Monthly Market Review

March 2026

Did You Know?

Context Is Key with Market Volatility

Volatility is grabbing headlines, but history offers perspective. A closer look shows today's market stress may not be as unprecedented as it feels.

Academic Perspective

Pluralistic Ignorance and Its Impact on Investor Behavior

By Hal Hershfield, Ph.D.

A psychological insight explains how silent assumptions can drive real financial outcomes.

Market Review

- A volatile first quarter ended with losses for many global stock and bond indexes.
- Global stocks declined in March amid unrest in the Middle East.
- U.S. Treasury yields rose, and the broad U.S. bond market also declined for the month.

Appendix

- Glossary

Did You Know?

Context Is Key with Market Volatility

On the last Friday in February, the CBOE Volatility Index (VIX) closed at 19.9 — very near its daily average since 1990. The VIX is a popular barometer of the market's expectations of near-term volatility for U.S stocks. Higher VIX levels indicate higher short-term volatility expectations and a higher cost for insurance against market downturns.

Given the conflict in Iran that began on February 28 and the ensuing market and economic uncertainty, it should come as no surprise that the VIX has reached higher levels on several occasions over the last month. An intra-day high of 35.3 occurred on March 9 — 78% above the February closing level — and the VIX closed above 30 as recently as March 30 before dropping to 25.3 to end the month.

Higher volatility is a reality for investors today, and uncertainty remains about the potential carry-on effects as the conflict in the Middle East continues. However, context is key.

It's normal for investors to place a higher weight in their minds on what's happened recently versus what's occurred in the past. A useful tactic for overcoming this potential psychological bias is to step back and consider today's events in the broader context.

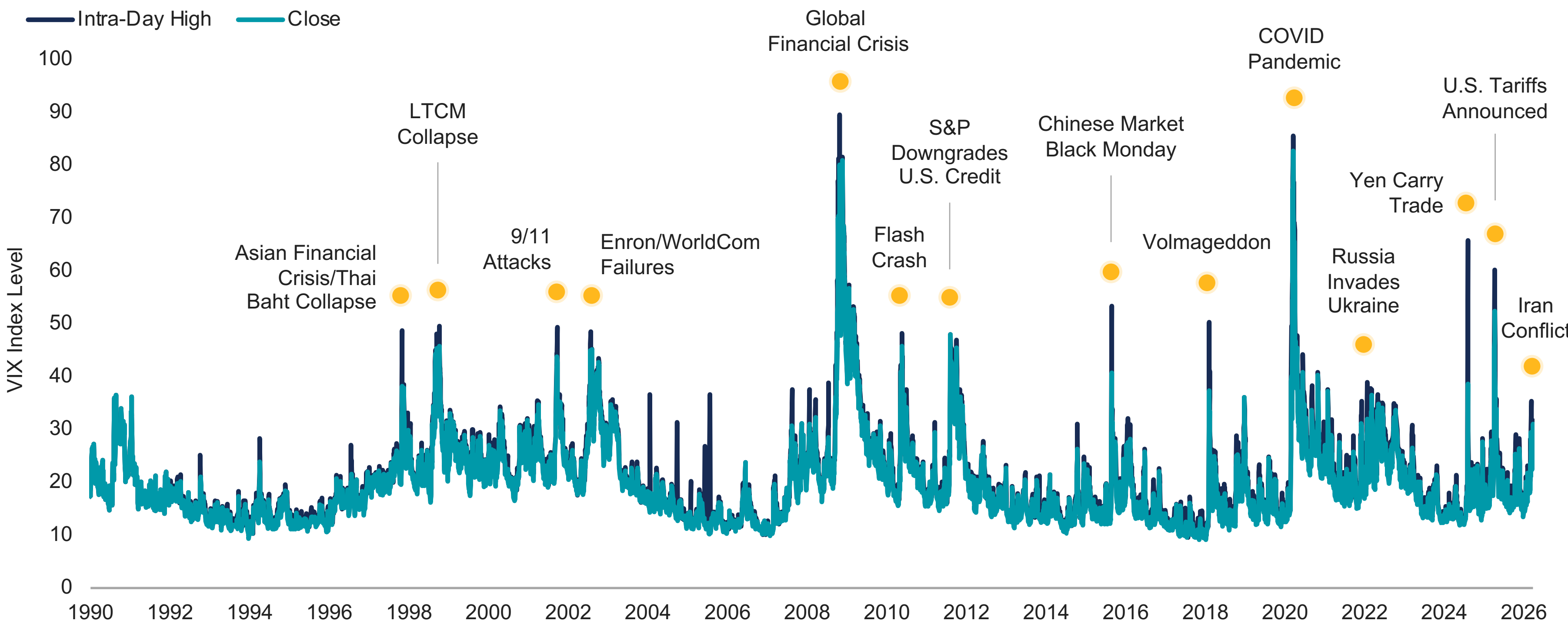
Context Is Key with Market Volatility

Let's consider where the VIX stands today versus history. **Figure 1** shows the daily VIX closing and intra-day highs from the start of 1990 through March 2026. The recent rise is evident in the chart, but we also observe many past instances when the VIX reached levels far higher than today. In fact, while the recent volatility should not be glossed over, there are several hundred days since 1990 when the VIX surpassed the March 2026 high of 35.3.

Remarkably, since the start of 2020, expected volatility has risen above recent levels on several occasions, including around the COVID-19 pandemic in 2020, the Russian invasion of Ukraine in 2022, the unwinding of the Yen carry trade in 2024, and U.S. tariff announcements in 2025.

Figure 1 | Volatility Has Risen but Remains Far Below Many Periods in the Past

VIX Index Levels Since 1990



Data from 1/1/1990 – 3/31/2026. Source: CBOE. The VIX Index tracks the expected 30-day future volatility of the S&P 500 Index.

Context Is Key with Market Volatility

Of course, the VIX is not the only measure garnering attention today. The direction of oil prices, inflation, interest rates, economic growth and more are routinely in the headlines. How do those stack up versus the past?

