

Quarterly Chartbook Q3 2024

For one-on-one presentation use only. Not for further distribution. The three Important Disclosures pages (70-72) are required to be shown during any presentation.



About the Quarterly Chartbook

The Quarterly Chartbook is constructed to help 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 Q3, this chartbook contains the latest available data as of the end of Q2.

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

Q2 Market summary | Total returns

Market commentary

- Large-cap equities continued their rise in Q2, although gains were increasingly concentrated in just a few stocks. Smallcap stocks on the other hand struggled to begin and end the quarter. Markets continue to watch the disinflation process play out, which fortunately persisted in Q2 after some stickiness in Q1.
- U.S. bond yields, represented by the Bloomberg U.S. Aggregate Bond Index, were volatile in the second quarter due to shifting expectations for the timing and number of rate cuts. The 10-year Treasury yield rose as high as 4.7% before ending the quarter around 4.4%.
- The European Central Bank cut rates in June and other global central banks are expected to follow suit in the coming months. The Bank of the Japan is an outlier and is expected to raise rates again this year following its first quarter rate hike.
- Energy commodities except for natural gas – gave back some of Q1's gains to weigh on commodity indexes, but broadbased rallies in metals helped provide an offset. REITS remained sluggish as Fed rate cut expectations continued to be reset, while demand for office/retail space remained hamstrung.

	BENCHMARK	Q2 2024	YTD	1-Year	3-Year	5-Year	10-Year
U.S. Large-Cap Stocks	S&P 500 [®] Index	4.3 %	1 5.3 %	24.5 %	1 0.0 %	1 5.0 %	1 2.8 %
U.S. Small-Cap Stocks	Russell 2000 [®] Index	-3.3 %	1. 7 %	10.0%	- 2.6 %	6.9 %	7.0%
International Developed Stocks	MSCI EAFE Index	-0.2%	5.7%	12.0 %	3.4%	6.9 %	4.8 %
Emerging Market Stocks	MSCI Emerging Markets Index	5.0%	7.6%	12.8 %	-4.8 %	3.4%	3. 1%
U.S. Bonds	Bloomberg US Aggregate Bond Index	0.1%	-0.7%	2.6%	-3.0%	-0.2%	1 .3 %
Treasury Inflation Protected Securities	Bloomberg US Treasury Inflation Protected Securities (TIPS) Index	0.8%	0.7 %	2.7%	-1.3%	2.1 %	1.9 %
High Yield Bonds	Bloomberg US Corporate High Yield Bond Index	1.1%	2.6%	1 0.4 %	1.6%	3.9%	4.3%
International Developed Bonds	Bloomberg Global Treasury ex-US Index	-3.0%	-6.8%	-2.5%	-8.3%	-4.2%	- 2 .1%
Commodities	S&P GSCI Index	0.7 %	11.1%	15.0%	1 2.7 %	8.3%	- 3. 1%
REITS	Dow Jones U.S. Select REIT Index	-0.2%	-0.6%	7.1%	-0.1%	2.8%	5.2%

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 6/30/2024. Indexes are unmanaged, do not incur management fees, costs and expenses, and cannot be invested in directly. For more information on indexes, please see <u>Schwab.com/IndexDefinitions</u>. Investing involves risk, including loss of principal. **Past performance is no guarantee of future results. For illustrative purposes only.**

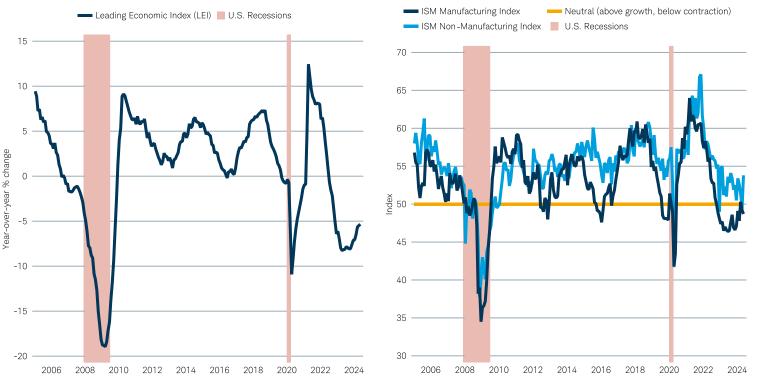
\frown		
O v	en	W

Economy	Growth held up in the second quarter, although some pockets of the economy continued to soften. Notably, the control group for retail sales* (which is a direct input for the consumer spending portion of GDP) declined by 0.5% in the first month of the quarter. This was followed by a 0.4% increase in the following month, however aggregate income growth also slowed relative to the beginning of the first quarter. Growth for several economic metrics is still in positive territory, but the pace continues to ease. Fortunately, this is also consistent with a renewed easing in inflation pressure. For now, the reacceleration in the first quarter looks to have been temporary, which is comforting for the Fed, but not yet enough to convince members that rates can be cut in the near-term.
Equities	U.S. stocks continued to move higher throughout the quarter, although gains were concentrated in just a handful of names. The S&P 500 started off on a weak foot in the first month of the quarter, but then rebounded strongly in May and continued to rise in June. The equal-weighted S&P 500 underperformed and started to diverge from the cap-weighted S&P 500 in mid-May-underscoring the fact that the market's breadth continued to grow less healthy as the quarter progressed. This occurred as investor sentiment remained optimistic-and as some metrics show, frothy-throughout the quarter. This paints the market as increasingly vulnerable in the face of a negative catalyst.
Income	Federal Reserve policy expectations continued to drive the bond market. U.S. Treasury yields initially rose in the second quarter on stronger-than- expected inflation readings, only to trend lower as other economic indicators suggested that the disinflationary trend was resuming. The median dot from the June 12 th FOMC meeting suggested one rate cut this year. Although yields have pulled back from their 2024 highs, we believe investors who have been staying too short should still consider extending duration with some intermediate or longer-term bonds. Despite the resilient economy, we have a bias toward higher credit quality bonds because spreads are tight.
Commodities	Divergence in commodities should persist in 2024 with energy swinging the biggest hammer. Oil prices remain at the mercy of the dynamic of robust non-OPEC production being met with potential tempered OPEC+ output cuts. Natural gas jumped off 1990s lows (when adjusted for inflation), so a pullback may be in store, but production has dipped which could buoy prices. Metals prices rallied in Q2, given supply concerns, geopolitical tensions fostering safety in precious metals, and signs China may be reviving despite festering real estate turmoil. Upside/downside commodity catalysts looking ahead include escalated geopolitical tensions, supply dynamics, global economic growth, world weather patterns, U.S dollar performance, global elections, and central bank actions, along with ongoing clean energy initiatives. Commodities should still offer portfolio diversification in 2024.
Asset allocation	Proper asset allocation and diversification are an important aspect of constructing a portfolio. Historically, fixed income, especially high-quality bonds, and international investments have provided diversification when compared to an all-equity portfolio. Diversification is important both across and within asset classes. 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.

*Control group retail sales excludes food services, auto dealers, building materials, and gas station sales. Source: Schwab Center for Financial Research. Commentary as of 6/30/2024. Investing involves risk, including loss of principal. Diversification strategies do not ensure a profit and do not protect against losses in declining markets. Past performance is no guarantee of future results.

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 we're looking at an uptrend. The positive offset has been strength 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 6/30/2024. 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.

Bars represent National Bureau of Economic Research defined recession periods. Source: Charles Schwab, Macrobond as of 6/30/2024.

Labor demand has cooled

Reducing the gap between job openings and unemployed persons is a key part of the Fed's objective. Job openings have come down to near their pre-pandemic levels as quits have also receded. While layoffs have picked up this year, they haven't spiked to recessionary-like levels.



Job Openings & Labor Turnover Survey (JOLTS), Quits

2024

2024

Source: Macrobond as of 6/30/2024. The April 2023 seasonal adjustment of jobless claims resulted in a larger than usual revision of some weeks over the past five years.

Labor supply still healthy

A key tenet of the labor market's resilience over the past few years has been the recovery in the primeage 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.

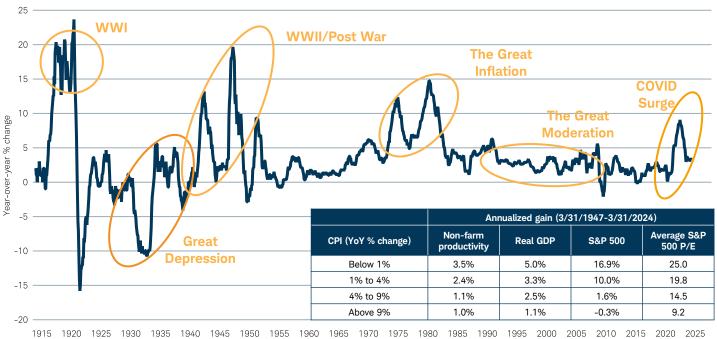


Economy

2020 2025 Source: Charles Schwab, Macrobond, Ned Davis Research using monthly data available as of 6/30/2024. U.S. CPI Urban Consumers YoY Not Seasonally Adjusted (CPI YoY Index). Investing involves risk, including loss of principal. Past performance is no guarantee of future results.

A long-term view of U.S. inflation

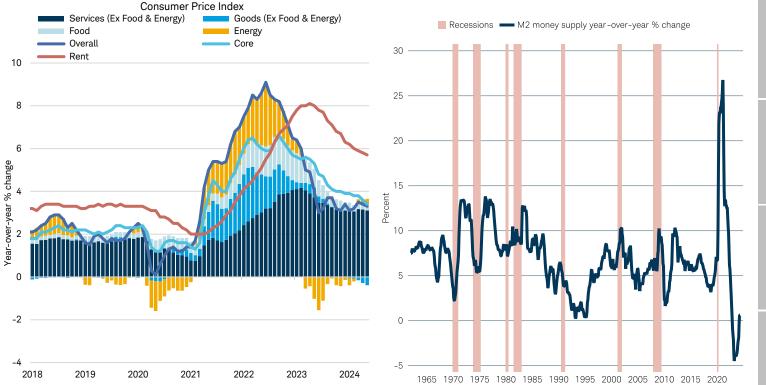
Previous surges in inflation were associated with unique events, some of which lasted for several years. More active monetary policies have been in place since the early 1980s, although it's uncertain whether the ultra-aggressive Fed actions can contain core inflation in the near term. Historically, higher inflation correlated with weaker stock market and economic gains.



Consumer Price Index for All Urban Consumers

Services sector driving bulk of inflation

The services sector remains responsible for the bulk of inflationary pressure in the current cycle. Core goods prices continue to deflate, which continues to put downward pressure on the headline inflation index.



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, May 2024, 12month 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 6/30/2024. M2 Money Supply is a calculation of money supply that includes cash, checking deposits, savings deposits, money market deposits, and other time deposits less than \$100,000. It is a broader measure of money supply than M1. **Past performance is no guarantee of future results**.

Source: Charles Schwab, Macrobond, using monthly data available as of 6/30/2024.

