Market Analysis / First Quarter 2025

INDEPENDENT WEALTH MANAGEMENT

Sturdy U.S. economy helped push up stocks and bond yields

The U.S. economy remained sturdy, and investors began to anticipate potential policy changes after the November elections. The Federal Reserve cut its policy rate during Q4 but acknowledged that additional monetary easing would depend on further progress toward its inflation target, which remained elusive in recent months. The global expansion remained intact, but political uncertainty rose and future upside surprises may be more difficult amid elevated valuations for riskier assets.

	MACRO	ASSET MARKETS
Q4 2024	• The global economic expansion continued, but monetary and political uncertainty rose.	• U.S. stocks rose but most asset categories dropped amid the rise in bond yields.
OUTLOOK	• The global business cycle remains in expansion, with a broad shift toward monetary easing and a stable earnings outlook. • The U.S. expansion continued to demonstrate evidence of both mid- and late-cycle dynamics. • Persistent core inflation in the U.S. implies additional Fed rate cuts may be difficult to achieve without greater cyclical slowing. • Near-term recession risks appear muted, but a full pivot to a disinflationary mid-cycle environment remains uncertain.	• Upside surprises may be more difficult amid higher valuations for riskier assets. • The base case of a prolonged cycle implies a near-term preference for more economically sensitive assets, but the stubborn inflation outlook and late-cycle flavor implies some restraint on active risk.

Diversification does not ensure a profit or guarantee against a loss.

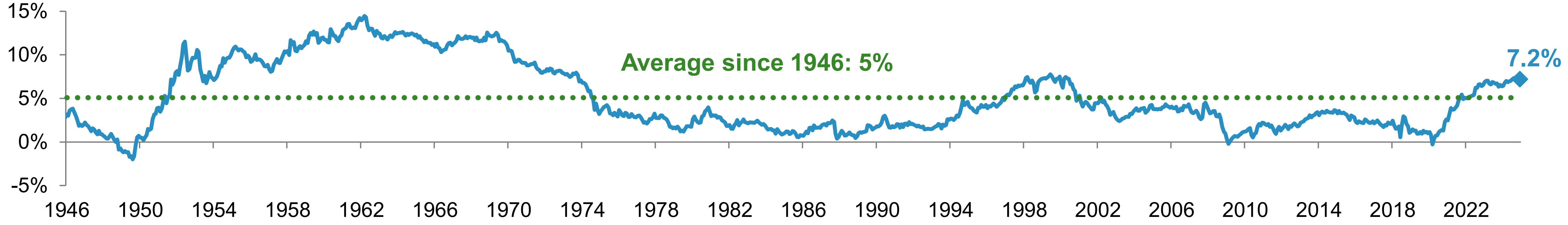
Broad asset rally fizzled in Q4, but a strong year for U.S. equities

The rise in U.S. Treasury-bond yields during Q4 created a headwind for most asset categories, as the broad 2024 rally fizzled. Non-U.S. equities suffered Q4 losses amid the rise in political uncertainty, and investment-grade fixed income assets eked out only modest 2024 gains after the weak Q4. Nevertheless, U.S. stocks added to their gains and finished the year with stellar double-digit returns, and most asset categories finished in positive territory for the full year.

	Q4 2024	2024		Q4 2024	2024
U.S. Growth	6.8%	32.5%	Emerging-Market Stocks	-8.0%	7.5%
Gold	-0.4%	27.2%	Emerging-Market Bonds	-1.9%	6.5%
U.S. Large Cap Stocks	2.4%	25.0%	Commodities	-0.4%	5.4%
U.S. Value	-1.9%	14.0%	Non-U.S. Developed-Country Stocks	-8.1%	3.8%
U.S. Small Cap Stocks	0.3%	11.5%	U.S. Corporate Bonds	-3.0%	2.0%
Real Estate Stocks	-6.2%	8.7%	Investment-Grade Bonds	-3.1%	1.3%
High Yield Bonds	0.2%	8.2%	Long Government & Credit Bonds	-7.4%	-4.2%

20-Year U.S. Stock Returns Minus IG Bond Returns since 1946

Annualized Return Difference

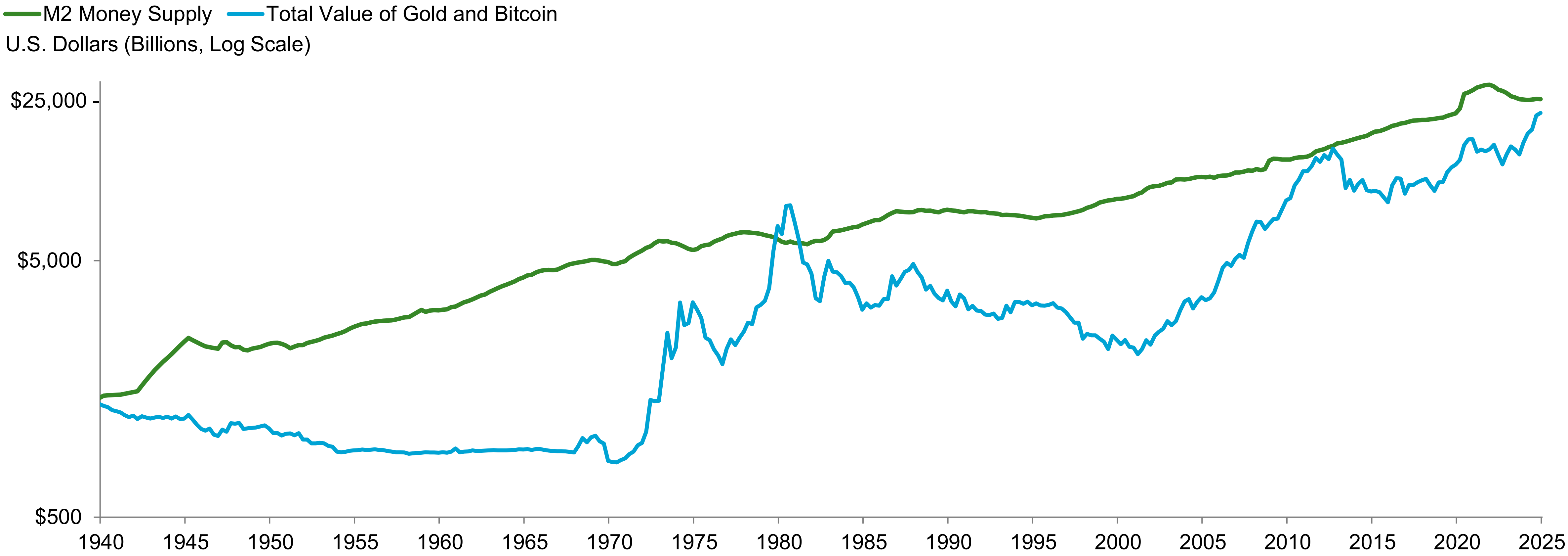


Past performance is no guarantee of future results. It is not possible to invest directly in an index. All indexes are unmanaged. See Appendix for important index information. IG: Investment grade. Assets represented by: U.S Growth Stocks—Russell 3000 Growth Index; Non-U.S. Developed-Country Stocks—MSCI EAFE Index; Gold—Gold Bullion, LBMA PM Fix; U.S. Large Cap Stocks—S&P 500®; Long Government & Credit Bonds—Bloomberg Long Government & Credit Index; Emerging-Market Stocks—MSCI EM Index; High-Yield Bonds—ICE BofA High Yield Bond Index; U.S. Corporate Bonds—Bloomberg U.S. Credit Index; Investment-Grade Bonds—Bloomberg U.S. Aggregate Bond Index; U.S. Small Cap Stocks—Russell 2000® Index; Real Estate Stocks—FTSE NAREIT Equity Index; Emerging-Market Bonds—JP Morgan EMBI Global Diversified Composite Index; U.S. Value Stocks—Russell 3000® Value Index; Commodities—Bloomberg Commodity Index. Source: Bloomberg Finance L.P., Fidelity Investments Asset Allocation Research Team (AART), as of 12/31/24.

A big year for gold and Bitcoin

Alternate sources of value registered a strong year in 2024, with gold outpacing U.S. stocks and Bitcoin more than doubling. Precious metals, and more recently, digital assets, have performed well when the long-term growth of the money supply outpaced economic activity and made some investors grow concerned about the value of paper currency.

M2 Money Supply vs. Gold and Bitcoin

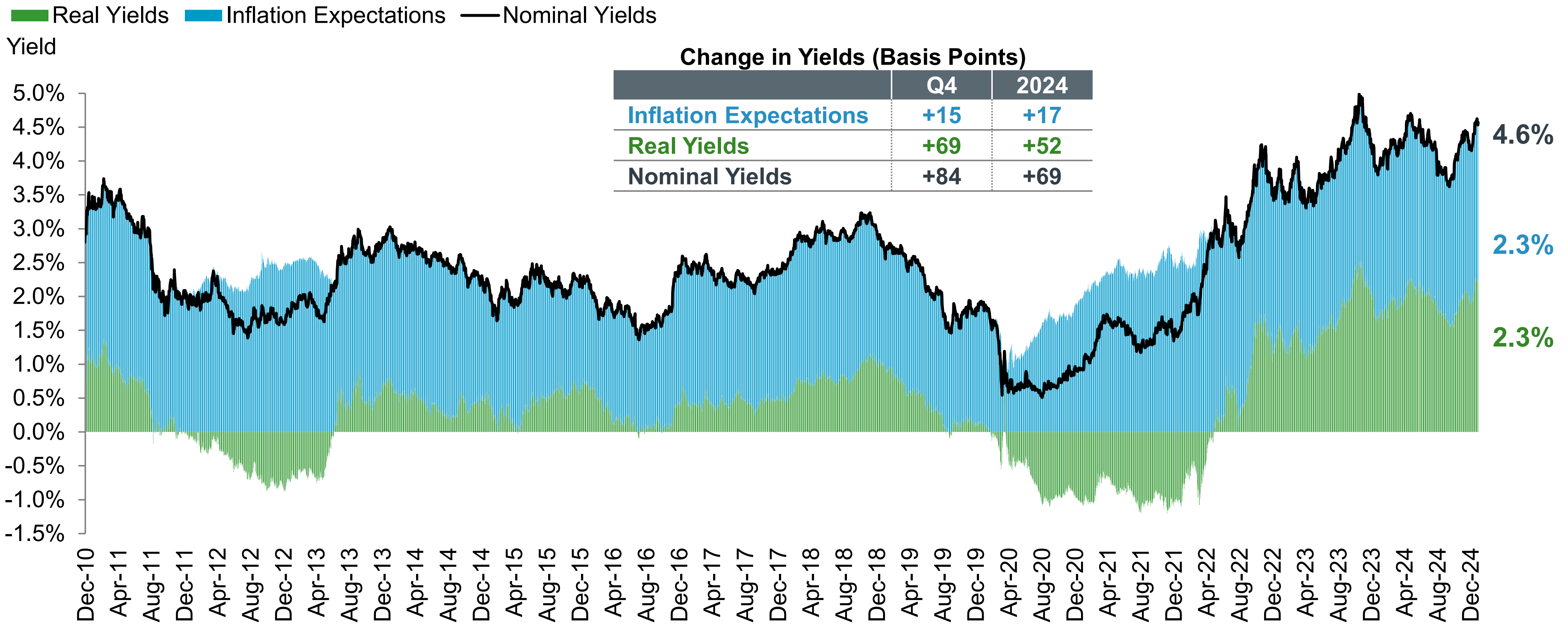


Total value of gold and Bitcoin: Value of above ground gold measured as the total tones of mined gold adjusted by the spot price, Bitcoin value measured as market cap beginning in Q1 2009. All values adjusted for inflation. Source: Bloomberg, Haver Analytics, World Gold Council, U.S. Geological Survey, Fidelity Investments (AART) as of 12/31/24.

