2%	19.8%	6.7%
Sugar Futures	19.26	-15.0%	-6.4%	0.7%	7.5%	2.9%
Cotton Futures	68.40	-7.0%	-15.6%	-15.3%	-0.2%	1.3%
Broad indexes						
Bloomberg Commodity Index	98.76	-1.6%	0.1%	-0.1%	4.1%	-0.5%
S&P GSCI Index	549.64	3.1%	2.6%	-0.7%	4.7%	2.8%

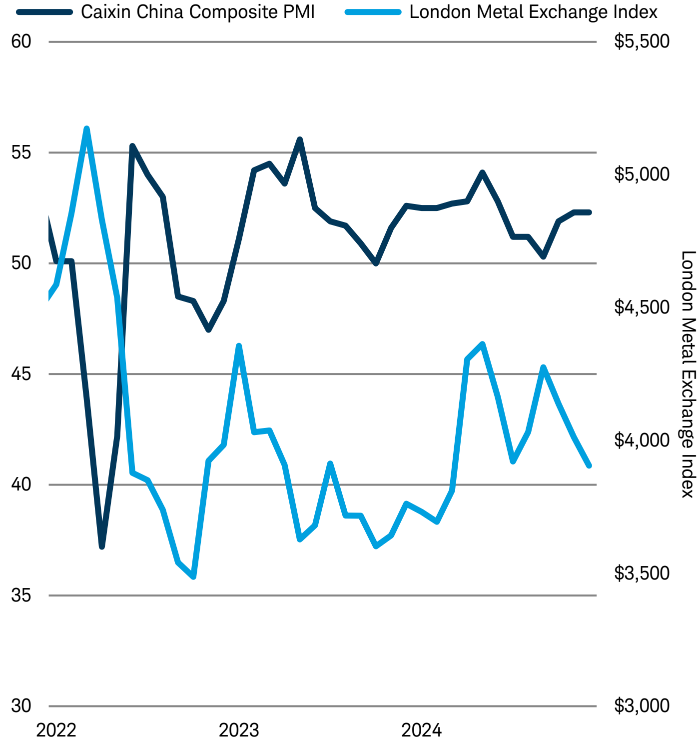


Returns are annualized for periods over one year.
Source: Bloomberg, S&P Goldman-Sachs Commodities Index. Price return does not include the effects of reinvested cash flows. Right chart is showing performance of the listed components of the S&P GSCI Index. Indexes are unmanaged, do not incur management fees, costs and expenses, and cannot be invested in directly. For illustrative purposes only. Futures and futures options trading involves substantial risk and is not suitable for all investors. Please read the [Risk Disclosure Statement for Futures and Options](https://www.schwab.com/Futures_RiskDisclosure) [https://www.schwab.com/Futures_RiskDisclosure] prior to trading futures products. Investing involves risk, including loss of principal. **Past performance is no guarantee of future results.**

Commodity relationships

The commodity index's modest increase in Q4 was driven by gains in the heavyweight energy sector—bolstered by a continued rally in natural gas—even as the U.S. dollar gained ground. China's economic growth remains sluggish to suppress industrial metals. If China's economy revives this could provide a boost for commodities.

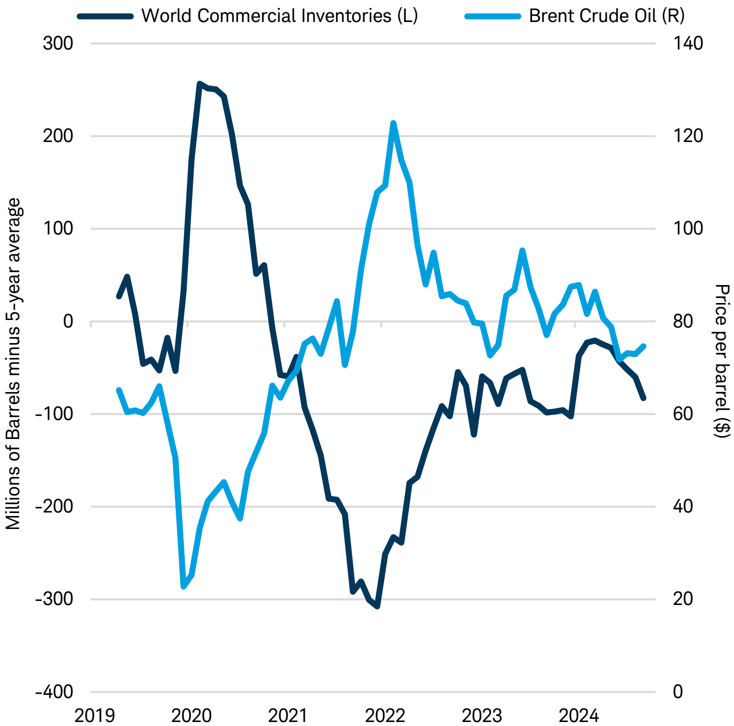


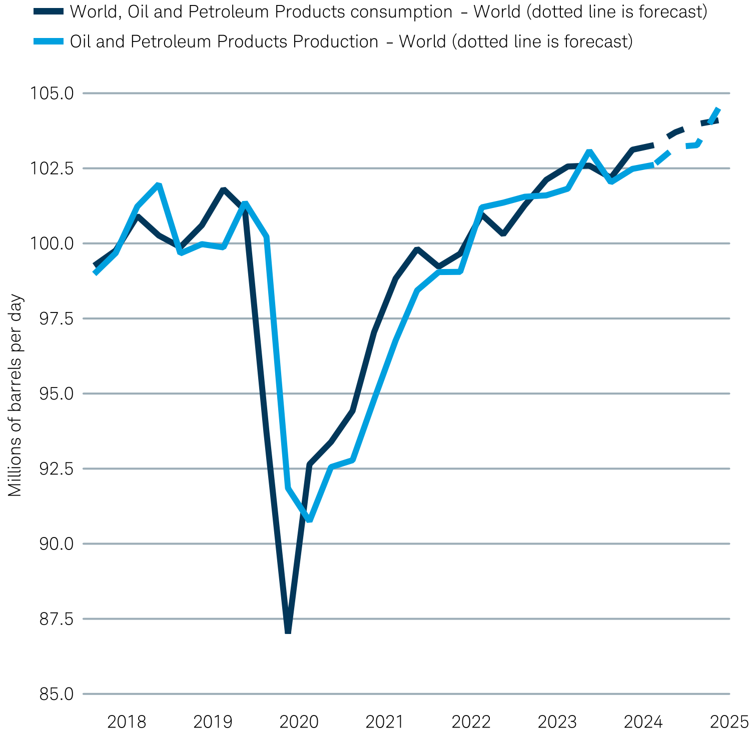


Source: Charles Schwab, Bloomberg, as of 12/31/2024. Price return does not include the effects of reinvested cash flows. Indexes are unmanaged, do not incur management fees, costs, and expenses, and cannot be invested in directly. Investing involves risk, including loss of principal. Currencies are speculative, very volatile and are not suitable for all investors. Commodity-related products carry a high level of risk and are not suitable for all investors. Commodity-related products may be extremely volatile, may be illiquid, and can be significantly affected by underlying commodity prices, world events, import controls, worldwide competition, government regulations, and economic conditions. **Past performance is no guarantee of future results.**

Oil supply/demand dynamics remain key to prices

Oil prices ticked higher in Q4 but remain on a downtrend. Oil may continue to be subdued as robust U.S.-led non-OPEC oil production makes up for delayed OPEC+ production increases, the U.S. dollar remains strong, and Fed rate cut estimates are being ratcheted down. This could be partially offset by the potential for further intensified geopolitical tensions and global monetary policy easing.