- Neutral (above growth, below contraction) - ISM Manufacturing PMI, Prices

65 6.0 5.5 Percent 5.0 4.5

Inflation watch

ISM Non-manufacturing PMI, Prices

Across several metrics, we've likely seen peak inflation. 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.

100 90 80 Index 70 60 4.0 50 3.5 40 3.0 2.5 30 2015 2016 2017 2018 2019 2015 2016 2017 2018 2019 202 2022 2023 2024 Zillow U.S. Rent Index (year-over-year % change) NFIB Small Business Price Plans. Next Three Months 17.5 -60 15.0 50 12.5 40 Percent Percent 10.0 30 7.5 5.0 2.5 0.0 2016 2017 2018 2019 2020 2021 2022 2023 2024 2015 2016 2017 2018 2019 2020 2021

Economy

2022

2023 2024

10



Atlanta Fed Wage Growth (three-month mov. avg.)

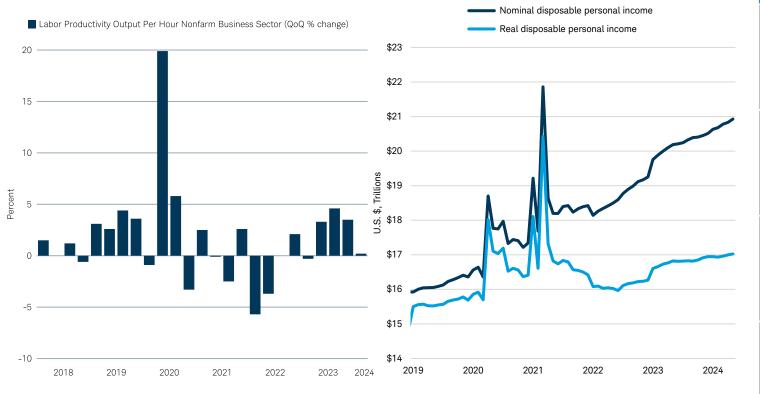
Quarterly Chartbook | Q3 2024

Source: Left: Macrobond as of 6/30/2024. Labor productivity tracks the total output that can be produced with a given input of labor. Right: Bloomberg as of 5/31/2024.

Economy

Productivity and income

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



Source: Charles Schwab, Macrobond as of 6/30/2024.

Quarterly Chartbook | Q3 2024

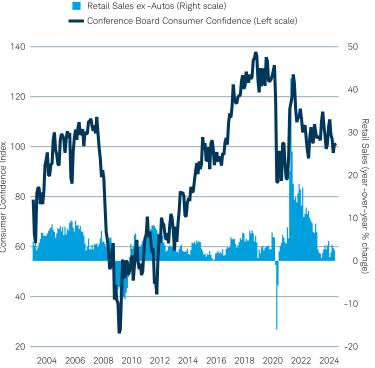
Business and consumer confidence Small business capital spending plans haven't yet signaled a firm expansion in business investment. Retail sales growth has softened this year as consumer sentiment has chopped around in a wide

range, likely held down by still-sticky inflation.

Small business spending plans and business investment

U.S. Private Nonresidential Domestic Investment (Right scale) 40 25 140 20 120 15 Quarter-over-quarter 30 Consumer Confidence Index Percent 80 % change 10 -15 -20 15 -25 10 -30 20 2004 2006 2008 2010 2012 2014 2016 2018 2020 2022 2024 2004 2006

Consumer optimism and retail sales

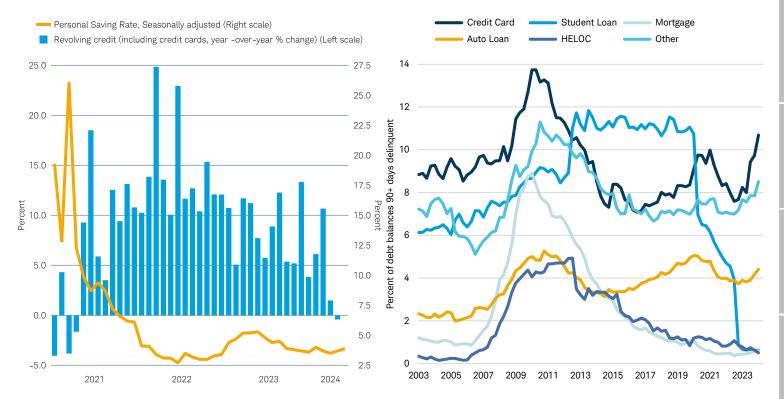


Source: Charles Schwab, Macrobond, Bloomberg. Savings rate and revolving credit as of 6/30/2024. Delinquencies as of 3/31/2024. Savings rate and revolving credit are on a monthly basis and subject to revisions.

13

Consumer spending

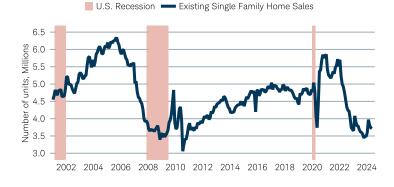
Consumer spending has been supported by a dramatic decline in the savings rate over the past few years and a subsequent increase in credit card debt. Serious delinquency rates have picked up sharply this cycle, particularly for credit cards.

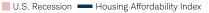


Quarterly Chartbook | Q3 2024

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 recent rolling over in homebuilder sentiment and lack of a pickup in mortgage applications.







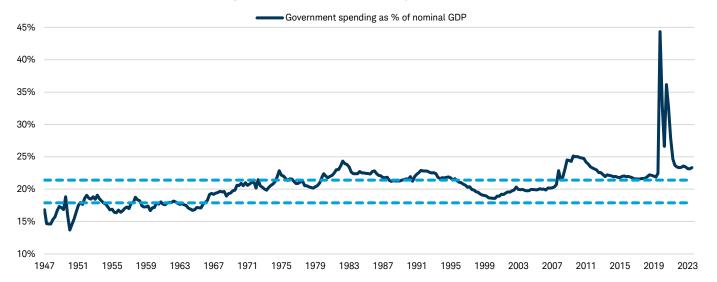
Bars represent National Bureau of Economic Research defined recession periods. Source: Charles Schwab, Bloomberg, Macrobond as of 6/30/2024.





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 – 3/31/2024)								
	Nonfarm payrolls	Real non-residential investment	Real GDP	CPI inflation					
Above 21.4%	1.4%	4.9%	2.7%	33%					
17.9% to 21.4%	1.8%	7.0%	3.1%	4.2%					
Below 17.9%	2.1%	8.2%	4.0%	2.6%					

Source: Charles Schwab, Bloomberg, Federal Reserve, Ned Davis Research, as of 3/31/2024.

©Copyright 2024 Ned Davis Research, Inc. Further distribution prohibited without prior permission. All Rights Reserved. See NDR Disclaimer at www.ndr.com/copyright.html. For data vendor disclaimers refer to www.ndr.com/vendorinfo/.

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.



Bars represent National Bureau of Economic Research defined recession periods.

Source: Schwab Center for Financial Research, Bloomberg as of 6/30/2024. Tax table source: 2024 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.



Married Filing Jointly | Qualifying Widow(er) 2024 IRS Brackets

Tax rate	Taxable income bracket	Capital gains bracket	Long-term capital gains and qualified dividends
10%	\$0 to \$23,200	\$0 to \$94,050	0%
12%	\$23,201 to \$94,300	\$94,051 to \$583,750	15%
22%	\$94,301 to \$201,050	\$583,751 or more	20%
24%	\$201,051 to \$383,900		
32%	\$383,901 to \$487,450		
35%	\$487,451 to \$731,200		
37%	\$731,201 or more		

Economy

Source: Charles Schwab, Bloomberg as of 6/30/2024. 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.

Consumer Price Index year-over-year %

Russia

8.3

4.8

3.9

3.3

2.8

2.7

2.7

2.6

2.4

2.3

2.0

0.8

0.3

17

India Brazil United States Japan Canada South Korea Furozone Germany France United Kingdom Italy 2011 2013 2023 China 2015 2017 2019 2021

Global inflation

10

8

6

2007

2005

2009

CPI YoY %

Emerging Economies CPI

Global inflation is in the process of rolling over, 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.

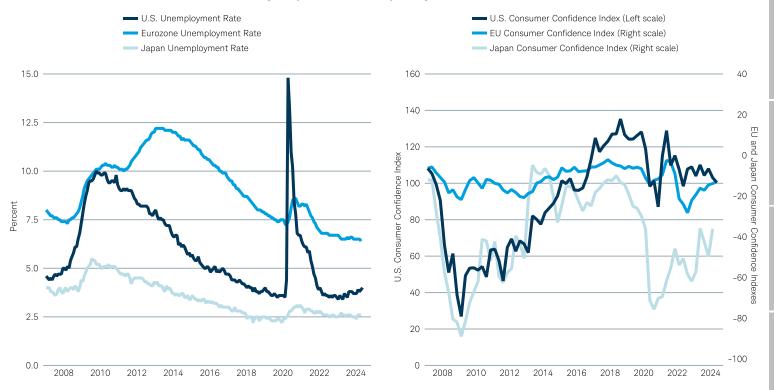
Major 7 Organisation for Economic Co-operation and Development (OECD) CPI

Quarterly Chartbook | Q3 2024

Economy

Global unemployment and consumer confidence

Labor markets around the globe look relatively tight, although the U.S. unemployment rate continues to tick higher. Consumer confidence metrics have started to find some stable footing, but recoveries have been uneven, as evidenced by Japan over the past year.

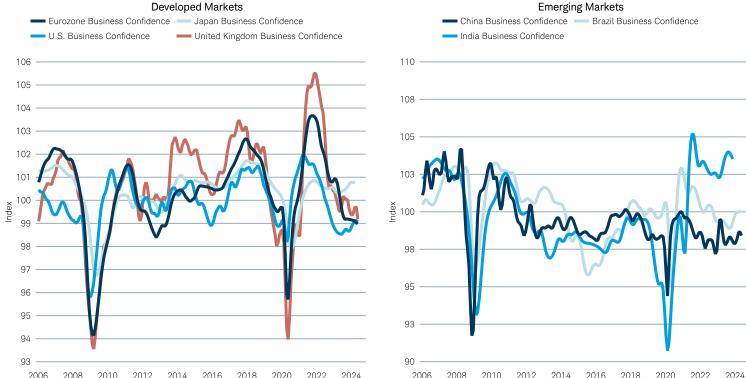


Source: Charles Schwab, Macrobond as of 6/30/2024, Business Confidence, released by the OECD, provides information on future developments, based upon opinion surveys on developments in production, orders, and stocks of finished goods in the industry sector. Numbers above 100 suggest an increased confidence in near future business performance, and numbers below 100 indicate pessimism towards future performance.



