Market Analysis / Third Quarter 2023

INDEPENDENT WEALTH MANAGEMENT

Disinflation Stalled and Rates Rose amid U.S. Expansion

The resilient U.S. late-cycle expansion contributed to a stalling pattern in disinflationary trends, another Fed rate hike, and rising long-term Treasury-bond yields. The uncertain global economic outlook and climbing oil prices added to the choppy backdrop for stock prices during the third quarter. This late-cycle environment is a mixed bag, with economic and corporate activity remaining solid but policy and inflation trends more uncertain.

	MACRO	ASSET MARKETS
Q3 2023	• Global disinflation stalled as economic trends became choppier.	• Stock and bond prices dropped while oil prices rose.
OUTLOOK	• The global business cycle remains in expansion but is less synchronized and facing multiple crosswinds. • The U.S. is in the late-cycle expansion phase, supported by a solid consumer backdrop. • China's policy easing is picking up pace amid weak cyclical and structural trends. • Tight labor markets and higher oil prices will make continued disinflation more difficult without greater economic slowing. • The Fed and other central banks are likely nearing the end of their hiking cycles, but global monetary tightening is dampening liquidity and adding to growth risks.	• Markets may be overly sanguine about the lagging impact of monetary tightening. • Greater uncertainty about inflation and monetary policy raises the odds that market volatility will rise. • The valuations of non-U.S. equities appear to price in more of this uncertainty. • Late-cycle positioning implies smaller cyclical tilts and a readiness for opportunities; high levels of long-term portfolio diversification remain warranted.

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

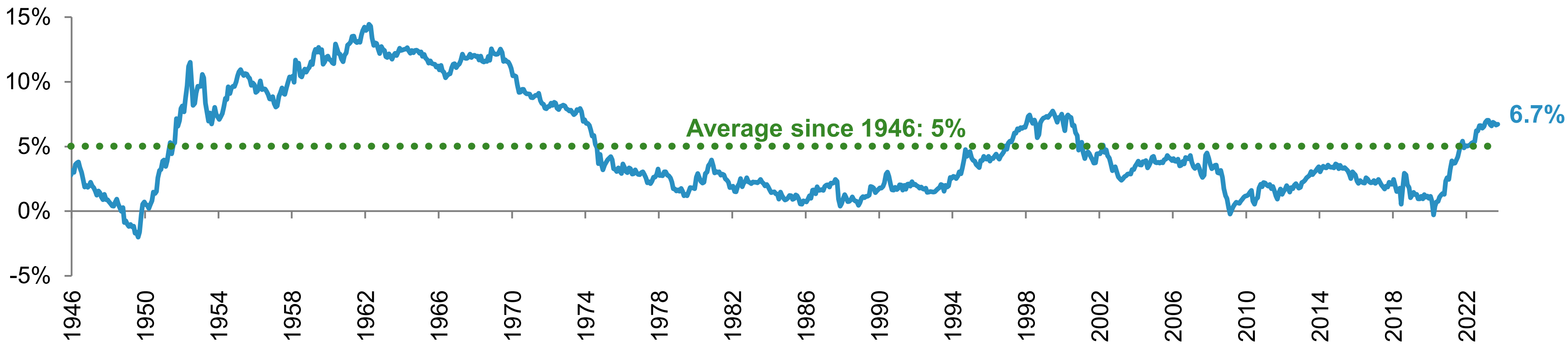
Rising Yields Weighed on Stocks and Bonds in Q3

During Q3, rising bond yields interrupted the 2023 rally in riskier assets, with losses occurring across most major U.S. and non-U.S. equity categories. Many fixed-income sectors drifted lower as well, with the most interest-rate sensitive categories suffering the largest declines. Commodities received a boost from rising oil prices. For the full year, U.S. stocks remained on top with solid gains, while high-quality bonds dipped into negative territory.

	Q3 2023	YTD (%)		Q3 2023	YTD (%)
Commodities	4.7%	-3.4%	U.S. Large Cap Stocks	-3.3%	13.1%
High Yield Bonds	0.5%	6.0%	U.S. Growth	-3.3%	23.8%
Emerging-Market Bonds	-2.2%	1.8%	Gold	-3.7%	1.3%
Emerging-Market Stocks	-2.9%	1.8%	Non-U.S. Developed-Country Stocks	-4.1%	7.1%
U.S. Corporate Bonds	-3.0%	0.0%	U.S. Small Cap Stocks	-5.1%	2.5%
U.S. Value	-3.2%	1.7%	Real Estate Stocks	-7.1%	-2.1%
Investment-Grade Bonds	-3.2%	-1.2%	Long Government & Credit Bonds	-9.4%	-5.4%

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

Annualized Return Difference

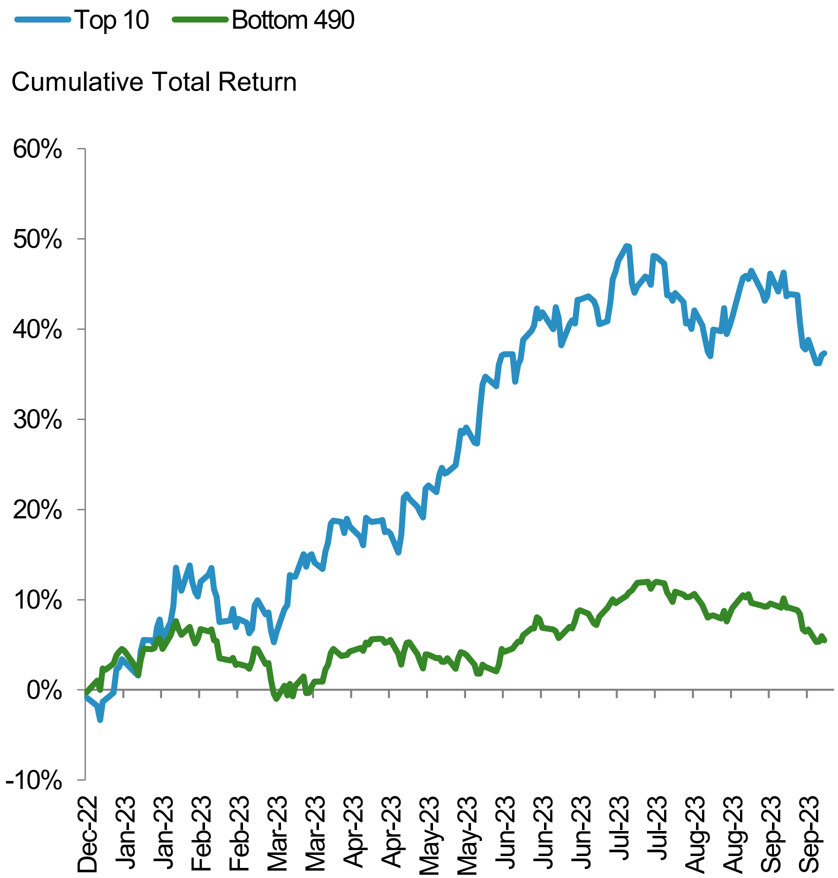


Past performance is no guarantee of future results. It is not possible to invest directly in an index. All indexes are unmanaged. See Appendix for important index information. IG: Investment grade. Assets represented by: U.S Growth Stocks—Russell 3000 Growth Index; Non-U.S. Developed-Country Stocks—MSCI 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., Haver Analytics, Fidelity Investments Asset Allocation Research Team (AART), as of 9/30/23.

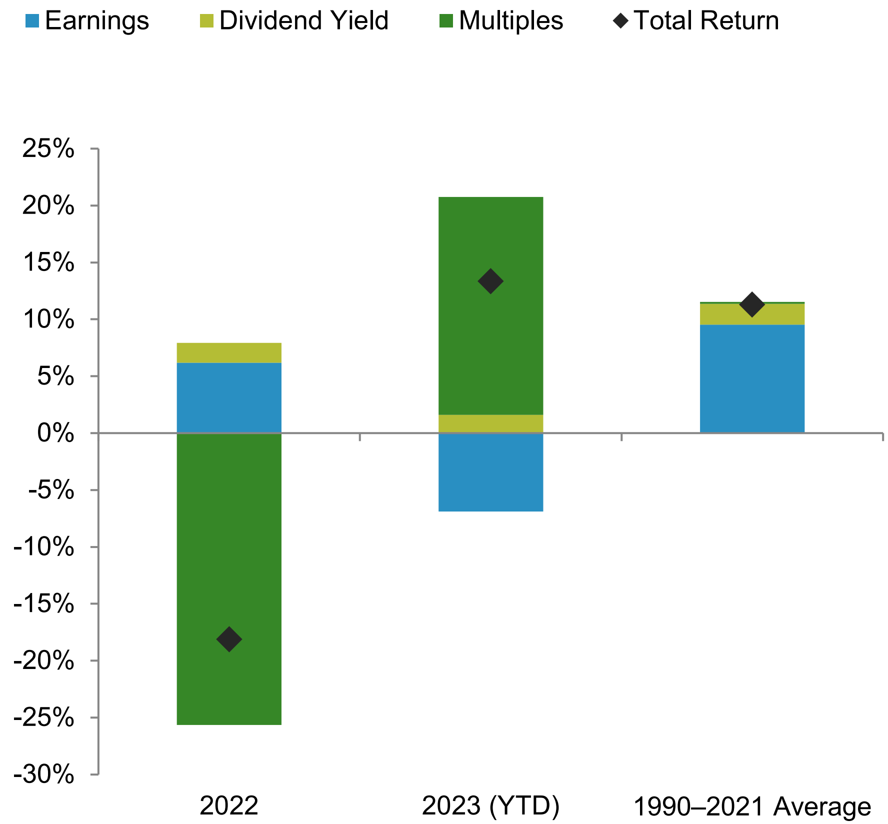
Narrow Leadership in the Equity-Market Rally

Despite strong gains for U.S. large-cap stocks on a year-to-date basis, the 2023 market rebound remained narrow. The 10 largest stocks, concentrated in the technology and communications sectors, have accounted for the bulk of the market's gains. Moreover, the appreciation in valuation multiples propelled the market's rally, as earnings growth declined—likely a sign that investors anticipate an earnings rebound in 2024.

