

Commentary | Fourth Quarter 2023

# Quarterly Market Update

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# Market Summary

# 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.

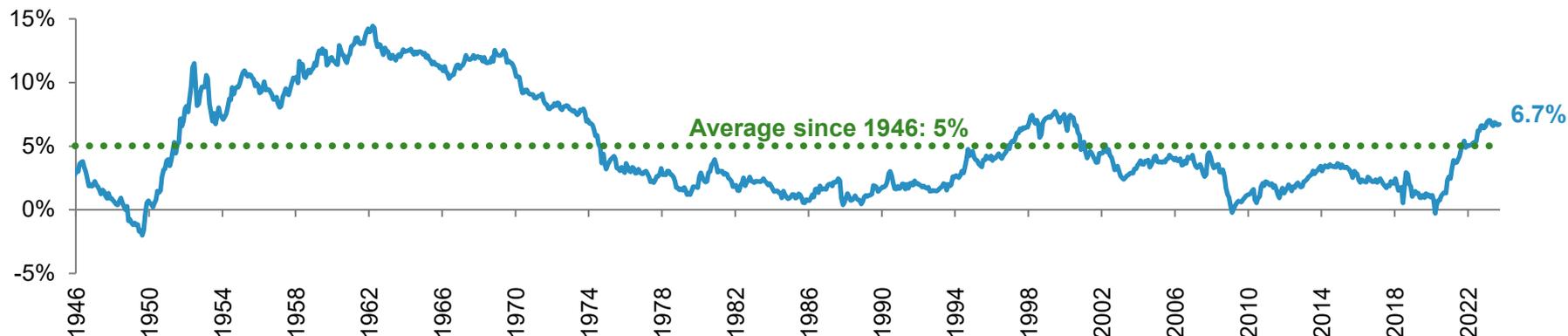
# Rising Yields Weighed on Stocks and Bonds in Q3

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

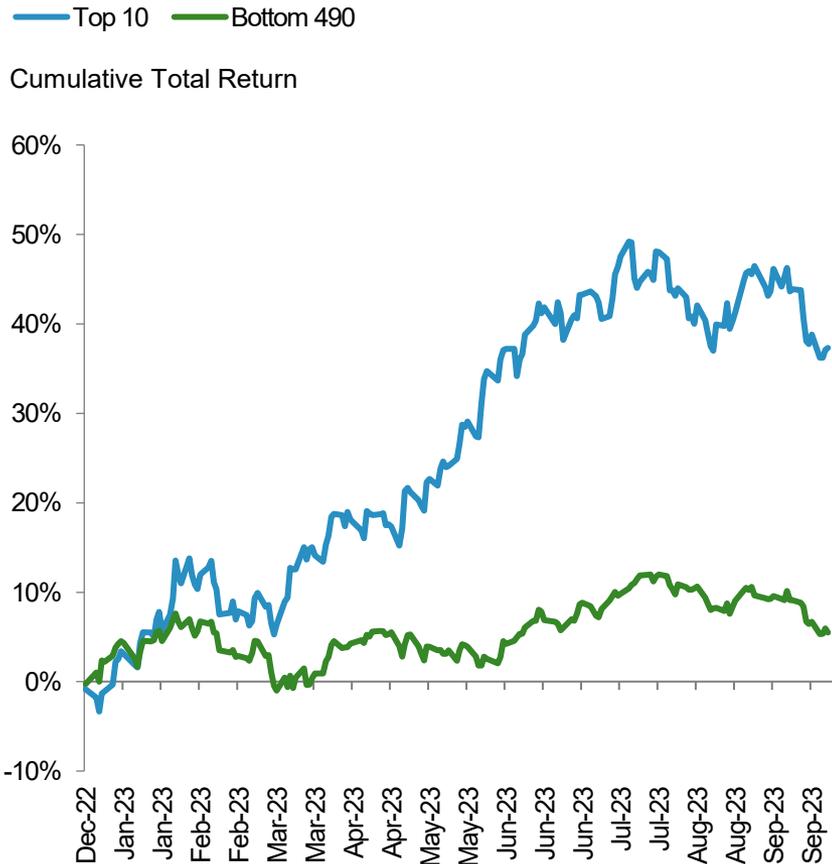


Past performance is no guarantee of future results. It is not possible to invest directly in an index. All indexes are unmanaged. See Appendix for important index information. IG: Investment grade. Assets represented by: U.S. Growth Stocks—Russell 3000 Growth Index; Non-U.S. Developed-Country Stocks—MSCI 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,