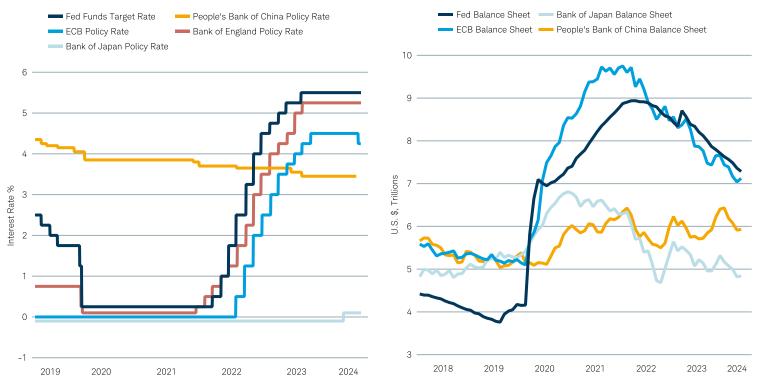
Global business sentiment

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



Global central banks

The European Central Bank has started to cut rates while the Federal Reserve and Bank of England have opted to keep rates steady. Global policy remains relatively restrictive and a drawdown in balance sheets may further exacerbate tightening financial conditions.



Source: Charles Schwab, Bloomberg, Macrobond as of 6/30/2024.

Source: Charles Schwab, Bloomberg, Macrobond as of 6/30/2024.

2021

2022

2023

2020

*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 21 total return of 25 emerging market currencies relative to the U.S. Dollar. Past performance is no guarantee of future results.

2024

Quarterly Chartbook | Q3 2024

Global currencies

The U.S. dollar has moved higher to date in 2024. 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.



■3mo ■1yr = 5yr

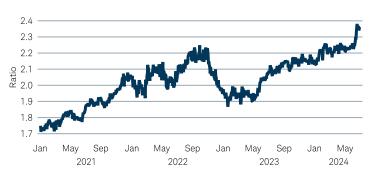
22

Global equity market summary

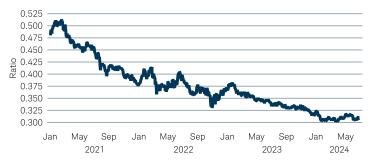
Total returns as of 6/30/2024

Global							
	Price	3-month	YTD	1-year	3-year	5-year	10-year
MSCI All Country World Index	802	3.0%	11.6%	19.9%	5.9%	11.3%	9.0%
Americas	Americas						
USA Dow Jones Index	39,417	-1.3%	4.8%	16.0%	6.4%	10.3%	11.3%
USA S&P 500 Index	5,477	4.3%	15.3%	24.5%	10.0%	15.0%	12.8%
USA NASDAQ Index	17,675	8.5%	18.6%	29.7%	7.8%	18.3%	16.1%
Canada S&P/TSX Index	21,876	-0.5%	6.1%	12.1%	6.0%	9.3%	7.0%
MSCI Latin America Index	2,179	-12.1%	-15.6%	-5.3%	1.3%	0.4%	-0.1%
EMEA							
Europe Euro Stoxx 50 Index	4,956	-1.6%	11.1%	14.9%	10.0%	10.4%	7.7%
UK FTSE 100 Index	8,199	3.7%	7.9%	12.6%	9.0%	5.7%	5.9%
France CAC 40 Index	7,623	-6.6%	1.9%	4.2%	8.0%	9.2%	8.6%
Germany DAX Index	18,373	-1.4%	8.9%	12.9%	5.5%	8.0%	6.4%
Spain IBEX 35 Index	11,099	0.1%	10.6%	18.3%	10.9%	6.6%	3.2%
Italy MIB Index	33,799	-1.5%	13.4%	23.6%	15.1%	13.6%	8.3%
Asia/Pacific							
Japan Nikkei 225 Index	39,583	-1.9%	19.3%	21.5%	13.5%	15.5%	12.2%
Hong Kong Hang Seng Index	17,719	9.0%	6.2%	-2.2%	-12.0%	-6.0%	0.7%
China CSI 300 Index	3,462	-1.0%	2.1%	-7.7%	-10.8%	0.2%	7.1%
Australia S&P/ASX 200 Index	7,767	-1.1%	4.2%	12.1%	6.3%	7.2%	8.0%

S&P 500 relative to MSCI EAFE







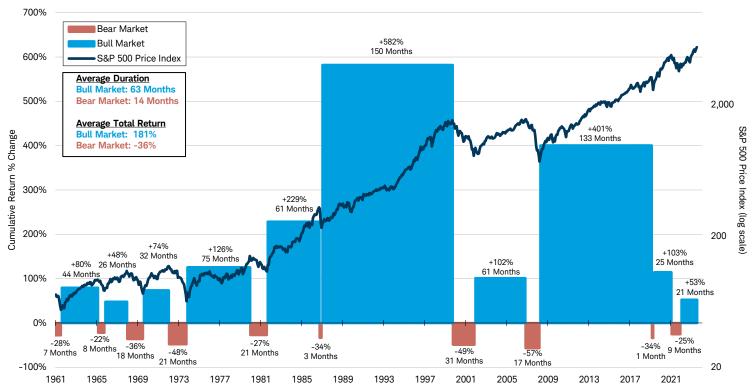
Returns are annualized for periods over one year.

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.

Source: Bloomberg as of 6/30/2024. 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.**

U.S. bull and bear markets

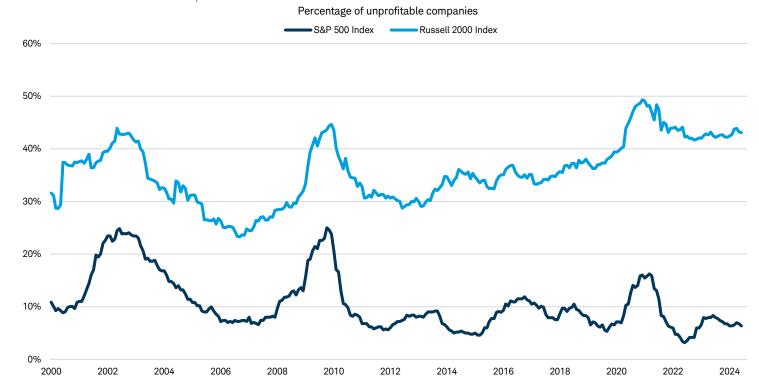
With the S&P 500 surpassing an all-time high this year, it is notable that bull markets have generally been longer in duration and greater in magnitude than bear markets, resulting in gains over time.



Equities

Comparing large-cap 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 6/30/2024. 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 are still 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.



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	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 6/30/2024. 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 9/30/2023. For illustrative purposes only. Investing involves fixk, 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.

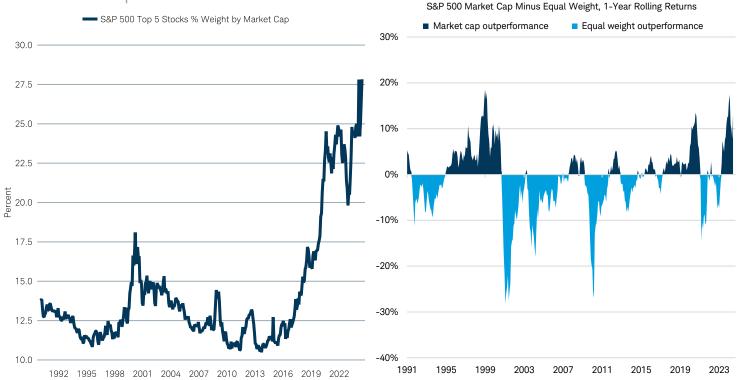


ncome

Commodities

Market concentration

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



Source: Charles Schwab, Bloomberg, Macrobond as of 6/30/2024. Top 5 stocks in the S&P 500 are Microsoft, NVIDIA, Apple, 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. Supporting documentation for any claims or statistical information is available upon request. Schwab does not recommend the use of technical analysis as a sole means of investment research. Past performance is no guarantee of future results.

Source: Charles Schwab, Bloomberg, Macrobond, Ned Davis Research, Inc. as of 6/30/2024. 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. 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**.

Quarterly Chartbook | Q3 2024

Equities

Technical indicators

The S&P 500 Index remained above its major moving averages in the second 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 above their 200-day moving average.



	Year-to-date									
Index	YTD return	Index maximum drawdown from YTD high	Average member maximum drawdown from YTD high	Index return from YTD low						
S&P 500	14%	-5%	-15%	16%						
NASDAQ	18%	-7%	-39%	22%						
Russell 2000	1%	-9%	-30%	7%						
Dow Jones	4%	-5%	-15%	5%						

Investor sentiment indicators

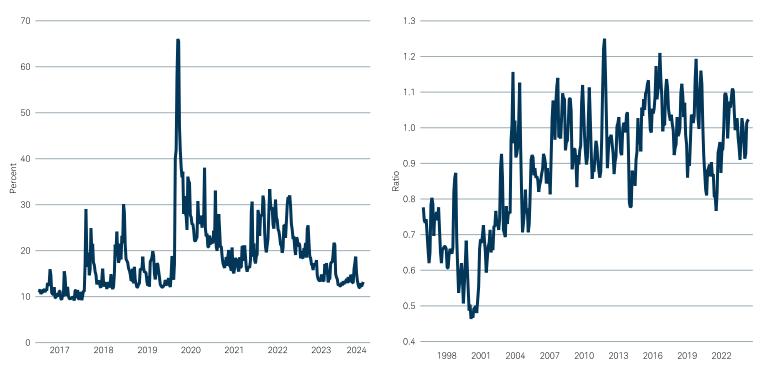
Several new all-time highs for the major indexes coincided with a significant upturn in investor sentiment. The Crowd Sentiment Poll from Ned Davis Research is still in "extreme optimism" territory, which has historically been a weaker zone for the stock market.



Ned Davis Research Crowd Sentiment Poll	S&P 500 annualized gain (12/01/1995-6/30/2024)	Percent of time		
Above 66	1.13%	28.28%		
57-66 from above	2.71%	17.34%		
57-66 from below	19.80%	18.09%		
Below 57	10.82%	35.91%		

Source: Charles Schwab, Ned Davis Research, Inc. as of 6/30/2024. See NDR Disclaimer at <u>www.ndr.com/copyright.html</u>. Further distribution prohibited without prior permission. All Rights Reserved. For data vendor disclaimers refer to <u>www.ndr.com/vendorinfo</u>. 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**.

- Ned Davis Research Crowd Sentiment Poll



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.

Equity market volatility

CBOE Volatility Index (on a weekly basis)

Source: Charles Schwab, Macrobond as of 6/30/2024. 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 <u>CLICKING</u> <u>HERE</u>. Call Schwab 1-1800-435-4000 for a current copy. Supporting documentation for any claims or statistical information is available upon request. 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**.

Total U.S. Equity Put/Call Ratio (three-month mov. avg.)