S&P 500 Stock Performance



Composition of S&P 500 Total Return

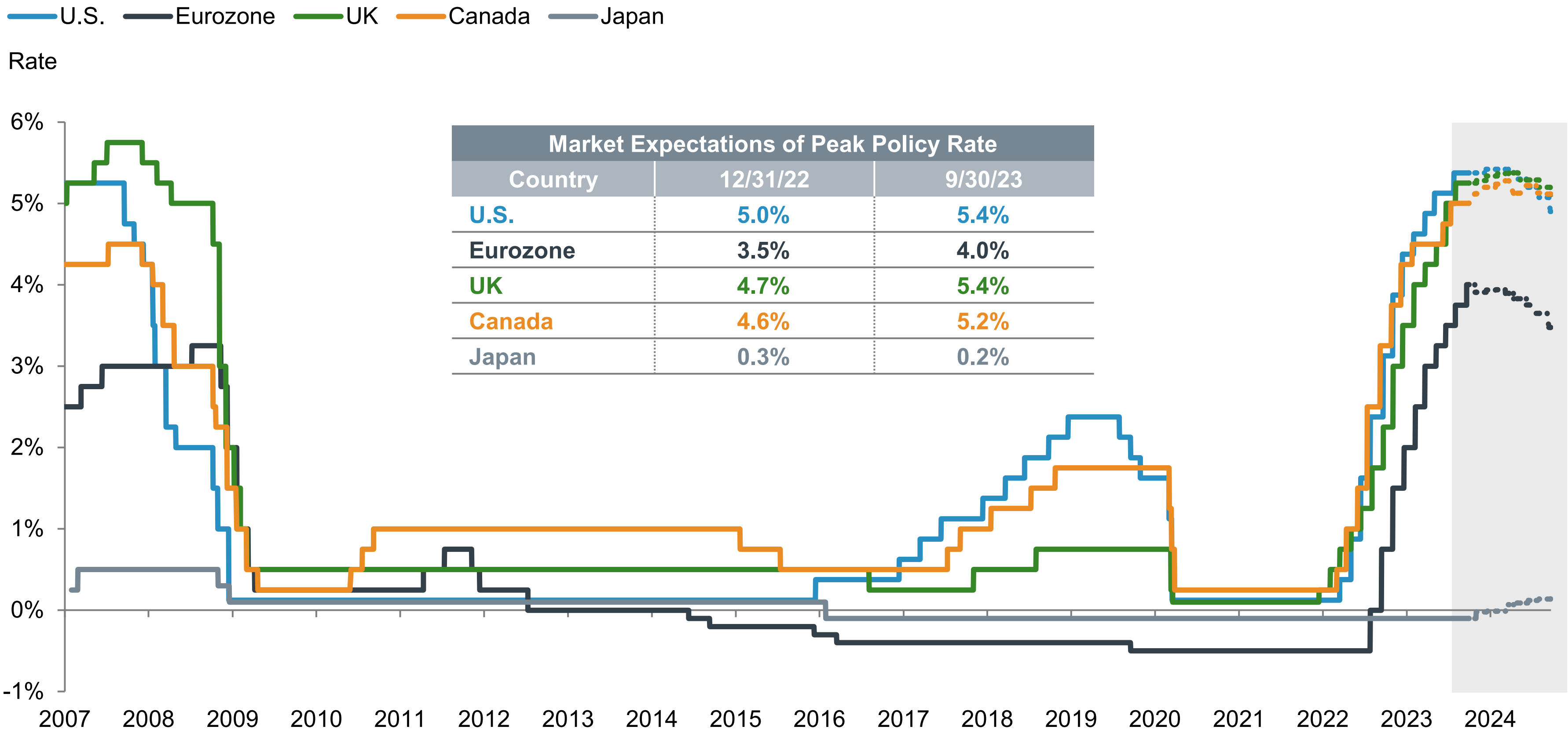


LEFT: Measures the performance of the largest 10 stocks and the other 490 based on market capitalization. Source: FactSet, Fidelity Investments, as of 9/30/23. **RIGHT:** Diluted earnings per share with street estimates for Q3-2023. Source: Factset, Bloomberg Financial LP, Fidelity Investments, as of 9/30/23.

Dramatic Global Hiking Cycle May Be Nearing a Peak

Monetary tightening by the world's major central banks continued during Q3, bringing global short-term interest rates to their highest levels in more than a decade. At the end of Q3, many investors expected that policy rates had reached their peaks and that easing may be on the horizon in the coming quarters. The lagged impact of the abrupt departure from the ultra-low rates era may weigh on economic and financial conditions.

Global Short-Term Policy Rates



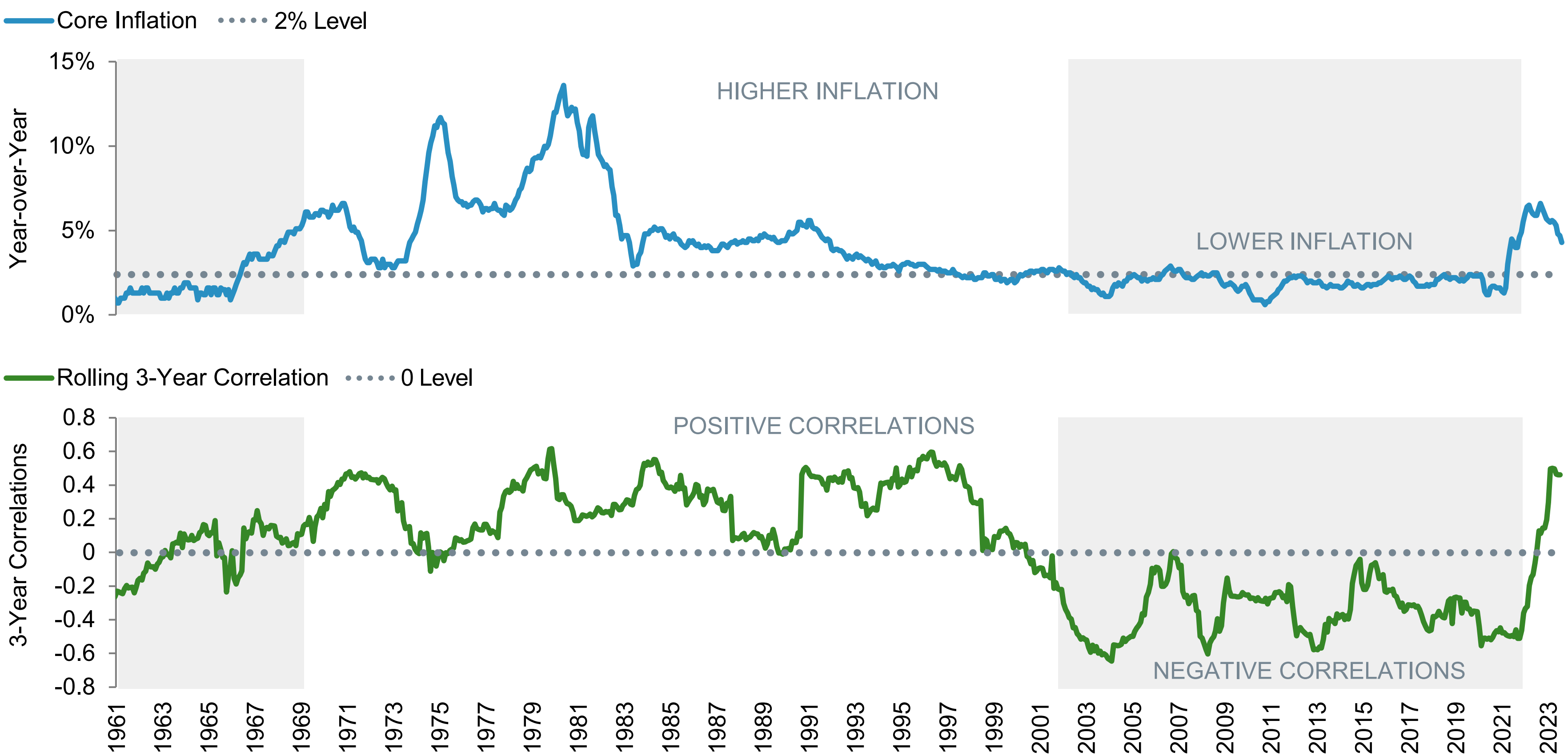
Market Expectations of Peak Policy Rate		
Country	**12/31/22**	**9/30/23**
U.S.	5.0%	5.4%
Eurozone	3.5%	4.0%
UK	4.7%	5.4%
Canada	4.6%	5.2%
Japan	0.3%	0.2%

Dotted lines in the shaded area 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 9/30/23.