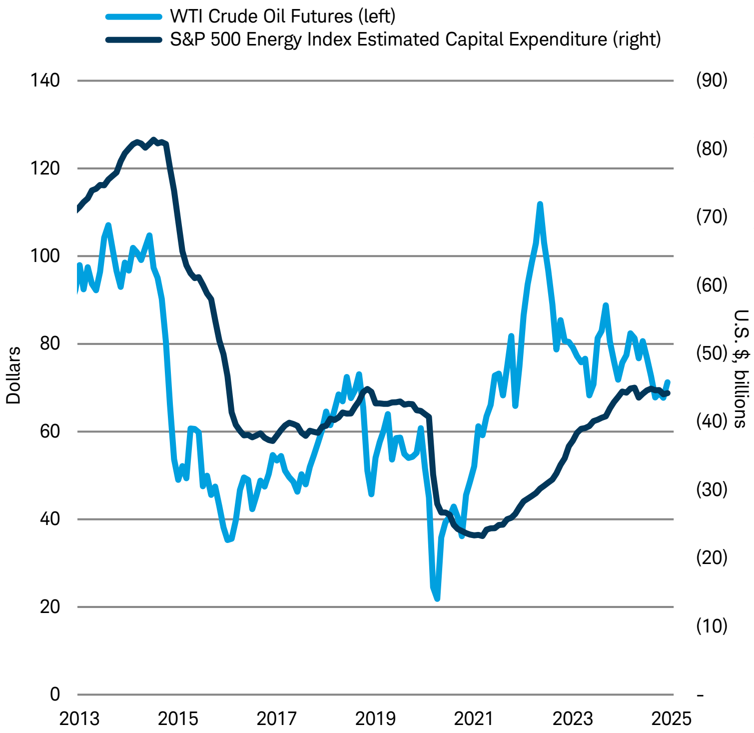


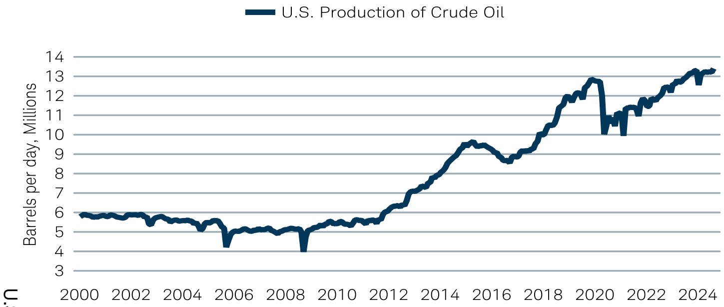


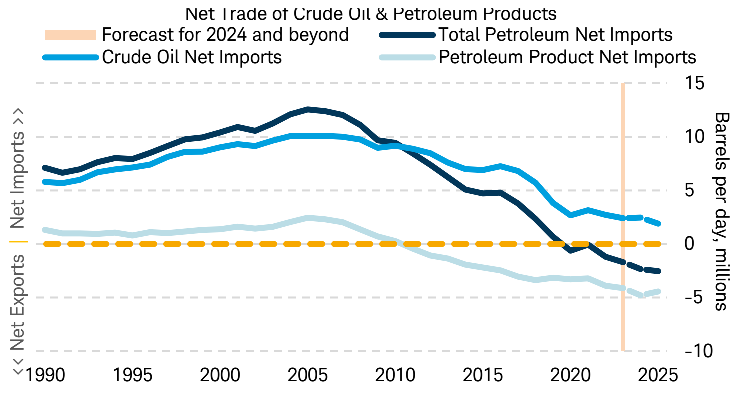
Source: Charles Schwab, International Energy Agency, Macrobond as of 12/31/2024. World commercial inventories measures the number of barrels of commercial oil held worldwide each month. World oil and petroleum products consumption measures the number of barrels of oil consumed per day worldwide. Oil and petroleum products production measures the number of barrels of oil produced per day worldwide. The dashed lines in the chart on the right reflect the Energy Information Administration's forecasts. Forecasts are for Q4 2024 to Q3 2025. **Past performance is no guarantee of future results.** Investing involves risk, including loss of principal.

U.S. energy position remains strong

U.S. oil production remains near record highs, countering the OPEC+ announcement to delay production increases from January to April 2025, thus maintaining U.S. status as a net petroleum product exporter and closing the gap on crude oil import dependency. However, U.S. capital expenditures may take a breather from the recent run as oil prices and profit margins stagnate.



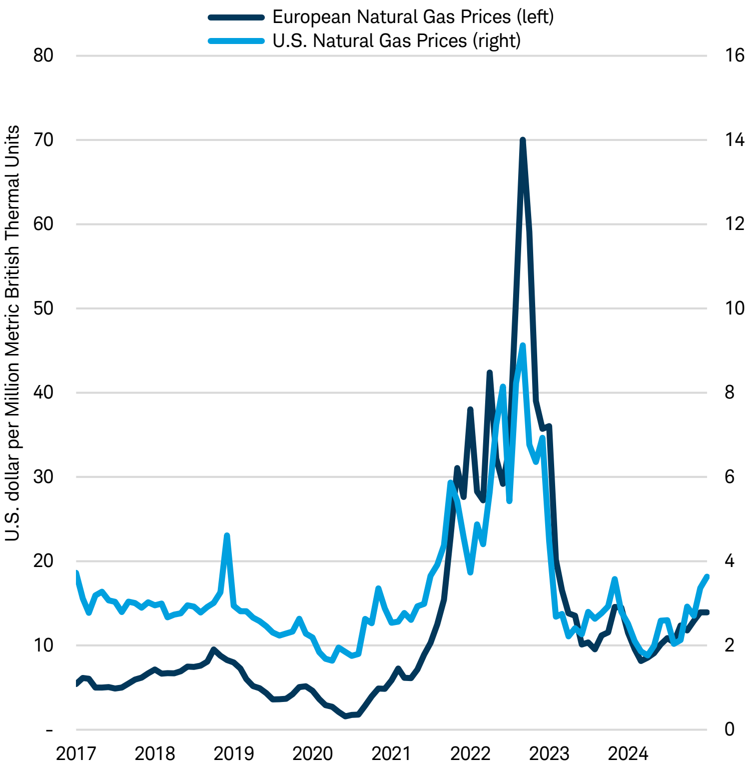


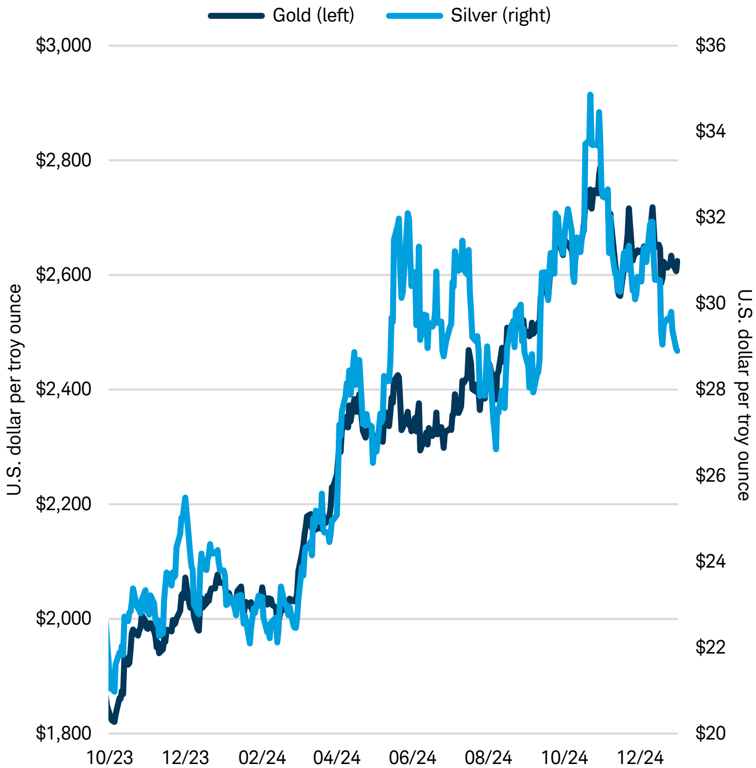


Source: Charles Schwab, Bloomberg, Macrobond, U.S. Energy Information Administration as of 12/31/2024. For illustrative purposes only. Futures and futures options trading involves substantial risk and is not suitable for all investors. Please read the Risk Disclosure Statement for Futures and Options [https://www.schwab.com/Futures_RiskDisclosure] prior to trading futures products. Commodity-related products carry a high level of risk and are not suitable for all investors. Commodity-related products may be extremely volatile, may be illiquid, and can be significantly affected by underlying commodity prices, world events, import controls, worldwide competition, government regulations, and economic conditions. **Past performance is no guarantee of future results.**

Natural gas and metals diverge

Natural gas extended a rally amidst festering geopolitical tensions, and supply/demand dynamics amplified by the surge in AI-induced data center buildouts. Meanwhile a strong U.S. dollar, a higher bar for interest rates, and a continued sluggish Chinese economy remain headwinds for metal prices.

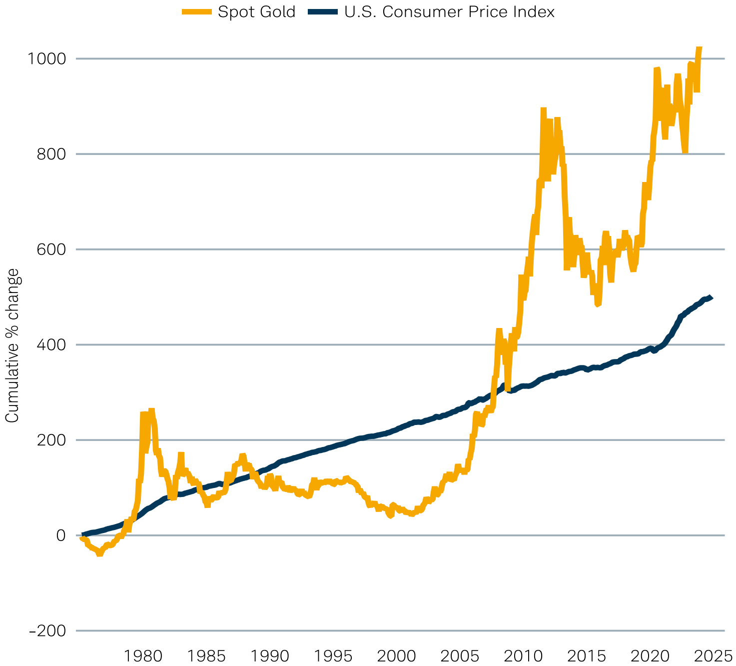




Source: Bloomberg as of 12/31/2024. **Past performance is no guarantee of future results.** For illustrative purposes only. Futures and futures options trading involves substantial risk and is not suitable for all investors. Please read the [Risk Disclosure Statement for Futures and Options](https://www.schwab.com/Futures_RiskDisclosure) [https://www.schwab.com/Futures_RiskDisclosure] prior to trading futures products.