Treasury yields spiked upward

Nominal 10-year U.S. Treasury bond yields surged nearly 90 basis point during Q4 and finished around 4.6%. A rise in real yields—the inflation-adjusted cost of borrowing—drove most of the nominal-rate increase, as investors lowered their expectations for Fed easing in 2025. Inflation expectations also ticked up modestly and remained in their average range over the past decade, while real yields remained at the high end of their range.

10-Year U.S. Government Bond Yields



Change in Yields (Basis Points)

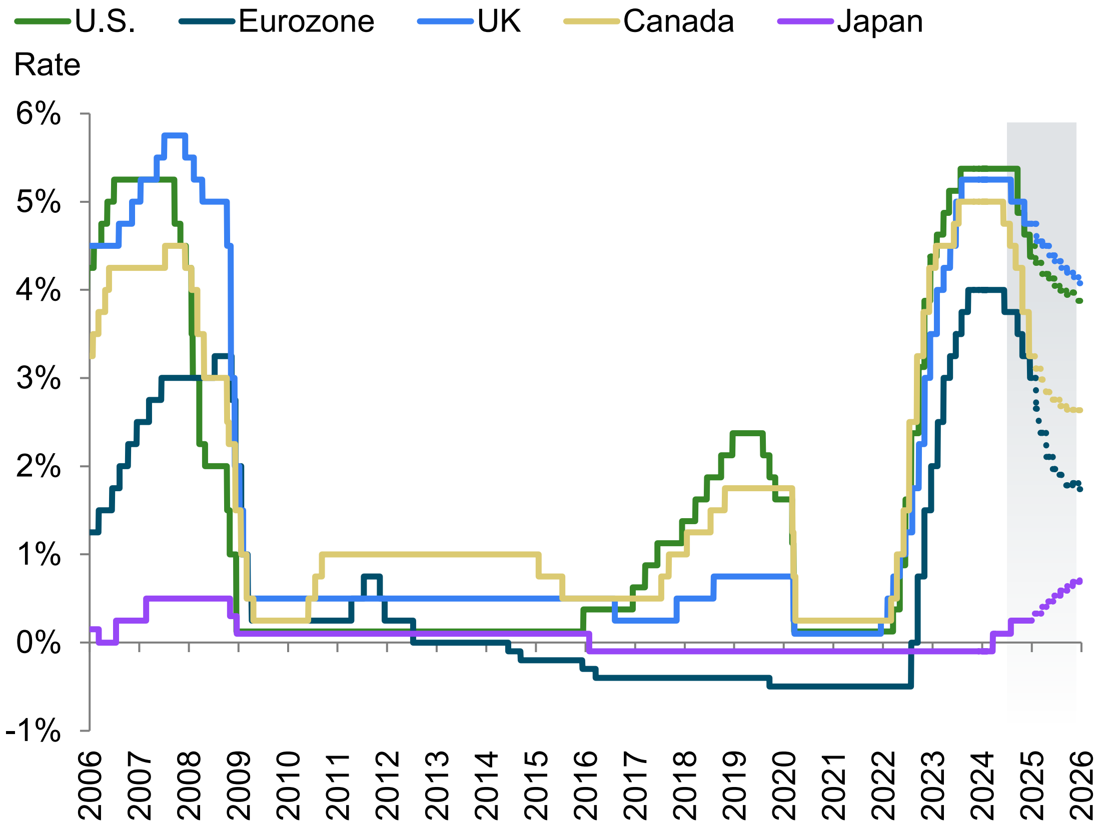
	Q4	2024
Inflation Expectations	+15	+17
Real Yields	+69	+52
Nominal Yields	+84	+69

Nominal yields are U.S. Generic Govt 10-Year yields, inflation expectations are the U.S. Breakeven 10-Year rates. TIPS: Treasury Inflation Protected Securities. Source: Bloomberg, Federal Reserve, Macrobond, Fidelity Investments (AART) as of 12/31/24.

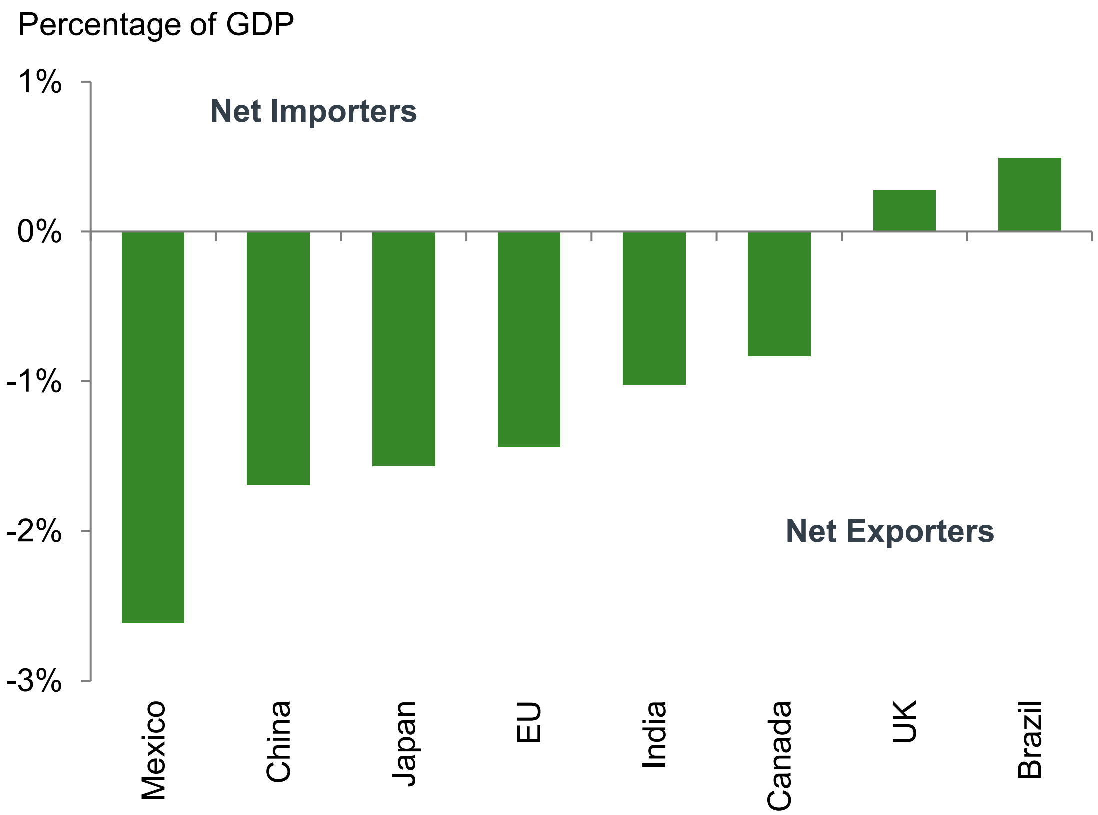
Uncertainty around monetary easing and trade policy

The global cycle faces policy crosswinds in 2025, including a potential headwind from trade policy and a tailwind from monetary easing. Most major developed market (DM) central banks continued to cut their policy rates during Q4, with expectations for more cuts in Europe and Canada in 2025 than in the U.S. The prospect of higher U.S. tariff rates poses a risk for major exporters, particularly countries that have meaningful goods trade surpluses with the U.S.

Global Short-Term Policy Rates



U.S. Trade Balance in Goods

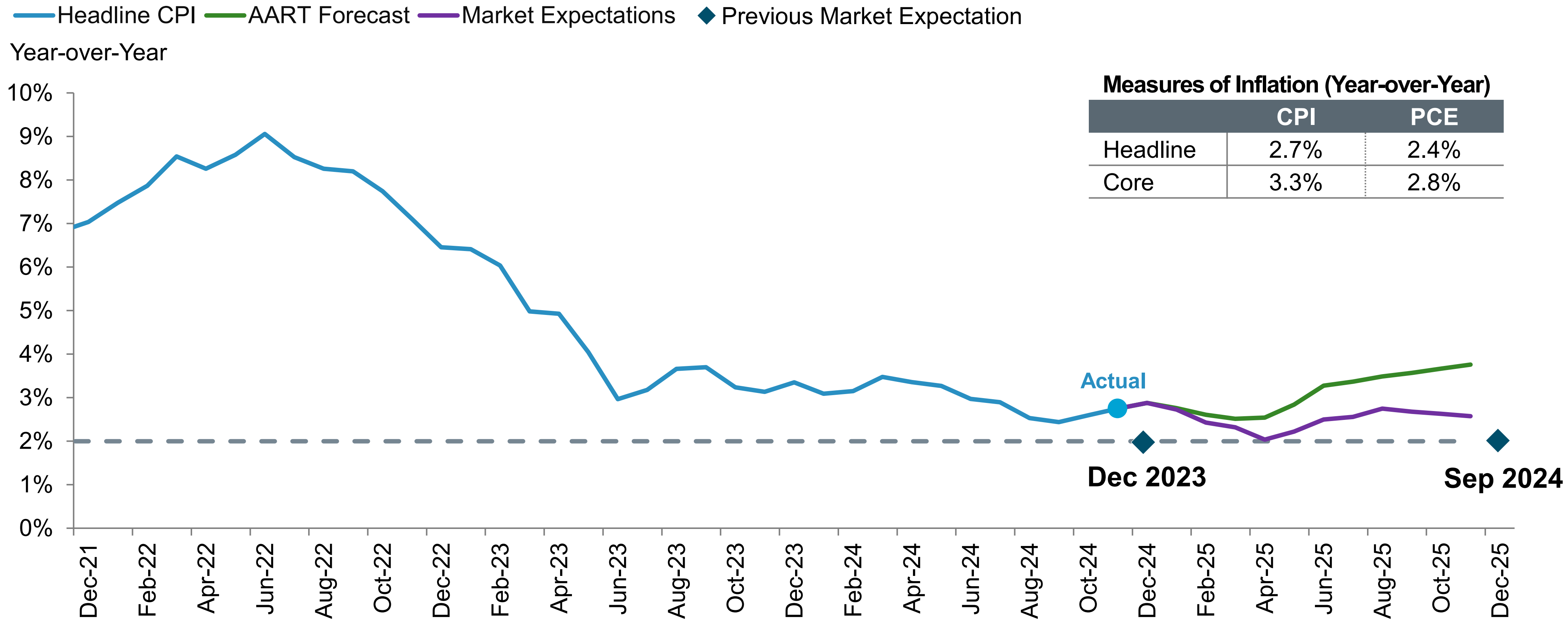


LEFT: Dotted lines represent market rate expectations using OIS swaps. They end at the peak expected policy rate by the market. Source: U.S. Federal Reserve Board, ECB, Bank of Japan, Bank of England, Bloomberg Finance L.P., Fidelity Investments (AART), as of 12/31/24. RIGHT: Source: National sources, Fidelity Investments (AART), as of 12/31/24.