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—as evidenced in Q3 2023—the backdrop has been more akin to prior periods of high inflation and positive stock-bond correlations, when stock and bond prices moved in the same direction.

Stock and Treasury Bond Correlations vs. Inflation

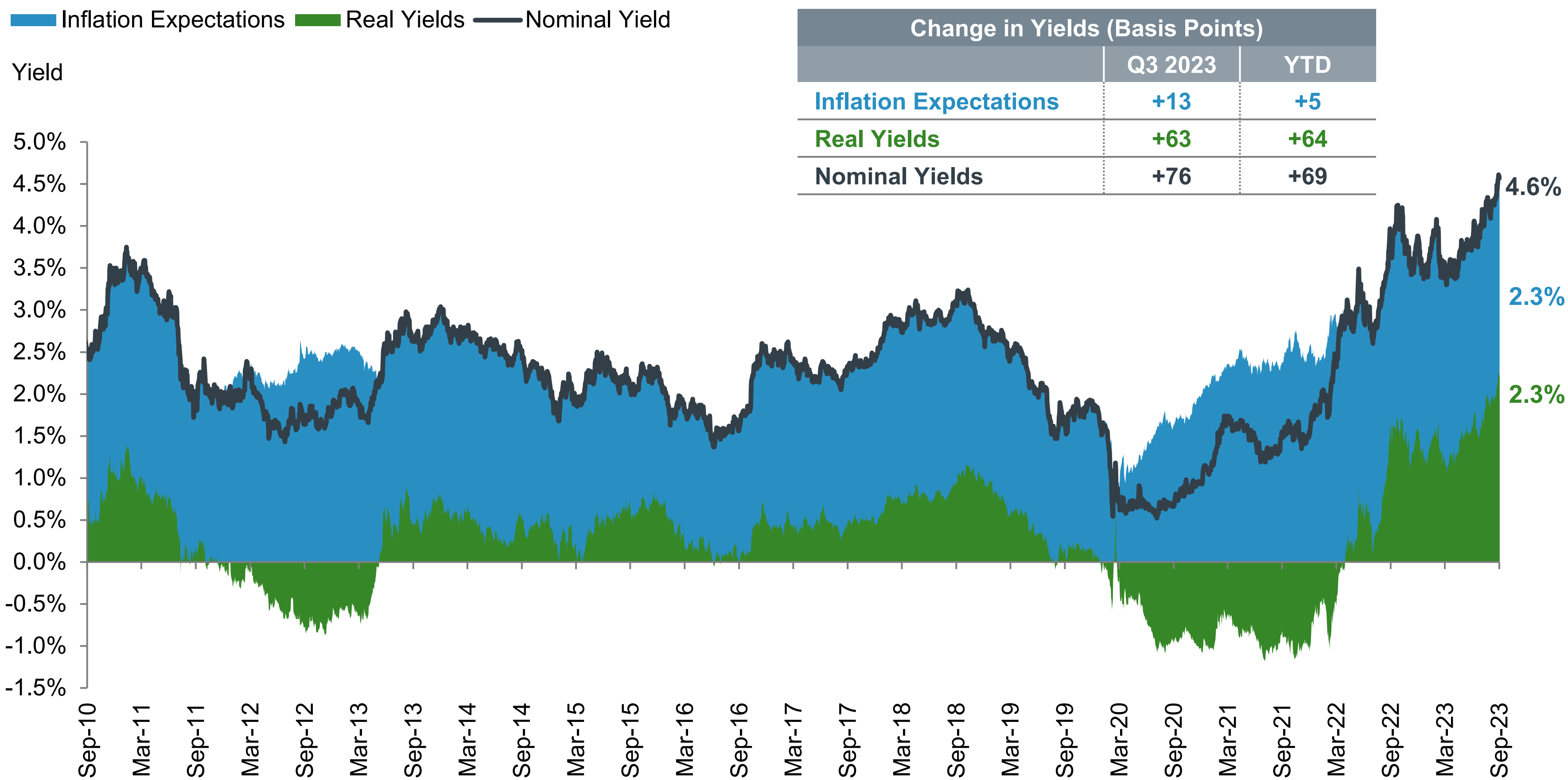


Past performance is no guarantee of future results. Diversification does not ensure a profit or guarantee against a loss. Fidelity Investments proprietary analysis of historical asset class performance is not indicative of future performance. Stocks measured by the Dow Jones U.S. Total Stock Market Index (Total Return). U.S. Treasuries measured by the Bloomberg U.S. Intermediate Treasury Bond Index (Total Return). Source: Bureau of Labor Statistics, Haver Analytics, Bloomberg Finance L.P., Fidelity Investments (AART), as of 8/31/23.

Sharp Rise in Real Rates Pushed Treasury Yields Higher

Nominal 10-year Treasury bond yields turned sharply higher during Q3, driven by a substantial rise in real yields—the inflation-adjusted cost of borrowing. Yields reached their highest levels since 2007, supported by the Fed's monetary tightening, persistent inflation and increased market expectations for a soft landing. Longer-term inflation expectations as implied by the TIPS market have been relatively steady this year, remaining above 2%.

10-Year U.S. Government Bond Yields



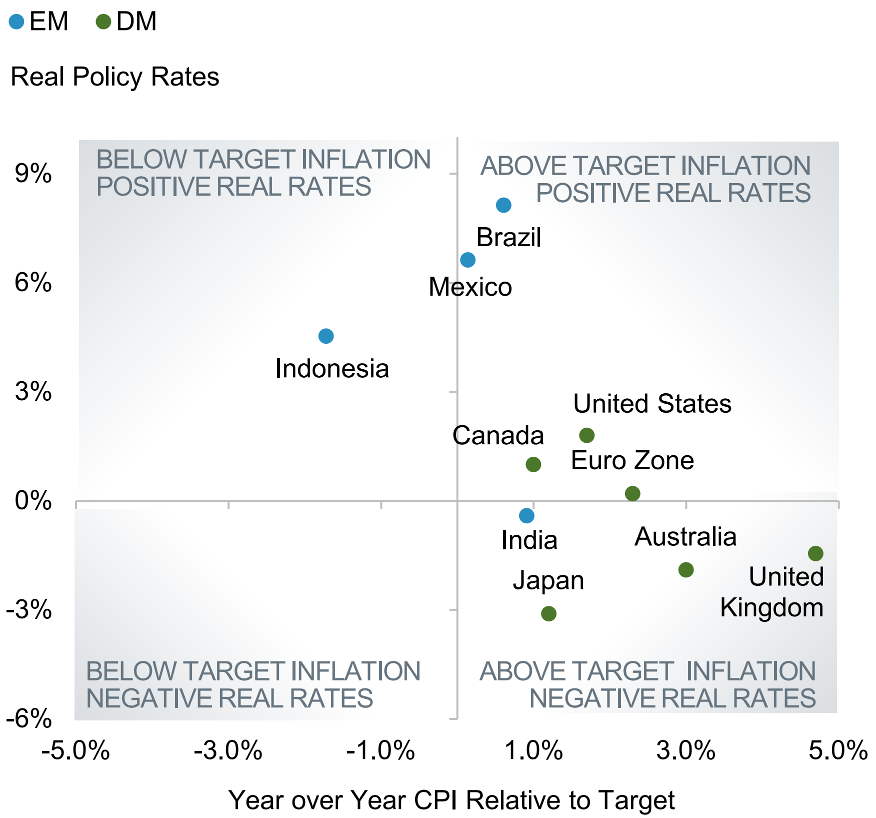
Change in Yields (Basis Points)		
	Q3 2023	YTD
Inflation Expectations	+13	+5
Real Yields	+63	+64
Nominal Yields	+76	+69

TIPS: Treasury Inflation Protected Securities. Source: Bloomberg Finance L.P., Fidelity Investments (AART), as of 9/30/23.