Commodities and inflation

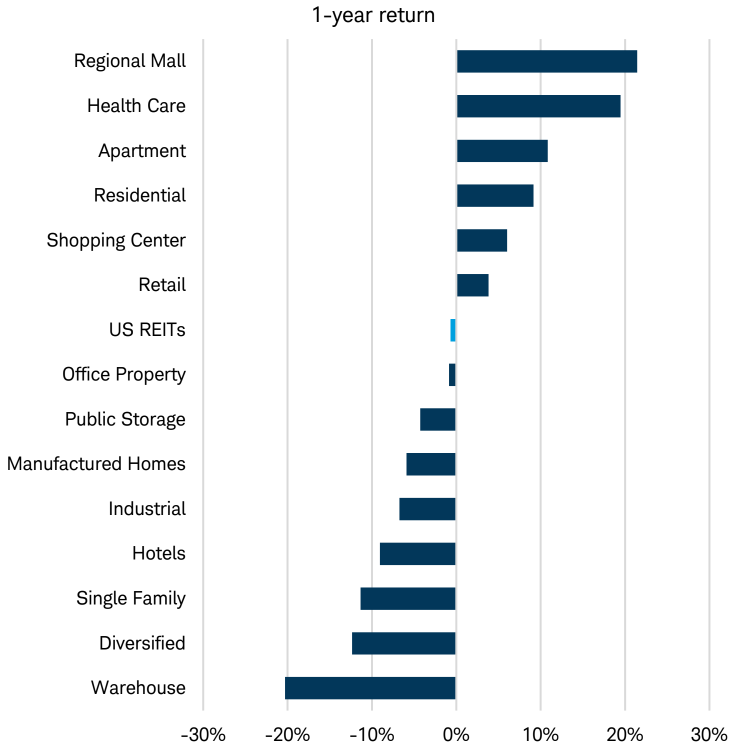
While gold is generally considered a good hedge against inflation, there has been a very loose relationship through time. The path of global interest rates, geopolitical developments, and global economic growth expectations prove more important to the performance of the precious metal. A closer relationship with inflation seems to lie with the overall commodities space.

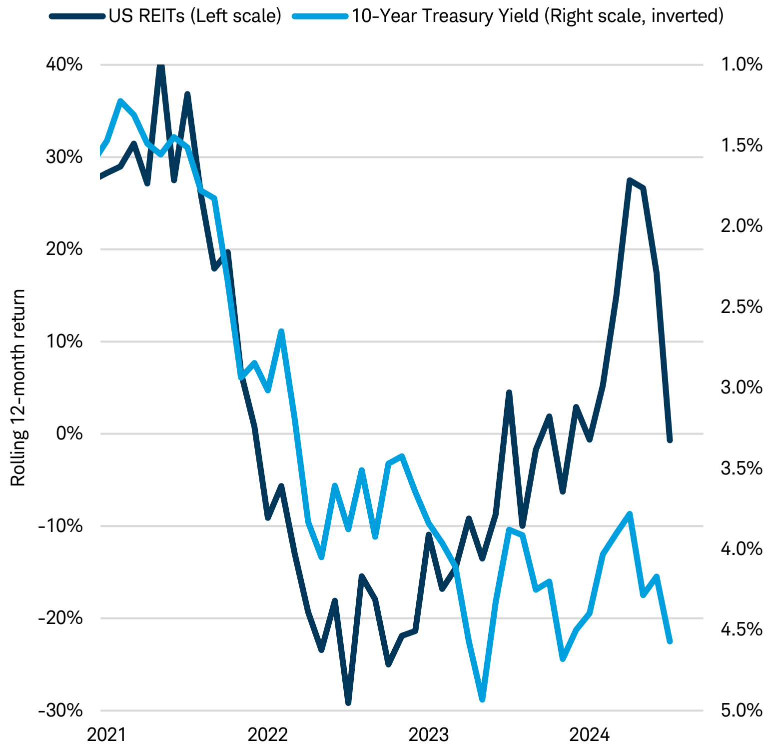


Source: Charles Schwab, Macrobond as of 12/31/2024. Cumulative percentage change of spot gold price and U.S. CPI. Spot gold is the price per ounce of gold at a given point in time. For illustrative purposes only. Investing involves risk, including loss of principal. **Past performance is no guarantee of future results.**

Adjusted interest rate expectations weigh on REITs

Broad 1-year gains in Real Estate Investment Trusts (REITs) were trimmed in Q4. Interest rates jumped in December as expectations for Fed rate cuts in 2025 were reset lower. Higher interest rates, for longer than expected, could continue to hamstring this rate-sensitive sector.

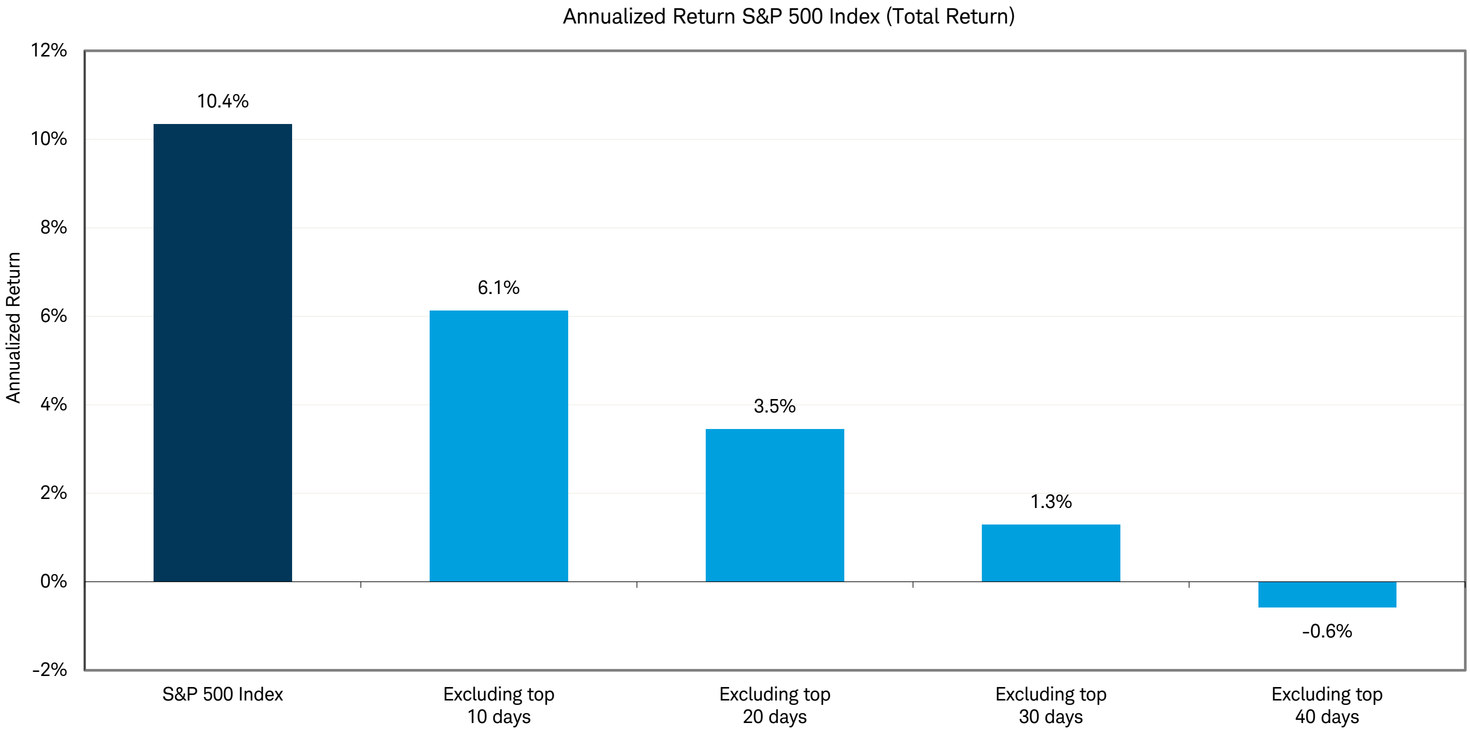




Source: Charles Schwab, Bloomberg as of 12/31/2024. REITs are represented by the Bloomberg US REIT Index and its respective sector indexes that are components of the overall index. Indexes are unmanaged, do not incur management fees, costs and expenses, and cannot be invested in directly. For illustrative purposes only. Investing involves risk, including loss of principal. **Past performance is no guarantee of future results.**

Time in the market is more important than timing the market

Missing the 10 strongest days of the market from 2005-2024 would have resulted in a significantly weaker annualized total return, compared to staying invested throughout the entire period.