After significant disinflation, reaching 2% may prove challenging

Both headline and core CPI have declined significantly from 2022's highs, but core CPI remained sticky, ending the year above 3%. The Fed's preferred inflation metric, PCE, stalled well above its 2% target and our forecasts (for both CPI and PCE) continue to indicate a flattish trend for inflation over the next year. Market expectations for CPI inflation have climbed higher over the years, moving closer to our forecast. We believe returning to the stable, low core-inflation backdrop of the past 20 years will be challenging.

AART Inflation Estimates vs. Market Expectations



Measures of Inflation (Year-over-Year)

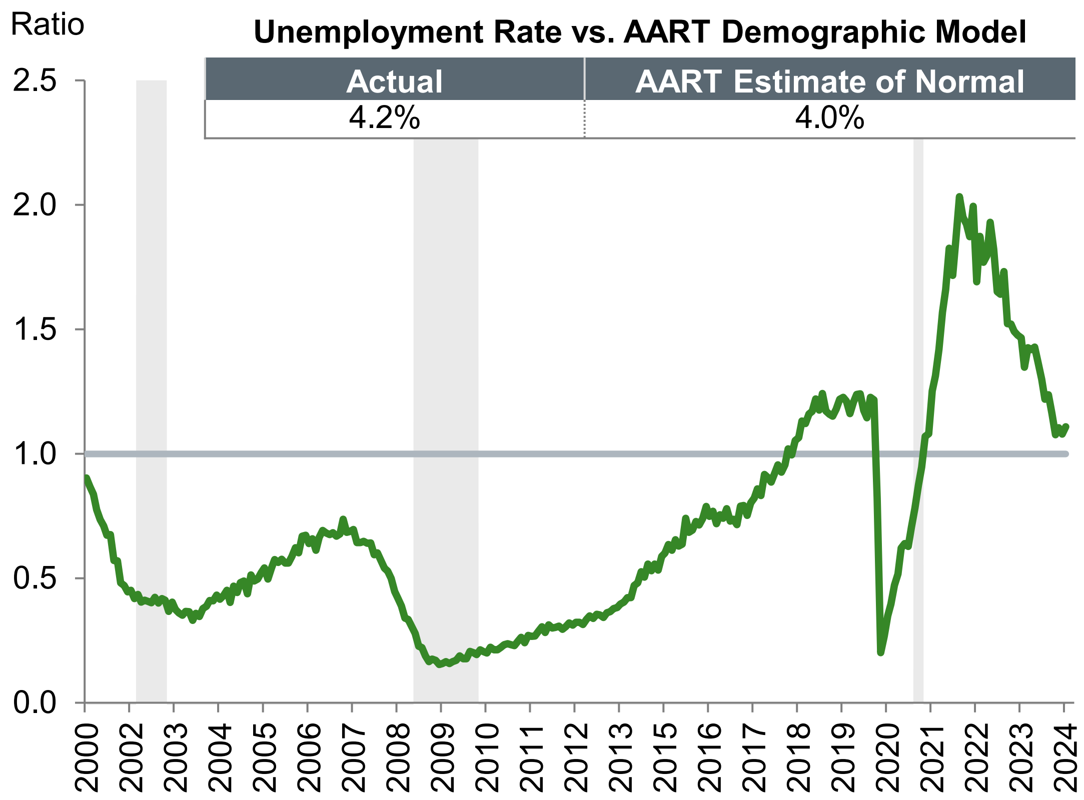
	CPI	PCE
Headline	2.7%	2.4%
Core	3.3%	2.8%

CPI: Consumer Price Index. PCE: Personal Consumption Expenditures. Market expectations: Inflation swaps. Source: Federal Reserve Bank of Cleveland, Macrobond, Bureau of Labor Statistics, Bloomberg, Haver Analytics, Fidelity Investments (AART), as of 12/31/24.

U.S. labor markets stabilized; immigration a labor-supply wildcard

Many labor-market indicators softened during 2024, but overall employment conditions remained tight. The unemployment rate stabilized in the second half to end the year near our estimate of normal unemployment, and job openings steadied at a level that still exceeded the total number of unemployed workers. More women and immigrants in the workforce helped offset falling participation rates from older workers, but immigration flows trended lower in 2024 and potentially tighter policy may restrain labor supply in 2025.

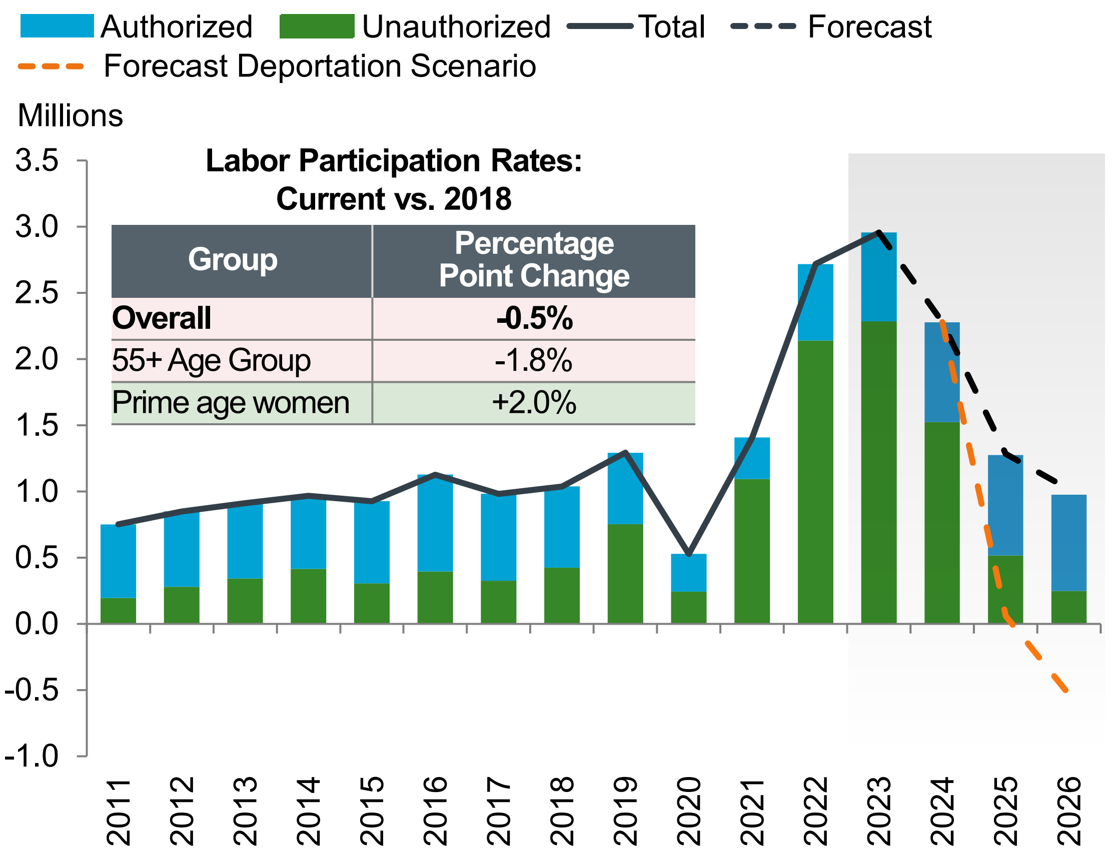
Job Openings Per Unemployed Worker



Unemployment Rate vs. AART Demographic Model

Actual	AART Estimate of Normal
4.2%	4.0%

U.S. Immigration Flows



Labor Participation Rates: Current vs. 2018

Group	Percentage Point Change
Overall	**-0.5%**
55+ Age Group	-1.8%
Prime age women	+2.0%

LEFT: AART estimated rate of normal unemployment over the long term, based on demographics. Gray bars indicate recessions. Source: Bureau of Labor Statistics, Macrobond, Fidelity Investments (AART) as of 12/31/24. **RIGHT**: Numbers are AART estimates. Shaded bar represents forecast. Forecast assumes continuation of current immigration policy. "Forecast: Deportation Scenario" (orange) assumes 1 million deportations a year. Table numbers are the participation rate on 11/30/24 less the participation rate on 11/30/2018. Source: Department of Homeland Security, ICE, Bureau of Labor Statistics, Macrobond, Fidelity Investments (AART) as of 12/31/24.

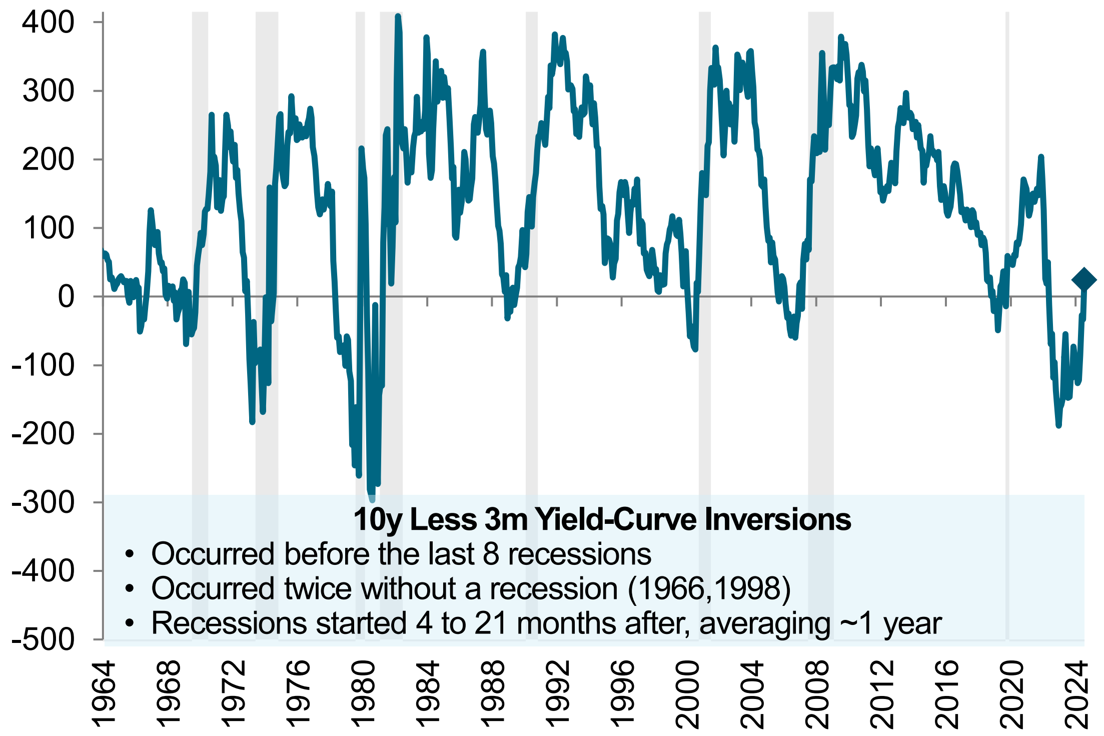
The yield curve exited inversion with no recession

After two years—the longest period on record with an inverted yield curve—the 10-year less 3-month Treasury yield curve flipped positive as the Fed cut rates and long-end yields rose. An inverted curve was historically a reliable leading indicator of recession, but the U.S. may have eluded recession due to the low rate sensitivity of the economy. Consumers locked in low mortgage rates, while large corporations locked in low rates on their debt and enjoyed earnings growth that far outpaced the rise in interest expense.