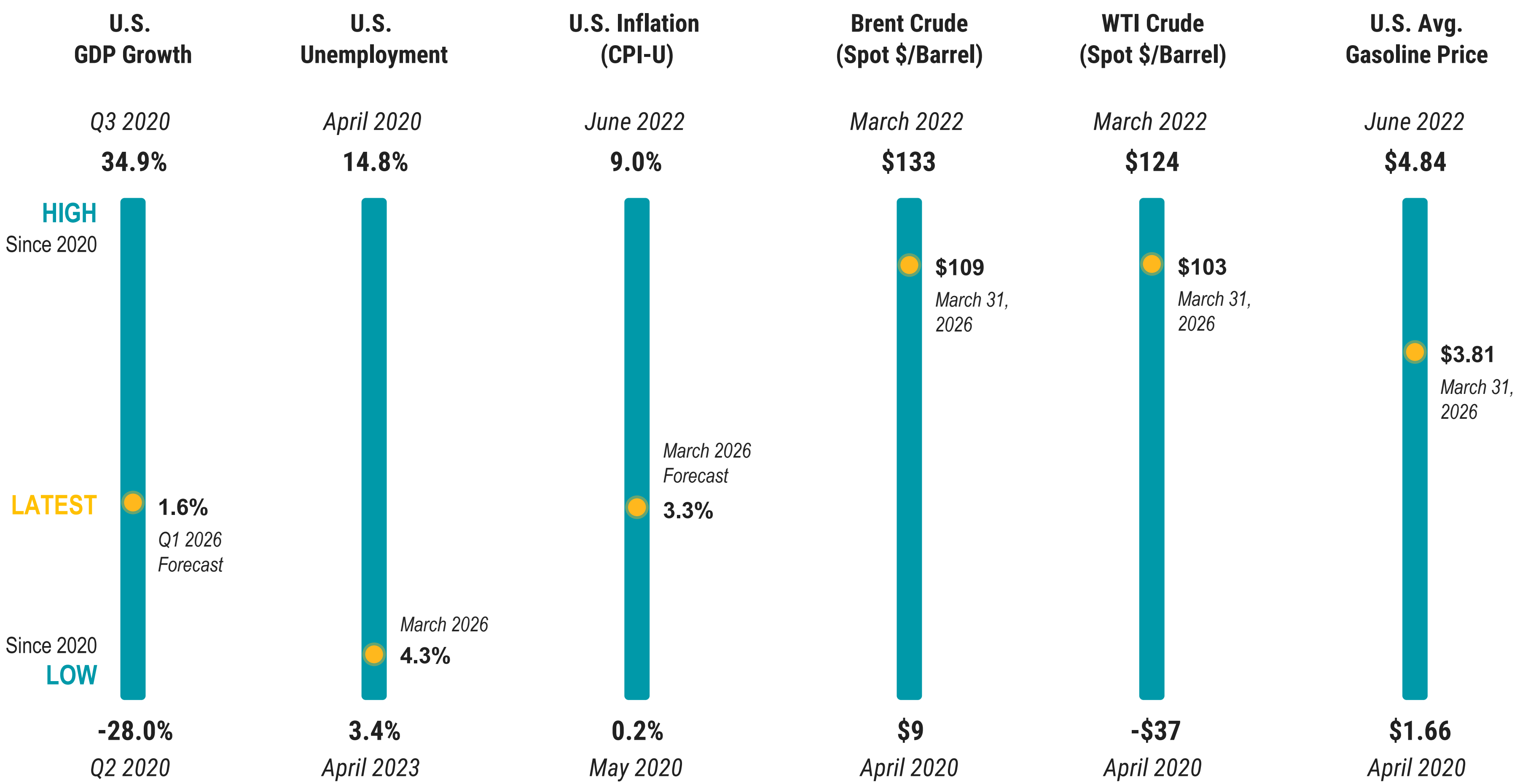
In **Figure 2**, we show a broad set of common market and macroeconomic measures, highlighting the latest data versus the highs and lows for each since the start of 2020. As seen previously in the VIX data, the range across the metrics shown has been significant. Current levels remain within the bounds investors have observed in only the past several years.

Even oil and gasoline prices (**Panel A**), which have elevated meaningfully over the past month, have thus far held below levels reached in 2022 after the Russian invasion of Ukraine, which was followed by severe sanctions on Russian oil. And, while Federal Reserve forecasts of March CPI are higher than prior prints (3.25%), that's still considerably lower than the highs from 2022. The Fed's latest forecast of first-quarter GDP growth also remains stable at 1.6%.

Context Is Key with Market Volatility

Figure 2 | Investors Have Faced a Wide Range of Headline Data Since 2020

PANEL A: Macroeconomic and Commodity Price Metrics

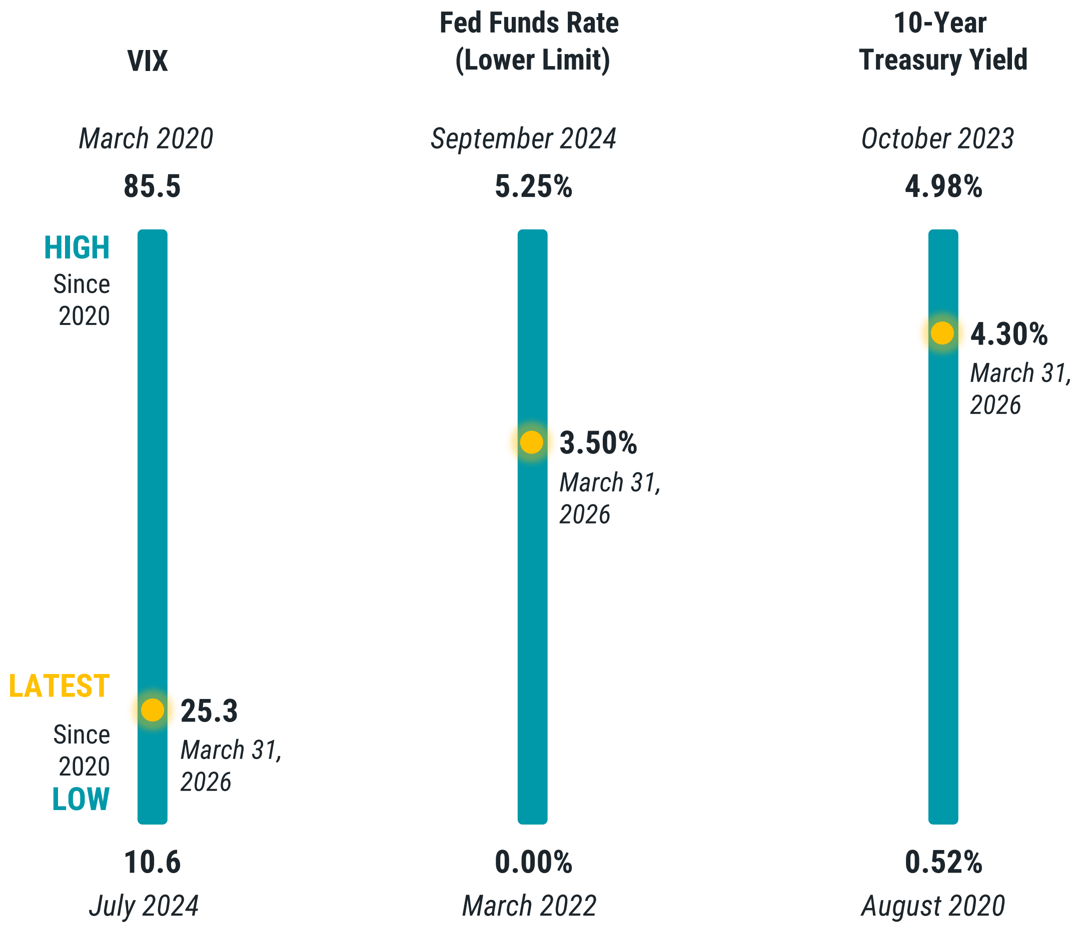


Data from 1/1/2020– 3/31/2026. GDP Source: U.S. Bureau of Economic Analysis (BEA) and the Federal Reserve Bank of Atlanta's GDPNow. U.S. Unemployment Source: U.S. Bureau of Labor Statistics (BLS). U.S. Inflation Source: U.S. Bureau of Labor Statistics (BLS) and the Federal Reserve Bank of Cleveland's Inflation Nowcasting. Brent Crude, WTI Crude, and U.S. Average Gasoline Price Source: U.S. Energy Information Administration (EIA).