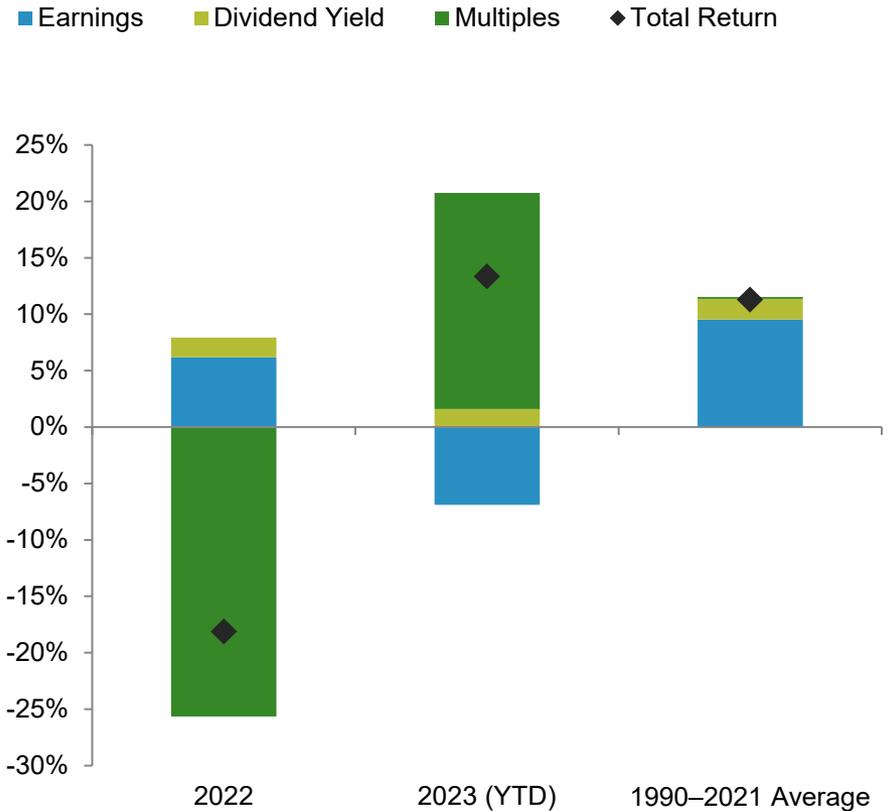
# Narrow Leadership in the Equity-Market Rally