Treasury Yield Curve Spread

10-Year minus 3-Month

Basis Points



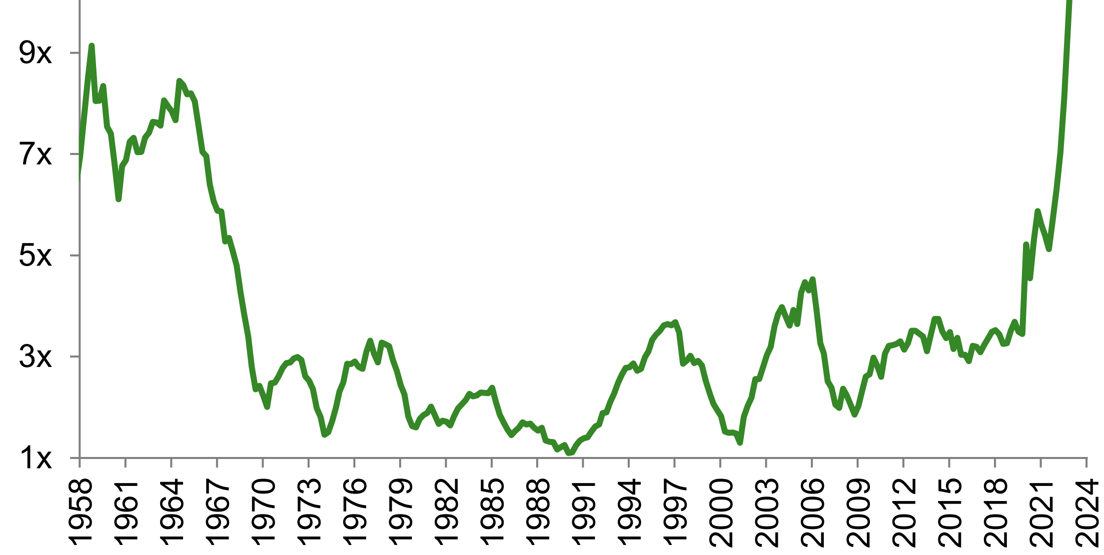
U.S. Corporate Interest Coverage

After Tax Earnings/Net Interest Expense

Ratio

Interest Expense Share of Total Debt

	2021	2024
Russell 2000	4.8%	7.1%
S&P 500 index	3.5%	4.2%

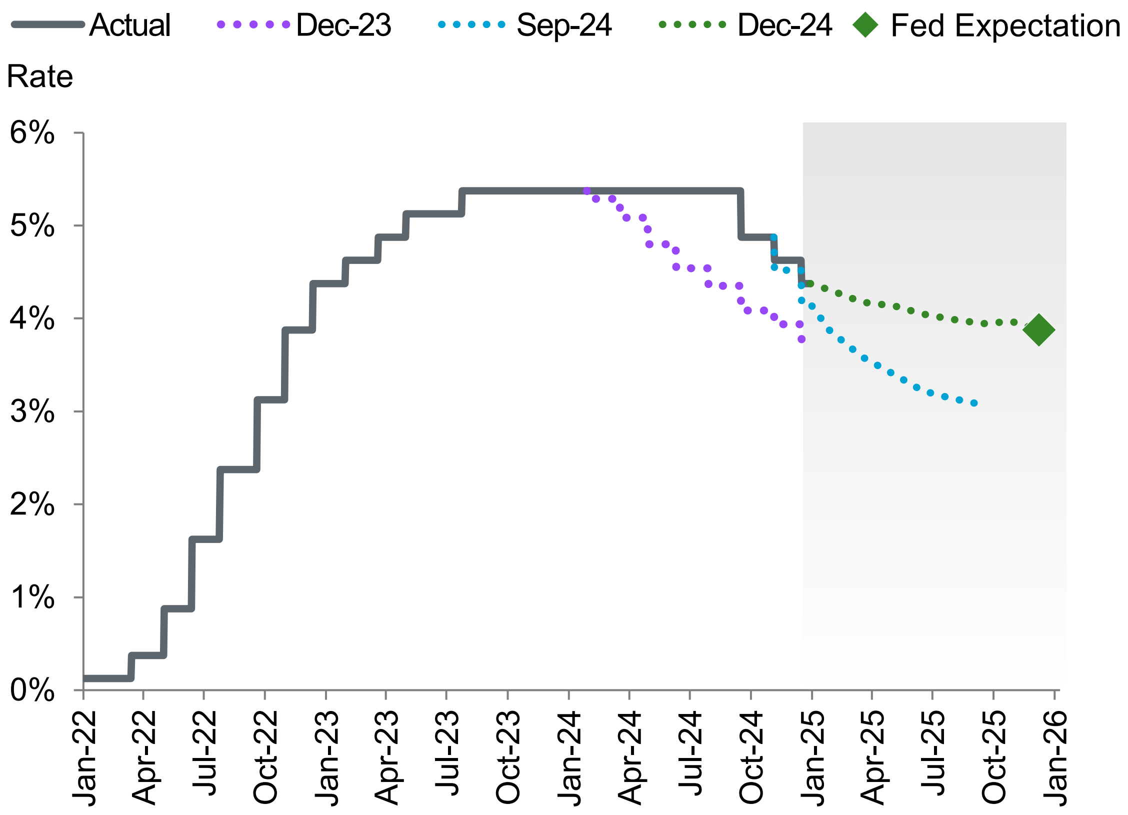


Shaded areas denote U.S. recession. **LEFT:** Source: Bloomberg Financial LP, NBER, Fidelity Investments (AART), as of 12/31/24. **RIGHT:** Bureau of Economic Analysis, Macrobond, Fidelity Investments (AART), as of 9/30/24.

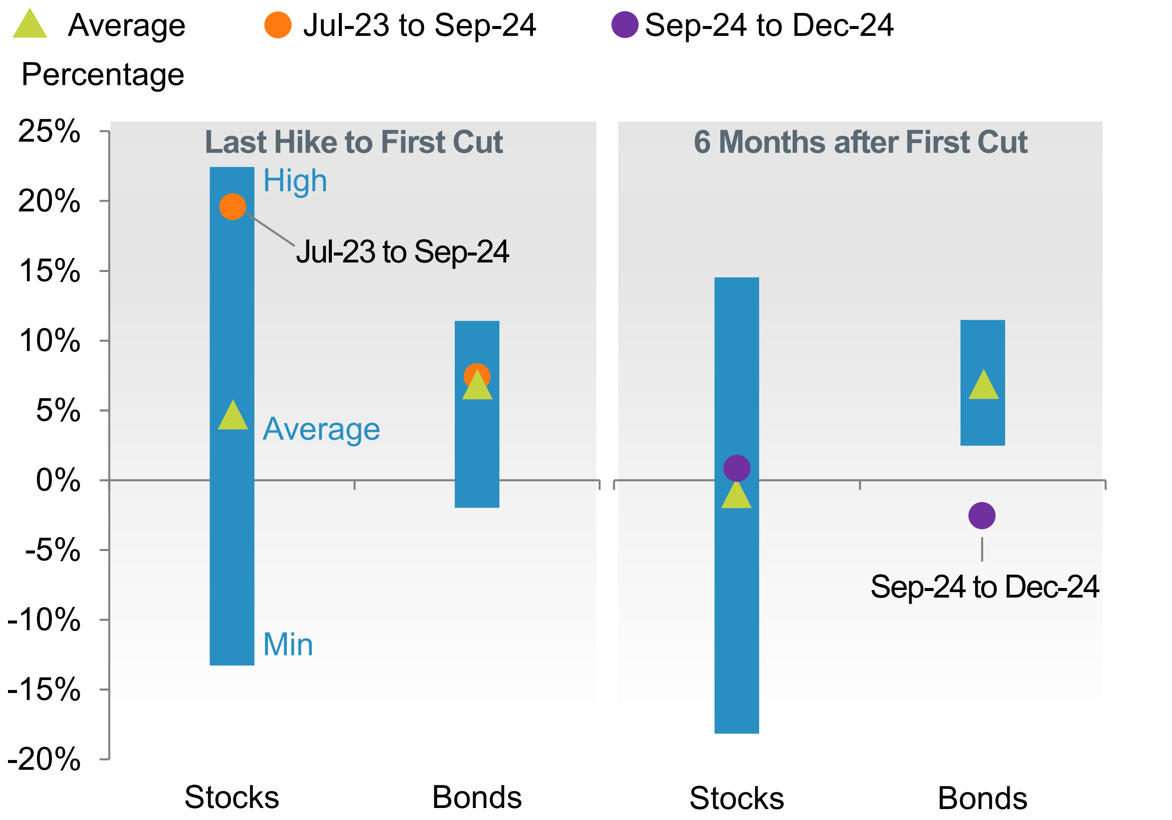
The Fed cut rates twice in Q4 but may be close to done

The U.S. Federal Reserve cut rates by 25bps twice during Q4, easing a total of 100bps during 2024. Coming into the year, the market expected 150bps of easing, but stubborn inflation kept the Fed from easing more aggressively and the market expected only 1 or 2 more cuts in 2025. Historically, stocks and bonds rally after the Fed's last hike and before the first cut, which occurred this cycle through Q3 2024. Typical equity returns after the first cut are more mixed, which has been the case so far with roughly flat returns this cycle.

Fed Funds Rate Expectations



Asset Class Returns around Fed's Last Hike and First Cut (1969–2024)



LEFT: Shaded area represents current Fed Funds Rate expectations. Source: U.S. Federal Reserve Board, NBER, Bloomberg Financial LP, Fidelity Investments (AART), as of 12/31/24. **RIGHT:** Stocks: Dow Jones Total Stock Market, Federal Reserve Board, Bonds: Bloomberg U.S. Aggregate Bond, Source: Bloomberg Finance L.P., Fidelity Investments (AART), as of 12/31/24.