Context Is Key with Market Volatility

Figure 2 | Investors Have Faced a Wide Range of Headline Data Since 2020

PANEL B: Market Metrics



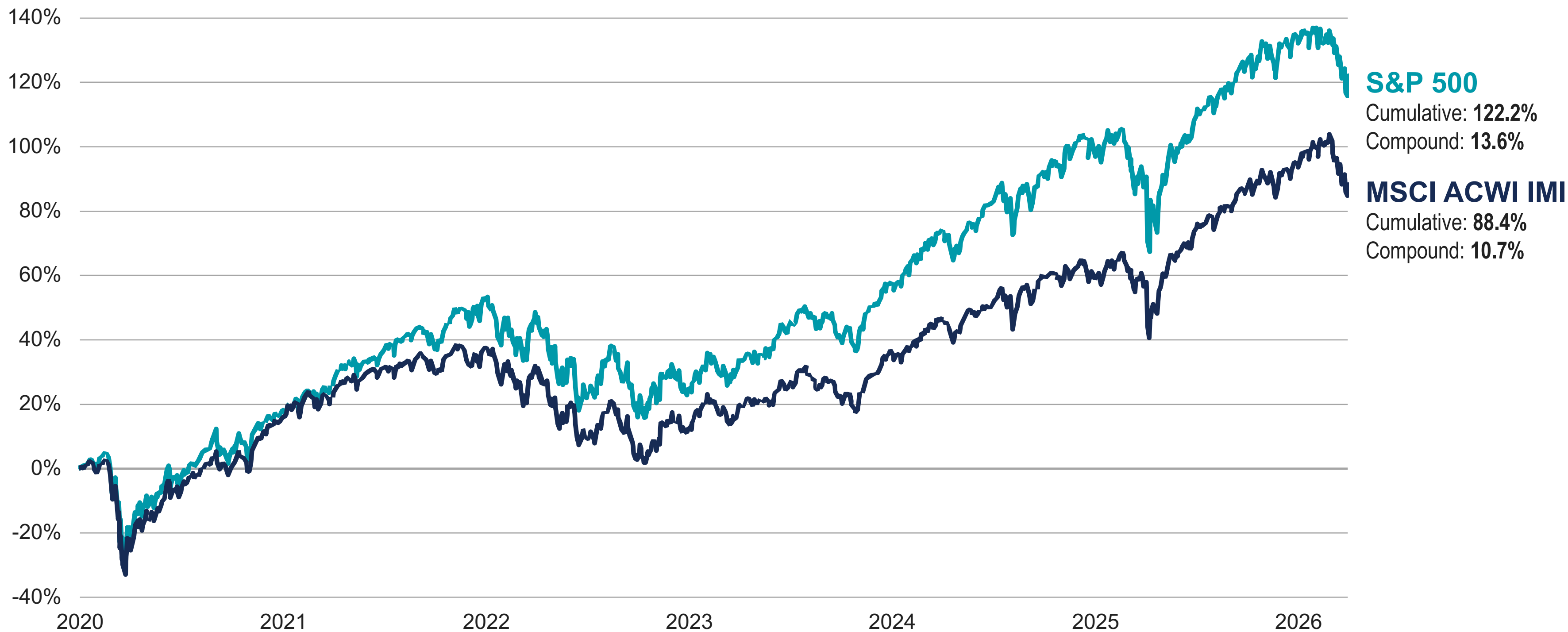
Data from 1/1/2020– 3/31/2026. VIX Source: CBOE. Fed Funds Rate and 10-Year Treasury Yield Source: Federal Reserve Bank of St. Louis (FRED).

Context Is Key with Market Volatility

Importantly, despite the dramatic highs and lows in the headline data investors considered over this period, global stock markets have delivered meaningful growth.

There were sizable drawdowns across global markets in early 2020, throughout much of 2022 and in early 2025. For context, the S&P 500 was down 5% in March 2026. It declined more than 20% in March 2020 and about 20% in each of 2022 and 2025. Yet, as shown in **Figure 3**, the S&P 500 Index is up about 122% (cumulative) since the start of 2020, and global stocks also gained nearly 90% in USD.

Figure 3 | Periods of Heightened Volatility Since 2020 Have Not Prevented Growth from Global Stocks



Source: Morningstar. Data from 1/1/2020 – 3/31/2026. **Past performance is no guarantee of future results.**

Context Is Key with Market Volatility

Taken together, the data presented provides a few important takeaways. While uncertainty is high today, where we stand on most popular measures of the market and economy is not outside what we've seen during separate periods in just the last six years.

While the conflict in Iran continues, it's unknown how high or low the headline metrics or market returns will go in the near term. With that said, we believe investors can benefit from remembering that a headline about a single measure, such as oil prices spiking or inflation estimates "rattling" markets, is always better with more context.

While each market downturn will have its own unique characteristics, investors may find comfort in knowing that many of the oft-cited measures have not reached recent past extremes. Importantly, those extremes are periods investors have recently faced, and for those who endured, global stock markets have delivered strong results.

Academic Perspective

Pluralistic Ignorance and Its Impact on Investor Behavior

When I first started graduate school and met the other students in my cohort, I was blown away at how smart, clever, and experienced they all were. Only a few days into our orientation, I started to develop the sneaking suspicion that I didn't really fit in – that somewhere along the way, the admissions committee had made a mistake by offering me admission. Perhaps they failed to really look into my file, for if they had, they surely would have realized that I wasn't cut out for a Ph.D. in psychology!

Then, a few weeks later, while sitting in a small lecture with the other first-year students, a professor posed a question to us: "How many of you," he began, "have at some point since arriving on campus felt like you didn't deserve to be here – that there was a mistake, and you don't actually belong in this program? And be honest!"

There were 14 of us in the room, and 13 hands immediately shot up. (It's possible that the 14th student wasn't paying attention, or maybe she was just really confident). In any case, it was an incredible demonstration of something that psychologists call pluralistic ignorance. Although my professor introduced it to counteract the feeling that we were all impostors, it's a concept that seems particularly applicable during times of volatility, whether the market is more bullish or bearish.

What Is "Pluralistic Ignorance"?

Here's the basic idea: You hold a private belief about something, but, because you don't hear others voice the same belief, you assume that they don't feel the same way, when in reality, they actually do. In my example, I experienced impostor syndrome, but because none of my friends said anything about how they felt that way too, I assumed I was the only one who stood out. Likewise, they each thought that they were the only impostors.

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Consultant to Avantis Investors

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His research asks, "How can we help move people from who they are now to who they'll be in the future in a way that maximizes well-being?"

Pluralistic Ignorance and Its Impact on Investor Behavior

A classic demonstration of this phenomenon was shown in the early 1990s at Princeton, a campus known for its heavy drinking culture. In that particular case, researchers[1] found that most Princeton students were uncomfortable with prevalent binge drinking, but because they didn't hear others speak up, they assumed they were alone in this belief.

So, because no one voiced any issues, everyone assumed everyone else was fine with the heavy drinking, when, in fact, most people weren't.

The Investor Context

The pluralistic ignorance phenomenon quite clearly applies far beyond college drinking culture! Imagine how this sort of process could easily play out in a variety of investor scenarios.