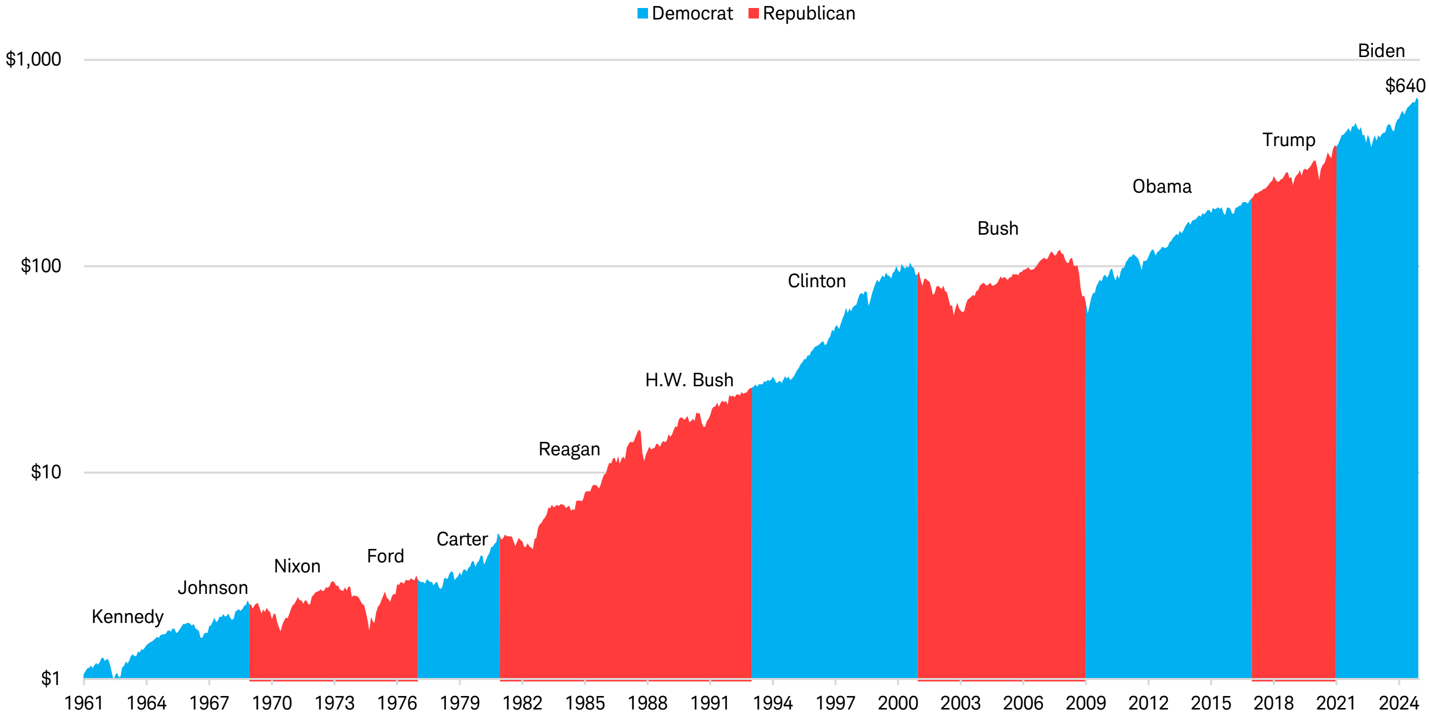


Source: Bloomberg as of 12/31/2024. Return data is annualized based on an average of 252 trading days within a calendar year. The year begins on the first trading day in January and ends on the last trading day of December, and daily total returns were used. Total returns assume reinvestment of dividends, interest, and other cash flows. When out of the market, cash is not invested. Market returns are represented by the S&P 500® Index which represents an index of widely traded stocks (dark blue bar). Top days are defined as the best performing days of the S&P 500 during the twenty-year period. Indexes are unmanaged, do not incur management fees, costs, and expenses, and cannot be invested in directly. Schwab does not recommend the use of technical analysis as a sole means of investment research. Investing involves risk, including loss of principal. For illustrative purposes only. **Past performance is no guarantee of future results.**

Politics versus sound investment principles

Politics can be stressful and can create uncertainty and a lot of noise. Historically, markets have rewarded long-term investors regardless of the party in charge of the White House.

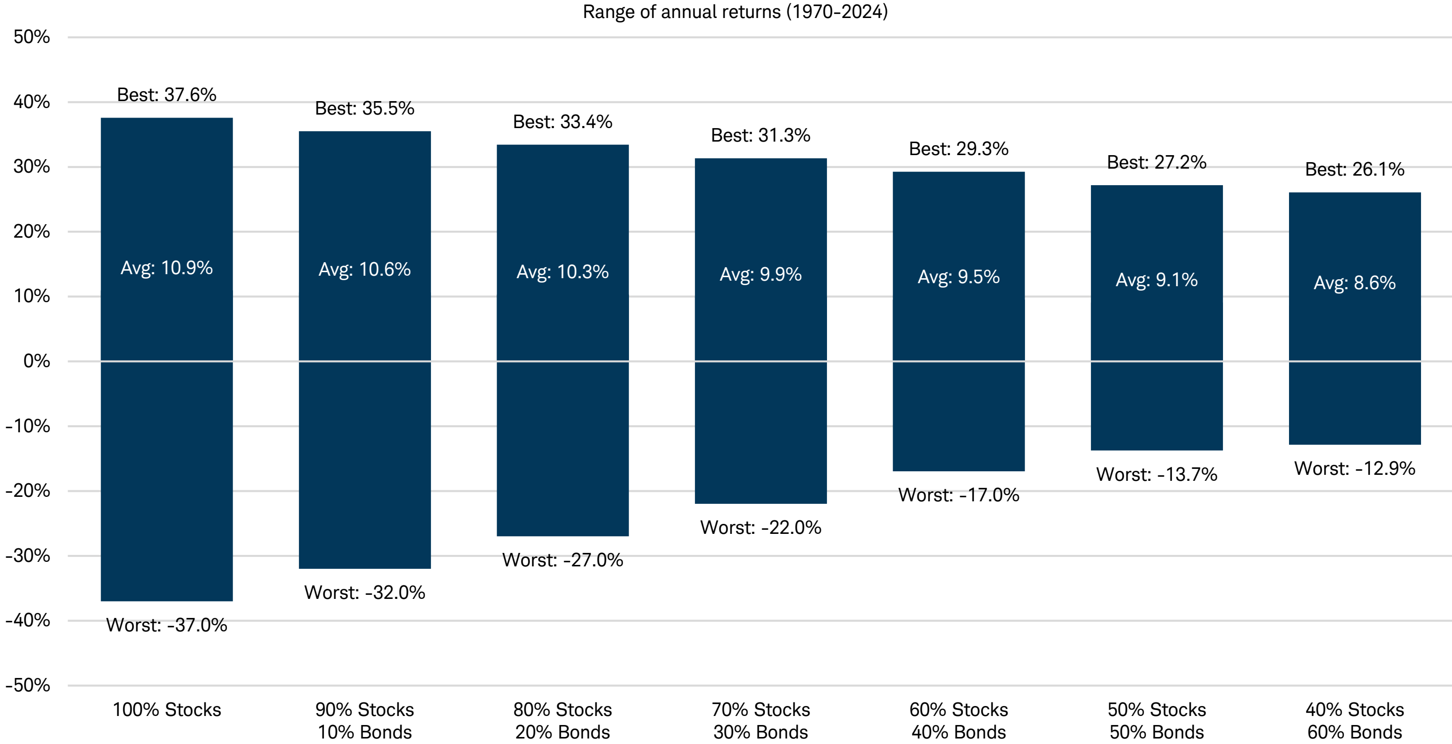
Growth of $1 (January 1961 - December 2024)



Source: Schwab Center for Financial Research, with data provided by Morningstar, Inc. The chart above shows the growth of $1 invested in a hypothetical portfolio that tracks the Ibbotson U.S. Large Stock Index starting on January 1, 1961. January returns in inauguration years are assumed to be under the party that is being inaugurated. The example is hypothetical and provided for illustrative purposes only. It is not intended to represent a specific investment product. Returns include investment of dividends and interest. The policy analysis provided by the Charles Schwab & Co., Inc. does not constitute and should not be interpreted as an endorsement of any political party. Indexes are unmanaged, do not incur management fees, costs, and expenses, and cannot be invested in directly. Investing involves risk, including loss of principal. **Past performance is no guarantee of future results.**

Importance of diversification

Adding fixed income investments to a portfolio of equities has historically lowered volatility.



Source: Schwab Center for Financial Research, with data provided by Morningstar, Inc. Stocks are represented by total annual returns of the S&P 500 Index, and bonds are represented by total annual returns of the Ibbotson U.S. Intermediate Government Bond Index. Return figures are the average, maximum, and minimum annual total returns for the hypothetical portfolios represented in the chart and are rebalanced annually. Returns include reinvestment of dividends, interest, and capital gains. The example is hypothetical and provided for illustrative purposes only. It is not intended to represent a specific investment product. Investing involves risk, including loss of principal. Indexes are unmanaged, do not incur management fees, costs, and expenses and cannot be invested in directly. **Past performance is no guarantee of future results. Diversification strategies do not ensure a profit and do not protect against losses in declining markets.**

Bonds offer potential diversification benefits

Based on low correlations, high-quality bonds such as U.S. Treasuries provide diversification benefits when added to a portfolio of stocks. Riskier bonds have provided less diversification benefits but can still make sense as part of a diversified portfolio to provide more income.