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



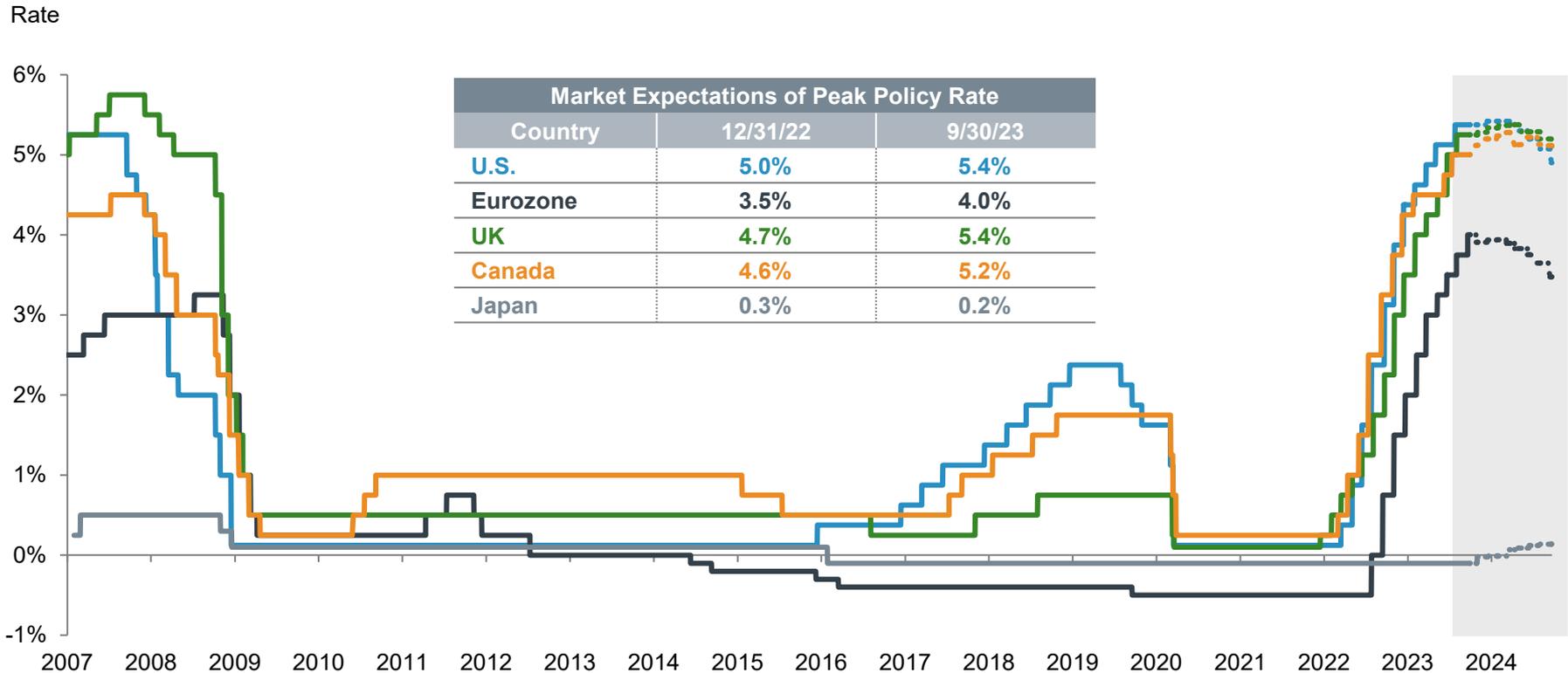
**LEFT:** Measures the performance of the largest 10 stocks and the other 490 based on market capitalization. Source: FactSet, Fidelity Investments, as of 9/30/23. **RIGHT:** Diluted earnings per share with street estimates for Q3-2023. Source: Factset, Bloomberg Financial LP, Fidelity Investments, as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