What if, for instance, you (or a client) believe that a particular stock or sector is undervalued and about to take off? That belief could feel like a personal insight or an edge. What they might not realize, however, is that thousands of others might also privately hold that belief. Suddenly, that particular space becomes crowded, and the stock or sector shoots way past its fair market value. If that sounds abstract, think about meme stocks or the tendency for investors to pile money into artificial intelligence (AI) companies in 2023-2024.

Or consider a more personal example: Imagine that one partner in a couple has grown quietly uncomfortable with the household's spending habits – the vacations are getting more lavish, maybe the renovations more frequent. But because the other partner hasn't said anything, the uncomfortable one assumes their partner is perfectly happy with the spending pattern. What they don't realize is that their partner may hold the same private unease. Neither says a word, so the spending continues – not because both partners endorse it, but because each is misreading the other's silence as agreement and satisfaction.

You could also imagine how the phenomenon could play out with risk tolerance: Perhaps a client is more risk-averse than they feel comfortable reporting, because they falsely believe that their peers are bolder than they are, so they let a more aggressive plan or portfolio allocation stand. The advisor, having heard no protest, has no reason to modify the plan or portfolio.

[1] D.A. Prentice and D.T. Miller, "Pluralistic Ignorance and Alcohol Use on Campus: Some Consequences of Misperceiving the Social Norm," *Journal of Personality and Social Psychology* 64, No. 2 (1993): 243-256.

Pluralistic Ignorance and Its Impact on Investor Behavior

Counteracting the Problem

I'm sure there are other examples I haven't listed here. But the real question becomes: What can be done about this deep-seated problem?

Make private beliefs public. For starters, we can take a page from my grad school professor's playbook: simply bringing privately held beliefs to the foreground can go a long way toward changing attitudes and behavior. In one research study[2] that followed up on the original Princeton research, incoming freshmen were asked to talk about their attitudes and behaviors around drinking in a group with other new students, and they were educated about pluralistic ignorance. Another group of students they were simply asked to talk about their own drinking behaviors with others, without any education surrounding pluralistic ignorance. Four to six months later, the students involved in the group discussions, where they learned about pluralistic ignorance, reported drinking less, precisely because their assumptions about other students' beliefs had been revised to better align with reality.

One way to combat pluralistic ignorance, then, is to clarify, when possible, what other investors actually believe. But don't just spotlight average sentiment; instead, show a client a distribution of beliefs and ask them where they might fall on the spectrum.

Give permission for true beliefs. If you sense a client's discomfort with a particular topic, it may be helpful to give them space to express their true beliefs. "What's your real worry right now?" or "Do you feel out of step in any way?" are just two starter questions that could help.

Point out historical examples. Bring up other times when investor behavior seemed to suddenly not be in line with previously held beliefs. Doing so could allow a client to recognize the ways that past scenarios might be similar to a current one.

We can never truly know what others are thinking or feeling. Part of being human is making educated guesses about what exists in our peers' minds – perspective-taking is surely at the heart of strong relationships. Problems arise, however, when we operate on assumptions about other people's beliefs, failing to recognize that we're actually more similar to those around us than we think we are. And it's that disconnect, or pluralistic ignorance, that can lead us to act when we should stay put or not act when we really should.

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[2] C.M. Schroeder and D.A. Prentice, "Exposing Pluralistic Ignorance to Reduce Alcohol Use Among College Students," *Journal of Applied Social Psychology* 28, No. 23 (1998): 2150-2180.

Market Review

Snapshot

A turbulent first quarter ended with losses for global stocks and bonds. Non-U.S. stocks fared better than U.S. stocks for the quarter, while U.S. bonds outpaced global bonds.

- The S&P 500 Index declined nearly 5% in March, leaving the index down for the first quarter. Stocks struggled against a backdrop of renewed tariff, AI and stagflation concerns, Fed policy uncertainty and geopolitical conflict in the Middle East. The index's first-quarter return was the worst quarterly performance since 2022.
- With oil prices soaring, the energy sector was the top performer for the quarter, up 38%, and the only sector that logged a gain in March. Five sectors declined for the quarter, including financials, consumer discretionary and information technology, each down more than 9%.
- Non-U.S. developed markets stocks outperformed U.S. stocks for the quarter. But they declined nearly 10% in March, lagging U.S. stocks. Emerging markets (EM) stocks also underperformed U.S. stocks for the month, but they outperformed U.S. and non-U.S. developed markets stocks for the quarter.
- The Fed, the European Central Bank and the Bank of England left interest rates unchanged during the first three months of 2026.
- U.S. and U.K. inflation rates held steady in January and February. Eurozone inflation rose in March to its highest level in more than a year amid soaring energy costs.
- U.S. size and style indices declined in March but delivered mixed first-quarter results. Outside the U.S., most major size and style indices in developed and EM declined for the month and quarter.
- U.S. Treasury yields rose for the quarter, and the broad U.S. bond market index declined slightly. The index logged a sharp decline in March, which dragged down the quarterly return.

Returns (%)

INDEX	1 MO	3 MO	YTD	1 YR	3 YR	5 YR	10 YR
U.S. Large-Cap Equity							
S&P 500	-4.98	-4.33	-4.33	17.80	18.32	12.06	14.16
U.S. Small-Cap Equity							
Russell 2000	-5.00	0.89	0.89	25.72	13.05	3.77	9.88
Intl. Developed Markets Equity							
MSCI World ex USA	-9.74	-0.94	-0.94	22.99	14.30	8.40	8.66
Emerging Markets Equity							
MSCI Emerging Markets	-13.06	-0.17	-0.17	29.55	14.84	3.69	7.80
Global Real Estate Equity							
S&P Global REIT	-7.73	0.77	0.77	7.03	6.63	2.83	3.17
U.S. Fixed Income							
Bloomberg U.S. Aggregate Bond	-1.76	-0.05	-0.05	4.35	3.63	0.31	1.70
Global Fixed Income							
Bloomberg Global Aggregate Bond	-3.07	-1.07	-1.07	4.26	2.59	-1.46	0.58
U.S. Cash							
Bloomberg U.S. 1-3 Month Treasury Bill	0.30	0.88	0.88	4.12	4.84	3.42	2.26

Data as of 3/31/2026. Performance in USD. Periods greater than one year have been annualized. Past performance is no guarantee of future results. Source: FactSet.

Inflation, sometimes referred to as headline inflation, reflects rising prices for consumer goods and services, or equivalently, a declining value of money. Core inflation excludes food and energy prices, which tend to be volatile.

Equity Returns | Size and Style

U.S.