Source: Charles Schwab, data by Bloomberg, as of 12/31/2024. Indexes used: Bloomberg US Treasury 1-3 Year Index (U.S. Treasuries: 1 to 3 Year Maturities), Bloomberg US Treasury 7-10 Year Index (U.S. Treasuries 7 to 10 Year Maturities), Bloomberg US Treasury 20+ Year Index (U.S. Treasuries: 20+ Year Maturities), Bloomberg Municipal Bond Index (Municipal Bonds), Bloomberg US Aggregate Bond Index (U.S. Aggregate Bond Index), Bloomberg Corporate Bond Index (Investment Grade Corporate Bonds), ICE BofA Preferred Stock Index (Preferred Securities), and Bloomberg Corporate High Yield Index (High-Yield Corporate Bonds). Correlations shown represent the correlations of each asset class with the S&P 500 during the 10-year period between December 2014 and December 2024. Correlation is a statistical measure of how two investments have historically moved in relation to each other and range from -1 to +1. A correlation of 1 indicates a perfect positive correlation, while a correlation of -1 indicates a perfect negative correlation. Indexes are unmanaged, do not incur management fees, costs, and expenses, and cannot be invested in directly. Investing involves risk, including loss of principal. **Past performance is no guarantee of future results. Diversification strategies do not ensure a profit and do not protect against losses in declining markets.**

Schwab Asset Class Quilt®

Sector diversification

Rotation in sector returns offers opportunities for tactical tilts, but concentration in too few sectors can increase risk in a portfolio.

Monthly returns ranked in order from best to worst

Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	1-year
Comm. Serv. 4.8%	Cons. Discr. 8.6%	Energy 10.4%	Utilities 1.6%	Info. Tech. 10.0%	Info. Tech. 9.3%	Real Estate 7.1%	Cons. Staples 5.8%	Cons. Discr. 7.0%	Financials 2.6%	Cons. Discr. 13.2%	Comm. Serv. 3.5%	Comm. Serv. 38.9%
Info. Tech. 3.9%	Industrials 7.0%	Utilities 6.3%	Energy -0.9%	Utilities 8.5%	Cons. Discr. 4.8%	Utilities 6.7%	Real Estate 5.6%	Utilities 6.4%	Comm. Serv. 1.8%	Financials 10.2%	Cons. Discr. 2.3%	Info. Tech. 35.7%
Financials 2.9%	Materials 6.3%	Materials 6.2%	Cons. Staples -1.1%	Comm. Serv. 6.6%	Comm. Serv. 4.7%	Financials 6.3%	Health Care 5.0%	Comm. Serv. 4.5%	Energy 0.7%	Industrials 7.3%	Info. Tech. 1.1%	Cons. Discr. 29.1%
Health Care 2.8%	Info. Tech. 6.2%	Financials 4.7%	Comm. Serv. -2.2%	Real Estate 4.9%	S&P 500 3.5%	Industrials 4.8%	Financials 4.4%	Industrials 3.3%	S&P 500 -1.0%	Energy 6.3%	S&P 500 -2.5%	Financials 28.4%
S&P 500 1.6%	Comm. Serv. 5.7%	Comm. Serv. 4.3%	Industrials -3.6%	S&P 500 4.8%	Health Care 1.8%	Materials 4.3%	Utilities 4.3%	Real Estate 2.8%	Info. Tech. -1.0%	S&P 500 5.7%	Cons. Staples -5.2%	S&P 500 23.3%
Cons. Staples 1.4%	S&P 500 5.2%	Industrials 4.3%	S&P 500 -4.2%	Materials 3.1%	Real Estate 1.3%	Health Care 2.5%	Industrials 2.7%	Info. Tech. 2.4%	Utilities -1.1%	Info. Tech. 4.6%	Financials -5.6%	Utilities 19.6%
Energy -0.5%	Financials 4.0%	Cons. Staples 3.2%	Financials -4.3%	Financials 3.0%	Cons. Staples -0.5%	Energy 2.0%	S&P 500 2.3%	Materials 2.4%	Industrials -1.4%	Cons. Staples 4.5%	Health Care -6.4%	Industrials 15.6%
Industrials -0.9%	Health Care 3.1%	S&P 500 3.1%	Cons. Discr. -4.4%	Cons. Staples 2.3%	Financials -1.0%	Cons. Staples 1.8%	Materials 2.2%	S&P 500 2.0%	Cons. Discr. -1.6%	Real Estate 4.0%	Utilities -8.1%	Cons. Staples 12.0%
Utilities -3.1%	Energy 2.6%	Health Care 2.2%	Materials -4.6%	Health Care 2.2%	Industrials -1.0%	Cons. Discr. 1.6%	Comm. Serv. 1.2%	Cons. Staples 0.6%	Cons. Staples -2.9%	Utilities 3.2%	Industrials -8.1%	Energy 2.3%
Cons. Discr. -3.6%	Real Estate 2.5%	Info. Tech. 1.9%	Health Care -5.2%	Industrials 1.4%	Energy -1.4%	S&P 500 1.1%	Info. Tech. 1.2%	Financials -0.7%	Real Estate -3.4%	Comm. Serv. 3.1%	Real Estate -9.1%	Real Estate 1.7%
Materials -3.9%	Cons. Staples 2.1%	Real Estate 1.1%	Info. Tech. -5.5%	Cons. Discr. 0.2%	Materials -3.3%	Info. Tech. -2.0%	Cons. Discr. -1.1%	Health Care -1.8%	Materials -3.5%	Materials 1.4%	Energy -9.6%	Health Care 0.9%
Real Estate -4.8%	Utilities 0.5%	Cons. Discr. 0.0%	Real Estate -8.6%	Energy -1.0%	Utilities -5.8%	Comm. Serv. -4.2%	Energy -2.3%	Energy -2.8%	Health Care -4.7%	Health Care 0.1%	Materials -10.9%	Materials -1.8%

Source: Charles Schwab, Bloomberg, as of 12/31/2024. Sector performance is represented by price returns of the following 11 GICS sector indexes: Consumer Discretionary Sector, Consumer Staples Sector, Energy Sector, Financials Sector, Health Care Sector, Industrials Sector, Information Technology Sector, Materials Sector, Real Estate Sector, Communication Services Sector, and Utilities Sector. Returns of the broad market are represented by the S&P 500. Returns are price returns and do not include the effects of reinvested cash flows. Indexes are unmanaged, do not incur management fees, costs, and expenses, and cannot be invested in directly. Investing involves risk, including loss of principal. Diversification strategies do not ensure a profit and do not protect against losses in declining markets. For illustrative purposes only. **Past performance is no guarantee of future results.**