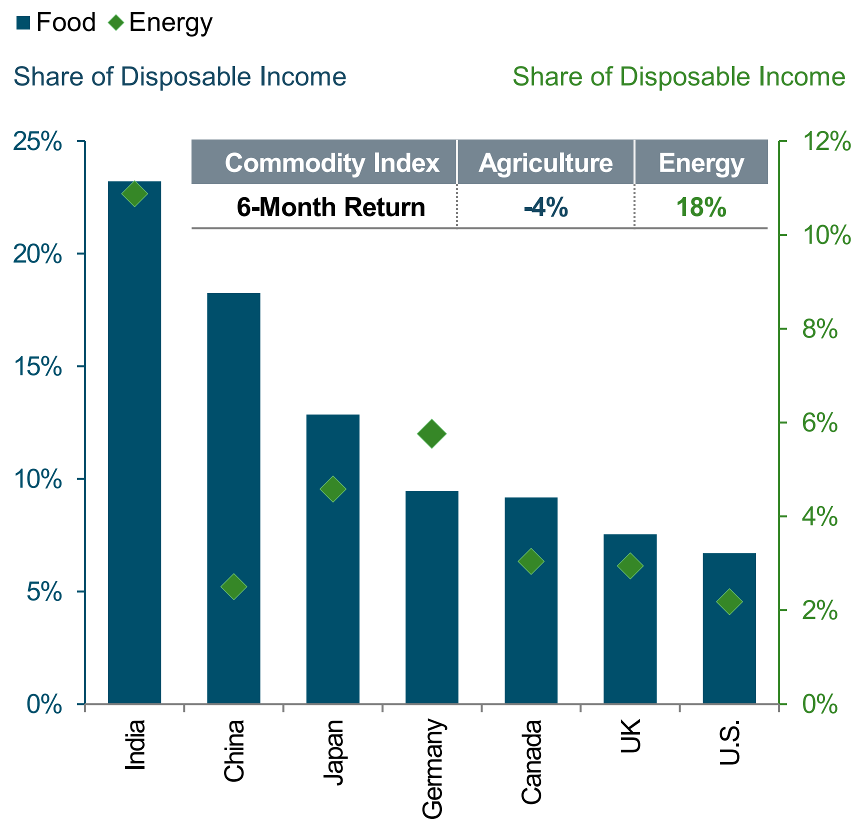
Global Hiking Cycles and Exposure to Commodities Mixed

Central banks have tightened policy at varying speeds and magnitudes. Decelerating inflation has led some emerging markets (EM) to pause or cut rates, but a re-acceleration of commodity prices is a risk. Some policymakers in developed markets are facing negative real policy rates and above-target inflation. A rise in oil prices is relatively less concerning for U.S. consumers, since they spend less disposable income on energy.

Global Monetary Policy and Inflation Trends



Household Spending on Food and Energy



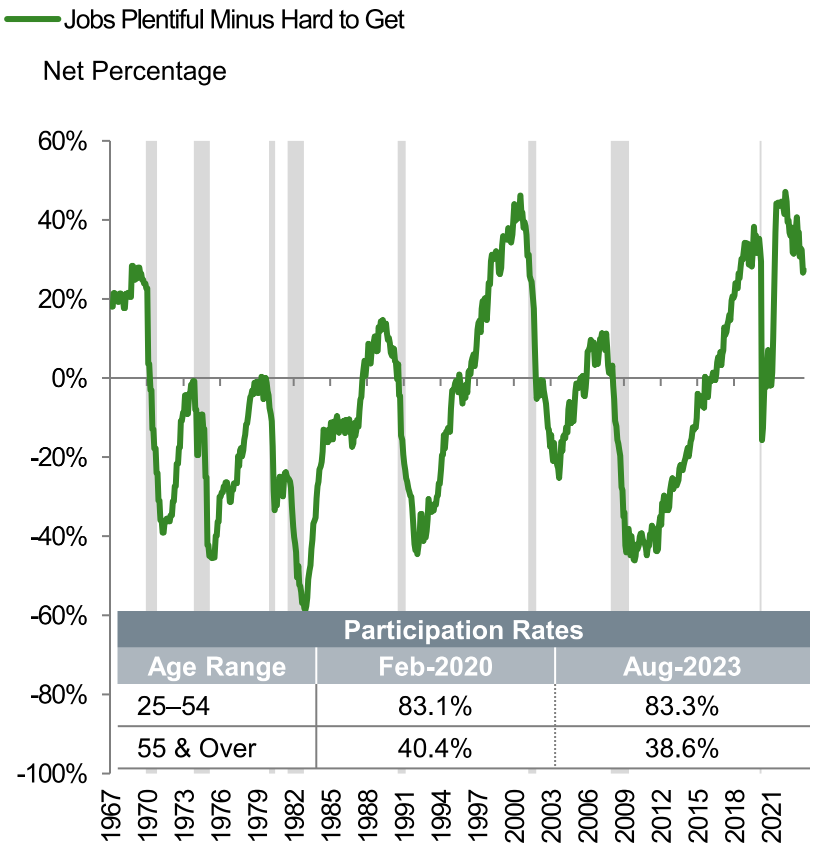
Commodity Index	Agriculture	Energy
6-Month Return	-4%	18%

LEFT: CPI: Consumer Price Index. Real policy rates is the policy rate of each central bank minus YoY CPI. YoY Headline CPI relative to upper bound target of each central bank (target rates differ between central banks). Source: Bloomberg Finance L.P., National statistical agencies, Fidelity Investments (AART), as of 9/30/23. **RIGHT**: Food: at home; Energy: utilities, gasoline, gas, oil, water. Share of disposable income calculated from 2019 values. .
TABLE: It is not possible to invest directly in an index. All indexes are unmanaged. See Appendix for important index information. Returns represented by Bloomberg commodity total return sub-indexes. Source: World Bank, Haver Analytics, Bloomberg Finance L.P., National statistical agencies, Fidelity Investments (AART), as of 9/30/23.

Modest Cooling in Extremely Tight U.S. Labor Markets

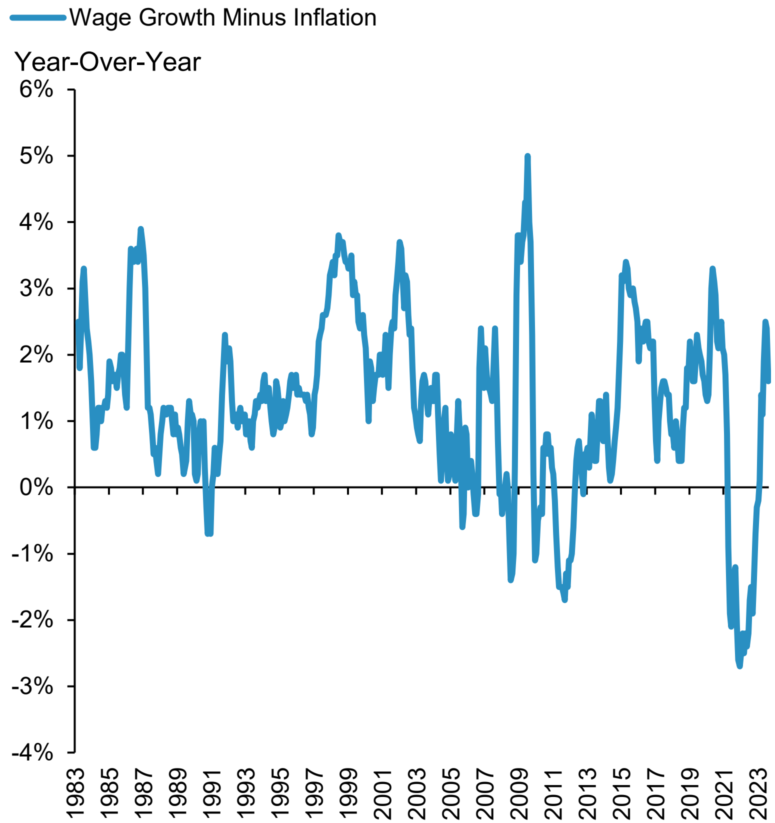
While coincident indicators of employment remain benign, there are some early signs of labor market cooling as worker sentiment rolled over from peak levels. Although tight labor markets have pushed participation rates of prime-age workers above pre-pandemic levels, aging demographics will remain a constraint on labor supply. Tight labor markets amid disinflation has pushed real wage growth positive, supporting consumers.