	QTD (%) Value	QTD (%) Growth	YTD (%) Value	YTD (%) Growth
Large	2.10	-9.78	2.10	-9.78
Small	4.96	-2.81	4.96	-2.81

Non-U.S. Developed Markets

	QTD (%) Value	QTD (%) Growth	YTD (%) Value	YTD (%) Growth
Large	2.64	-5.74	2.64	-5.74
Small	-0.13	-0.62	-0.13	-0.62

Emerging Markets

	QTD (%) Value	QTD (%) Growth	YTD (%) Value	YTD (%) Growth
Large	1.17	-2.29	1.17	-2.29
Small	0.10	-1.59	0.10	-1.59

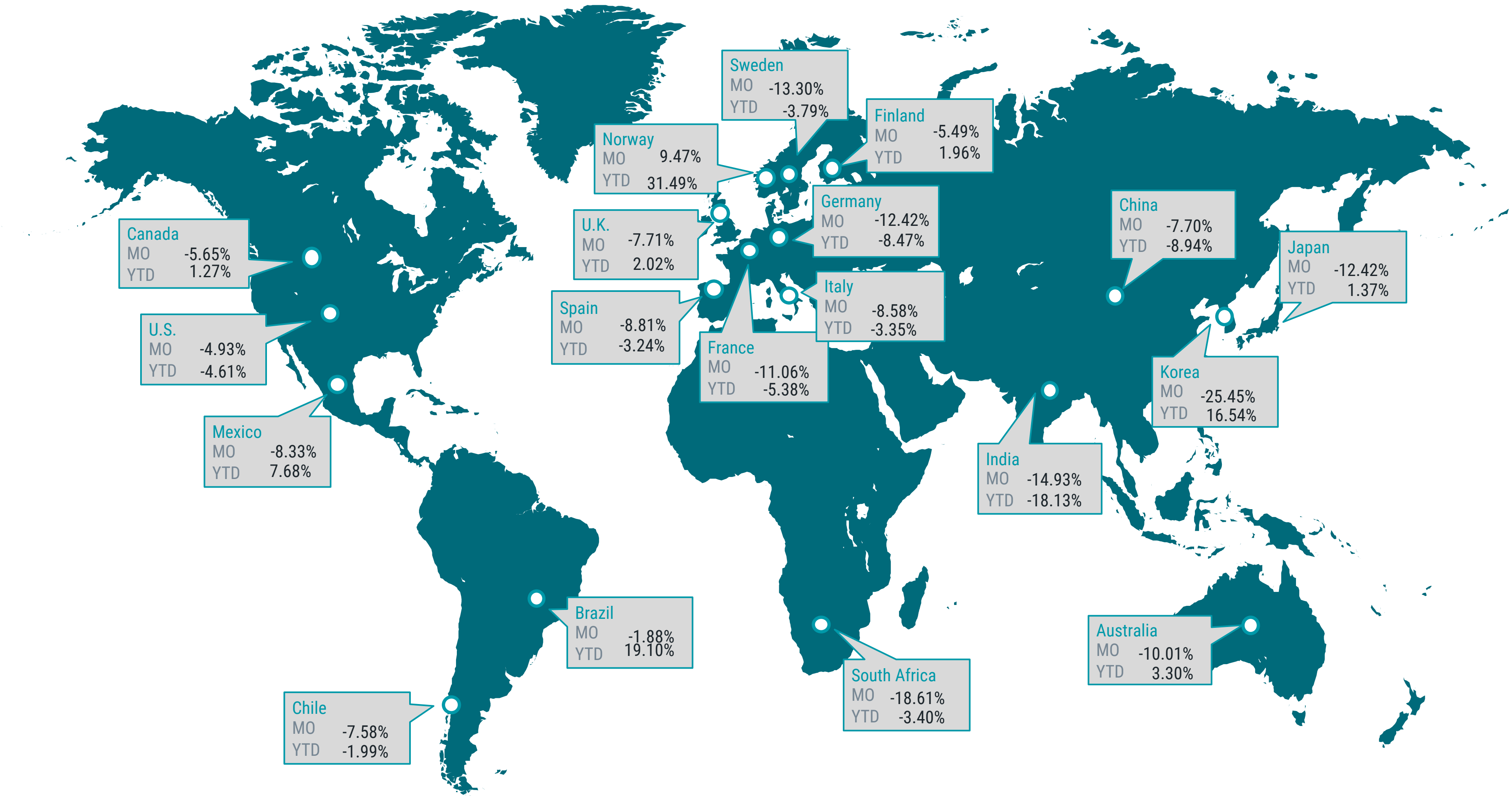
- The broad U.S. stock market declined in the first quarter, largely due to a nearly 5% decline in March. Size and style indices retreated in March and posted mixed results for the quarter.
- Large- and small-cap stocks declined approximately 5% in March. For the quarter, small-cap stocks rose nearly 1%, outpacing large-caps, which declined more than 4%.
- While all style indices declined in March, value stocks fared better than their growth-style peers. That trend persisted for the quarter, with small-cap value gaining 5% and large-cap growth declining by nearly 10%.

- Non-U.S. developed markets stocks declined and lagged U.S. stocks in March. They also fell for the quarter, but they outperformed U.S. stocks.
- Small-cap stocks declined more than 11% in March and lagged large-caps, which fell by nearly 10%. First-quarter declines were modest, and small-caps fared better than large-caps.
- Value stocks outpaced their growth-style peers in March and the quarter. Large-cap value stocks were top performers for the quarter, advancing by nearly 3%, followed by small-cap value stocks, which logged a slight decline.

- The emerging markets (EM) stock index underperformed U.S. stocks in March but outperformed developed markets indices for the quarter. The index declined by 13% in March and by nearly 0.2% for the quarter.
- While EM capitalization indices declined sharply in March, small-cap stocks fared better than large-caps. For the quarter, large-caps slightly outpaced small-caps.
- Value stocks outperformed growth stocks for the month and quarter. Large-cap value stocks were top first-quarter performers, up more than 1%, followed by small-cap value, up 0.1%.

Data as of 3/31/2026. Performance in USD. Past performance is no guarantee of future results. Source: FactSet.
U.S. Equity, International Developed Markets and Emerging Markets Equity style boxes are represented by Russell, MSCI World ex USA and MSCI Emerging Markets indices, respectively.

Equity Returns | Country



Data as of 3/31/2026. Performance in USD. Past performance is no guarantee of future results. Source: FactSet. Countries are represented by MSCI country indices.

Fixed-Income Returns

After logging four consecutive quarterly gains, the broad U.S. bond index declined slightly in the first quarter. Amid renewed stagflation fears triggered by Middle East unrest, Treasury yields rose.

- A March decline of nearly 2% left the Bloomberg U.S. Aggregate Bond Index with a first-quarter return of -0.05%.
- The yield on the 10-year Treasury note ended the quarter at 4.32%, compared with 3.95% at the end of February and 4.17% at the end of December. The two-year Treasury yield climbed 33 bps in the first quarter — and 42 bps in March — to 3.81%.
- Within the Bloomberg U.S. Aggregate Bond Index, all sectors declined in March, and only the MBS sector advanced in the first quarter. Credit spreads widened for the month and the quarter, and high-yield corporates outperformed investment-grade corporates.
- Economic data remained uneven, inflation stayed above its 2% target, and the Fed held interest rates steady at both of its first-quarter policy meetings. The target lending rate ended March in a range of 3.5% to 3.75%. Most Fed officials penciled in one rate cut for later in the year.
- Annual headline and core CPI remained unchanged from January to February, at 2.4% and 2.5%, respectively. Meanwhile, the annualized core PCE inflation rate, the Fed's preferred inflation gauge, rose from 3% in December to 3.1% in January.
- Municipal bonds broke their two-quarter winning streak, declining by 0.2% and slightly lagging Treasuries. For the month, munis declined more than 2% and underperformed Treasuries.
- TIPS advanced and outperformed nominal Treasuries for the quarter, as inflation expectations rose.