Schwab Asset Class Quilt®

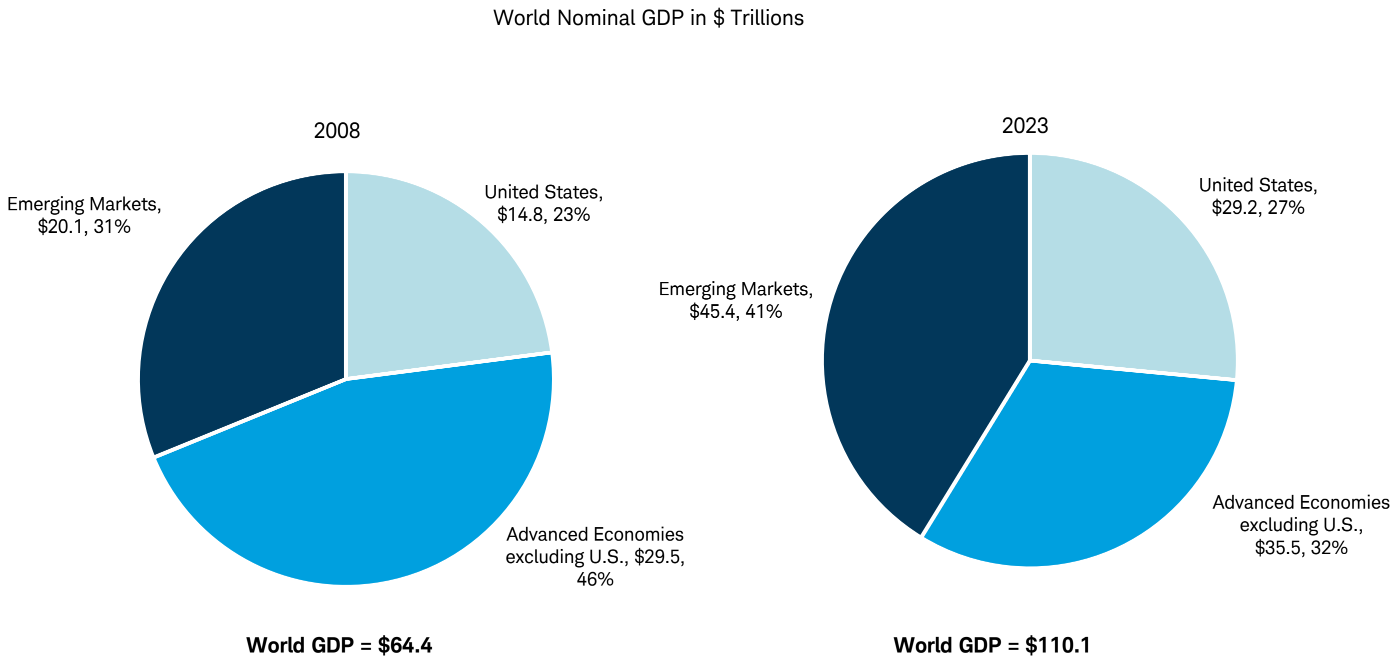
Why global diversification makes sense

2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	Average of periods Ann. Return	Average of periods Std Dev
Int'l Dev SC 9.6%	US Sm Cap 21.3%	EM 37.3%	T-bills 1.8%	US Lg Cap 31.5%	Gold & Other PM 23.0%	US REITs 43.1%	T-bills 1.5%	US Lg Cap 26.3%	Gold & Other PM 26.1%	US Lg Cap 13.1%	US Sm Cap 20.7%
US REITs 2.5%	High Yield Bonds 16.6%	Int'l Dev SC 33.0%	Core Bonds 0.0%	US Sm Cap 25.5%	US Sm Cap 20.0%	US Lg Cap 28.7%	Gold & Other PM -0.4%	Int'l Dev LC 18.2%	US Lg Cap 25.0%	US Sm Cap 7.8%	US REITs 18.2%
US Lg Cap 1.4%	US Lg Cap 12.0%	Int'l Dev LC 25.0%	TIPS -1.3%	Int'l Dev SC 25.0%	US Lg Cap 18.4%	US Sm Cap 14.8%	EM Bonds -8.0%	US Sm Cap 16.9%	US Sm Cap 11.5%	Gold & Other PM 7.2%	EM 17.1%
Core Bonds 0.5%	EM 11.2%	US Lg Cap 21.8%	High Yield Bonds -2.6%	US REITs 24.4%	EM 18.3%	Int'l Dev LC 11.3%	TIPS -11.8%	**Diversified Portfolio 13.9%**	**Diversified Portfolio 9.0%**	**Diversified Portfolio 6.0%**	Int'l Dev SC 16.7%
T-bills 0.0%	**Diversified Portfolio 8.7%**	EM Bonds 17.1%	Gold & Other PM -3.6%	Int'l Dev LC 22.0%	Int'l Dev SC 12.3%	**Diversified Portfolio 11.1%**	High Yield Bonds -11.9%	US REITs 13.8%	US REITs 8.4%	US REITs 5.5%	US Lg Cap 15.4%
Int'l Dev LC -0.8%	US REITs 8.5%	**Diversified Portfolio 16.8%**	US REITs -3.8%	**Diversified Portfolio 19.5%**	TIPS 11.0%	Int'l Dev SC 10.0%	Core Bonds -13.0%	High Yield Bonds 13.8%	High Yield Bonds 7.7%	Int'l Dev SC 5.5%	Int'l Dev LC 15.2%
TIPS -1.4%	Gold & Other PM 8.4%	US Sm Cap 14.6%	US Lg Cap -4.4%	EM 18.4%	**Diversified Portfolio 10.5%**	TIPS 6.0%	Int'l Dev LC -14.5%	Int'l Dev SC 13.2%	EM 7.5%	Int'l Dev LC 5.2%	Gold & Other PM 14.1%
Diversified Portfolio - 2.3%	EM Bonds 6.3%	Gold & Other PM 12.0%	EM Bonds -6.3%	Gold & Other PM 17.6%	Int'l Dev LC 7.8%	High Yield Bonds 4.5%	**Diversified Portfolio -14.9%**	EM Bonds 11.6%	T-bills 5.3%	High Yield Bonds 4.7%	**Diversified Portfolio 10.9%**
US Sm Cap -4.4%	TIPS 4.7%	High Yield Bonds 6.8%	**Diversified Portfolio -7.2%**	High Yield Bonds 15.3%	Core Bonds 7.5%	T-bills 0.0%	US Lg Cap -18.1%	Gold & Other PM 11.5%	Int'l Dev LC 3.8%	EM 3.6%	EM Bonds 10.1%
High Yield Bonds -5.3%	Core Bonds 2.6%	US REITs 4.3%	US Sm Cap -11.0%	EM Bonds 9.0%	High Yield Bonds 5.9%	Core Bonds -1.5%	EM -20.1%	EM 9.8%	TIPS 1.8%	TIPS 2.2%	High Yield Bonds 7.8%
Gold & Other PM -11.1%	Int'l Dev SC 2.2%	Core Bonds 3.5%	Int'l Dev LC -13.8%	Core Bonds 8.7%	EM Bonds 3.8%	EM -2.5%	US Sm Cap -20.4%	Core Bonds 5.5%	Int'l Dev SC 1.8%	T-bills 1.8%	TIPS 5.1%
EM Bonds -11.1%	Int'l Dev LC 1.0%	TIPS 3.0%	EM -14.6%	TIPS 8.4%	T-bills 0.6%	Gold & Other PM -5.1%	Int'l Dev SC -21.4%	T-bills 5.1%	Core Bonds 1.3%	Core Bonds 1.3%	Core Bonds 5.0%
EM -14.9%	T-bills 0.3%	T-bills 0.8%	Int'l Dev SC -17.9%	T-bills 2.2%	US REITs -7.5%	EM Bonds -8.2%	US REITs -24.4%	TIPS 3.9%	EM Bonds -3.7%	EM Bonds 0.6%	T-bills 0.6%

Source: Morningstar Direct. Data is from January 1, 2015-December 31, 2024. Standard deviation (Std Dev) is a statistical measure of the historical volatility of a mutual fund or portfolio. More generally, a measure of the extent to which numbers are spread around their average. For illustrative purposes only. Investing involves risk, including loss of principal. Diversification strategies do not ensure a profit and do not protect against losses in declining markets. Indexes are unmanaged, do not incur management fees, costs, and expenses, and cannot be invested in directly. **Past performance is no guarantee of future results.** See full disclosure of chart and indexes in the back of the document under Important Information.

The impact of international and emerging markets growth

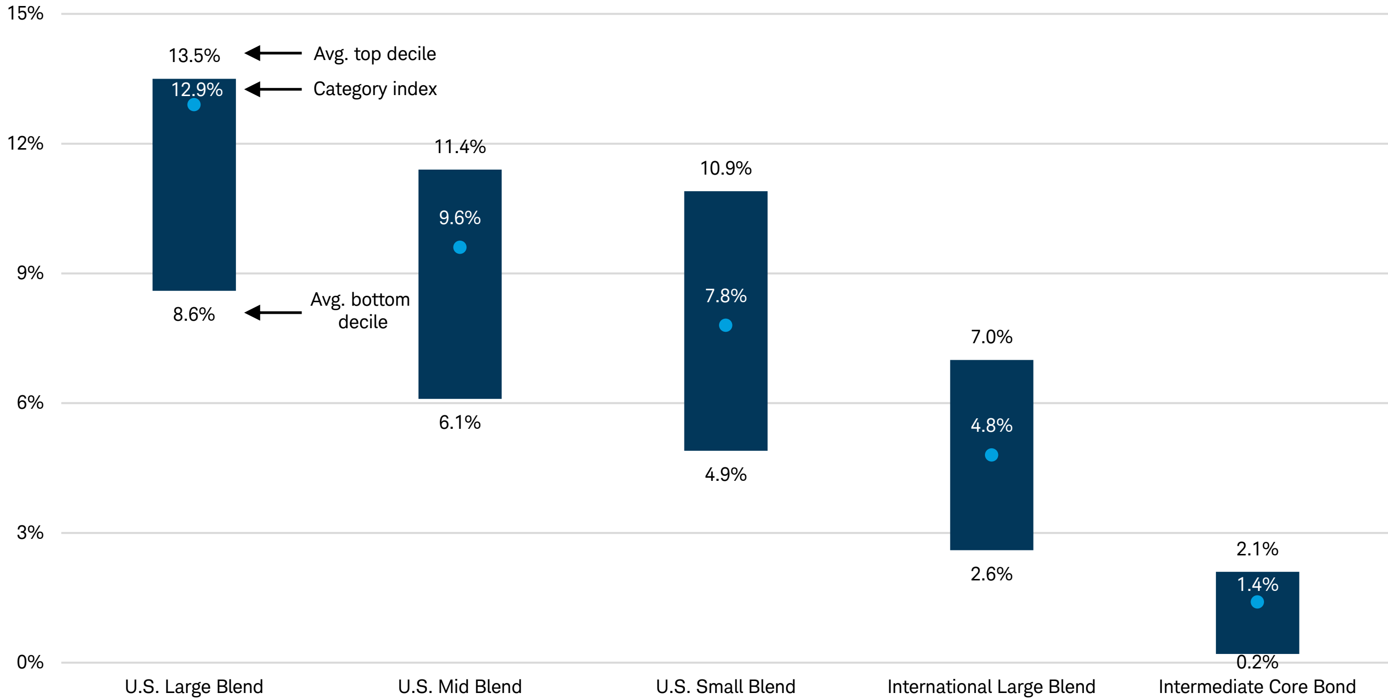
Emerging markets now represent a much larger share of world GDP compared to 15 years ago and can make sense as part of a well-diversified portfolio.