Employment Conditions: Worker Sentiment



Participation Rates		
Age Range	Feb-2020	Aug-2023
25–54	83.1%	83.3%
55 & Over	40.4%	38.6%

Real Wage Growth



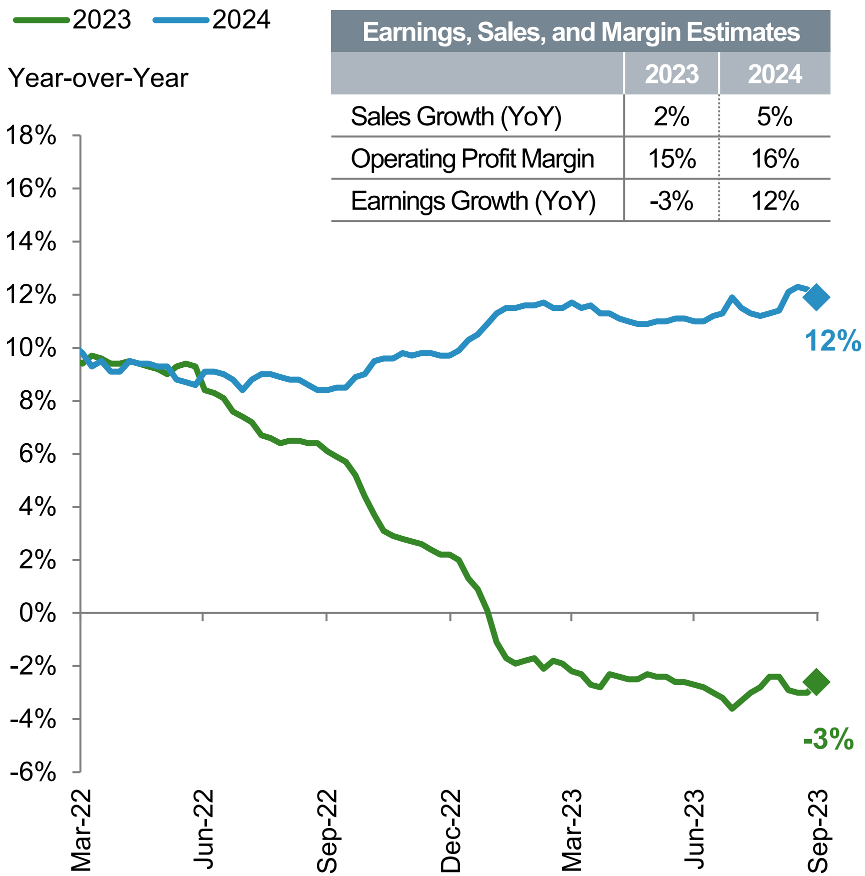
LEFT: Shaded areas represent U.S. recessions. Source: Conference Board, National Bureau of Economic Research, Macrobond, Fidelity Investments (AART), as of 9/30/23. **RIGHT**: Real Wage Growth: Atlanta Fed Wage Growth Tracker (Unweighted 3 month moving average) minus year-over-year CPI. Source: Federal Reserve Bank of Atlanta, Bureau of Labor Statistics, Macrobond, Fidelity Investments (AART), as of 9/30/23.

Fidelity INVESTMENTS

Market Expects Earnings Rebound in 2024

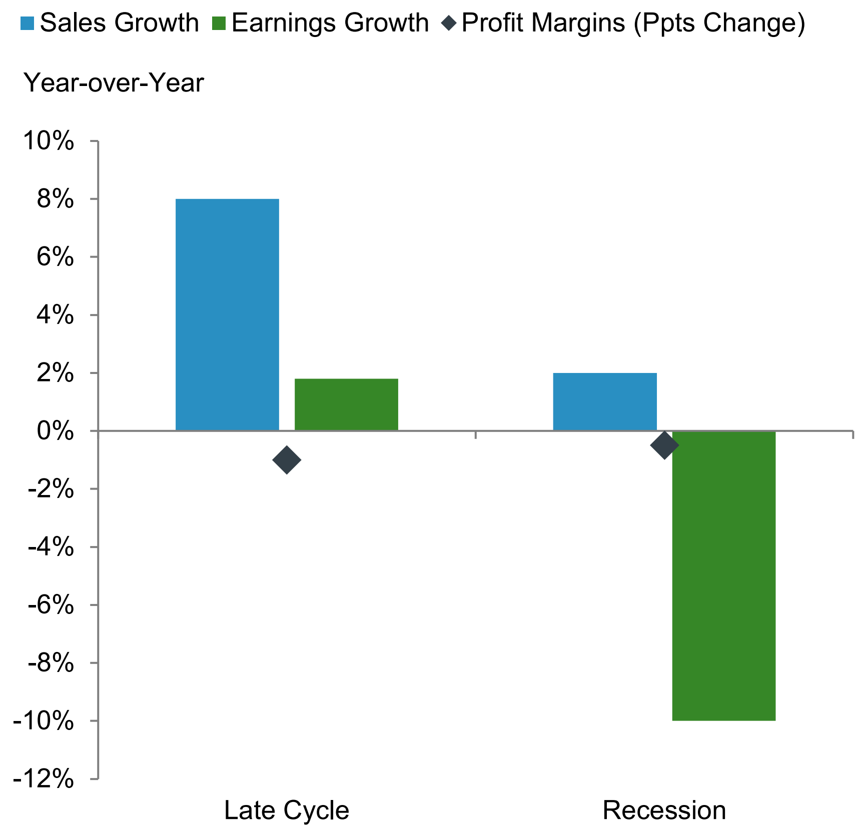
During a typical late cycle, top-line sales tend to hold up, but rising input costs reduce profit margins and pressure earnings growth. Despite rising costs, companies have generally been able to pass along higher prices to maintain high profit margins. Earnings growth is currently contracting at low-single digit rates, but the consensus outlook has stabilized, and investors expect a double-digit profit-growth rebound in 2024.

S&P 500 Earnings Growth Expectations



Earnings, Sales, and Margin Estimates		
	2023	2024
Sales Growth (YoY)	2%	5%
Operating Profit Margin	15%	16%
Earnings Growth (YoY)	-3%	12%

Business Cycle Averages (1950–2020)

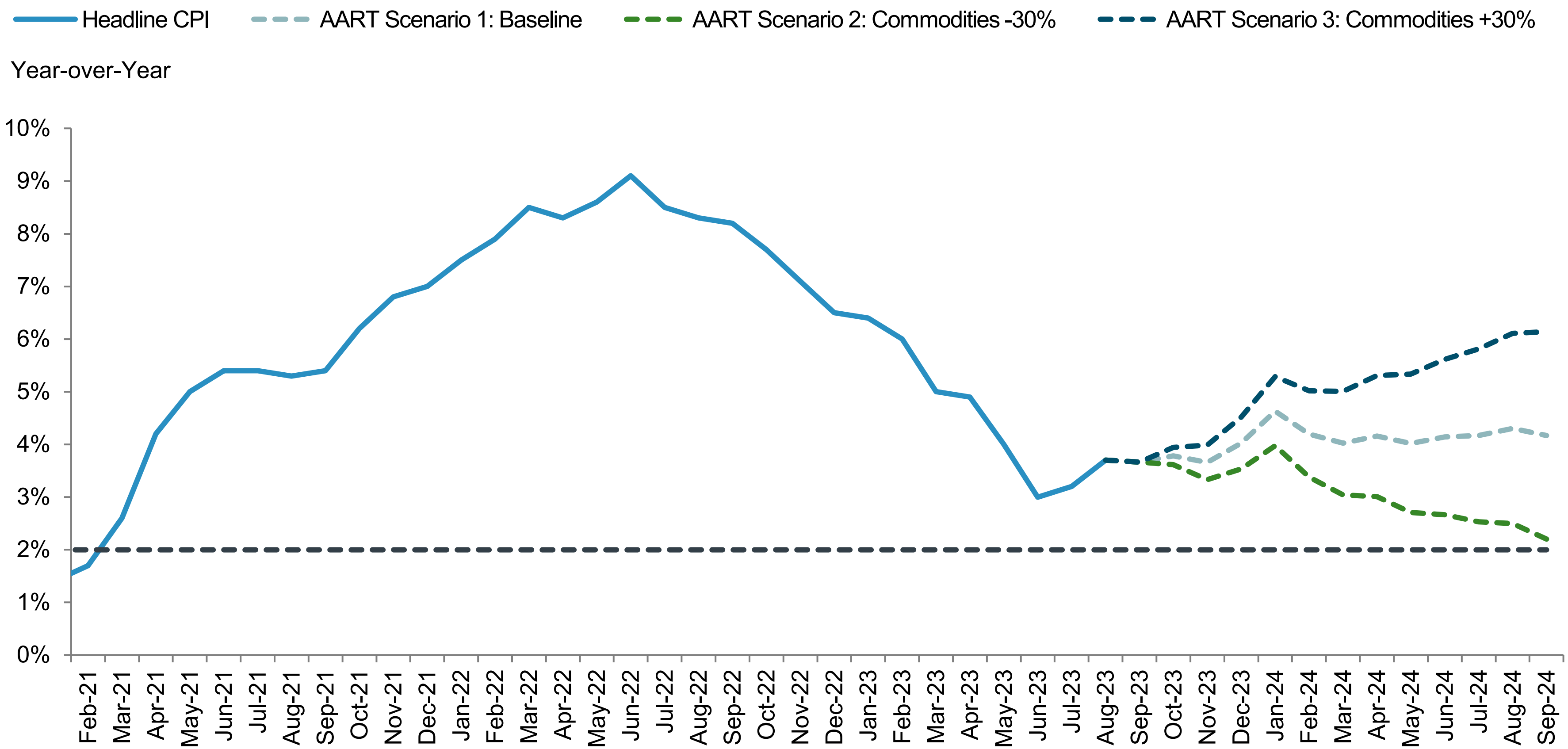


LEFT: Street estimates. Source: Bloomberg Financial LP, Fidelity Investments (AART), as of 6/30/23. **RIGHT:** Ppts: percentage points. Source: Bureau of Economic Analysis, Fidelity Investments (AART), as of 9/30/23.