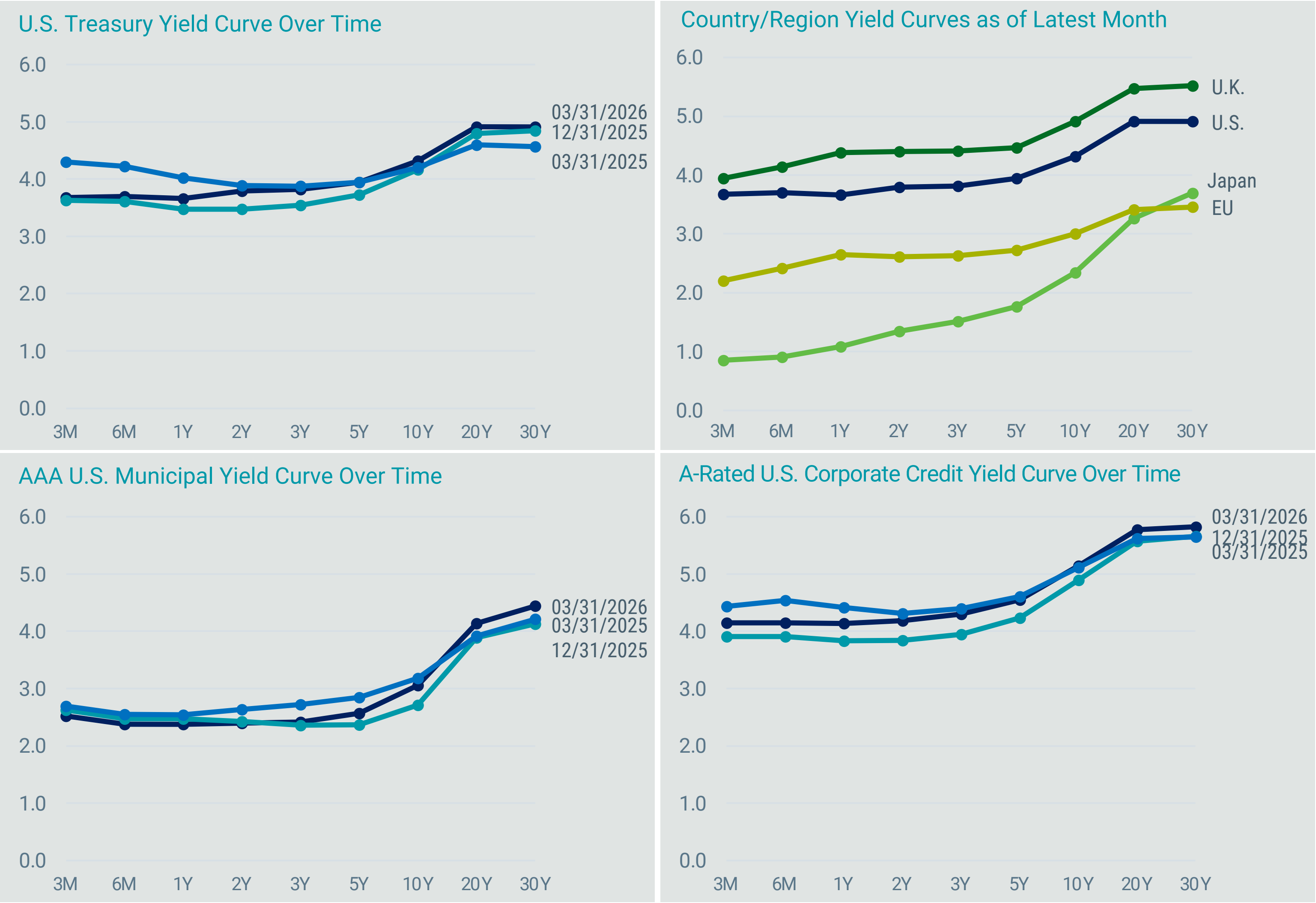
Returns (%)

INDEX	1 MO	3 MO	YTD	1 YR	3 YR	5 YR	10 YR
Global Fixed Income							
Bloomberg Global Aggregate Bond	-3.07	-1.07	-1.07	4.26	2.59	-1.46	0.58
U.S. Fixed Income							
Bloomberg U.S. Aggregate Bond	-1.76	-0.05	-0.05	4.35	3.63	0.31	1.70
U.S. High-Yield Corporate							
Bloomberg U.S. Corporate High Yield Bond	-1.18	-0.50	-0.50	7.01	8.60	4.23	6.12
U.S. Investment Grade							
Bloomberg U.S. Corporate Bond	-1.98	-0.54	-0.54	4.78	4.70	0.76	2.81
Municipals							
Bloomberg Municipal Bond	-2.32	-0.18	-0.18	4.29	2.87	0.84	2.16
U.S. TIPS							
Bloomberg U.S. Treasury Inflation Protected Securities (TIPS)	-1.34	0.26	0.26	3.00	3.18	1.48	2.66
U.S. Treasuries							
Bloomberg U.S. Treasury Bond	-1.74	-0.04	-0.04	3.25	2.59	-0.14	1.04
U.S. Cash							
Bloomberg U.S. 1-3 Month Treasury Bill	0.30	0.88	0.88	4.12	4.84	3.42	2.26

Data as of 3/31/2026. Performance in USD. Periods greater than one year have been annualized. Past performance is no guarantee of future results. Source: FactSet.

Mortgage-backed securities (MBS) are a type of securitized debt that represents ownership in pools of mortgage loans and their payments.

Global Yield Curves



Data as of 3/31/2026. Source: Bloomberg.

Yield is a rate of return for bonds and other fixed-income securities. A yield curve is a line graph that shows yields of fixed-income securities from a single sector (e.g., Treasuries) over various maturities (e.g., five and 10 years) at a single point in time (e.g., 12/31/2020).

Appendix

Glossary

Agencies: Agency securities are debt securities issued by U.S. government agencies such as the Federal Home Loan Bank and the Federal Farm Credit Bank. Some agency securities are backed by the full faith and credit of the U.S. government, while others are guaranteed only by the issuing agency.

Basis points (BPS): Basis points are used in financial literature to express values that are carried out to two decimal places (hundredths of a percentage point), particularly ratios, such as yields, fees, and returns. Basis points describe values that are typically on the right side of the decimal point--one basis point equals one one-hundredth of a percentage point (0.01%).

Bloomberg Global Aggregate Bond Index: A flagship measure of global investment-grade debt from 24 local currency markets. This multicurrency benchmark includes Treasury, government-related, corporate and securitized fixed-rate bonds from both developed and emerging markets issuers.

Bloomberg Global U.S. Treasury - U.S. TIPS Index: Consists of Treasury inflation-protected securities issued by the U.S. Treasury with a remaining maturity of one year or more.

Bloomberg Municipal Bond Index: A market value-weighted index designed for the long-term tax-exempt bond market.

Bloomberg U.S. 1-3 Month Treasury Bill Index: A subindex of the Bloomberg Barclays U.S. Short Treasury Index, the Bloomberg Barclays U.S. 1-3 Month Treasury Bill Index is composed of zero-coupon Treasury bills with a maturity between one and three months.

Bloomberg 1-5 Year U.S. Government/Credit Index: Tracks the market for investment grade, US dollar-denominated, fixed-rate treasuries, government-related and corporate securities.