— U.S. — Eurozone — UK — Canada — Japan

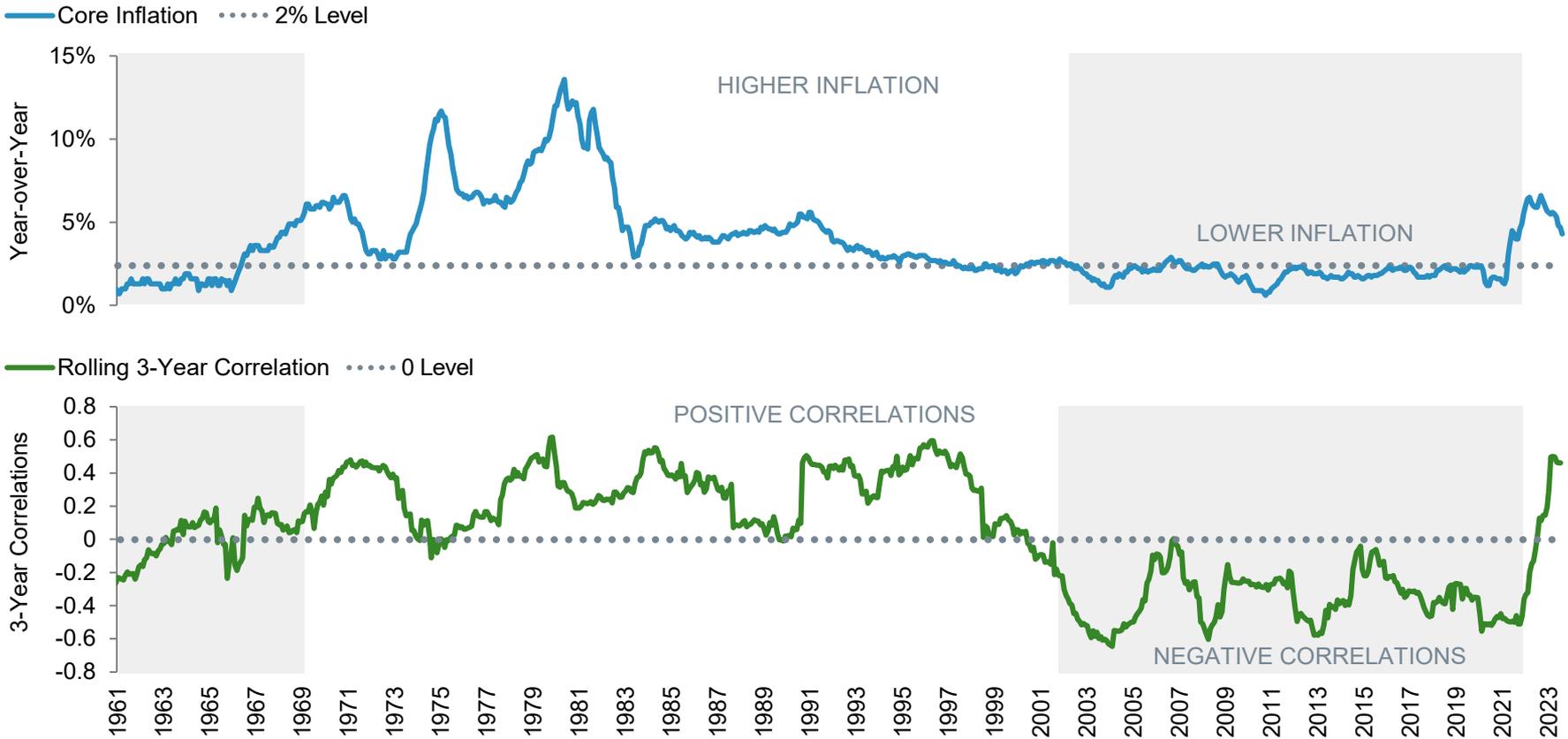


Dotted lines in the shaded area represent market rate expectations using OIS swaps. They end at the peak expected policy rate by the market. Source: U.S. Federal Reserve Board, ECB, Bank of Japan, Bank of England, Bloomberg Finance L.P., Fidelity Investments (AART), as of 9/30/23.