Easy Disinflation is over; Reaching 2% May be a Challenge

Since June of last year, year-over-year inflation rates had been consistently falling, but started to accelerate during Q3. This tick higher in inflation has been consistent with our view that it will be difficult to return to the stable low core-inflation environment of the past two decades. A big drop in energy prices had helped reduce year-over-year total inflation, but a rebound in commodity prices adds additional risk to the inflation outlook.

Inflation Estimates under Different Commodity Price Scenarios



CPI: Consumer Price Index. Commodity prices are represented by the Bloomberg Commodity Index (BCOM), and their hypothetical changes over the next year are assumed to occur equally throughout the year. Source: Bureau of Labor Statistics, Bloomberg, Haver Analytics, Fidelity Investments (AART), as of 9/30/23.

Global Equity Markets fall for Q3 as Yields rose

All major global equity market categories were negative for Q3, giving back some of the gains from earlier this year. The energy sector was one standouts, posting double-digit returns as the price of oil rose. Riskier fixed income sectors, such as leveraged loans continued to add to year-to-date gains, but more interest rate sensitive ones, such as government bonds, posted losses as yields rose.

U.S. Equity Styles Total Return

	Q3 2023	YTD (%)
Value	-3.2%	1.7%
Large Caps	-3.3%	13.1%
Growth	-3.3%	23.8%
Mid Caps	-4.7%	3.9%
Small Caps	-5.1%	2.5%

U.S. Equity Sectors Total Return

	Q3 2023	YTD (%)
Energy	12.2%	6.0%
Communication Services	3.1%	40.4%
Financials	-1.1%	-1.7%
Health Care	-2.7%	-4.1%
Materials	-4.8%	2.6%
Consumer Discretionary	-4.8%	26.6%
Industrials	-5.2%	4.5%
Info Tech	-5.6%	34.7%
Consumer Staples	-6.0%	-4.8%
Real Estate	-8.9%	-5.5%
Utilities	-9.2%	-14.4%

International Equities and Global Assets Total Return

	Q3 2023	YTD (%)
ACWI ex-USA	-3.8%	5.3%
Japan	-1.6%	11.2%
EAFE Small Cap	-3.5%	1.8%
Canada	-4.0%	3.8%
EAFE	-4.1%	7.1%
Europe	-5.0%	8.0%
EMEA	-1.8%	-0.2%
EM Asia	-2.9%	1.0%
Emerging Markets	-2.9%	1.8%
Latin America	-4.7%	12.9%
Gold	-3.7%	1.3%
Commodities	4.7%	-3.4%

U.S. Equity Factors Total Return

	Q3 2023	YTD (%)
Yield	-2.1%	6.8%
Quality	-2.1%	12.6%
Value	-2.2%	10.8%
Low Volatility	-2.6%	6.7%
Size	-3.0%	4.4%
Momentum	-3.2%	9.9%

Fixed Income Total Return

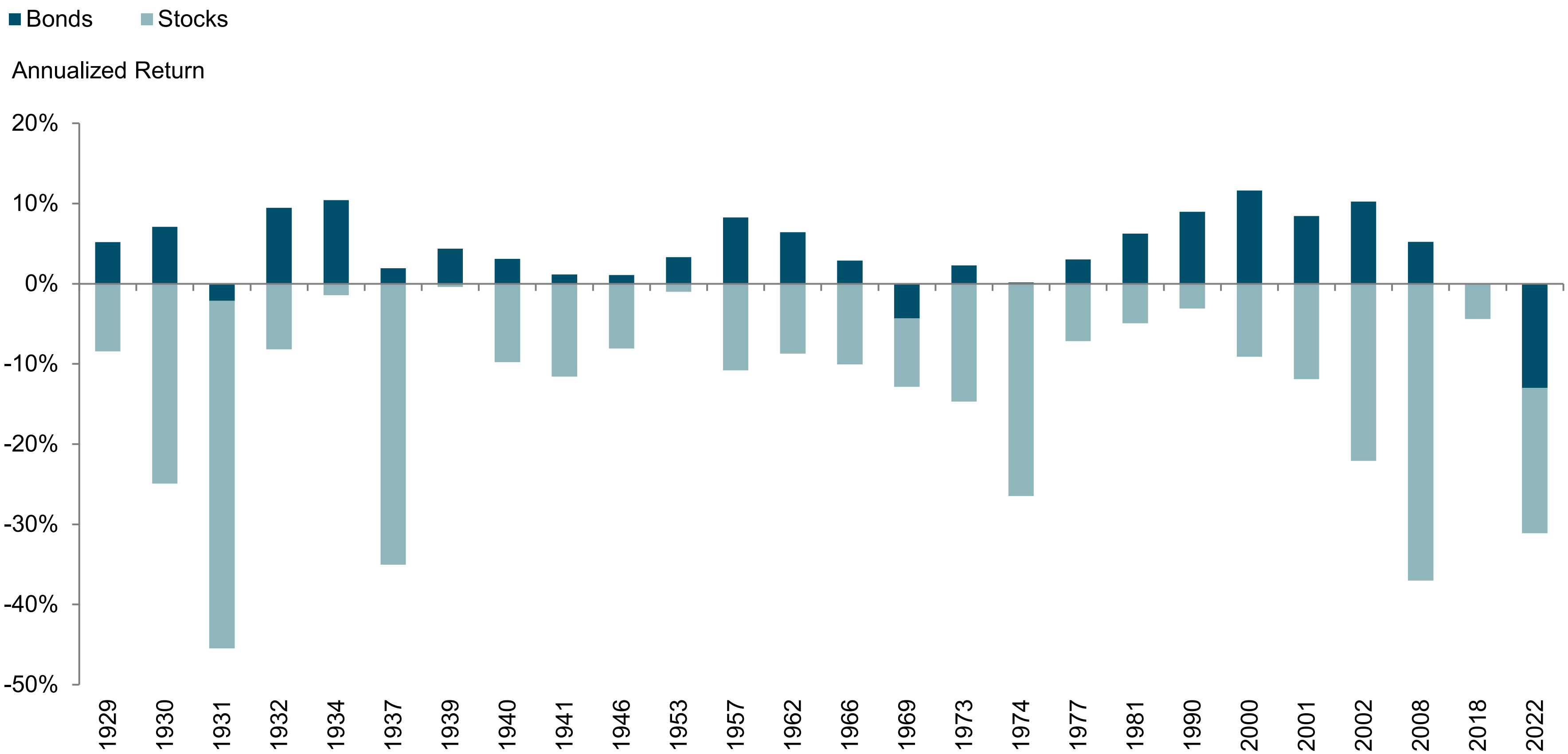
	Q3 2023	YTD (%)
Leveraged Loan	3.5%	10.2%
High Yield	0.5%	6.0%
ABS	0.2%	2.0%
Agency	-0.2%	1.4%
CMBS	-1.0%	0.2%
EM Debt	-2.2%	1.8%
TIPS	-2.6%	-0.8%
Credit	-3.0%	0.0%
Treasuries	-3.1%	-1.5%
Aggregate	-3.2%	-1.2%
Municipal	-3.9%	-1.4%
MBS	-4.1%	-2.3%
Long Govt & Credit	-9.4%	-5.4%

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 9/30/23.

2022 Was an Unusually Bad Year for Bonds as Diversifiers

In 2022, broad measures of the two largest U.S. asset categories—large cap stocks and investment-grade bonds—both posted double-digit losses for the first time in modern history (since 1926). Historically, the bond market often registered a gain during the calendar years that equity prices declined, making 2022 the most challenging year in history for portfolio diversification.