After mixed Q4, most assets finished with positive 2024 returns

The S&P 500 posted modest gains during Q4, bringing its total return to 25% for the year. The U.S. equity market exhibited a wide dispersion of returns with communication services and information technology far outpacing sectors like health care and materials for Q4 and the year. Other asset categories struggled in Q4, including non-U.S. stocks, which fell amid a rising dollar, and fixed income assets, which were hurt by rising Treasury yields. Despite the weak quarter, most assets exhibited positive calendar year returns.

U.S. Equity Styles Total Return

	Q4 2024	2024
Growth	6.8%	32.5%
Large Caps	2.4%	25.0%
Mid Caps	0.6%	15.3%
Value	-1.9%	14.0%
Small Caps	0.3%	11.5%

U.S. Equity Sectors Total Return

	Q4 2024	2024
Communication Services	8.9%	40.2%
Info Tech	4.8%	36.6%
Financials	7.1%	30.5%
Consumer Discretionary	14.3%	30.1%
Utilities	-5.5%	23.4%
Industrials	-2.4%	17.3%
Consumer Staples	-3.3%	14.9%
Energy	-2.4%	5.7%
Real Estate	-7.9%	5.2%
Health Care	-10.3%	2.6%
Materials	-12.4%	0.0%

Non-U.S./Global Assets Total Return

	Q4 2024	2024
ACWI ex-USA	-7.6%	5.5%
Canada	-1.8%	11.9%
Japan	-3.6%	8.3%
EAFE	-8.1%	3.8%
EAFE Small Cap	-8.4%	1.8%
Europe	-9.7%	1.8%
EM Asia	-7.9%	12.0%
Emerging Markets	-8.0%	7.5%
EMEA	-4.0%	5.6%
Latin America	-15.8%	-26.4%
Gold	-0.4%	27.2%
Commodities	-0.4%	5.4%

U.S. Equity Factors Total Return

	Q4 2024	2024
Momentum	5.8%	33.0%
Quality	1.1%	22.3%
Yield	-0.5%	22.0%
Value	1.9%	18.3%
Low Volatility	-0.9%	16.3%
Size	-0.2%	15.4%

Fixed Income Total Return

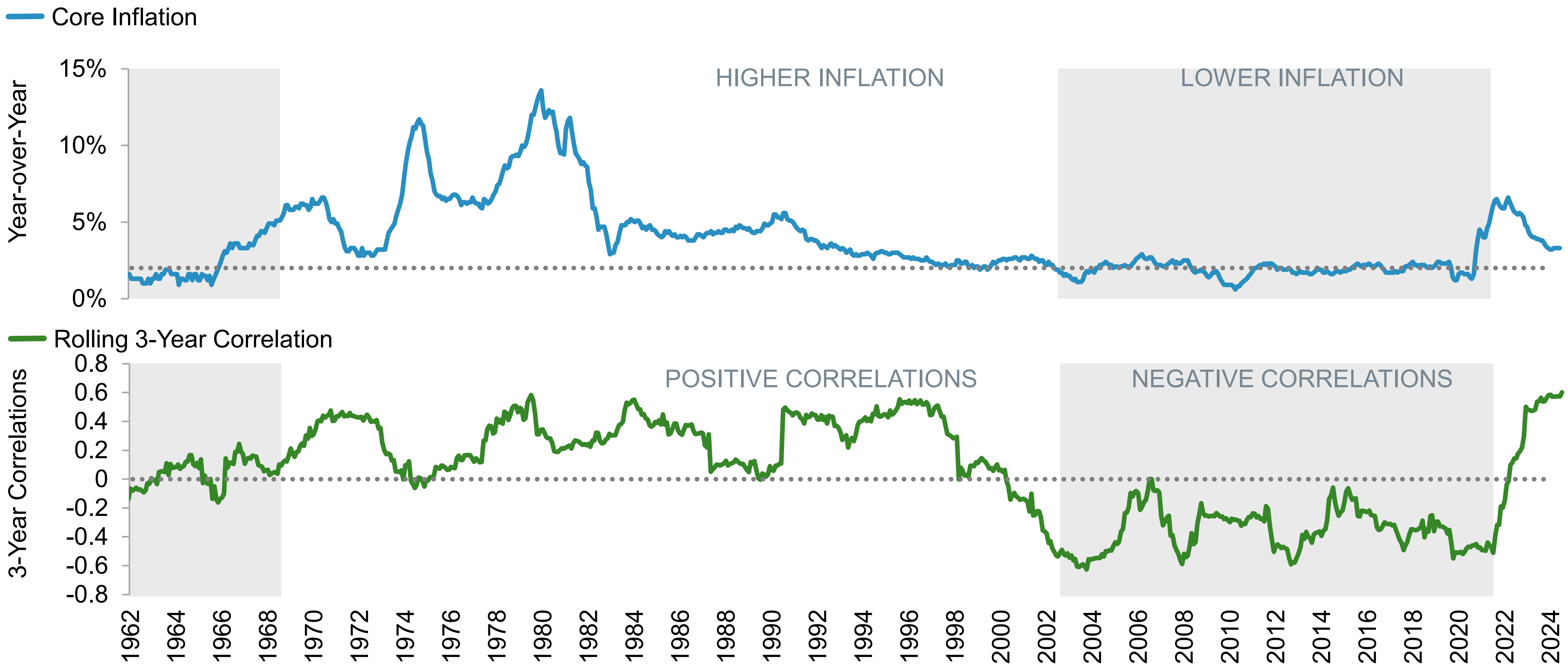
	Q4 2024	2024
Leveraged Loan	2.3%	9.0%
High Yield	0.2%	8.2%
EM Debt	-1.9%	6.5%
ABS	-0.1%	5.0%
CMBS	-1.5%	4.7%
Agency	-1.1%	3.2%
Credit	-3.0%	2.0%
TIPS	-2.9%	1.8%
Aggregate	-3.1%	1.3%
MBS	-3.2%	1.2%
Municipal	-1.2%	1.1%
Treasuries	-3.1%	0.6%
Long Govt & Credit	-7.4%	-4.2%

EAFE: Europe, Australasia, and the Far East. EM: Emerging markets. EMEA: Europe, the Middle East, and Africa. For indexes and other important information used to represent above asset categories, see Appendix. **Past performance is no guarantee of future results**. It is not possible to invest directly in an index. All indexes are unmanaged. Sector returns represented by S&P 500 sectors. Sector investing involves risk. Because of its narrow focus, sector investing may be more volatile than investing in more diversified baskets of securities. Source: Bloomberg Finance L.P., Fidelity Investments (AART), as of 12/31/24.

High inflation drives positive stock-bond correlations

Over the past 20 years, subdued and relatively stable U.S. core inflation averaged about 2% and facilitated an environment of negative correlations between U.S. stocks and Treasury bonds, leading to strong portfolio diversification. Since 2021, the backdrop has been more akin to prior periods of high inflation and positive stock-bond correlations.

Stock and Treasury Bond Correlations vs. Inflation

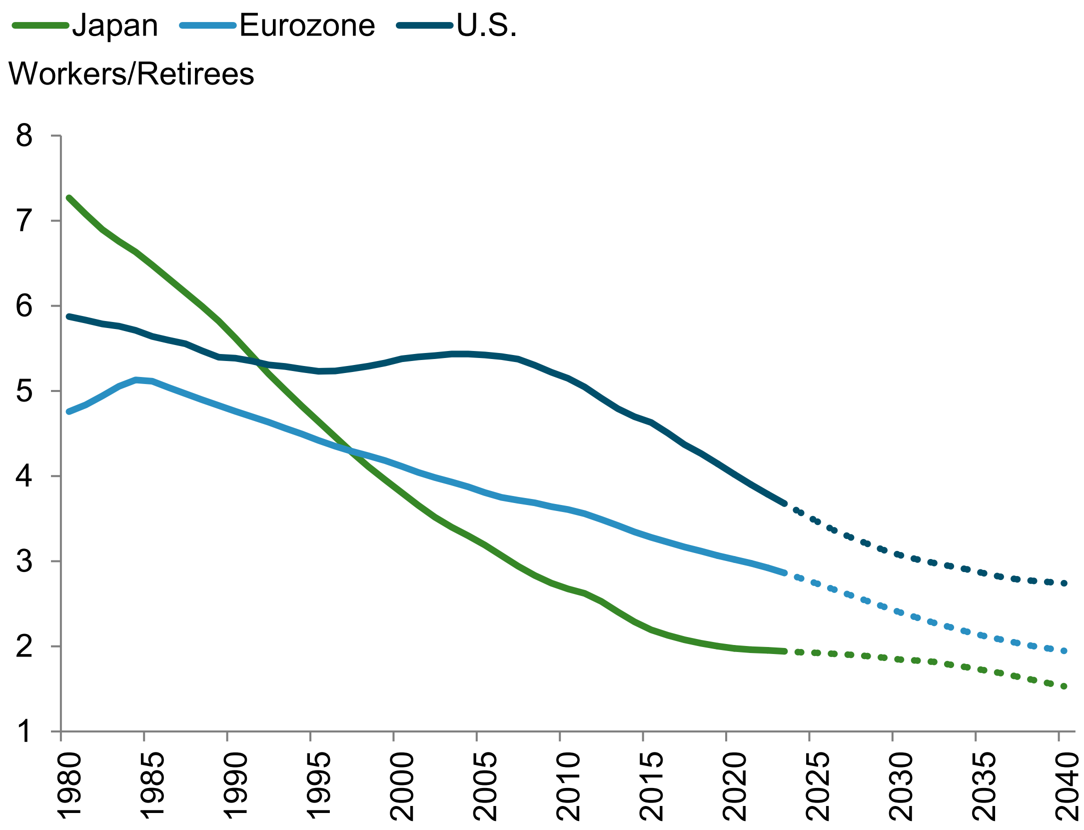


Past performance is no guarantee of future results. Diversification does not ensure a profit or guarantee against a loss. Fidelity Investments proprietary analysis of historical asset class performance is not indicative of future performance. Stocks measured by the Dow Jones U.S. Total Stock Market Index (Total Return). U.S. Treasuries measured by the Bloomberg U.S. Intermediate Treasury Bond Index (Total Return). Source: Bureau of Labor Statistics, Macrobond, Bloomberg Finance L.P., Fidelity Investments (AART), as of 12/31/24.