Bloomberg U.S. Aggregate Bond Index: Represents securities that are taxable, registered with the Securities and Exchange Commission, and U.S. dollar-denominated. The index covers the U.S. investment-grade fixed-rate bond market, with index components for government and corporate securities, mortgage pass-through securities and asset-backed securities.

Bloomberg U.S. Corporate Bond Index: Measures the investment-grade, fixed-rate, taxable corporate bond market. It includes U.S. dollar-denominated securities publicly issued by U.S. and non-U.S. industrial, utility and financial issuers.

Bloomberg U.S. Corporate High Yield Bond Index: Measures the U.S. dollar-denominated, high-yield (non-investment grade), fixed-rate corporate bond market.

Bloomberg U.S. Corporate High Yield Bond Index: Measures the U.S. dollar-denominated, high-yield (non-investment grade), fixed-rate corporate bond market.

Bloomberg U.S. Treasury Index: Measures U.S. dollar-denominated, fixed-rate, nominal debt issued by the U.S. Treasury. Treasury bills are excluded by the maturity constraint but are part of a separate Short Treasury Index.

Book-to-Market Ratio: Compares a company's book value relative to its market capitalization. Book value is generally a firm's reported assets minus its liabilities on its balance sheet. A firm's market capitalization is calculated by taking its share price and multiplying it by the number of shares it has outstanding.

Carbon Emissions Intensity: A measure of emissions efficiency calculated as company emissions normalized by company revenue (metric tons CO2 per USD million sales) and presented as a weighted average of fund or index holdings. Company emissions data includes reported or estimated scope 1 and scope 2 greenhouse gas emissions in carbon dioxide equivalents. If neither reported nor estimated emissions data is available for a company held by the fund or index, emissions data for that company is excluded from the carbon emissions intensity calculation. The calculation of this measure is completed by American Century Investment Management Inc, the investment advisor to the ETFs reporting the measure, based on data sources from MSCI. The Carbon Emissions Intensity figure is solely a result of a mathematical calculation based on the MSCI data, with no additional inputs. Scores and ratings across third-party providers may be inconsistent or incomparable and, in certain cases, incorrect. In addition, data is not currently available for many issuers and, when available, frequently only includes some but not all of the characteristics considered.

CBOE Volatility Index (VIX): Tracks the expected 30-day future volatility of the S&P 500 Index.

U.S. Consumer Confidence Index: A survey administered by The Conference Board that measures how optimistic or pessimistic consumers are about their expected financial situation.

Consumer Price Index (CPI): CPI is a U.S. government (Bureau of Labor Statistics) index derived from detailed consumer spending information. Headline CPI measures price changes in a market basket of consumer goods and services such as gas, food, clothing, and cars. Core CPI excludes food and energy prices, which tend to be volatile.

CRSP U.S. Total Market Index: Consists of nearly 4,000 constituents across mega, large, small and micro capitalizations, representing nearly 100% of the U.S. investable equity market.

Glossary

Credit Quality: Refers to the creditworthiness or financial health of the issuer of the bond. It reflects the likelihood that the issuer will meet its debt obligations, including interest payments and the return of principal, in a timely manner. Credit rating agencies assess and assign credit ratings to bonds based on the issuer's financial strength, stability, and ability to honor its debt commitments.

Credit Rating. Standard & Poor's credit ratings range from AAA (highest quality; perceived as least likely to default) to D (in default). Securities and issuers rated AAA to BBB are considered/perceived to be "investment-grade"; those below BBB are considered/perceived to be non-investment-grade (high yield).

Dow Jones Industrial Average: An average made up of 30 blue-chip stocks that trade daily on the New York Stock Exchange.

Duration: Measures how long it takes, in years, for an investor to be repaid a bond's price by the bond's total cash flows. It is also a measure of a bond's interest rate sensitivity. The longer the duration, the more sensitive a bond is to interest rate shifts.

Effective Duration: The average duration of all the bonds in a fund. It provides an indication of how a fund's net asset value (NAV) will change as interest rates change.

Emerging Markets Debt: Debt issued by countries whose economies are considered to be developing or emerging from underdevelopment.

Environmental, Social and Governance (ESG): Standards used to evaluate a company's operations in terms of sustainability and ethical impact. Environmental criteria consider how a company performs as a steward of nature. Social criteria examine how it manages relationships with employees, suppliers, customers, and communities. Governance criteria assess the company's leadership, executive pay, audits, internal controls, and shareholder rights.

Exchange-Traded Fund (ETF): An ETF represents a basket of securities that trades on an exchange, similar to a stock. An ETF differs from a mutual fund in that its share price fluctuates all day as investors buy and sell the ETF. A mutual fund's net asset value (NAV) is calculated once per day after the market closes.

Expected Returns: Valuation theory shows that the expected return of a stock is a function of its current price, its book equity (assets minus liabilities) and expected future profits, and that the expected return of a bond is a function of its current yield and its expected capital appreciation (depreciation). We use information in current market prices and company financials to identify differences in expected returns among securities, seeking to overweight securities with higher expected returns based on this current market information. Actual returns may be different than expected returns, and there is no guarantee that the strategy will be successful.

Inverted Yield Curve: An interest rate environment in which long-term debt instruments have a lower yield than short-term debt instruments of the same credit quality.

Market Capitalization: The market value of all the equity of a company's common and preferred shares. It is usually estimated by multiplying the stock price by the number of shares for each share class and summing the results.

Money Market Mutual Funds: These funds invest in short-term debt instruments (e.g., commercial paper, U.S. Treasury bills, repurchase agreements) and are valued for their relative safety and liquidity.

MSCI ACWI Index: A capitalization-weighted index that is designed to measure the equity market performance of developed and emerging markets.

MSCI ACWI ex-USA Index: A market capitalization-weighted index that is designed to measure the equity market performance of developed and emerging markets, excluding the United States.

MSCI Emerging Markets IMI Index: Captures large-, mid- and small-cap securities across 27 emerging markets countries.

MSCI Emerging Markets IMI Value Index: Captures large-, mid- and small-cap securities exhibiting overall value style characteristics across 27 emerging markets countries. The value investment style characteristics for index construction are defined using three variables: book value to price, 12-month forward earnings to price and dividend yield.

MSCI Emerging Markets Asia IMI Index: Captures large-, mid- and small-cap securities in China, India, Indonesia, Korea, Malaysia, the Philippines, Taiwan and Thailand.

MSCI Emerging Markets EMEA IMI Index: Captures large-, mid- and small-cap securities across 11 emerging markets countries in Europe, the Middle East and Africa (EMEA).

MSCI Emerging Markets Latin America IMI Index: Captures large-, mid- and small-cap securities in Brazil, Chile, Colombia, Mexico and Peru.

MSCI Europe IMI Index: Captures large-, mid- and small-cap securities across 15 developed markets countries in Europe.

MSCI Pacific IMI Index: Captures large-, mid- and small-cap securities in five developed markets countries: Australia, Hong Kong, Japan, New Zealand and Singapore.

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MSCI USA Index: A market capitalization-weighted index designed to measure the performance of the large and mid-cap segments of the U.S. market.

MSCI World ex USA IMI Index: Captures large-, mid- and small-cap representation across 22 of 23 developed markets countries, excluding the U.S.

MSCI World ex USA Small Cap Index: Captures small-cap representation across 22 of 23 developed markets countries, excluding the U.S.