Equity and Bond Returns in Years When Equities Fell (1926–2022)

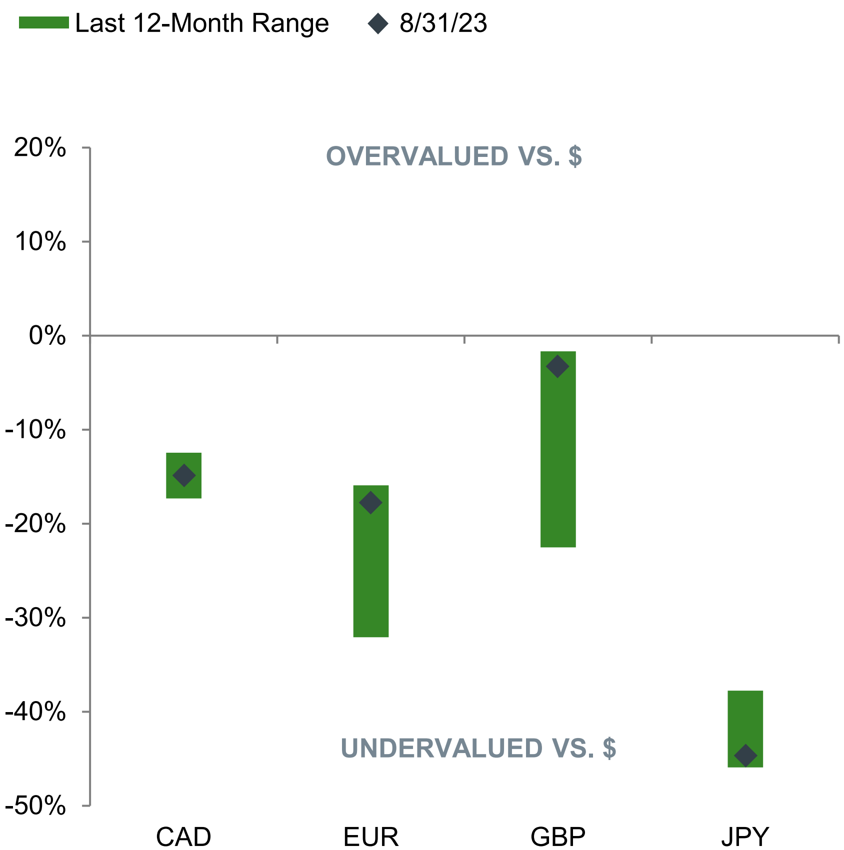


Stocks: S&P 500 index. Bonds: Bloomberg U.S. Aggregate Bond Index. Past performance is no guarantee of future results. Diversification does not ensure a profit or guarantee against a loss. Fidelity Investments proprietary analysis of historical asset class performance is not indicative of future performance. Source: Fidelity Investments (AART), Haver Analytics, as of 12/31/22.

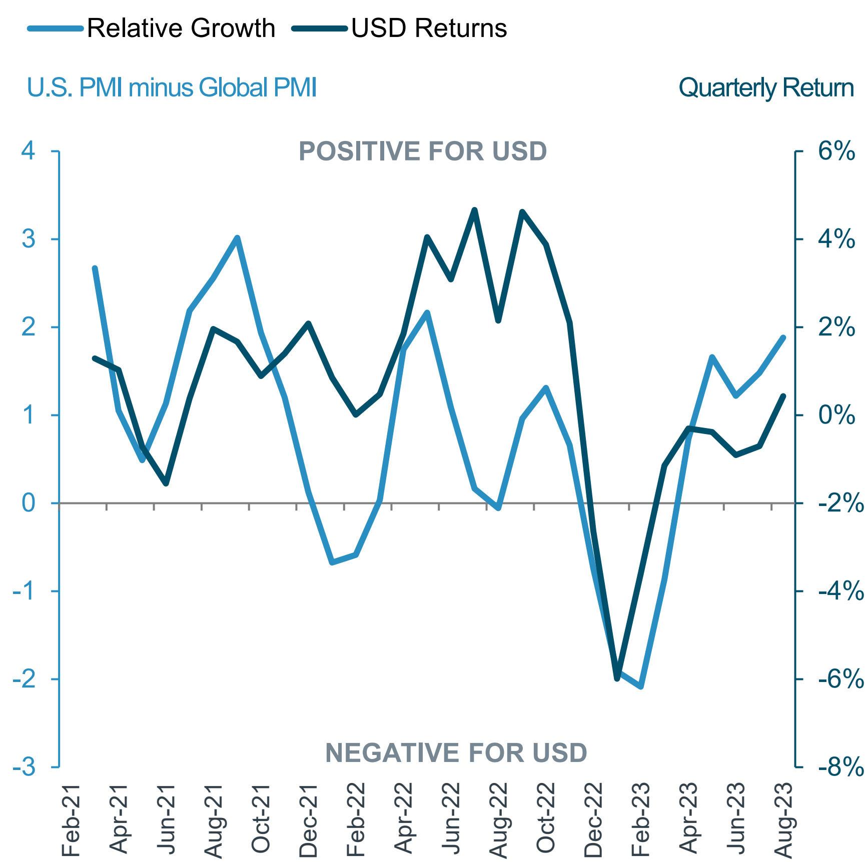
U.S. Dollar Bolstered by Strong Relative Growth Backdrop

On a cyclical basis, stronger U.S. growth trends relative to the rest of world imply a more favorable medium-term outlook for the dollar and could explain some of its recent outperformance. Non-U.S. currencies appear undervalued relative to the dollar, suggesting that non-U.S. currencies to provide longer-term potential upside and portfolio diversification benefits.

FX Valuation: Purchasing Power Parity (PPP)



Growth Influences on U.S. Dollar

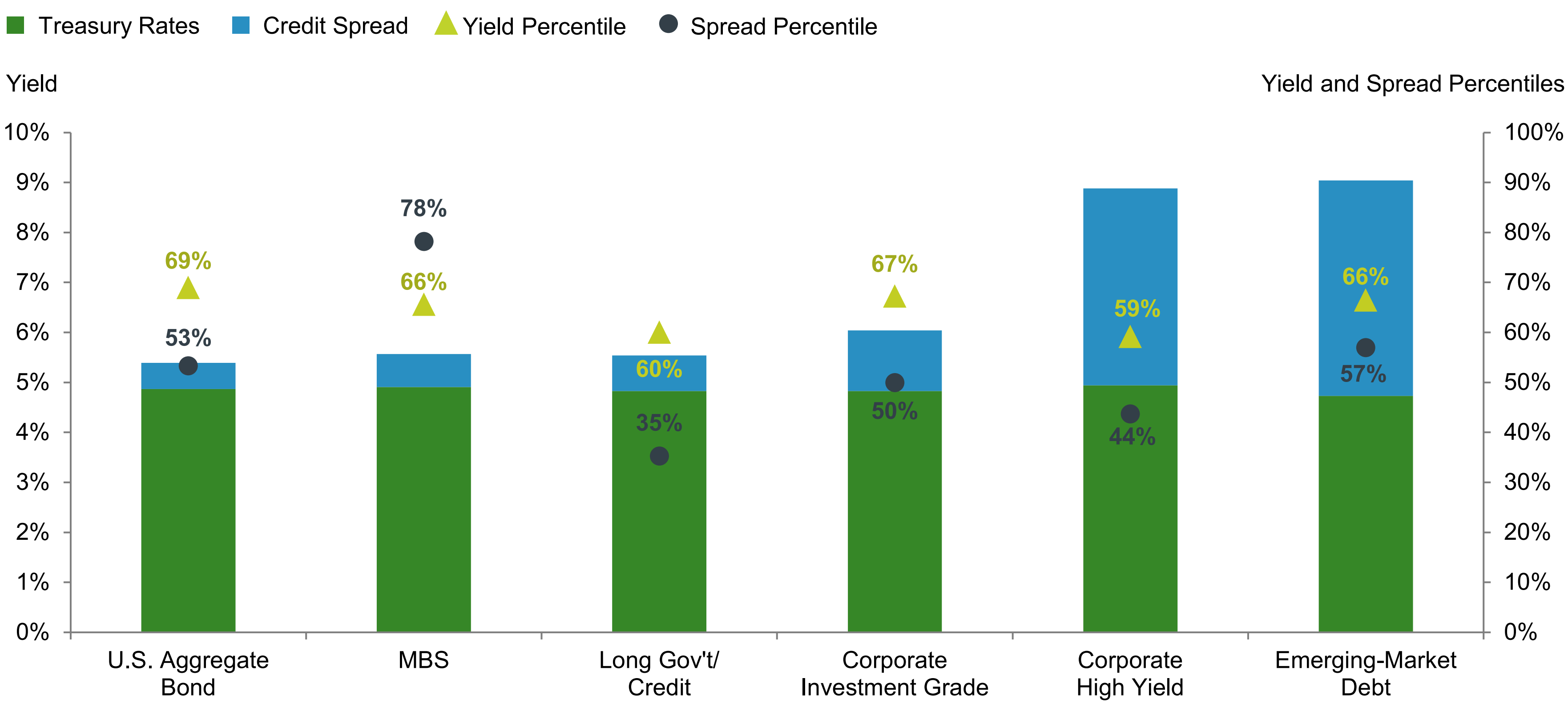


FX: Foreign currency exchange rate, PMI: Purchasing Managers Index of manufacturing activity. **LEFT**: Source: Bloomberg Finance L.P., Haver Analytics, and Fidelity Investments, as of 8/31/23. **RIGHT**: USD returns calculated quarterly based on US Broad Trade Weighted Index. Global PMI measured by market cap weighting. Relative Growth measured as 3-month moving average. Sources: Bloomberg, Fidelity Investments, Haver Analytics, S&P Global, and Federal Reserve, as of 8/31/23

Fixed Income Yields Rise Further Above Historical Averages

The sharp rise in Treasury yields during Q3 caused bond yields to rise above their long-term historical averages across all fixed income categories. Bond sector spreads were mixed, exhibiting significantly less volatility than Treasury rates. After many years of very low bond yields and tight credit spreads, fixed income assets offer relatively better income opportunities with more attractive valuations.