U.S. equity sector returns and valuations

Data as of 6/30/2024

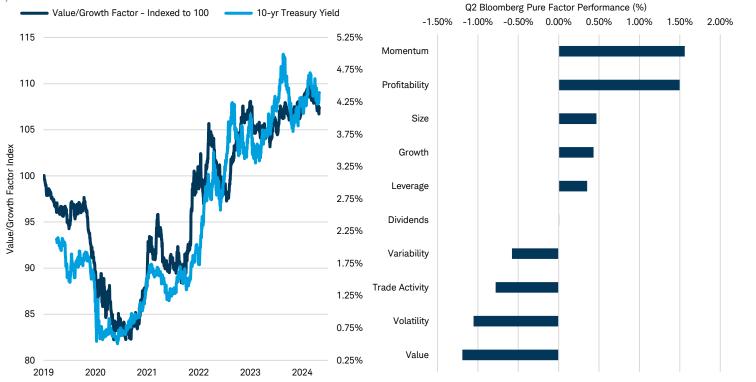
S&P 500 Sectors									
Index	S&P Weight	3-month Total Return	1-year Total Return	Total Return since last market peak (1/2022)	since last		Median Forward P/E since 1990	Dividend Yield	
S&P 500 Index	100.0%	4.3%	24.5%	18.4%	56.8%	21.1	15.8	1.3%	
Information Technology	32.1%	13.8%	41.8%	43.9%	115.8%	30.3	17.8	0.6%	
Financials	12.5%	-2.0%	24.1%	9.1%	40.4%	15.2	13.0	1.6%	
Health Care	11.8%	-1.0%	11.7%	8.9%	23.2%	19.0	16.5	1.6%	
Consumer Discretionary	10.0%	0.6%	13.1%	-7.9%	38.2%	23.5	18.8	0.7%	
Communication Services	9.3%	9.4%	44.9%	18.0%	95.5%	18.9	15.5	0.7%	
Industrials	8.1%	-2.9%	15.5%	21.2%	48.1%	20.5	16.2	1.5%	
Consumer Staples	5.8%	1.4%	8.2%	8.9%	21.8%	19.9	17.1	2.8%	
Energy	3.7%	-2.4%	15.8%	75.5%	20.4%	11.9	15.3	3.2%	
Utilities	2.3%	4.7%	7.8%	4.3%	17.6%	16.2	14.6	3.2%	
Materials	2.2%	-4.5%	8.7%	4.2%	33.6%	19.5	15.9	1.9%	
Real Estate	2.1%	-1.9%	5.6%	-18.2%	20.5%	34.4	n/a	3.6%	

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**.

Quarterly Chartbook | Q3 2024

Equity investment styles and factors

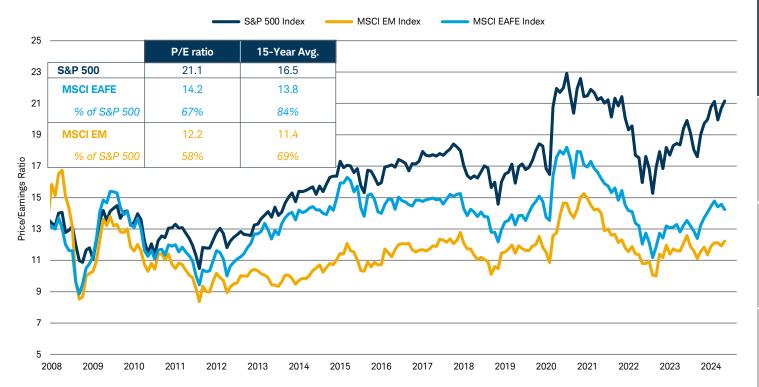
Value tends to outperform growth when interest rates rise. Beyond growth and value, there are several factors, including profitability and momentum, that can help explain overall market performance.



Source: Charles Schwab, Bloomberg as of 6/30/2024. 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, 31 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, the outsized impact of the war in Ukraine is pressuring EAFE valuations, while China's sluggish growth has weighed on emerging market valuations.

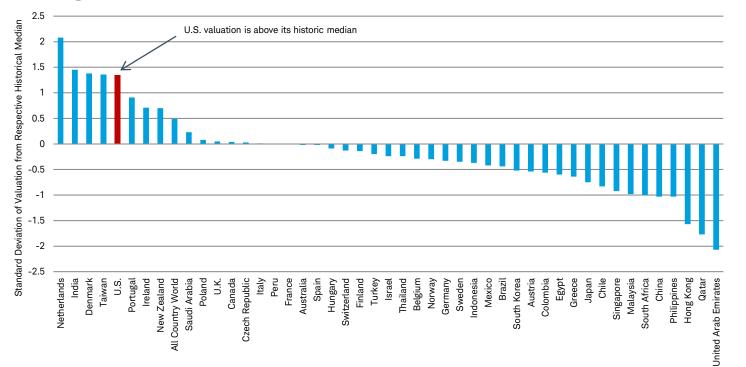


Source: Bloomberg, the Schwab Center for Financial Research as of 6/30/2024. Indexes are unmanaged, do not incur management fees, costs, and expenses, and cannot be invested in directly. Investing involves risk, including loss of principal. Past performance is no guarantee of future results.

Equities

Comparing valuations around the globe

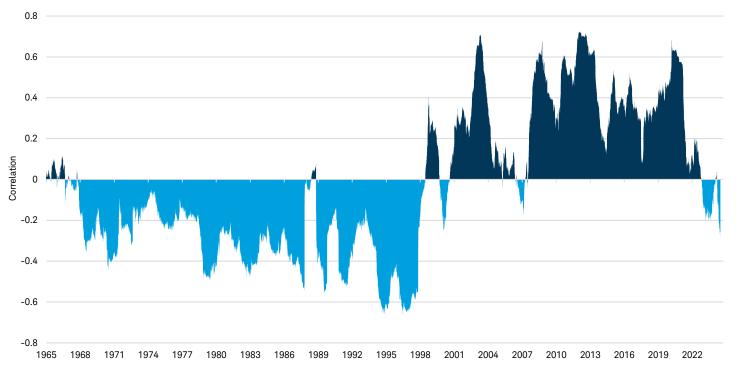
In this alternative metric, the cyclically adjusted measure of valuations is based on long-term earnings. Many markets have more attractive valuations than the U.S. market. This helps support the case for global diversification.



Source: Ned Davis Research. Data as of 6/30/2024. 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 has fallen back into negative territory—painting a similar backdrop to what was considered normal from the mid–1960s to the mid–1990s.

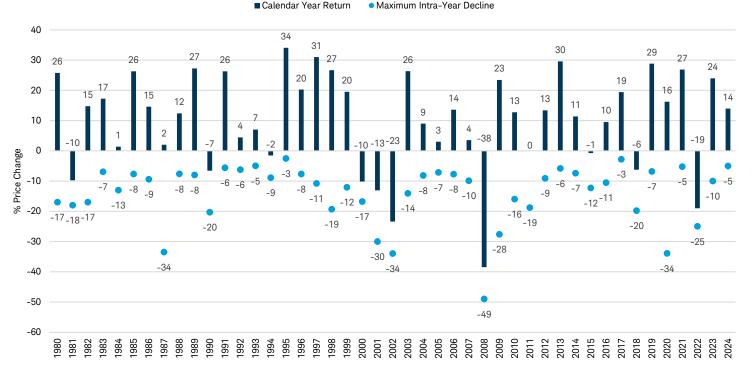


Rolling 1-year correlation between S&P 500 and 10-year bond yield

Source: Charles Schwab, Bloomberg as of 6/30/2024. 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.**

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 6/30/2024. 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 6/30/2024

Core Bonds								
	3-month	YTD	1-year	3-year	5-year	10-year		
Bloomberg U.S. Aggregate	0.1%	-0.7%	2.6%	-3.0%	-0.2%	1.3%		
Treasuries	0.2%	-0.7%	1.5%	-3.3%	-0.7%	0.9%		
Municipal Bonds	0.0%	-0.4%	3.2%	-0.9%	1.2%	2.4%		
Mortgage Backed	0.1%	-1.0%	2.1%	-2.9%	-0.8%	0.9%		
Agency Bonds	0.8%	0.8%	4.3%	-1.0%	0.7%	1.5%		
Investment Grade Corporate	0.1%	0.0%	5.0%	-2.8%	0.8%	2.4%		
Commercial Mortgage Backed	0.7%	1.7%	6.0%	-1.8%	0.7%	2.0%		
Asset Backed	1.0%	1.7%	5.5%	0.7%	1.6%	1.8%		
Aggressive Income								
High-Yield Bonds	1.1%	2.6%	10.4%	1.6%	3.9%	4.3%		
Bank Loans	1.9%	4.4%	11.1%	6.1%	5.5%	4.6%		
Preferred Stock	-0.7%	4.9%	10.9%	-1.2%	3.1%	4.1%		
Convertible Bonds	-0.6%	0.9%	5.4%	-3.6%	9.6%	8.6%		

International									
	3-month	YTD	1-year	3-year	5-year	10-year			
International Treasuries	-3.0%	-6.8%	-2.5%	-8.3%	-4.2%	-2.1%			
International Investment Grade	-0.2%	-1.1%	4.5%	-4.0%	-0.4%	0.9%			
Emerging Market Bonds (USD)	0.3%	2.1%	9.0%	-2.9%	-0.2%	2.5%			
Emerging Market Bonds (Local)	-1.4%	-3.6%	-0.7%	-3.4%	-1.7%	-1.1%			
Dividend Equity									
U.S. Dividend Stocks	-2.6%	4.1%	11.2%	4.6%	11.9%	10.9%			

Economy

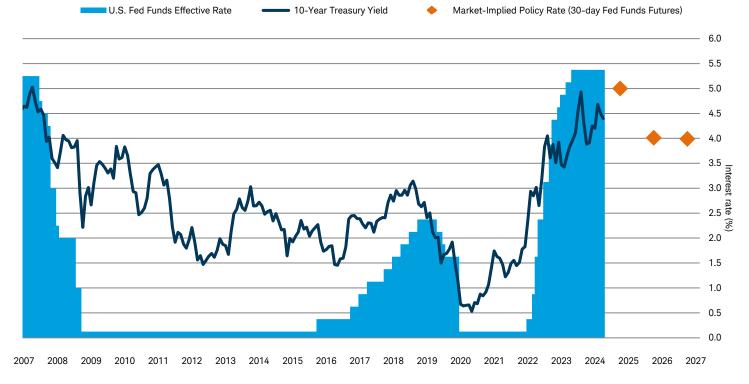
Returns are annualized for periods over one year.

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.