# 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.

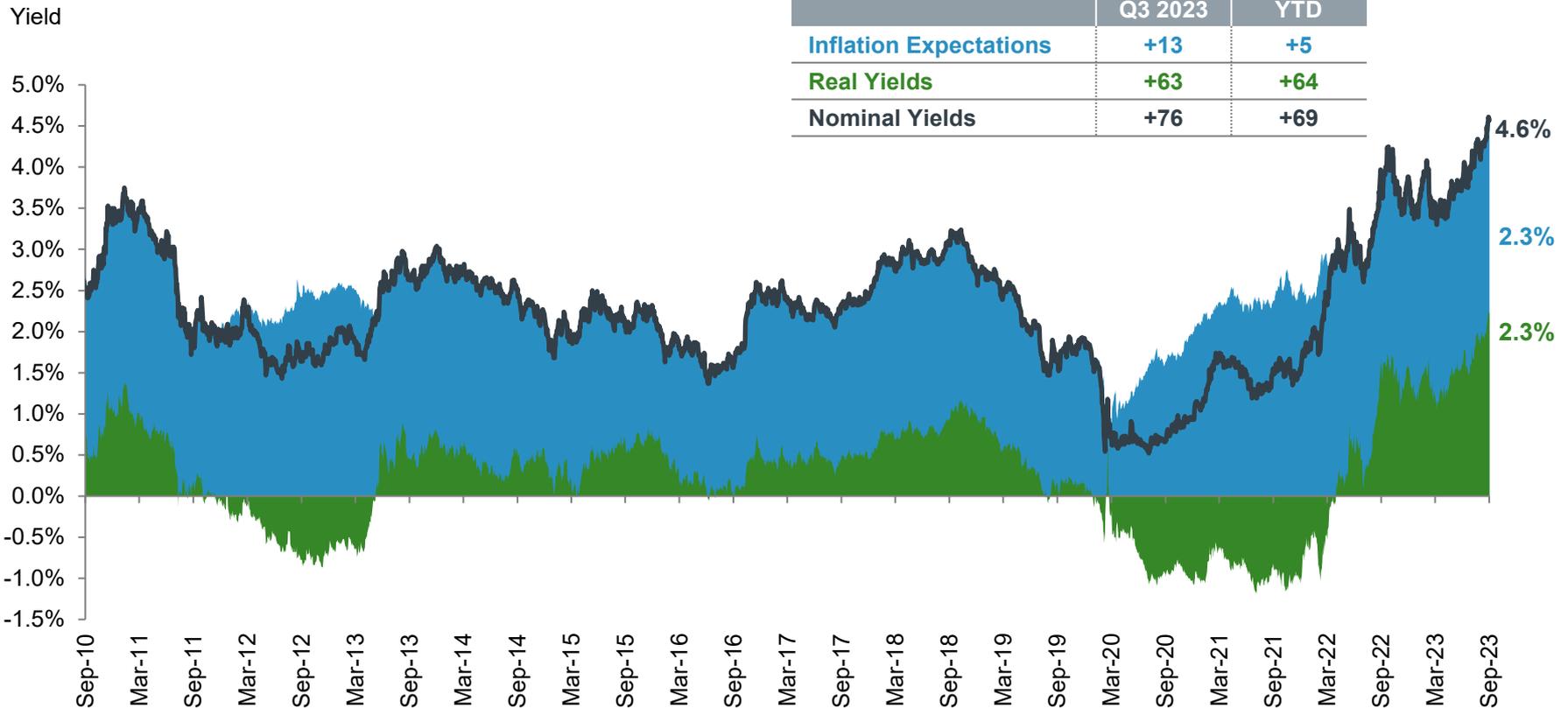


# Sharp Rise in Real Rates Pushed Treasury Yields Higher

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

■ Inflation Expectations ■ Real Yields — Nominal Yield



# Economy/Macro Backdrop

# Multi-Time-Horizon Asset Allocation Framework

Fidelity's Asset Allocation Research Team (AART) believes that asset-price fluctuations are driven by a confluence of factors that evolve over different time horizons. As a result, we employ a framework that analyzes trends among three temporal segments: tactical (short term), business cycle (medium term), and secular (long term).