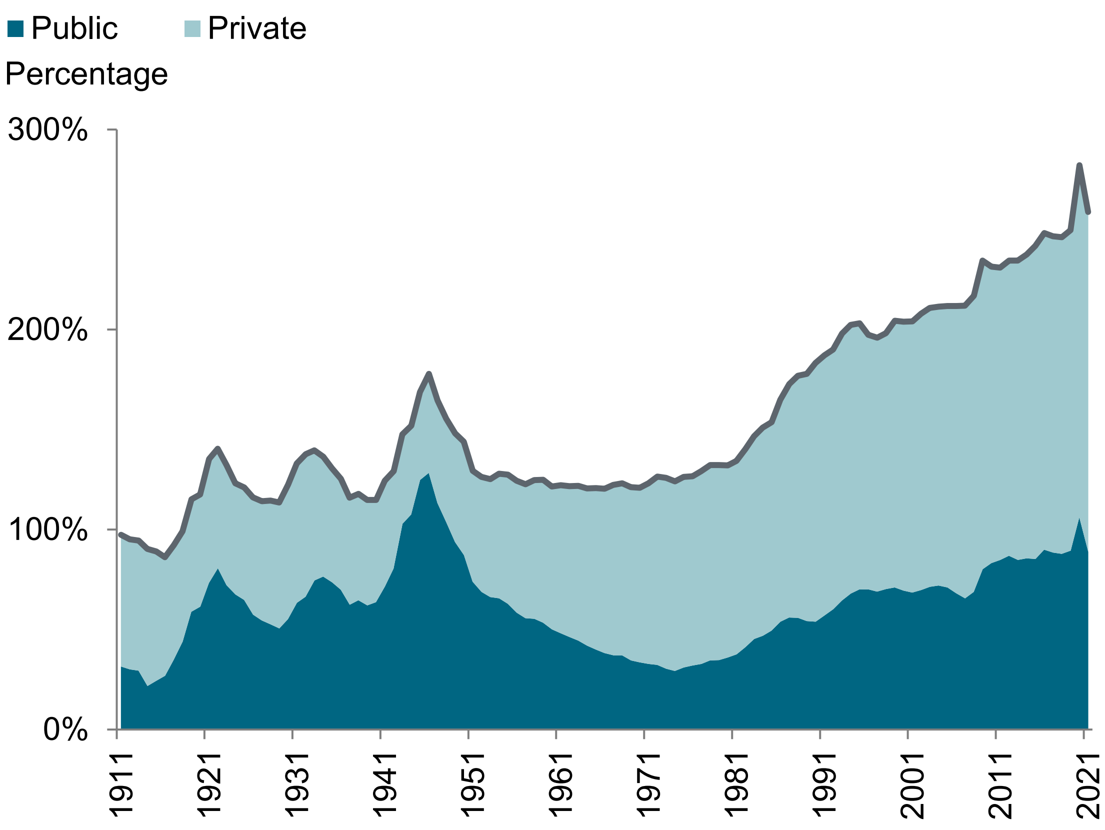
Unprecedented debt levels amid aging demographics

Most major economies face deteriorating demographic trends. With fewer new workers to support a growing number of retirees, greater fiscal pressures are ahead due to rising spending on pensions and health care. The dramatic worldwide rise in public and private debt in recent decades has been sustained by extraordinary monetary accommodation, leaving the outlook more uncertain amid higher interest and inflation rates.

Demographic Support Ratio



Global Debt as a Share of GDP



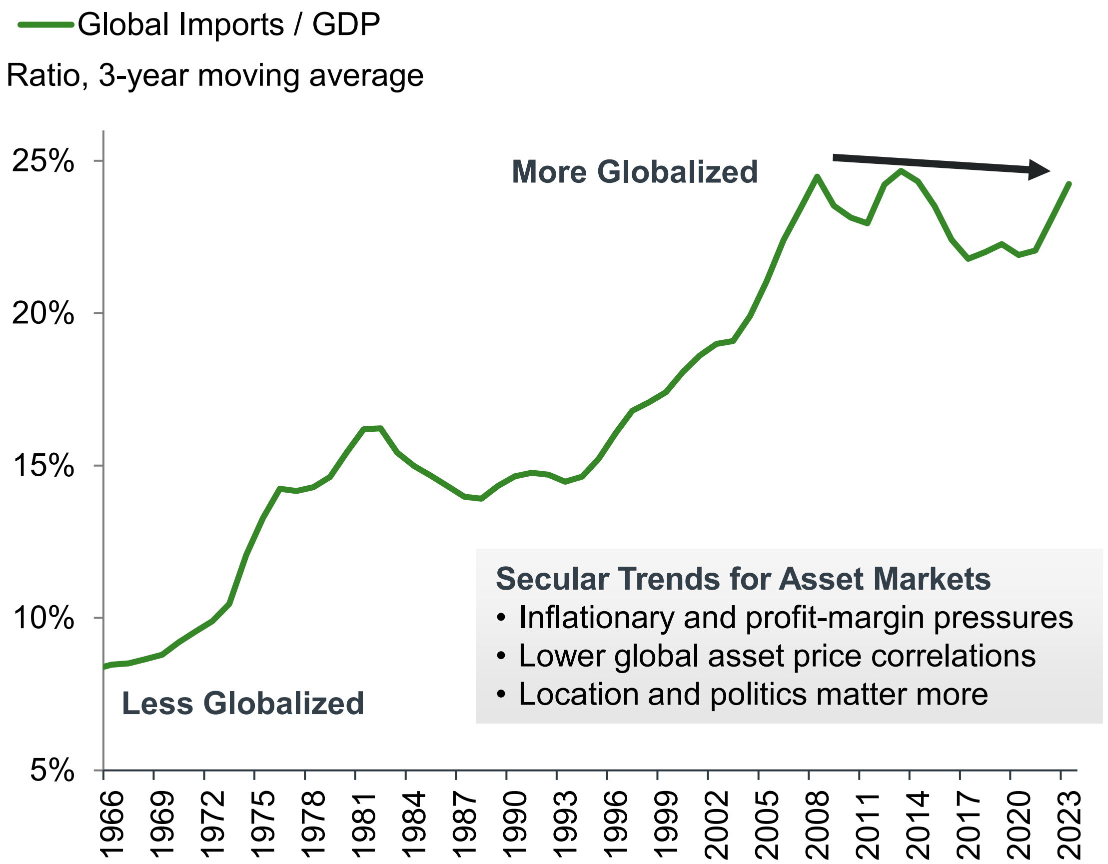
LEFT: The demographic support ratio is calculated as the number of workers (15–64 years old)/number of retirees (65 and older). Dotted line represents a projection. Source: United Nations, Haver Analytics, Fidelity Investments (AART), as of 7/31/22. **RIGHT:** Source: Bank of International Settlements, International Monetary Fund, Maddison Project, Fidelity Investments (AART), and the Jordà-Schularick-Taylor Macrohistory Database, compiled by Oscar Jordà, Moritz Schularick, and Alan M. Taylor, as of 12/31/21.

Multipolar geopolitical instability at the heart of peak globalization

The stable, unipolar backdrop under U.S. dominance fostered rapid global integration, but economic openness has stalled in recent years. At the heart of "peak globalization" is a secular environment of higher geopolitical risk. The shift to today's multipolar environment implies more great-power competition, particularly the deepening U.S.–China rivalry, and a less stable global backdrop. The more politics and location matter, the greater the potential benefits and active opportunities from global asset diversification.

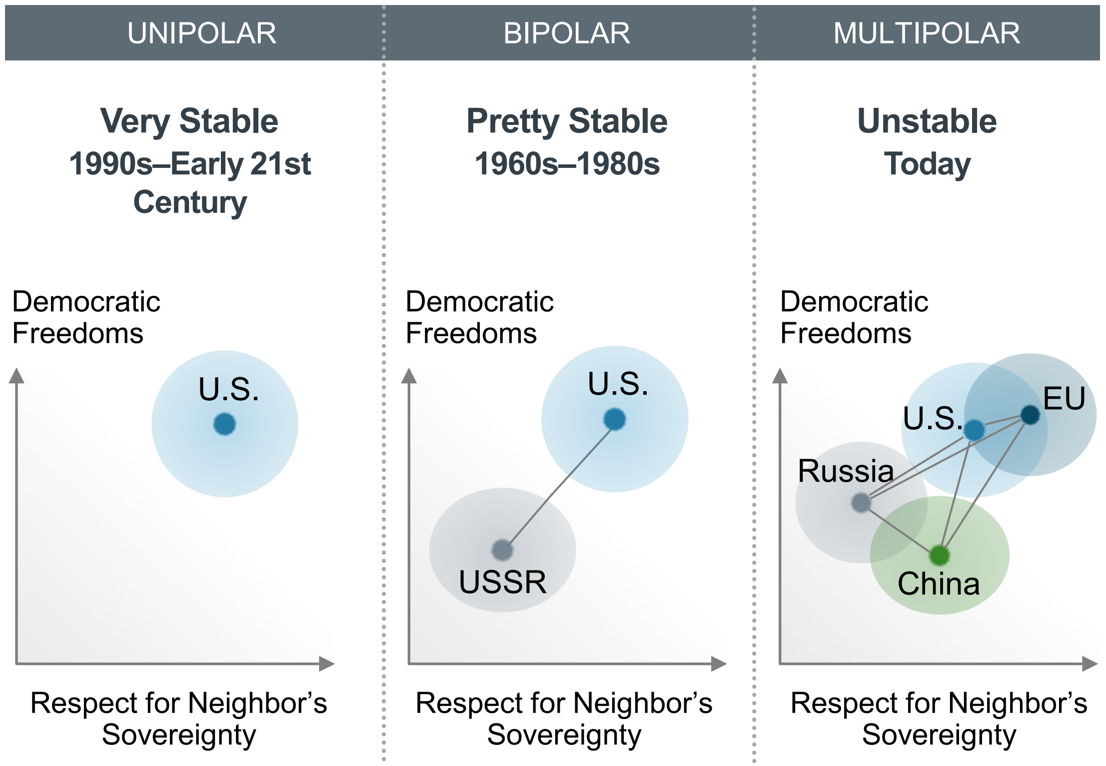
LONG-TERM

Trade Globalization



Secular Trends for Asset Markets
- Inflationary and profit-margin pressures
- Lower global asset price correlations
- Location and politics matter more