Source: Bloomberg as of 6/30/2024. Market-implied policy rates for 12/2024, 12/2025 and 12/2026. For illustrative purposes only. Futures and futures options trading involves substantial risk and is not suitable for all investors. Please read the <u>Risk Disclosure Statement for Futures and Options</u> prior to trading futures products. **Past performance is no guarantee of future results.**



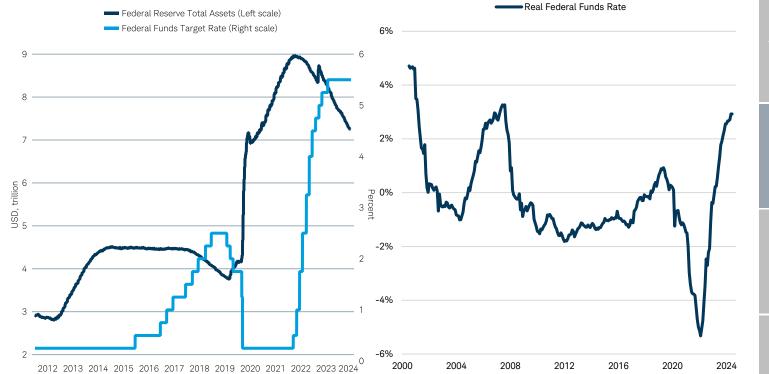
FOMC projections suggest that a rate cut by the end of the year is still likely; however, the timing and potential for additional cuts will depend on the path of inflation and the economy.



of and

Federal Reserve balance sheet and real yields

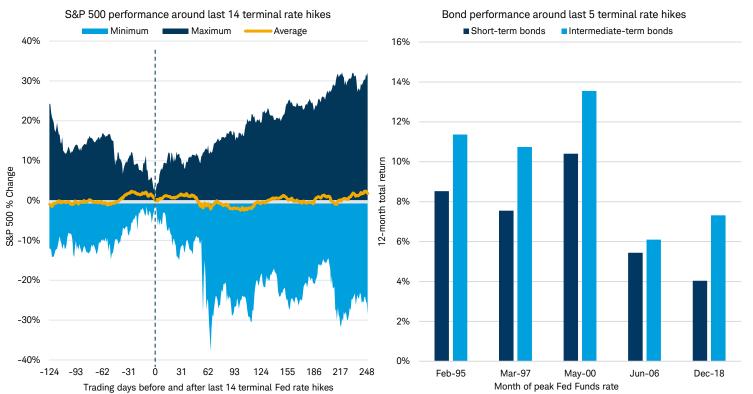
The Fed slowed the pace of its balance sheet runoff, or "quantitative tightening," in June. Over time, the Fed prefers to have a Treasury-only balance sheet, allowing all mortgage-backed securities to roll off.



Source: Macrobond as of 6/30/2024. Left chart reflects top of Fed Funds Target Rate range. Bloomberg as of 5/31/2024. Right chart shows the Federal Funds Target Rate upper bound minus the Core Personal Consumer Expenditures (PCE) year-over-year percentage change. **Past performance is no guarantee of future results.**

Rate hike cycle

Intermediate-term bonds have outperformed short-term bonds in the 12 months following the last rate hike over the past five cycles, while stock returns have varied.



Source: Charles Schwab, Bloomberg. Left: 1929-2019. Dark blue shading represents best historical performance before and after last 14 terminal Fed rate hikes. Light blue shading represents worst historical performance before and after last 14 terminal Fed rate hikes. Right: 12-month total returns for each period are as of month-end. The indexes used for each asset class are the Bloomberg U.S. Aggregate 1-3 Year Index for "Short-term" and the Bloomberg U.S. Aggregate 5-7 Year Index for "Intermediate-term." 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. Past performance is no guarantee of future results.

Income

Yield curve slope and recessions

The spread between the 2-year and 10-year Treasury yields remained inverted in the second quarter. We expect the curve to eventually steepen 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 6/30/2024. 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.

Corporate bond spreads

Bond spreads represent the extra yield that corporate bonds offer above comparable Treasury yields. Spreads rose modestly in the second quarter but remain near the cyclical lows.



Bars represent National Bureau of Economic Research defined recession periods.

Source: Charles Schwab, Bloomberg as of 6/30/2024. 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.

Source: Charles Schwab, Bloomberg as of 6/30/2024. 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.

Quarterly Chartbook | Q3 2024

Global yields

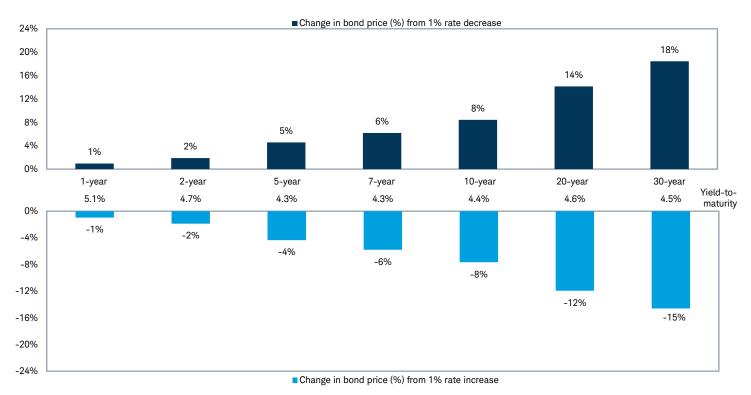
Interest rate generic differentials can influence the value of currencies. Yields in the U.S. are higher than most other developed market government bond yields, although that gap is off its previous highs.



Source: Charles Schwab and Federal Reserve, using yields as of 6/30/2024. 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.

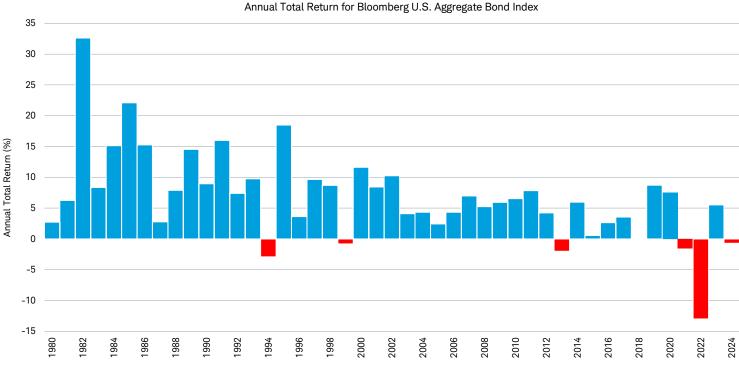
Interest rates and bond prices

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.



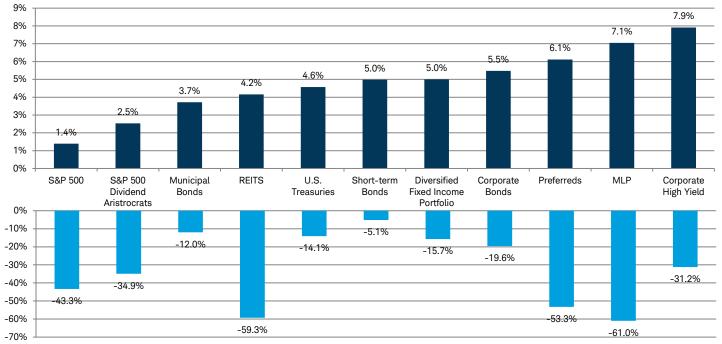
Negative returns have been uncommon in a diversified bond portfolio

After the worst year in the U.S. Aggregate's history, total returns were positive in 2023. Given the high starting yields and expectations for rate cuts, positive returns still seem likely in 2024.



Source: Bloomberg as of 6/30/2024. 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



Dividend Yield or Yield to Worst

Worst Rolling 12-Month Total Return

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 6/30/2024. Worst rolling 12-month total returns are from 12/31/1999 to 6/30/2024 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 6/30/2024

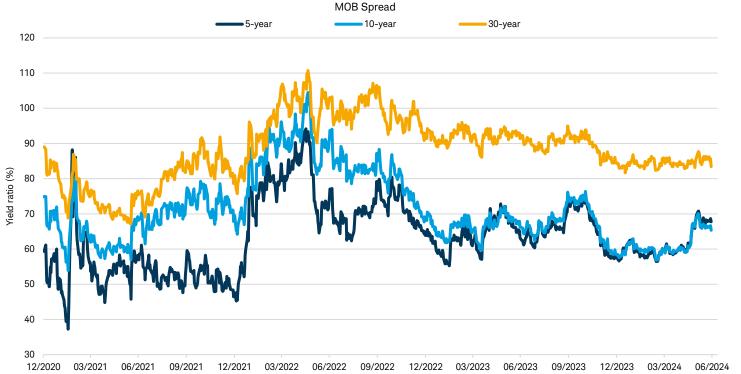
Fixed Income					Fixed Income		Tax-equivalent yield		
	1-month	3-month	6-month	12-month		Current	CA Resident*	NY Resident ⁺	National*
Municipal	1.53%	-0.02%	-0.40%	3.21%	Municipal	3.72%	8.10%	7.38%	6.86%
Municipal High Yield	2.45%	2.59%	4.14%	8.90%	Municipal High Yield	5.43%	11.82%	10.77%	10.01%
Taxable Municipal	1.05%	-0.19%	-0.08%	3.81%	Taxable Municipal	5.19%	5.19%	5.19%	5.19%
By Maturity					By Maturity				
1 Year (1-2)	0.57%	0.82%	0.94%	3.19%	1 Year (1-2)	3.42%	7.44%	6.78%	6.30%
3 Year (2-4)	0.80%	0.36%	0.08%	2.63%	3 Year (2-4)	3.37%	7.34%	6.69%	6.22%
5 Year (4-6)	1.05%	-0.42%	-0.79%	2.26%	5 Year (4-6)	3.42%	7.45%	6.79%	6.31%
7 Year (6-8)	1.25%	-0.85%	-1.33%	2.06%	7 Year (6-8)	3.46%	7.53%	6.86%	6.38%
10 Year (8-12)	1.51%	-1.04%	-1.57%	1.92%	10 Year (8-12)	3.45%	7.52%	6.85%	6.37%
15 Year (12-17)	1.81%	-0.15%	-0.19%	3.92%	15 Year (12-17)	3.69%	8.04%	7.32%	6.81%
20 Year (17-22)	1.86%	0.29%	-0.03%	4.03%	20 Year (17-22)	4.05%	8.81%	8.03%	7.46%
Long Bond (22+)	2.10%	0.83%	0.08%	4.26%	Long Bond (22+)	4.23%	9.22%	8.40%	7.81%
Quality					Quality				
Aaa	1.60%	-0.28%	-1.09%	2.52%	Aaa	3.58%	7.79%	7.10%	6.60%
Aa	1.48%	-0.11%	-0.68%	2.73%	Aa	3.60%	7.84%	7.14%	6.64%
Α	1.52%	0.22%	0.33%	4.31%	Α	3.95%	8.61%	7.84%	7.29%
Baa	1.97%	0.68%	1.29%	5.63%	Baa	4.38%	9.55%	8.70%	8.09%
Municipal High Yield	2.45%	2.59%	4.14%	8.90%	Municipal High Yield	5.43%	11.82%	10.77%	10.01%

*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

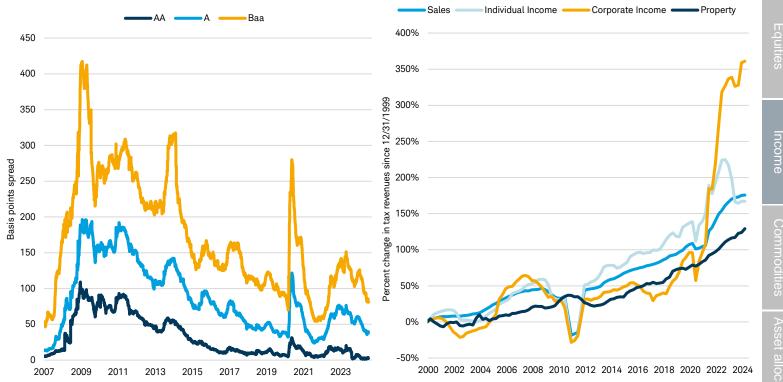
Relative to Treasuries, short- and intermediate-term muni yields rose in the second quarter, but longterm yields were flat. While relative yields are generally below their long-term averages, munis may still make sense for investors in high tax brackets who are looking for more conservative income options.