## DYNAMIC ASSET ALLOCATION TIMELINE

HORIZONS

**Secular**

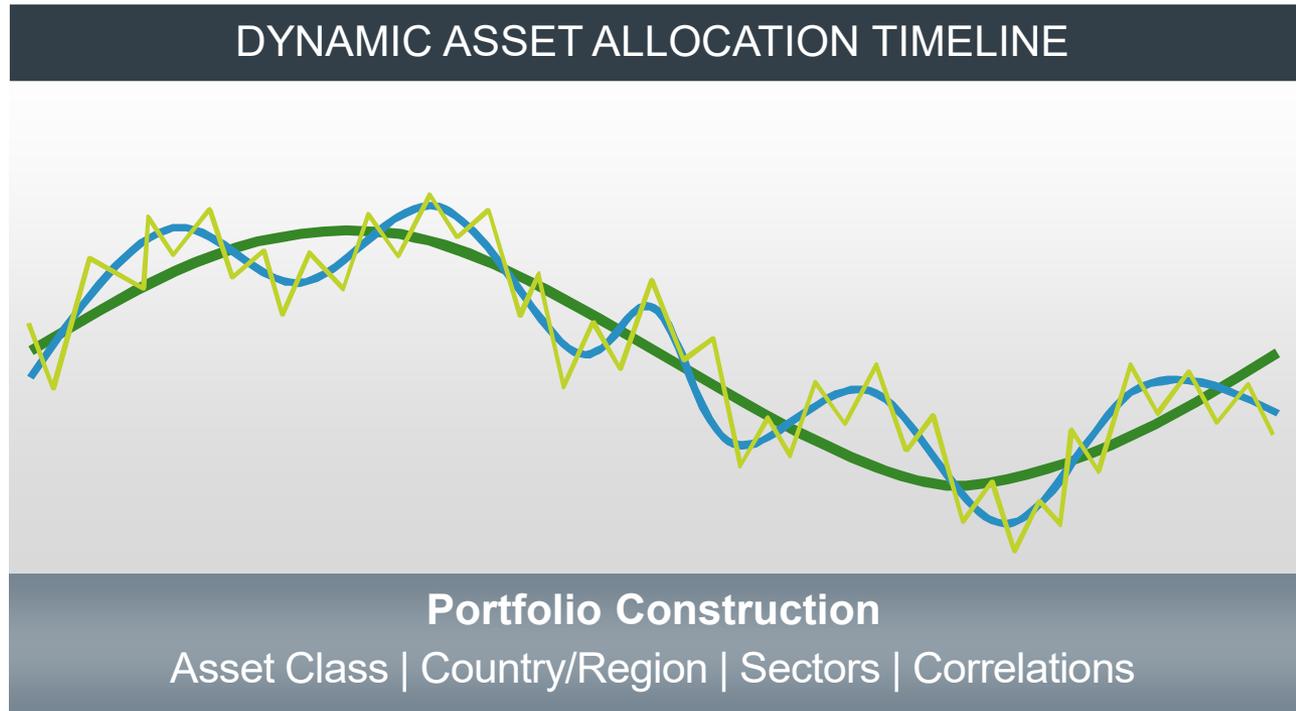
(10–30 years)

**Business Cycle**

(1–10 years)