Fixed Income Yields and Spreads (1993–2023)

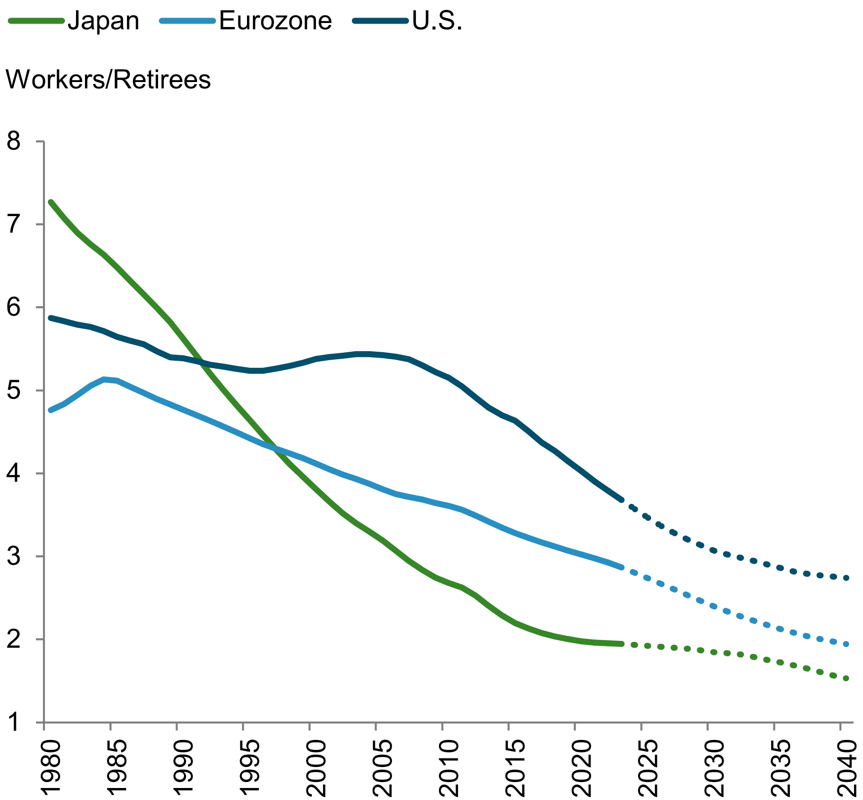


U.S. Aggregate Bond—Bloomberg U.S. Aggregate Bond Index; MBS—Bloomberg MBS Index; Long Gov't/Credit Bonds—Bloomberg Long Government & Credit Index; Corporate Investment Grade—Bloomberg U.S. Corporate Bond Index; High-Yield Bonds—ICE BofA High Yield Bond Index; Emerging-Market Bonds—JP Morgan EMBI Global Diversified Composite Index. 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. Percentile ranks of yields and spreads based on historical period from 1993 to 2023. Treasury rates different across asset classes due to different duration for each index.
Source: Bloomberg Finance L.P., Fidelity Investments (AART), as of 9/30/23.

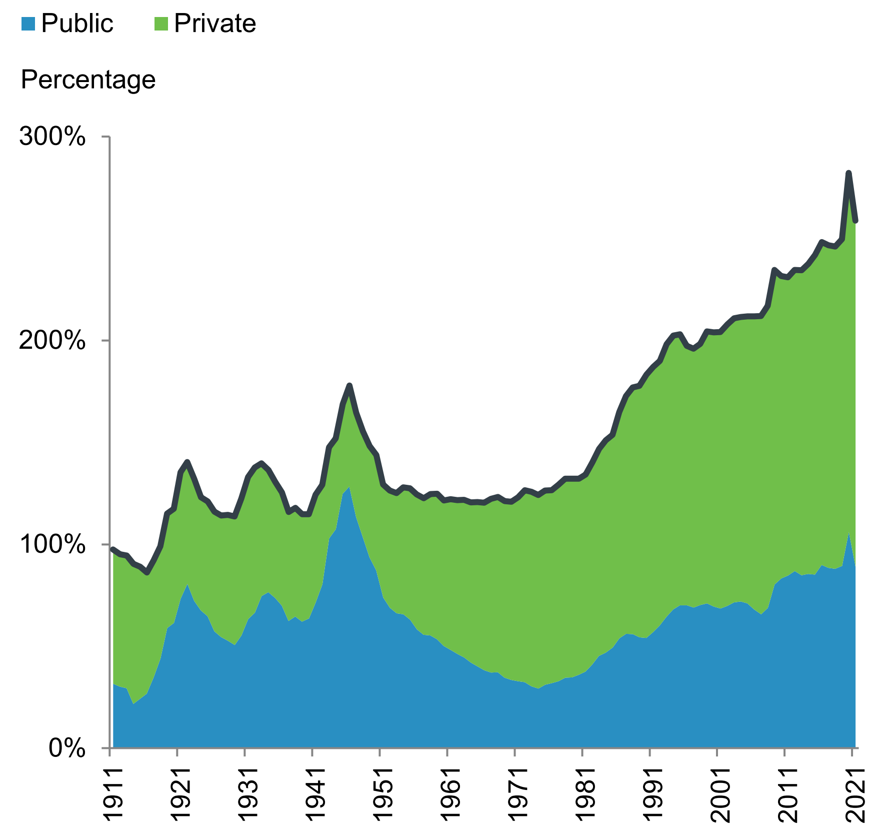
Unprecedented Debt Levels amid Aging Demographics

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.

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

2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	YTD	Legend
32%	35%	35%	40%	5%	79%	28%	8%	20%	39%	28%	5%	21%	38%	0%	36%	38%	43%	16%	24%	Growth Stocks
26%	21%	33%	16%	-20%	58%	27%	8%	19%	34%	14%	3%	18%	30%	-2%	31%	20%	29%	-8%	13%	Large Cap Stocks
21%	14%	27%	12%	-26%	37%	19%	4%	18%	33%	13%	1%	18%	26%	-2%	26%	18%	27%	-11%	7%	60% Large Cap 40% IG Bonds
18%	12%	22%	11%	-34%	32%	18%	4%	18%	32%	12%	1%	12%	22%	-3%	26%	18%	26%	-13%	7%	Foreign-Developed Country Stocks
17%	7%	18%	7%	-36%	28%	17%	2%	16%	23%	11%	1%	12%	15%	-4%	26%	14%	25%	-14%	6%	High-Yield Bonds
11%	5%	16%	6%	-36%	27%	16%	2%	16%	19%	6%	0%	11%	15%	-4%	22%	8%	17%	-16%	3%	Small Cap Stocks
11%	5%	12%	5%	-37%	26%	15%	0%	16%	7%	5%	-4%	9%	13%	-9%	22%	8%	15%	-18%	2%	Emerging-Market Stocks
9%	5%	11%	2%	-38%	20%	15%	-4%	15%	3%	3%	-4%	8%	9%	-11%	18%	6%	11%	-20%	2%	Value Stocks
8%	4%	9%	-1%	-38%	19%	12%	-12%	11%	-2%	-2%	-5%	7%	8%	-11%	14%	3%	5%	-20%	-1%	Investment-Grade Bonds
7%	3%	4%	-2%	-43%	18%	8%	-13%	4%	-2%	-4%	-15%	3%	4%	-11%	9%	-3%	-2%	-24%	-2%	REITs
4%	2%	2%	-16%	-53%	6%	7%	-18%	-1%	-10%	-17%	-25%	2%	1%	-14%	8%	-8%	-3%	-29%	-3%	Commodities

Past performance is no guarantee of future results. Diversification/asset allocation does not ensure a profit or guarantee against a loss. It is not possible to invest directly in an index. All indexes are unmanaged. See Appendix for important index information. Asset classes represented by: Commodities—Bloomberg Commodity Index; Emerging-Market Stocks—MSCI Emerging Markets Index; Non-U.S. Developed-Country Stocks—MSCI EAFE Index; Growth Stocks—Russell 3000 Growth Index; High-Yield Bonds—ICE BofA U.S. High Yield Index; Investment-Grade Bonds—Bloomberg U.S. Aggregate Bond Index; Large Cap Stocks—S&P 500 index; Real Estate/REITs—FTSE NAREIT All Equity Total Return Index; Small Cap Stocks—Russell 2000 Index; Value Stocks—Russell 3000 Value Index. Source: Morningstar, Standard & Poor's, Haver Analytics, Fidelity Investments (AART), as of 9/30/23.

Appendix: Important Information

Information presented herein is for discussion and illustrative purposes only and is not a recommendation or an offer or a solicitation to buy or sell any securities. Views expressed are as 9/30/23, based on the information available at that time, and may change based on market and other conditions. Unless otherwise noted, the opinions provided are those of the authors and not necessarily those of Fidelity Investments or its affiliates. Fidelity does not assume any duty to update any of the 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 30 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.

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.

Appendix: Important Information

Market Indexes (continued)

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.

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.

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Appendix: Important Information

Market Indexes (continued)

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.

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