Source: Bloomberg. Daily data as of 6/30/2024. 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 spreads and fundamentals

Credit quality has likely peaked but conditions remain resilient. Despite a slowdown in revenues, many states have used the strong tax growth and substantial fiscal support during the COVID-19 crisis to build their liquidity levels to record highs. Looking ahead, we don't anticipate broad credit downgrades.



Source: Bloomberg AA, A, and Baa Municipal Bond Indexes. As of 6/30/2024. Difference in yields over time may be due to different index characteristics such as durations, average coupons, or other characteristics. U.S. Census Bureau, Quarterly Summary of State and Local Taxes, as of Q4 2023, which is the most recent data available. Percent change is based on the four-quarter rolling average. 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**.

Dividend-paying stocks can be an income-generating security. \$12,591 Growth of a Hypothetical Investment in the S&P 500 Index, Reinvesting Dividends (12/31/1982 - 12/31/2023)Total portfolio value derived from dividend receipt, reinvestment and price appreciation \$4,770 \$141 1992 1994 1996 1998 2000 2002 2004 2006 2008 2010 2012 2014 2016 2018 2020 2022 1982 1984 1986 1988 1990 Total Portfolio Value Price Appreciation Only

Impact of dividends on total return

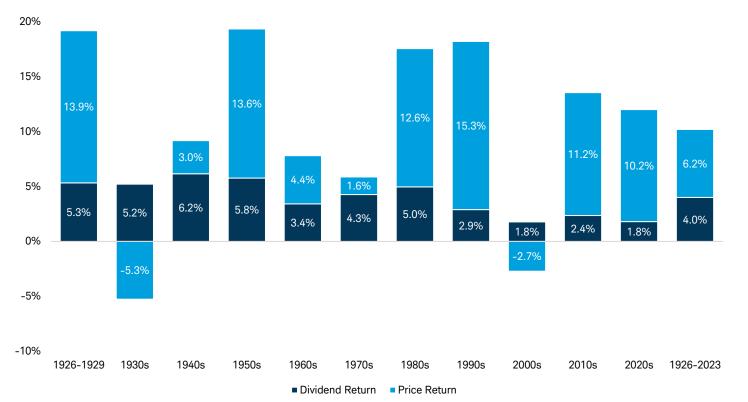
Growth of the S&P 500 Total Return Index assumes reinvestment of dividends, includes capital gains, and does not reflect the effect of taxes and fees. The \$141 is the S&P 500 Index price on 12/31/1982. The example is hypothetical and provided for illustrative purposes only. It is not intended to represent a specific investment product. Source: S&P Global Indices and Bloomberg as of 12/31/2023. Indexes are unmanaged, do not incur management fees, costs and expenses, and cannot be invested in directly. Investing involves risk, including but not limited to the risk that stocks may reduce or stop paying dividends. **Past performance is no guarantee future results**.

49

Quarterly Chartbook | Q3 2024

Contribution of dividends to S&P 500 Index total return

From 1926–2023, dividends have been a meaningful part of total return.



Source: 2019 Stocks, Bonds, Bills & Inflation® (SBBI®) Yearbook (1926-2018); Bloomberg (2019 - 2023). 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 6/30/2024

Energy							
	Price	3-month	YTD	1-year	3-year	5-year	10-year
WTI Crude Oil Futures	81.54	-2.0%	13.8%	15.4%	3.5%	6.9%	-2.5%
Brent Crude Oil Futures	86.41	-1.2%	12.2%	15.4%	4.8%	5.4%	-2.6%
Gasoline Futures	252.91	-8.4%	20.3%	-4.0%	4.1%	5.4%	-1.9%
NY Harbor ULSD Futures	251.69	-3.8%	-1.4%	2.8%	5.7%	5.3%	-1.6%
Sulphur Gasoil Futures	785.50	-3.9%	4.6%	10.8%	9.6%	5.7%	-1.5%
Natural Gas Futures	2.60	47.5%	3.5%	-7.0%	-10.7%	2.4%	-5.3%
Metals							
Gold Spot \$/Oz	2,326.75	4.3%	12.8%	21.2%	9.5%	10.5%	5.8%
Silver Spot \$/Oz	29.14	16.7%	22.5%	28.0%	3.7%	13.7%	3.3%
Platinum Spot \$/Oz	996.26	9.3%	0.4%	9.9%	-2.5%	3.6%	-3.9%
Palladium Spot \$/Oz	977.10	-3.9%	-11.2%	-20.6%	-29.5%	-8.7%	1.5%
LME Aluminum 3MO (\$)	2,524.50	8.0%	5.9%	17.3%	0.0%	7.0%	2.9%
LME COPPER 3MO (\$)	9,599.00	8.3%	12.2%	15.4%	0.8%	9.9%	3.2%
Agriculture							
Corn Futures	397.25	-10.1%	-15.7%	-28.4%	-18.0%	-1.1%	-0.7%
Wheat Futures	553.50	-1.2%	-11.9%	-13.0%	-6.2%	0.9%	-0.2%
Soybean Futures	1,150.50	-3.4%	-11.1%	-26.1%	-7.4%	5.0%	-1.9%
Coffee Futures	228.95	21.2%	21.6%	42.2%	12.8%	16.2%	2.8%
Sugar Futures	20.31	-9.8%	-1.3%	-11.3%	4.8%	10.5%	2.0%
Cotton Futures	69.81	-23.6%	-13.8%	-15.7%	-6.0%	2.0%	-1.3%
Broad indexes	·				·	·	
Bloomberg Commodity Index	100.99	1.5%	2.4%	-0.5%	2.2%	4.9%	-2.8%
S&P GSCI Index	578.39	-0.7%	8.0%	7.0%	2.6%	6.3%	-1.3%



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 <u>Risk Disclosure Statement for Futures and Options</u> prior to trading futures products. Investing involves risk, including loss 51 of principal. **Past performance is no guarantee of future results**.

Commodities

Commodity relationships

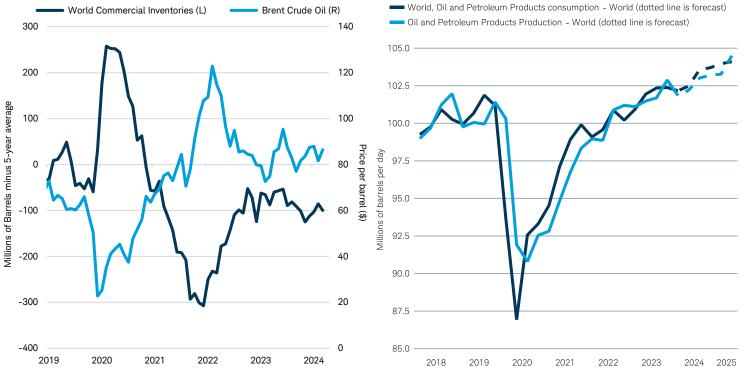
Q2's flat performance in commodities came as energy declined—save natural gas—offset by a broadbased rally in metals. The U.S. dollar ticked higher but remains well off the 2022 highs and in a range. Volatility in the greenback amid global central bank changes and political elections could play a role in commodity prices, along with China's economy, which has shown some life. U.S. Dollar Index ______ S&P GSCI Price Return Index (YoY%) ______ Caixin China Composite PMI ______ London Metal Exchange Index



Source: Charles Schwab, Bloomberg. Left chart as of 6/30/2024. Right chart as of 5/31/2024. 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, range likely in store

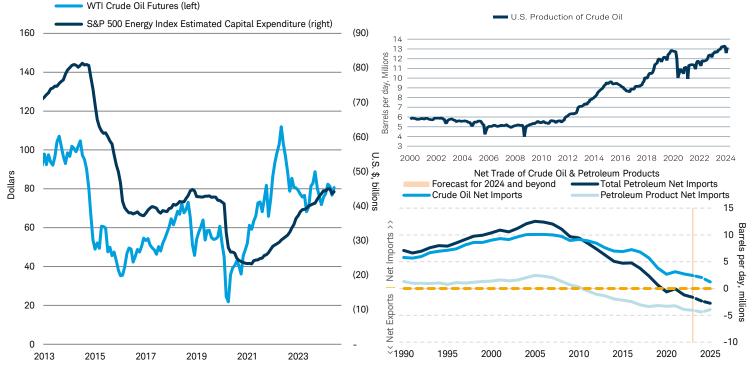
Oil prices gave back some of Q1's gains to preserve the recent range and downtrend from 2022 highs. OPEC production cuts are being offset by increased production of non-OPEC countries—led by record output in the U.S.—while geopolitical tensions, and relatively stable economic growth, namely consumption, could provide support for oil prices.



Source: Charles Schwab, International Energy Agency, Macrobond as of 6/30/2024. 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 Q2 2024 to Q2 2025. Past performance is no guarantee of future results.

U.S. energy position continues to strengthen

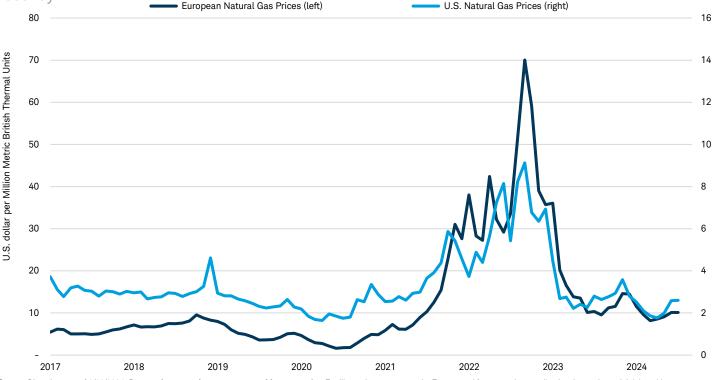
Oil production in the U.S. remains near record highs, continuing to counter OPEC+ production cuts, while also maintaining U.S. status as a net petroleum product exporter and closing the gap on crude oil import dependency. Amid this backdrop, capital expenditures in the sector may continue to trend higher.



Source: Charles Schwab, Bloomberg, Macrobond, U.S. Energy Information Administration as of 6/30/2024. For illustrative purposes only. Futures and futures options trading involves substantial risk and is not suitable for all investors. Please read the <u>Risk Disclosure Statement for Futures and Options</u> 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 rebounds but remains suppressed

Q2 natural gas prices bounced off multi-year lows on decelerated production levels and warmer global weather trends. However, prices remained subdued, as exports outside Russia– in response to the war – buoyed supply, along with economic dynamics impacting demand for natural gas more recently.



Source: Bloomberg as of 6/30/2024. 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 <u>Risk Disclosure Statement for Futures and Options</u> prior to trading futures products.