Source: International Monetary Fund, World Economic Outlook Database. Estimate as of October 2024. International investments involve additional risks, which include differences in financial accounting standards, currency fluctuations, political instability, foreign taxes and regulations, and the potential for illiquid markets. Investing in emerging markets may accentuate these risks. **Diversification strategies do not ensure a profit and do not protect against losses in declining markets. Investing involves risk, including loss of principal.**

Manager selection is an important part of investing

Historically, dispersion among active funds has varied greatly, indicating the importance of monitoring funds on a regular basis. It's difficult for a fund to consistently be a top performer—therefore investors only looking for market exposure may want to consider index funds.

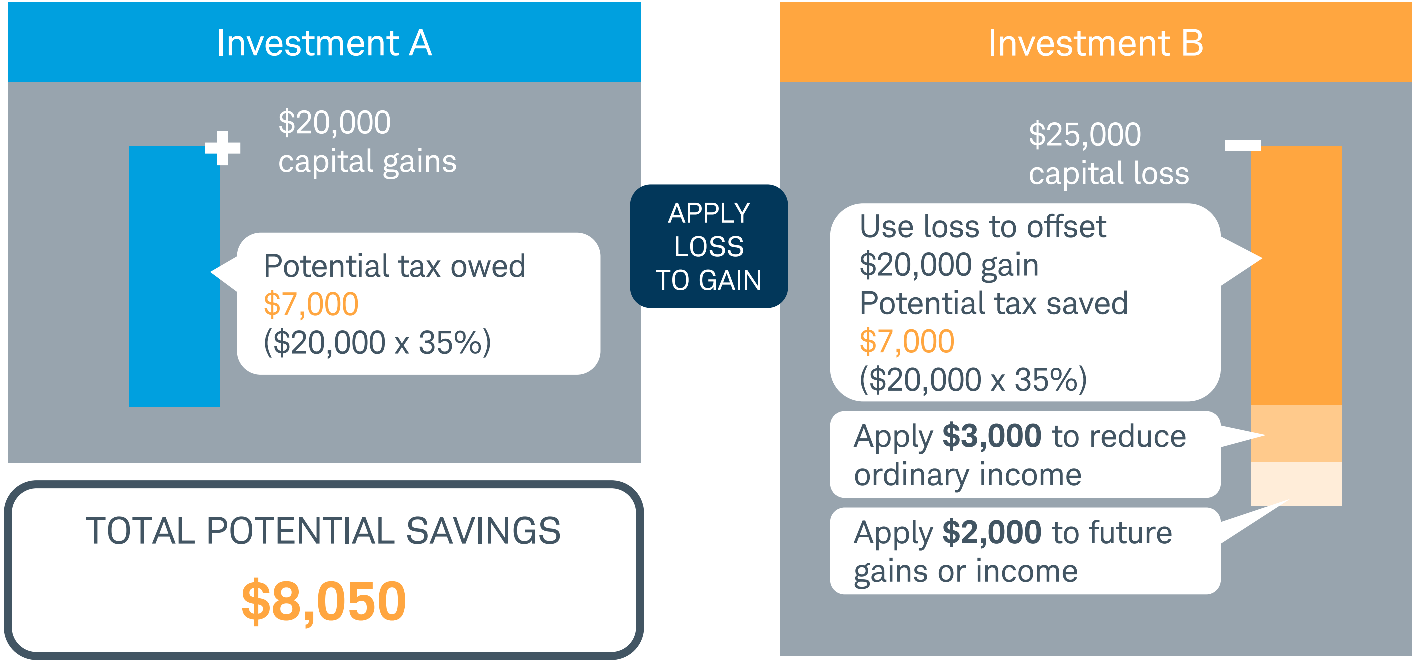


Source: Schwab Center for Financial Research with data provided by Morningstar, Inc. as of 12/31/2024. This chart examines all active U.S. domestic equity funds with a 10-year history as of 12/31/2024 for the Morningstar categories listed. For each category, funds were ranked by their 10-year return, and shown are the simple averages of the top and bottom deciles. Also shown are the 10-year returns of the category indexes. Indexes for each category are as follows: Russell 1000 Index (U.S. Large Blend), Russell Mid Cap Index (U.S. Mid Blend), Russell 2000 Index (U.S. Small Blend), MSCI ACWI Ex-US Index (International Large Blend), and Bloomberg US Aggregate Bond Index (Intermediate Core Bond). Indexes are unmanaged, do not incur management fees, costs, and expenses, and cannot be invested in directly. Investing involves risk, including loss of principal. For illustrative purposes only. **Past performance is no guarantee of future results. Investors should consider carefully information contained in the prospectus, or if available, the summary prospectus, including investment objectives, risks, charges, and expenses. You can request a prospectus by calling 800-435-4000. Please read the prospectus carefully before investing.**

Tax-efficient investing

Use losses to your advantage with tax-loss harvesting.

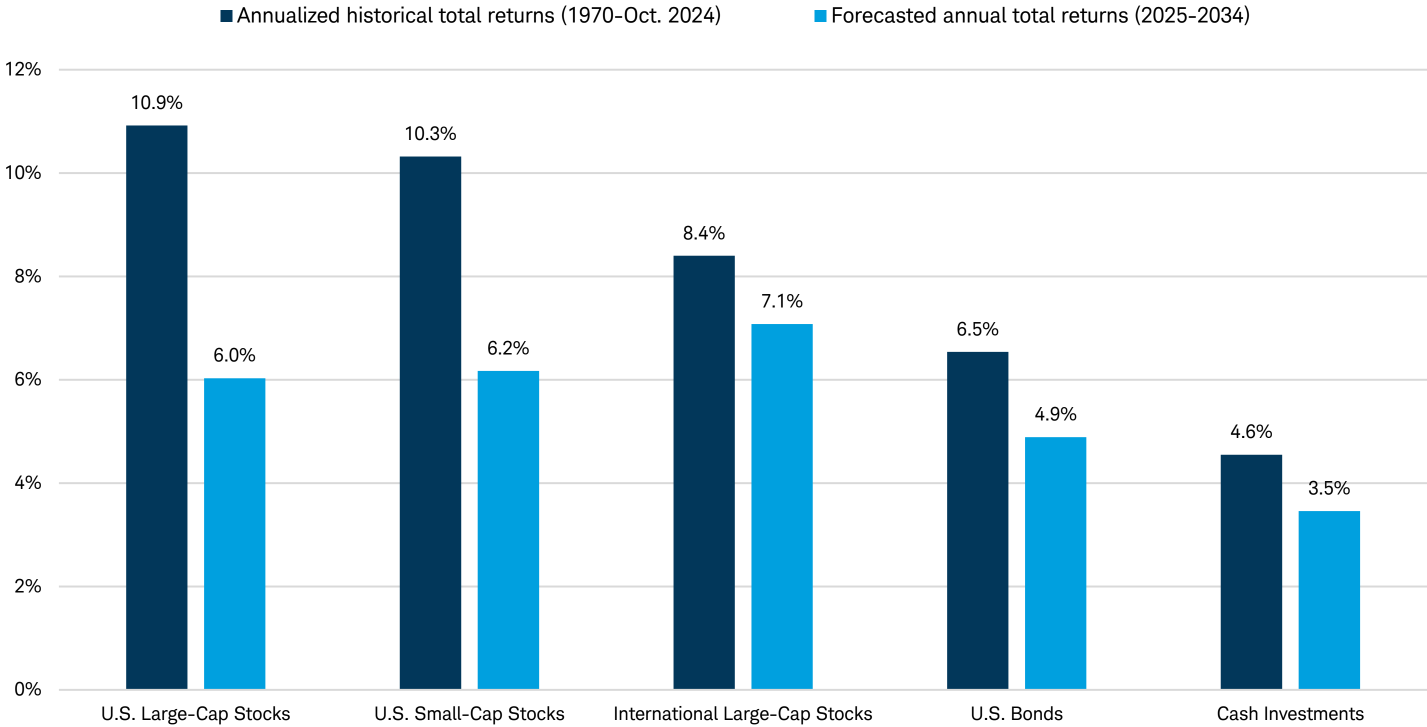
Example: Use your losses to get a tax break. In this example, an investor realized $20,000 in capital gains from Investment A, and a $25,000 capital loss from Investment B. Capital losses offset gains first; the excess is then applied to ordinary income, and finally to future gains or income.



Source: Schwab Center for Financial Research. Assumes a 35% combined federal/state marginal income tax bracket. The example is hypothetical and provided for illustrative purposes only. It is not intended to represent a specific investment product and the example does not reflect the effects of fees. Neither the tax-loss harvesting strategy, nor any discussion herein, is intended as tax advice and Charles Schwab & Co., Inc. does not represent that any particular tax consequences will be obtained. Tax-loss harvesting involves certain risks including unintended tax implications. Investors should consult with their tax advisors and refer to the Internal Revenue Service (IRS) website at www.irs.gov about the consequences of tax-loss harvesting.