MSCI World ex USA Value Index: Captures large- and mid-cap securities exhibiting overall value style characteristics across 22 of 23 developed markets countries. The value investment style characteristics for index construction are defined using three variables: book value to price, 12-month forward earnings to price and dividend yield.

Net Asset Value (NAV): The total value per share of all the underlying securities in a portfolio.

Oil and Gas Revenue Percentage: Represents the proportion of total revenue of fund or index holdings that is derived from reported or estimated oil and gas-related activities. If neither reported nor estimated oil and gas-related data is available for held by either the fund or the index, such data for that company is excluded from the calculation.

The calculation of this measure is completed by American Century Investment Management Inc, the investment advisor to the ETFs reporting the measure, based on data sourced from MSCI. The Oil and Gas Revenue Percentage figure is solely a result of a mathematical calculation based the MSCI data, with no additional inputs.

Scores and ratings across third party providers may be inconsistent or incomparable, and, in certain cases, incorrect. In addition, data is not currently available for many issuers and, when available, frequently only includes some but not all of the characteristics considered.

Option-Adjusted Spread (OAS): Measures the difference between the yield of a bond with an embedded option and the yield on Treasuries. Call options give the issuer the right to redeem the bond prior to maturity at a preset price, and put options allow the holder to sell the bond back to the company on certain dates. The OAS adjusts the spread to account for these potential changing cash flows.

Personal Consumption Expenditures (PCE): The PCE price deflator — which comes from the Bureau of Economic Analysis' quarterly report on U.S. gross domestic product — is based on a survey of businesses and is intended to capture the price changes in all final goods, no matter the purchaser. Because of its broader scope and certain differences in the methodology used to calculate the PCE price index, the Federal Reserve holds the PCE deflator as its preferred, consistent measure of inflation over time.

Price-to-Earnings Ratio (P/E): The price of a stock divided by its annual earnings per share. These earnings can be historical (the most recent 12 months) or forward-looking (an estimate of the next 12 months). A P/E ratio allows analysts to compare stocks on the basis of how much an investor is paying (in terms of price) for a dollar of recent or expected earnings. Higher P/E ratios imply that a stock's earnings are valued more highly, usually on the basis of higher expected earnings growth in the future or higher quality of earnings.

Producer Price Index (PPI): Measures the average change over time in the prices that domestic producers receive for their goods and services. It is a key indicator of inflation at the wholesale level, reflecting the prices producers charge for their output before it reaches consumers.

Profits-to-Book Ratio: Measures a company's profits relative to its book value. A company's profits are generally calculated by subtracting operating expenses from its gross profit. Book value is generally a firm's reported assets minus its liabilities on its balance sheet.

Responsible Equity ETFs: Because the portfolio managers screen securities based on environmental, social and governance (ESG) characteristics, the fund may exclude the securities of certain issuers or industry sectors for other than financial reasons and, as a result, the fund may perform differently or maintain a different risk profile than the market generally or compared to funds that do not use similar ESG-based screens.

Investing based on ESG considerations may also prioritize long-term rather than short-term returns. Furthermore, when analyzing ESG criteria for issuers, the portfolio management team relies on proprietary evaluations and information, ratings and scoring models published by third-party sources (collectively, "ESG Data").

Due to the lack of regulation and uniform reporting standards with respect to ESG characteristics of issuers, ESG Data may be inconsistent across sources and, in certain cases, incorrect. In addition, ESG Data is not currently available for many issuers and, when available, frequently only includes some but not all of the ESG characteristics considered by the team when applying their ESG screens.

See Environmental, Social and Governance (ESG) in the Glossary for more information.

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Russell 1000® Growth Index: Measures the performance of those Russell 1000 Index companies (the 1,000 largest publicly traded U.S. companies, based on total market capitalization) with higher price-to-book ratios and higher forecasted growth values.

Russell 1000® Value Index: Measures the performance of those Russell 1000 Index companies (the 1,000 largest publicly traded U.S. companies, based on total market capitalization) with lower price-to-book ratios and lower forecasted growth values.

Russell 2000® Index: Measures the performance of the 2,000 smallest companies among the 3,000 largest publicly traded U.S. companies, based on total market capitalization.

Russell 2000® Growth Index: Measures the performance of those Russell 2000 Index companies (the 2,000 smallest of the 3,000 largest publicly traded U.S. companies, based on total market capitalization) with higher price-to-book ratios and higher forecasted growth values.

Russell 2000® Value Index: Measures the performance of those Russell 2000 Index companies (the 2,000 smallest of the 3,000 largest publicly traded U.S. companies, based on total market capitalization) with lower price-to-book ratios and lower forecasted growth values.

Russell 3000® Index: Measures the performance of the largest 3,000 U.S. companies representing approximately 98% of the investable U.S. equity market.

S&P 500® Index: A market-capitalization-weighted index of the 500 largest U.S. publicly traded companies. The index is widely regarded as the best gauge of large-cap U.S. equities.

S&P Global REIT Index: A comprehensive benchmark of publicly traded equity REITs listed in both developed and emerging markets.

S&P National AMT-Free Municipal Bond Index: A broad, comprehensive, market value-weighted index designed to measure the performance of the investment-grade tax-exempt U.S. municipal bond market. Bonds issued by U.S. territories, including Puerto Rico, are excluded from this index. It is not possible to invest directly in an index.

SEC Yield: A calculation based on a 30-day period ending on the last day of the previous month. It is computed by dividing the net investment income per share earned during the period by the maximum offering price per share on the last day of the period.

Securitized Debt: Debt resulting from the process of aggregating debt instruments into a pool of similar debts, then issuing new securities backed by the pool (securitizing the debt). Examples include asset-backed and mortgage-backed securities.

Standard deviation: Standard deviation is a statistical measurement of variations from the average. In financial literature, it's often used to measure risk when risk is measured or defined in terms of volatility. In general, more risk means more volatility and more volatility means a higher standard deviation — there's more variation from the average of the data being measured.

Treasury Inflation-Protected Securities (TIPS): A special type of U.S. Treasury security that is indexed to inflation as measured by the Consumer Price Index, or CPI. At maturity, TIPS are guaranteed by the U.S. government to return at least their initial $1,000 principal value, or that principal value adjusted for inflation, whichever amount is greater. In addition, as their principal values are adjusted for inflation, their interest payments also adjust.

Treasury Yield: The yield of a Treasury security (most often refers to U.S. Treasury securities issued by the U.S. government).

U.S. Treasury securities: Debt securities issued by the U.S. Treasury and backed by the direct "full faith and credit" of the U.S. government. Treasury securities include bills (maturing in one year or less), notes (maturing in two to 10 years) and bonds (maturing in more than 10 years).

Weighted Average Book-to-Market: An average book-to-market ratio resulting from the multiplication of each security's book-to-market by its weight in the portfolio.

Weighted Average Market Capitalization: An average market capitalization resulting from the multiplication of each security's market capitalization by its weight in the portfolio.

Weighted Average Profitability-to-Book: An average profitability-to-book ratio resulting from the multiplication of each security's profitability-to-book by its weight in the portfolio.

Yield to Maturity: The rate of return an investor will receive if an interest-bearing security, such as a bond, is held to its maturity date. It considers total annual interest payments, the purchase price, the redemption value, and the amount of time remaining until maturity.