55

Commodities

Source: Charles Schwab, Macrobond as of 6/30/2024. 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.

Quarterly Chartbook | Q3 2024

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 may prove more important to the performance of the precious metal. A closer relationship with inflation seems to lie with the overall commodities space.



Commodifies

Source: Charles Schwab, Macrobond as of 6/30/2024. For illustrative purposes only. Investing involves risk, including loss of principal. Past performance is no guarantee of future results.



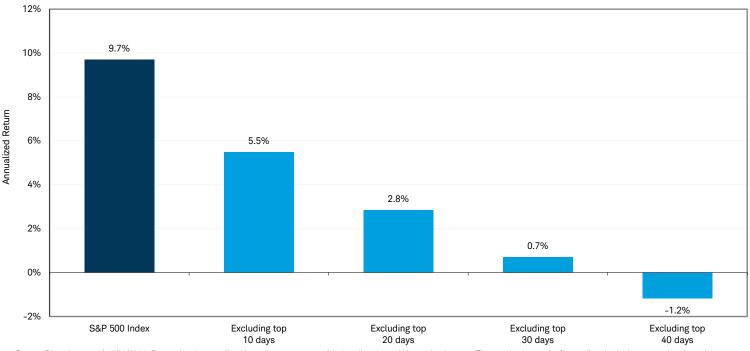
Metals rally helped offset energy drag

Metals rallied broadly as economic and geopolitical uneasiness continued to boost precious metals, while resilient global economic output—including China—and supply concerns in aluminum and copper continued to lift industrial metals. These dynamics remain in play as we move forward.



Time in the market is more important than timing the market

Missing the 10 strongest days of the market from 2004-2023 resulted in a significantly weaker annualized total return, compared to staying invested throughout the entire period.



Source: Bloomberg as of 12/31/2023. 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.**

Annualized Return S&P 500 Index (Total Return)

Politics versus sound investment principles

Elections are stressful and can create uncertainty and a lot of noise. Historically, markets have rewarded long-term investors regardless of the presidential party.

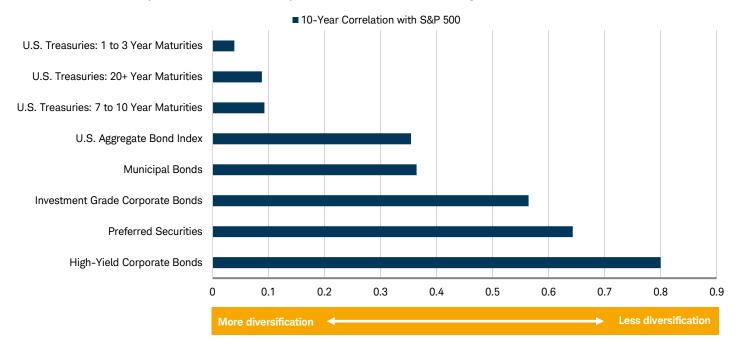
Growth of \$1 (January 1961 - June 2024)

Democrat Republican \$1.000 Biden Trump Obama Bush \$100 Clinton H.W. Bush Reagan \$10 Carter Ford Nixon Johnson Kennedy \$ 1961 1965 1969 1973 1977 1981 1985 1989 1993 1997 2001 2005 2009 2013 2017 2021

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 lbbotson 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. Returns include investment of dividends and interest. For illustrative purposes only. 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.

Bonds offer potential diversification benefits

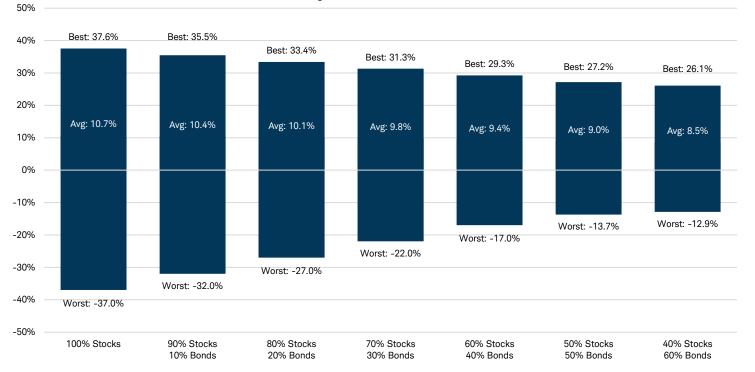
Based on low correlations, high-quality bonds such as U.S. Treasuries provide diversification benefits when added to a portfolio of stocks. Riskier bonds have provided less diversification benefits but can still make sense as part of a diversified portfolio for lower volatility or more income.



Source: Charles Schwab, data by Bloomberg, as of 12/31/2023. 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 US Treasury 20+ Year Maturities), Bloomberg US Treasury 20+ Year Maturities), Bloomberg US Treasure X (U.S. Treasuries: 20+ Year Maturities), Bloomberg US Treasury 7-10 Year US Aggregate Bond Index (U.S. Aggregate Bond Index), Bloomberg US Treasury 20+ Year Maturities), Bloomberg Municipal Bond Index (Municipal Bond), Bloomberg US Aggregate Bond Index (I.S. Aggregate Bond Index), Bloomberg 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 2013 and December 2023. 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.**

Importance of diversification

Adding fixed income investments to a portfolio of equities can help lower volatility.

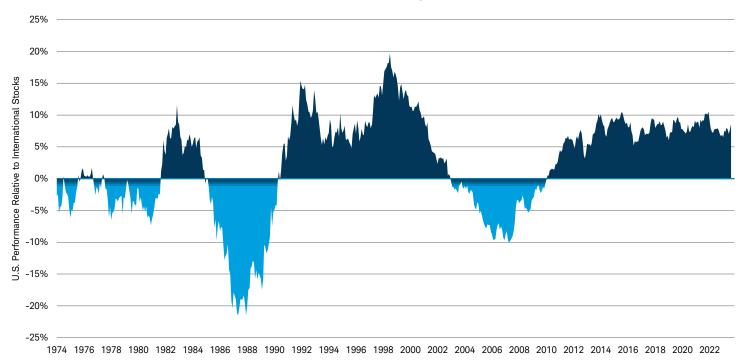


Range of annual returns (1970-2023)

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.**

International equities versus U.S. equities

Outperformance of U.S. equities versus international equities has rotated over time, reinforcing the benefit of a globally diversified portfolio.



U.S. Stocks Minus International, Rolling Five-Year Return

Source: Bloomberg as of 6/30/2024. The graph shows the rolling five-year annualized total returns of the S&P 500[®] Index, representing U.S. stocks and MSCI EAFE[®] Index-Net of Taxes representing international stocks, from January 1970 through June 2024. The first rolling five-year period is January 1970 through December 1974. Returns assume reinvestment of dividends. 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. Diversification strategies do not ensure a profit and do not protect against losses in declining markets. **Past performance is no guarantee of future results.**

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.

Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	1-year
Energy 7.3%	Energy 1.3%	Energy 2.5%	Utilities 1.2%	Info. Tech. 12.7%	Real Estate 8.0%	Comm. Serv. 4.8%	Cons. Discr. 8.6%	Energy 10.4%	Utilities 1.6%	Info. Tech. 10.0%	Info. Tech. 9.3%	Comm. Serv. 43.6%
Comm. Serv. 6.7%	Comm. Serv. -0.4%	Health Care -3.1%	Info. Tech. -0.1%	Real Estate 12.3%	Industrials 6.8%	Info. Tech. 3.9%	Industrials 7.0%	Utilities 6.3%	Energy -0.9%	Utilities 8.5%	Cons. Discr. 4.8%	Info. Tech. 40.7%
Financials 4.7%	Health Care -0.8%	Financials -3.2%	Cons. Staples -1.4%	Cons. Discr. 10.8%	Cons. Discr. 6.1%	Financials 2.9%	Materials 6.3%	Materials 6.2%	Cons. Staples -1.1%	Comm. Serv. 6.6%	Comm. Serv. 4.7%	S&P 500 22.7%
Materials 3.4%	Cons. Discr. -1.3%	Comm. Serv. -3.3%	Comm. Serv. -2.0%	Financials 10.7%	Financials 5.3%	Health Care 2.8%	Info. Tech. 6.2%	Financials 4.7%	Comm. Serv. -2.2%	Real Estate 4.9%	S&P 500 3.5%	Financials 21.9%
S&P 500 3.1%	Info. Tech. -1.5%	Cons. Staples -4.8%	S&P 500 -2.2%	S&P 500 8.9%	Comm. Serv. 4.8%	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%	Industrials 13.6%
Industrials 2.9%	S&P 500 -1.8%	S&P 500 -4.9%	Financials -2.6%	Industrials 8.5%	S&P 500 4.4%	Cons. Staples 1.4%	S&P 500 5.2%	Industrials 4.3%	S&P 500 -4.2%	Materials 3.1%	Real Estate 1.3%	Cons. Discr. 12.1%
Info. Tech. 2.6%	Industrials -2.3%	Materials -5.0%	Real Estate -2.9%	Materials 8.1%	Materials 4.3%	Energy -0.5%	Financials 4.0%	Cons. Staples 3.2%	Financials -4.3%	Financials 3.0%	Cons. Staples -0.5%	Energy 12.0%
Cons. Discr. 2.4%	Financials -2.9%	Utilities -5.8%	Industrials -3.0%	Comm. Serv. 7.8%	Health Care 4.1%	Industrials -0.9%	Health Care 3.1%	S&P 500 3.1%	Cons. Discr. -4.4%	Cons. Staples 2.3%	Financials -1.0%	Health Care 9.8%
Utilities 2.4%	Real Estate -3.1%	Cons. Discr. -6.0%	Materials -3.2%	Health Care 5.2%	Info. Tech. 3.8%	Utilities -3.1%	Energy 2.6%	Health Care 2.2%	Materials -4.6%	Health Care 2.2%	Industrials -1.0%	Materials 6.6%
Cons. Staples 2.0%	Materials -3.5%	Industrials -6.1%	Health Care -3.3%	Utilities 4.5%	Cons. Staples 2.4%	Cons. Discr. -3.6%	Real Estate 2.5%	Info. Tech. 1.9%	Health Care -5.2%	Industrials 1.4%	Energy -1.4%	Cons. Staples 5.3%
Real Estate 1.2%	Cons. Staples -3.8%	Info. Tech. -6.9%	Cons. Discr. -4.5%	Cons. Staples 3.7%	Utilities 1.7%	Materials -3.9%	Cons. Staples 2.1%	Real Estate 1.1%	Info. Tech. -5.5%	Cons. Discr. 0.2%	Materials -3.3%	Utilities 4.1%
Health Care 0.9%	Utilities -6.7%	Real Estate -7.8%	Energy -6.1%	Energy -1.6%	Energy -0.2%	Real Estate -4.8%	Utilities 0.5%	Cons. Discr. 0.0%	Real Estate -8.6%	Energy -1.0%	Utilities -5.8%	Real Estate 1.9%

Source: Charles Schwab, Bloomberg, as of 6/30/2024. Sector performance is represented by price returns of the following 11 GICS sector indexes: Consumer Discretionary Sector, Consumer Staples 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 incure 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