Global Regime Stability



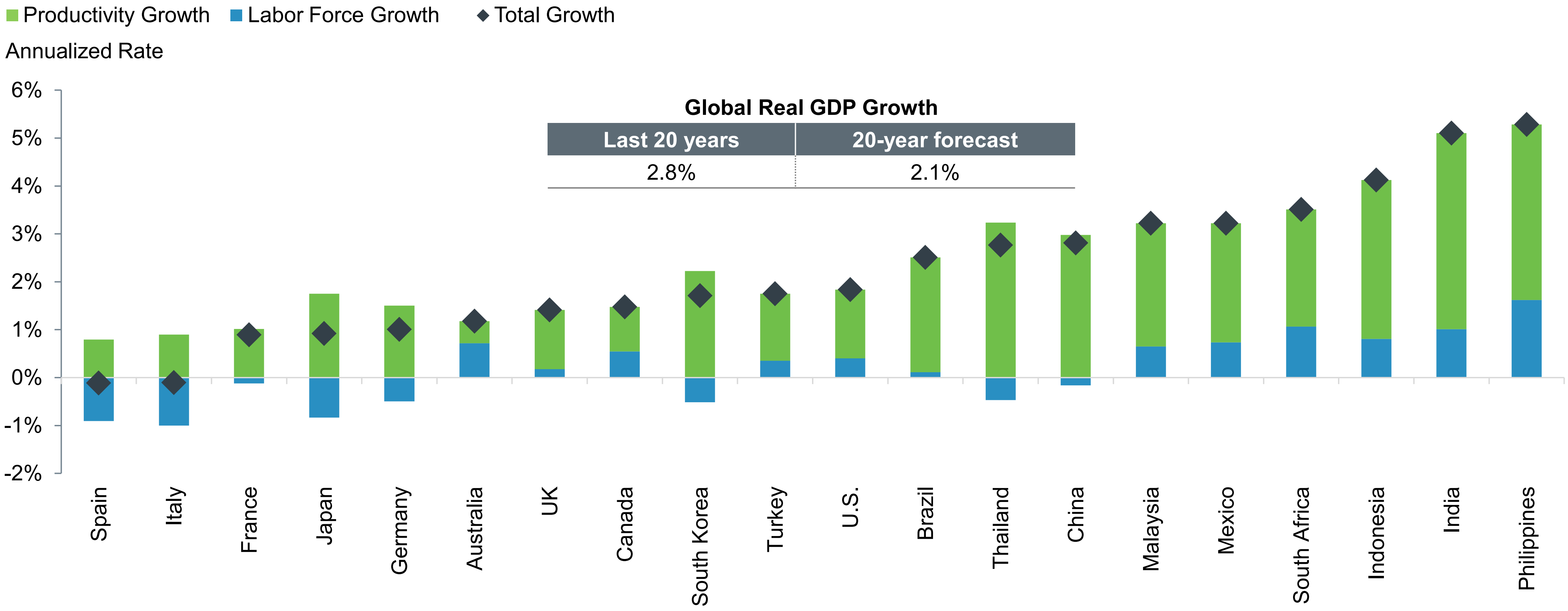
Diversification does not ensure a profit or guarantee against a loss. **LEFT:** The arrow on the chart notes the general downtrend in global imports as a percentage of gross domestic product since roughly the end of the 2007–2009 Global Financial Crisis. Source: World Bank, International Monetary Fund (IMF), Macrobond, Fidelity Investments (AART) as of 12/31/22. **RIGHT:** Source: Fidelity Investments (AART), as of 12/31/24.

Secular forecast: Slower global growth, EM to lead

Slowing labor-force growth and aging demographics are expected to tamp down global economic growth over the next two decades (relative to the past 20 years). We expect GDP growth in emerging markets to outpace that of developed markets over the long term, providing a relatively favorable secular backdrop for emerging-market equity returns.

LONG-TERM

Real GDP 20-Year Growth Forecasts



Global Real GDP Growth

Last 20 years	20-year forecast
2.8%	2.1%

Past performance is no guarantee of future results. EM: Emerging markets. GDP: Gross domestic product.
Source: OECD and Fidelity Investments (AART), as of 5/31/24.

Performance rotations underscore need for diversification

The performance of different assets has fluctuated widely from year to year, and the magnitude of returns can vary significantly among asset classes in any given year—even among asset classes that are moving in the same direction. A portfolio allocation with a variety of global assets illustrates the potential benefits of diversification.

Periodic Table of Returns

2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
35%	40%	5%	79%	28%	8%	20%	39%	28%	5%	21%	38%	0%	36%	38%	43%	16%	41%	32%
33%	16%	-20%	58%	27%	8%	19%	34%	14%	3%	18%	30%	-2%	31%	20%	29%	-8%	26%	25%
27%	12%	-26%	37%	19%	4%	18%	33%	13%	1%	18%	26%	-2%	26%	18%	27%	-11%	18%	16%
22%	11%	-34%	32%	18%	4%	18%	32%	12%	1%	12%	22%	-3%	26%	18%	26%	-13%	18%	14%
18%	7%	-36%	28%	17%	2%	16%	23%	11%	1%	12%	15%	-4%	26%	14%	25%	-14%	17%	12%
16%	6%	-36%	27%	16%	2%	16%	19%	6%	0%	11%	15%	-4%	22%	8%	17%	-16%	14%	9%
12%	5%	-37%	26%	15%	0%	16%	7%	5%	-4%	9%	13%	-9%	22%	8%	15%	-18%	13%	8%
11%	2%	-38%	20%	15%	-4%	15%	3%	3%	-4%	8%	9%	-11%	18%	6%	11%	-20%	12%	8%
9%	-1%	-38%	19%	12%	-12%	11%	-2%	-2%	-5%	7%	8%	-11%	14%	3%	5%	-20%	10%	5%
4%	-2%	-43%	18%	8%	-13%	4%	-2%	-4%	-15%	3%	4%	-11%	9%	-3%	-2%	-24%	6%	4%
2%	-16%	-53%	6%	7%	-18%	-1%	-10%	-17%	-25%	2%	1%	-14%	8%	-8%	-3%	-29%	-8%	1%

Legend
Growth Stocks
Large Cap Stocks
60% Large Cap 40% IG Bonds
Value Stocks
Small Cap Stocks
REITs
High-Yield Bonds
Emerging-Market Stocks
Commodities
Foreign-Developed Country Stocks
Investment-Grade Bonds

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Appendix: Important information

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Past performance and dividend rates are historical and do not guarantee future results.

Investing involves risk, including risk of loss.

Diversification does not ensure a profit or guarantee against a loss.

Index or benchmark performance presented in this document does not reflect the deduction of advisory fees, transaction charges, and other expenses, which would reduce performance.

Indexes are unmanaged. It is not possible to invest directly in an index.

Although bonds generally present less short-term risk and volatility than stocks, bonds do contain interest rate risk (as interest rates rise, bond prices usually fall, and vice versa) and the risk of default, or the risk that an issuer will be unable to make income or principal payments.

Additionally, bonds and short-term investments entail greater inflation risk—or the risk that the return of an investment will not keep up with increases in the prices of goods and services—than stocks. Increases in real interest rates can cause the price of inflation-protected debt securities to decrease.

Stock markets, especially non-U.S. markets, are volatile and can decline significantly in response to adverse issuer, political, regulatory, market, or economic developments. Foreign securities are subject to interest rate, currency exchange rate, economic, and political risks, all of which are magnified in emerging markets. The securities of smaller, less well-known companies can be more volatile than those of larger companies.

There is no guarantee that a factor-based investing strategy will enhance performance or reduce risk. Before investing, make sure you understand how a factor investment strategy may differ from a more traditional index-based or actively managed approach. Depending on market conditions, factor-based investments may underperform compared to investments that seek to track a market-capitalization-weighted index or investments that employ full active management.

Growth stocks can perform differently from the market as a whole and from other types of stocks and can be more volatile than other types of stocks. Value stocks can perform differently from other types of stocks and can continue to be undervalued by the market for long periods of time.

Lower-quality debt securities generally offer higher yields but also involve greater risk of default or price changes due to potential changes in the credit quality of the issuer. Any fixed income security sold or redeemed prior to maturity may be subject to loss.

Floating rate loans generally are subject to restrictions on resale, and sometimes trade infrequently in the secondary market; as a result, they may be more difficult to value, buy, or sell. A floating rate loan may not be fully collateralized and therefore may decline significantly in value.

The municipal market can be affected by adverse tax, legislative, or political changes, and by the financial condition of the issuers of municipal securities. Interest income generated by municipal bonds is generally expected to be exempt from federal income taxes and, if the bonds are held by an investor resident in the state of issuance, from state and local income taxes. Such interest income may be subject to federal and/or state alternative minimum taxes. Investing in municipal bonds for the purpose of generating tax-exempt income may not be appropriate for investors in all tax brackets. Generally, tax-exempt municipal securities are not appropriate holdings for tax-advantaged accounts, such as IRAs and 401(k)s.

The commodities industry can be significantly affected by commodity prices, world events, import controls, worldwide competition, government regulations, and economic conditions.

The gold industry can be significantly affected by international monetary and political developments, such as currency devaluations or revaluations, central bank movements, economic and social conditions within a country, trade imbalances, or trade or currency restrictions between countries.

Changes in real estate values or economic downturns can have a significant negative effect on issuers in the real estate industry.

Leverage can magnify the impact that adverse issuer, political, regulatory, market, or economic developments have on a company. In the event of bankruptcy, a company's creditors take precedence over the company's stockholders.

Appendix: Important information

Market Indexes

Index returns on slide 28 represented by: Growth—Russell 3000® Growth Index; Small Cap—Russell 2000® Index; Large Cap—S&P 500®; Mid Cap—Russell Midcap® Index; Value—Russell 3000® Value Index; ACWI ex USA—MSCI ACWI (All Country World Index) ex USA Index; Japan—MSCI Japan Index; EAFE Small Cap—MSCI EAFE Small Cap Index; EAFE—MSCI EAFE (Europe, Australasia, Far East) Index; Europe—MSCI Europe Index; Canada—MSCI Canada Index; EM Asia—MSCI Emerging Markets Asia Index; Emerging Markets (EM)—MSCI EM Index; EMEA (Europe, Middle East, and Africa)—MSCI EM EMEA Index; Latin America—MSCI EM Latin America Index; Gold—Gold Bullion Price, LBMA PM Fix; Commodities—Bloomberg Commodity Index; High Yield—ICE BofA U.S. High Yield Index; Leveraged Loan—S&P/LSTA Leveraged Loan Index; TIPS (Treasury Inflation-Protected Securities)—Bloomberg U.S. TIPS Index; EM Debt (Emerging-Market Debt)—JP Morgan EMBI Global Diversified Composite Index; CMBS (Commercial Mortgage-Backed Securities)—Bloomberg Investment-Grade CMBS Index; Credit—Bloomberg U.S. Credit Bond Index; Municipal—Bloomberg Municipal Bond Index; Long Government & Credit (Investment-Grade)—Bloomberg Long Government & Credit Index; ABS (Asset-Backed Securities)—Bloomberg ABS Index; Aggregate—Bloomberg U.S. Aggregate Bond Index; Agency—Bloomberg U.S. Agency Index; Treasuries—Bloomberg U.S. Treasury Index; MBS (Mortgage-Backed Securities)—Bloomberg MBS Index; Momentum—Fidelity U.S. Momentum Factor Index TR; Low Volatility—Fidelity U.S. Low Volatility Factor Index; Quality—Fidelity U.S. Quality Factor Index; Value—Fidelity U.S. Value Factor Index; Size—Fidelity Small-Mid Factor Index; Yield—Fidelity High Dividend Index.