Expected asset class returns

Expectations for all asset classes are lower than historical returns due to macroeconomic headwinds and higher equity valuations.



Source: Charles Schwab as of 10/31/2024. Forecasts are derived by Charles Schwab Investment Management. Charles Schwab Investment Management, Inc., dba Schwab Asset Management® is a registered investment adviser and an affiliate of Charles Schwab & Co., Inc. ("Schwab"). Indexes used: S&P 500 Index (U.S. Large-Cap Stocks), Russell 2000 Index (U.S. Small-Cap Stocks), MSCI EAFE Index (International Large-Cap Stocks), Bloomberg US Aggregate Bond Index (U.S. Bonds), and FTSE US 3-Month U.S. Treasury Bill Index (Cash Investments). Returns assume reinvestment of dividends and interest. Forecasts contained herein are for illustrative purposes only, may be based upon proprietary research and are developed through analysis of historical public data. Indexes are unmanaged, do not incur management fees, costs, and expenses, and cannot be invested in directly. Investing involves risk, including loss of principal. **Past performance is no guarantee of future results.**

Important Disclosures

Investing involves risk, including risk of principal.

Past performance is no guarantee of future results, and the opinions presented cannot be viewed as an indicator of future performance.

The information provided here is for general informational purposes only and should not be considered an individualized recommendation or personalized investment advice. The investment strategies mentioned here may not be suitable for everyone. Each investor needs to review an investment strategy for his or her own particular situation before making any investment decision. All expressions of opinion are subject to change without notice in reaction to shifting market conditions. Data contained herein from third-party providers is obtained from what are considered reliable sources. However, its accuracy, completeness, or reliability cannot be guaranteed. Examples provided are for illustrative purposes only and not intended to be reflective of results you can expect to achieve.

The information and content provided herein is general in nature and is for informational purposes only. It is not intended, and should not be construed, as a specific recommendation, individualized tax, legal, or investment advice. Tax laws are subject to change, either prospectively or retroactively. Where specific advice is necessary or appropriate, individuals should contact their own professional tax and investment advisors or other professionals (CPA, Financial Planner, Investment Manager) to help answer questions about specific situations or needs prior to taking any action based upon this information.

Schwab does not recommend the use of technical analysis as a sole means of investment research.

Diversification strategies do not ensure a profit and do not protect against losses in declining markets.

International investments involve additional risks, which include differences in financial accounting standards, currency fluctuations, political instability, foreign taxes and regulations, and the potential for illiquid markets. Investing in emerging markets may accentuate these risks.

Fixed income securities are subject to increased loss of principal during periods of rising interest rates. Fixed-income investments are subject to various other risks including changes in credit quality, market valuations, liquidity, prepayments, early redemption, corporate events, tax ramifications, and other factors. Lower rated securities are subject to greater credit risk, default risk and liquidity risk.

Commodity-related products carry a high level of risk and are not suitable for all investors. Commodity-related products may be extremely volatile, may be illiquid, and can be significantly affected by underlying commodity prices, world events, import controls, worldwide competition, government regulations, and economic conditions.

Master Limited Partnerships (MLPs) - Investments in securities of MLPs involve risks that differ from an investment in common stock. MLPs are controlled by their general partners, which generally have conflicts of interest and limited fiduciary duties to the MLP, which may permit the general partner to favor its own interests over the MLPs.

Real Estate Investment Trusts (REITs) - Risks of the REITs are similar to those associated with direct ownership of real estate, such as changes in real estate values and property taxes, interest rates, cash flow of underlying real estate assets, supply and demand, and the management skill and credit worthiness of the issuer. Investing in REITs may pose additional risks such as real estate industry risk, interest rate risk, risks related to the uncertainty of and compliance with certain tax regime rules, and liquidity risk.

Preferred stocks: (1) generally have lower credit ratings than a firm's individual bonds; (2) generally have a lower claim to assets than a firm's individual bonds; (3) often have higher yields than a firm's individual bonds due to these risk characteristics; (4) are often callable, meaning the issuing company may redeem the stock at a certain price after a certain date.

Important Disclosures

Bank loans typically have below investment-grade credit ratings and may be subject to more credit risk, including the risk of nonpayment of principal or interest. Most bank loans have floating coupon rates that are tied to short-term reference rates like the Secured Overnight Financing Rate (SOFR), so substantial increases in interest rates may make it more difficult for issuers to service their debt and cause an increase in loan defaults. A rise in short-term references rates typically result in higher income payments for investors, however. Bank loans are typically secured by collateral posted by the issuer, or guarantees of its affiliates, the value of which may decline and be insufficient to cover repayment of the loan. Many loans are relatively illiquid or are subject to restrictions on resales, have delayed settlement periods, and may be difficult to value. Bank loans are also subject to maturity extension risk and prepayment risk.

Treasury Inflation Protected Securities (TIPS) are inflation-linked securities issued by the US Government whose principal value is adjusted periodically in accordance with the rise and fall in the inflation rate. Thus, the dividend amount payable is also impacted by variations in the inflation rate, as it is based upon the principal value of the bond. It may fluctuate up or down. Repayment at maturity is guaranteed by the US Government and may be adjusted for inflation to become the greater of the original face amount at issuance or that face amount plus an adjustment for inflation. Treasury Inflation-Protected Securities are guaranteed by the US Government, but inflation-protected bond funds do not provide such a guarantee.

Tax-exempt bonds are not necessarily a suitable investment for all persons. Information related to a security's tax-exempt status (federal and in-state) is obtained from third parties, and Charles Schwab & Co., Inc. does not guarantee its accuracy. Tax-exempt income may be subject to the Alternative Minimum Tax (AMT). Capital appreciation from bond funds and discounted bonds may be subject to state or local taxes. Capital gains are not exempt from federal income tax.

There are risks associated with investing in dividend paying stocks, including but not limited to the risk that stocks may reduce or stop paying dividends.

Mortgage-backed securities (MBS) may be more sensitive to interest rate changes than other fixed income investments. They are subject to extension risk, where borrowers extend the duration of their mortgages as interest rates rise, and prepayment risk, where borrowers pay off their mortgages earlier as interest rates fall. These risks may reduce returns.

Small-cap investments are subject to greater volatility than those in other asset categories.

Asset Class Performance Quilt Chart: Source: Morningstar Direct. Data is from January 1, 2015-December 31, 2024. This chart represents a hypothetical investment and is for illustrative purposes only. Diversification strategies do not ensure a profit and do not protect against losses in declining markets. Core bonds consists of Treasuries, investment-grade corporate bonds, and securitized bonds. The diversified portfolio is a hypothetical portfolio consisting of 18% U.S. large cap stocks (S&P 500 Index), 10% U.S. small cap stocks (Russell 2000 Index), 12% international developed market large cap stocks (MSCI EAFE Index), 8% international developed market small cap stocks (MSCI EAFE Small Cap Index), 8% emerging markets stocks (MSCI Emerging Markets Index), 3% U.S. REITs (S&P U.S. REIT Index), 2% international REITs (S&P Global REITs ex-U.S. Index), 1% Treasuries (Bloomberg 3-7 Year Treasury Bond Index), 2% investment-grade corporate bonds (Bloomberg U.S. Credit Index), 6% securitized bonds (Bloomberg U.S. Securitized Bond Index), 9% high-yield bonds (Bloomberg Very Liquid High Yield Bond Index), 4% international developed country bonds (Bloomberg Global Aggregate ex-USD Index), 1% agency bonds (Bloomberg U.S. Agency Bond Index), 6% emerging markets bonds (Bloomberg Emerging Markets USD Aggregate Bond Index), 2% gold and other precious metals (S&P GSCI Precious Metals Index), 1% energy (S&P GSCI Energy Index), 1% industrials metals (S&P GSCI Industrial Metals Index), 1% agriculture (S&P GSCI Agricultural Index), and 5% cash (Bloomberg 1-3 Month Treasury Bill Index). Including fees and expenses in the diversified portfolio would lower returns. The portfolio is rebalanced annually. Returns include reinvestment of dividends, interest, and capital gains.

Hedges against inflation chart: The indexes representing each asset class are the Ibbotson U.S. Large Stock Index (U.S. Equities), MSCI EAFE Index (International Stocks), Bloomberg U.S. Aggregate Corporate Bond Index (Investment Grade Corporates), Ibbotson U.S. Long-Term Government Index (Long-term Treasuries), ICE BofA U.S. Mortgage Backed Securities Index (MBS), Ibbotson U.S. Intermediate-Term Government Index (Intermediate-term Treasuries), Gold Dollar Spot (Gold), Ibbotson U.S. 10Month Treasury Bills (Treasury Bills), S&P GSCI Index (Commodities), Bloomberg U.S. Corporate High Yield Bond Index (High-Yield Corporates), ICE BofA U.S. Municipal Securities Index (Municipal Bonds), U.S. Treasury Inflation Protected Securities (TIPS).

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