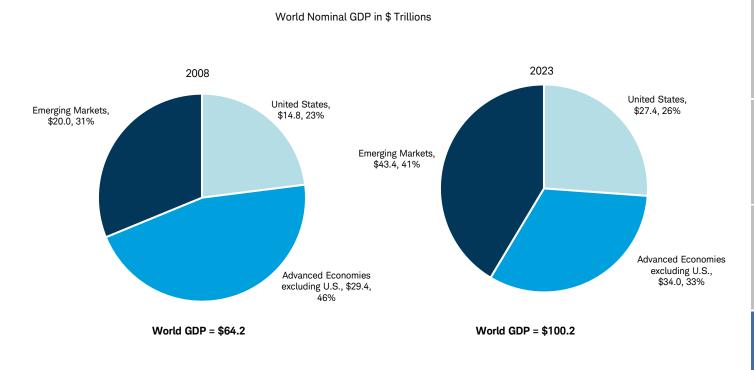
•										Average of perious			
2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Ann. Return	Std Dev		
US REITs 30.3%	Int'l Dev SC 9.6%	US Sm Cap 21.3%	EM 37.3%	T-bills 1.8%	US Lg Cap 31.5%	Gold & Other PM 23.0%	US REITs 43.1%	T-bills 1.5%	US Lg Cap 26.3%	US Lg Cap 12.0%	US Sm Cap 20.2%		
US Lg Cap 13.7%	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 REITs 7.5%	US REITs 18.0%		
Core Bonds 6.0%	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 7.2%	EM 17.0%		
US Sm Cap 4.9%	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 5.4%	Int'l Dev SC 16.0%		
TIPS 3.6%	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%	Int'l Dev SC 4.8%	US Lg Cap 15.2%		
Diversified Portfolio 3.2%	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%	Gold & Other PM 4.3%	Int'l Dev LC 14.9%		
High Yield Bonds 2.1%	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%	Int'l Dev LC 4.3%	Gold & Other PM 14.3%		
T-bills 0.0%	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%	High Yield Bonds 4.1%	Diversified Portfolio 10.8%		
EM -2.2%	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%	EM 2.7%	EM Bonds 10.2%		
Gold & Other PM -4.1%	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 2.4%	High Yield Bonds 7.7%		
Int'l Dev LC -4.9%	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%	Core Bonds 1.8%	TIPS 5.0%		
Int'l Dev SC -4.9%	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%	T-bills 1.2%	Core Bonds 4.4%		
EM Bonds -5.8%	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 0.4%	T-bills 0.4%		

Source: Morningstar Direct. Data is from January 1, 2014-December 31, 2023. 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.

Average of periods

The impact of international and emerging markets growth

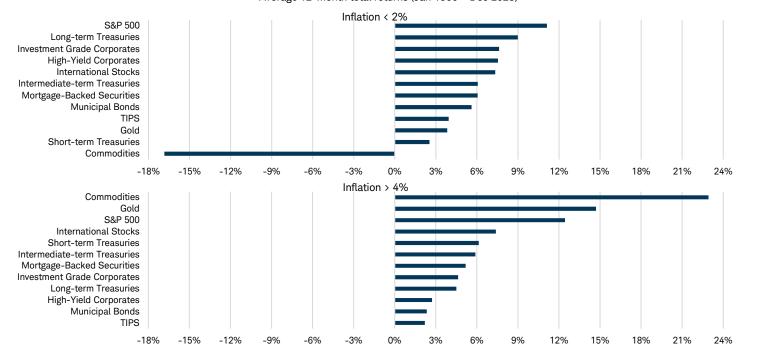
Emerging markets now represent a much larger share of world GDP compared to 15 years ago and could be part of a well-diversified portfolio.



Source: International Monetary Fund, World Economic Outlook Database. Estimate as of April 2024. International investments involve additional risks, which include differences in financial accounting standards, currency fluctuations, geopolitical risk, 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.

Hedges against inflation

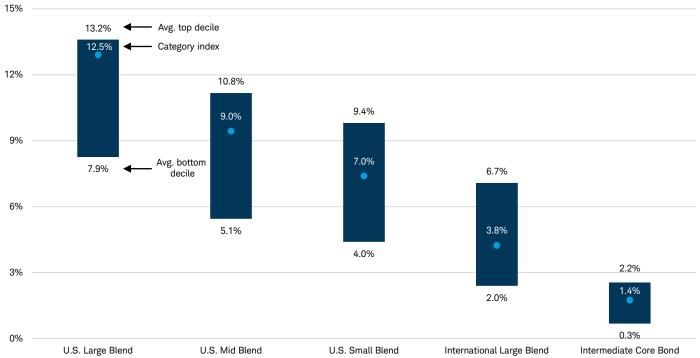
Stocks have been an effective hedge when inflation is on the higher side over the long term by helping preserve purchasing power. Gold, commodities, and short-term Treasuries have also provided inflation protection. Average 12-month total returns (Jan 1960 – Dec 2023)



Source: Schwab Center for Financial Research with data provided by Bloomberg and Morningstar. Returns assume reinvestment of dividends and interest. Inflation is measured by the year-overyear change in the Consumer Price Index. *Due to data limitations, not every investment type has readily available total return data going back to 1960. For this study, the start date for each investment type is as follows: U.S. Equities, Treasury Bills, Intermediate-Term Treasuries, and Long-Term Treasuries, and Long-Term Treasuries, 1/1961; Cold: 1/1962; International Stocks: 12/1970; Commodities: 1/1971; Investment Grade Corporates: 1/1974; Mortgage-Backed Securities: 1/1977; High-Yield Corporates: 7/1984; Municipal Bonds: 12/1989; TIPS: 3/1998. Indexes are unmanaged, do not incur management fees, costs, and expenses, and cannot be invested in directly. Diversification strategies do not ensure a profit and do not protect against losses in declining markets. Investing involves risk, including loss of principal. For illustrative purposes only. **Past performance is no guarantee of future results**. See full disclosure of chart and indexes in the back of the document under Important Information.

Manager selection is an important part of investing

Looking at historical performance, dispersion among active funds varies greatly, indicating the importance of monitoring funds on a regular basis. It's difficult for a fund to consistently be a top performer, so investors only looking for market exposure may want to consider index funds.



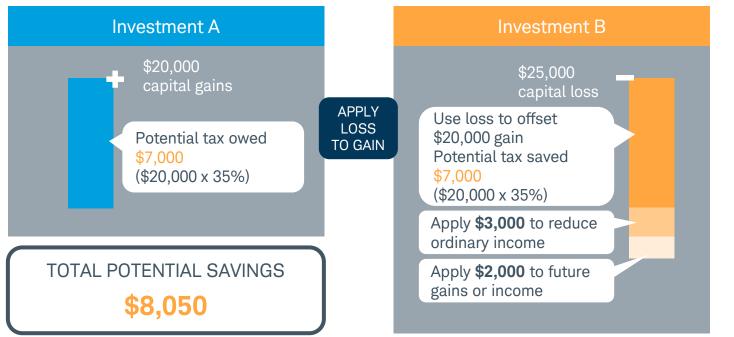
Source: Schwab Center for Financial Research with data provided by Morningstar, Inc. as of 6/30/2024. This chart examines all active U.S. domestic equity funds with a 10-year history as of 6/30/2024 for the Morningstar categories listed. For each category, funds were ranked by their 10-year return, and 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.

Asset allocation

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.

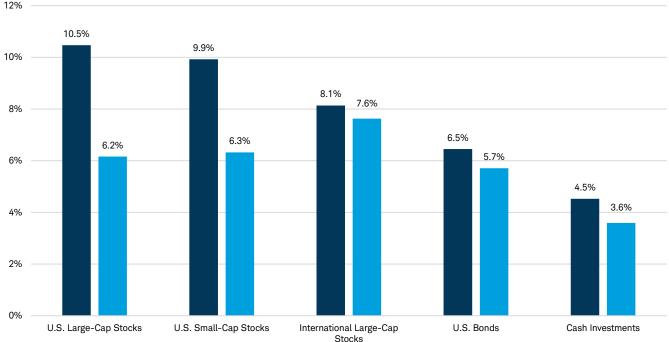
is a registered investment adviser and an affiliate of Charles Schwab & Co., Inc. ("Schwab"), Indexes used: S&P 500 Index (U.S. Large-Cap Stocks), Russell 2000 Index (U.S. Small-Cap Stocks), public data. Indexes are unmanaged, do not incur management fees, costs, and expenses, and cannot be invested in directly. Investing involves risk, including loss of principal. Past performance is no guarantee of future results.

Quarterly Chartbook | Q3 2024

Asset allocation



Forecasted annual total returns (2024-2033)



Expected asset class returns

Annualized historical total returns (1970-Oct. 2023)

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

Source: Charles Schwab as of 10/31/2023. Forecasts are derived by Charles Schwab Investment Management. Charles Schwab Investment Management, Inc., dba Schwab Asset Management® 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

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.

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. Supporting documentation for any claims or statistical information is available upon request.

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 U.S. 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 U.S. 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 U.S. 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, 2014-December 31, 2023. 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 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).

Important Disclosures

© 2024 Ned Davis Research, Inc. as of 3/31/2024. Further distribution prohibited without prior permission. All rights reserved. See NDR Disclaimer at <u>ndr.com/copyright.html</u>. For data vendor disclaimers, refer to <u>ndr.com/vendor-info</u>. Indexes are unmanaged, do not incur fees or expenses, and cannot be invested in directly. NDR Crowd Sentiment Poll shows perspective on a composite sentiment indicator designed to highlight short- to intermediate-term swings in investor psychology. The indicator is a composite reading which is based on seven different individual sentiment indicators in order to represent the psychology of a broad array of investors.

Schwab Asset Management® is the dba name for Charles Schwab Investment Management, Inc. Schwab Asset Management is a subsidiary of The Charles Schwab Corporation.

Charles Schwab & Co., Inc. (Schwab) and Schwab Asset Management® are separate but affiliated companies and subsidiaries of The Charles Schwab Corporation.

The Schwab Center for Financial Research is a division of Charles Schwab & Co., Inc.

Source: Bloomberg Index Services Limited. BLOOMBERG® is a trademark and service mark of Bloomberg Finance L.P. and its affiliates (collectively "Bloomberg"). Bloomberg or Bloomberg's licensors own all proprietary rights in the Bloomberg Indices. Neither Bloomberg nor Bloomberg's licensors approves or endorses this material, or guarantees the accuracy or completeness of any information herein, or makes any warranty, express or implied, as to the results to be obtained therefrom and, to the maximum extent allowed by law, neither shall have any liability or responsibility for injury or damages arising in connection therewith.

Indexes are unmanaged, do not incur management fees, costs, and expenses and cannot be invested in directly. For more information on indexes, please see <u>Schwab.com/IndexDefinitions</u>.

© 2024 Charles Schwab and Co., Inc. All rights reserved.

MKT103775-23 00301398

(0724-B4NH)