Bloomberg U.S. Aggregate Bond is a broad-based, market value-weighted benchmark that measures the performance of the investment-grade, U.S. dollar-denominated, fixed-rate taxable bond market. **Bloomberg U.S. Credit Bond Index** is a market value-weighted index of investment-grade corporate fixed-rate debt issues with maturities of one year or more.

Bloomberg U.S. Treasury Index is a market value-weighted index of public obligations of the U.S. Treasury with maturities of one year or more. **Bloomberg U.S. Treasury Inflation-Protected Securities (TIPS) Index (Series-L)** is a market value-weighted index that measures the performance of inflation-protected securities issued by the US Treasury. **Bloomberg Long U.S. Government Credit Index** includes all publicly issued U.S. government and corporate securities that have $250 million or more of outstanding face value. **Bloomberg U.S. Agency Bond Index** is a market value-weighted index of U.S. Agency government and investment-grade corporate fixed-rate debt issues. **Bloomberg Municipal Bond Index** is a market value-weighted index of investment-grade municipal bonds with maturities of one year or more.

Bloomberg U.S. MBS Index is a market value-weighted index of fixed-rate securities that represent interests in pools of mortgage loans, including balloon mortgages, with original terms of 15 and 30 years that are issued by the Government National Mortgage Association (GNMA), the Federal National Mortgage Association (FNMA), and the Federal Home Loan Mortgage Corp. (FHLMC).

Bloomberg CMBS Index is designed to mirror commercial mortgage-backed securities of investment-grade quality (Baa3/BBB-/BBB- or above) using Moody's, S&P, and Fitch, respectively, with maturities of at least one year. **Bloomberg ABS Index** is a market value-weighted index that covers fixed-rate asset-backed securities with average lives greater than or equal to one year and that are part of a public deal; the index covers the following collateral types: credit cards, autos, home equity loans, stranded-cost utility (rate-reduction bonds), and manufactured housing.

ICE BofA U.S. High Yield Index is a market capitalization-weighted index of U.S. dollar-denominated, below-investment-grade corporate debt publicly issued in the U.S. market.

JPM® EMBI Global Diversified Composite Index comprises of USD denominated Brady bonds, Eurobonds and Traded loans issued by sovereign and quasi sovereign entities. The Diversified version limits the weights of the index countries by only including a specified portion of those countries' eligible current face amounts of debt outstanding. This provides a more even distribution of weights within the countries in the index.

Standard & Poor's/Loan Syndications and Trading Association (S&P/LSTA) Leveraged Performing Loan Index is a market value-weighted index designed to represent the performance of U.S. dollar-denominated institutional leveraged performing loan portfolios (excluding loans in payment default) using current market weightings, spreads, and interest payments.

Bloomberg Commodity Index measures the performance of the commodities market. It consists of exchange-traded futures contracts on physical commodities that are weighted to account for the economic significance and market liquidity of each commodity.

Russell 3000® Index is a market capitalization-weighted index designed to measure the performance of the 3,000 largest companies in the U.S. equity market. **Russell 3000 Growth Index** is a market capitalization-weighted index designed to measure the performance of the broad growth segment of the U.S. equity market. It includes those Russell 3000 Index companies with higher price-to-book ratios and higher forecasted growth rates. **Russell 3000 Value Index** is a market capitalization-weighted index designed to measure the performance of the small to mid cap value segment of the U.S. equity market. It includes those Russell 3000 Index companies with lower price-to-book ratios and lower forecasted growth rates. **Russell Midcap® Index** is a market capitalization-weighted index designed to measure the performance of the mid cap segment of the U.S. equity market. It contains approximately 800 of the smallest securities in the Russell 1000 Index.

Russell 1000® Index is a market capitalization-weighted index designed to measure the performance of the large cap segment of the U.S. equity market. **Russell 1000 Growth Index** is a market capitalization-weighted index designed to measure the performance of the large cap growth segment of the U.S. equity market. It includes those Russell 1000 Index companies with higher price-to-book ratios and higher forecasted growth rates. **Russell 1000 Value Index** is a market capitalization-weighted index designed to measure the performance of the large cap value segment of the U.S. equity market. It includes those Russell 1000 Index companies with lower price-to-book ratios and lower expected growth rates.

Appendix: Important information

Market Indexes (continued)

Russell 2000® Index is a market capitalization-weighted index designed to measure the performance of the small cap segment of the U.S. equity market. It includes approximately 2,000 of the smallest securities in the Russell 3000 Index.

S&P 500® is a market capitalization-weighted index of 500 common stocks chosen for market size, liquidity, and industry group representation to represent U.S. equity performance. S&P 500 is a registered service mark of The McGraw-Hill Companies, Inc., and has been licensed for use by Fidelity Distributors Corporation and its affiliates.

Sectors and **Industries** are defined by Global Industry Classification Standards (GICS®), except where noted otherwise. **S&P 500 sectors**: Consumer Discretionary—companies that tend to be the most sensitive to economic cycles. Consumer Staples—companies whose businesses are less sensitive to economic cycles. Energy—companies whose businesses are dominated by either of the following activities: the construction or provision of oil rigs, drilling equipment, and other energy-related services and equipment; or the exploration, production, marketing, refining, and/or transportation of oil and gas products, coal, and consumable fuels. Financials—companies involved in activities such as banking, consumer finance, investment banking and brokerage, asset management, insurance and investments, and mortgage real estate investment trusts (REITs). Health Care—companies in two main industry groups: health care equipment suppliers, manufacturers, and providers of health care services; and companies involved in research, development, production, and marketing of pharmaceuticals and biotechnology products. Industrials—companies that manufacture and distribute capital goods, provide commercial services and supplies, or provide transportation services. Information Technology—companies in technology software and services and technology hardware and equipment. Materials—companies that engage in a wide range of commodity-related manufacturing. Real Estate—companies in real estate development, operations, and related services, as well as equity REITs. Communication Services—companies that facilitate communication and offer related content through various media. Utilities—companies considered electric, gas, or water utilities, or that operate as independent producers and/or distributors of power.

Dow Jones U.S. Total Stock Market Index℠ is a full market capitalization-weighted index of all equity securities of U.S.-headquartered companies with readily available price data.

MSCI All Country World Index (ACWI) is a market capitalization-weighted index designed to measure investable equity market performance for global investors of developed and emerging markets. **MSCI ACWI (All Country World Index) ex USA Index** is a market capitalization-weighted index designed to measure investable equity market performance for global investors of large and mid cap stocks in developed and emerging markets, excluding the United States.

MSCI Europe, Australasia, Far East Index (EAFE) is a market capitalization-weighted index designed to measure the investable equity market performance for global investors in developed markets, excluding the U.S. and Canada. **MSCI EAFE Small Cap Index** is a market capitalization-weighted index designed to measure the investable equity market performance of small cap stocks for global investors in developed markets, excluding the U.S. and Canada. **MSCI Europe Index** is a market capitalization-weighted index that is designed to measure the investable equity market performance for global investors of the developed markets in Europe. **MSCI Canada Index** is a market capitalization-weighted index designed to measure equity market performance in Canada. **MSCI Japan Index** is a market capitalization-weighted index designed to measure equity market performance in Japan.

MSCI Emerging Markets (EM) Index is a market capitalization-weighted index designed to measure the investable equity market performance for global investors in emerging markets. **MSCI EM Asia Index** is a market capitalization-weighted index designed to measure equity market performance of EM countries of Asia. **MSCI EM Europe, Middle East, and Africa (EMEA) Index** is a market capitalization-weighted index designed to measure the investable equity market performance for global investors in the EM countries of Europe, the Middle East, and Africa. **MSCI EM Latin America Index** is a market capitalization-weighted index designed to measure the investable equity market performance for global investors in Latin America.

FTSE® National Association of Real Estate Investment Trusts (NAREIT®) All REITs Index is a market capitalization-weighted index that is designed to measure the performance of all tax-qualified REITs listed on the NYSE, the American Stock Exchange, or the NASDAQ National Market List. **FTSE® NAREIT® Equity REIT** Index is an unmanaged market value-weighted index based on the last closing price of the month for tax-qualified REITs listed on the New York Stock Exchange (NYSE). **FTSE NAREIT All Equity Total Return Index** is a market capitalization-weighted index that is designed to measure the performance of tax-qualified real estate investment trusts (REITs) listed on the New York Stock Exchange, the NYSE MKT LLC, or the NASDAQ National Market List.

Fidelity U.S. Low Volatility Factor Index is designed to reflect the performance of stocks of large and mid-capitalization U.S. companies with lower volatility than the broader market. **Fidelity U.S. Value Factor Index** is designed to reflect the performance of stocks of large and mid-capitalization U.S. companies that have attractive valuations. **Fidelity U.S. Quality Factor Index** is designed to reflect the performance of stocks of large and mid-capitalization U.S. companies with a higher quality profile than the broader market. **Fidelity Small-Mid Factor Index** is designed to reflect the performance of stocks of small and mid-capitalization U.S. companies with attractive valuations, high quality profiles, positive momentum signals, and lower volatility than the broader market. **Fidelity U.S. Momentum Factor Index** is designed to reflect the performance of stocks of large and mid-capitalization U.S. companies that exhibit positive momentum signals. **Fidelity High Dividend Index** is designed to reflect the performance of stocks of large and mid-capitalization dividend-paying companies that are expected to continue to pay and grow their dividends.

Appendix: Important information

Market Indexes (continued)

The London Bullion Market Association (LBMA) publishes the international benchmark price of gold in USD, twice daily. The LBMA gold price auction takes place by ICE Benchmark Administration (IBA) at 10:30 a.m. and 3:00 p.m.

Consumer Price Index (CPI) is an inflationary indicator published monthly by the U.S. Bureau of Labor Statistics that measures the change in the cost of a fixed basket of products and services, including housing, electricity, food, and transportation.

Personal consumption expenditure (PCE) indexes, published by the U.S. Bureau of Economic Analysis, are a primary measure of actual and imputed household expenditures on goods (durable and non-durable) and services. Core PCE, the Federal Reserve's preferred measure of consumer price inflation, excludes volatile food and energy prices. Definitions, data, and related resources regarding CPI and PCE variants are available at https://www.atlantafed.org/research/inflationproject/underlying-inflation-dashboard.

Bloomberg Commodity Total Return Sub-indexes are composed of futures contracts and reflect the returns on fully collateralized commodity investments in metals, agriculture, energy, and precious metals. The sub-indexes are the Bloomberg Industrial Metals Subindex Total Return Index, Bloomberg Agriculture Subindex Total Return Index, Bloomberg Energy Subindex Total Return Index, and the Bloomberg Precious Metals Subindex Total Return Index.

The Chartered Financial Analyst® (CFA®) designation is offered by CFA Institute. To obtain the CFA charter, candidates must pass three exams demonstrating their competence, integrity, and extensive knowledge in accounting, ethical and professional standards, economics, portfolio management, and security analysis, and must also have at least 4,000 hours of qualifying work experience completed in a minimum of 36 months, among other requirements. CFA® is a trademark owned by CFA Institute.