**Tactical**

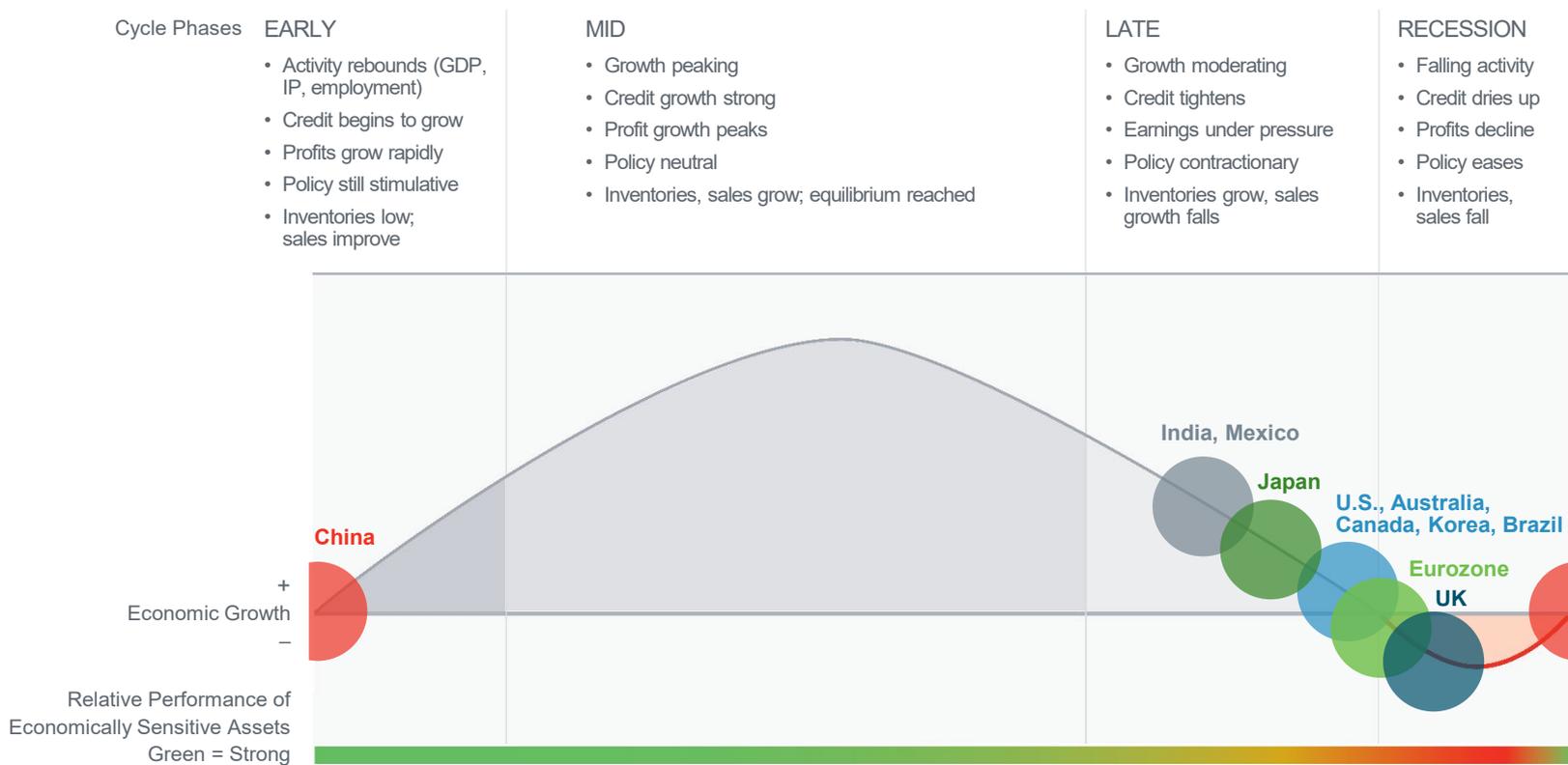
(1–12 months)



# Global Business Cycle in an Uneven Expansion

Many major economies, including the U.S., remained in the late-cycle stage of expansion. Global crosswinds included evidence of solid service activity in many developed economies, with monetary tightening and rising oil prices weighing on the outlook. China's economy appeared to stabilize amid a pick-up in policy easing, while Europe lost momentum amid a manufacturing downturn.

## Business Cycle Framework



A growth recession is a significant decline in activity relative to a country's long-term economic potential. Note: The diagram above is a hypothetical illustration of the business cycle, the pattern of cyclical fluctuations in an economy over a few years that can influence asset returns over an intermediate-term horizon. There is not always a chronological, linear progression among the phases of the business cycle, and there have been cycles when the economy has skipped a phase or retraced an earlier one. Source: Fidelity Investments (AART), as of 9/30/23.



# Resilient Strength in Global Cycle Despite Headwinds

The global cycle has been unexpectedly resilient with leading economic indicators rising across a majority of the world's largest economies. The U.S. and developing economies are exhibiting positive bullwhips—new orders minus inventories—signaling potential for firming manufacturing activity. Risks to the cycle remain, including the continued divergence between contractionary manufacturing and expansionary services activity.

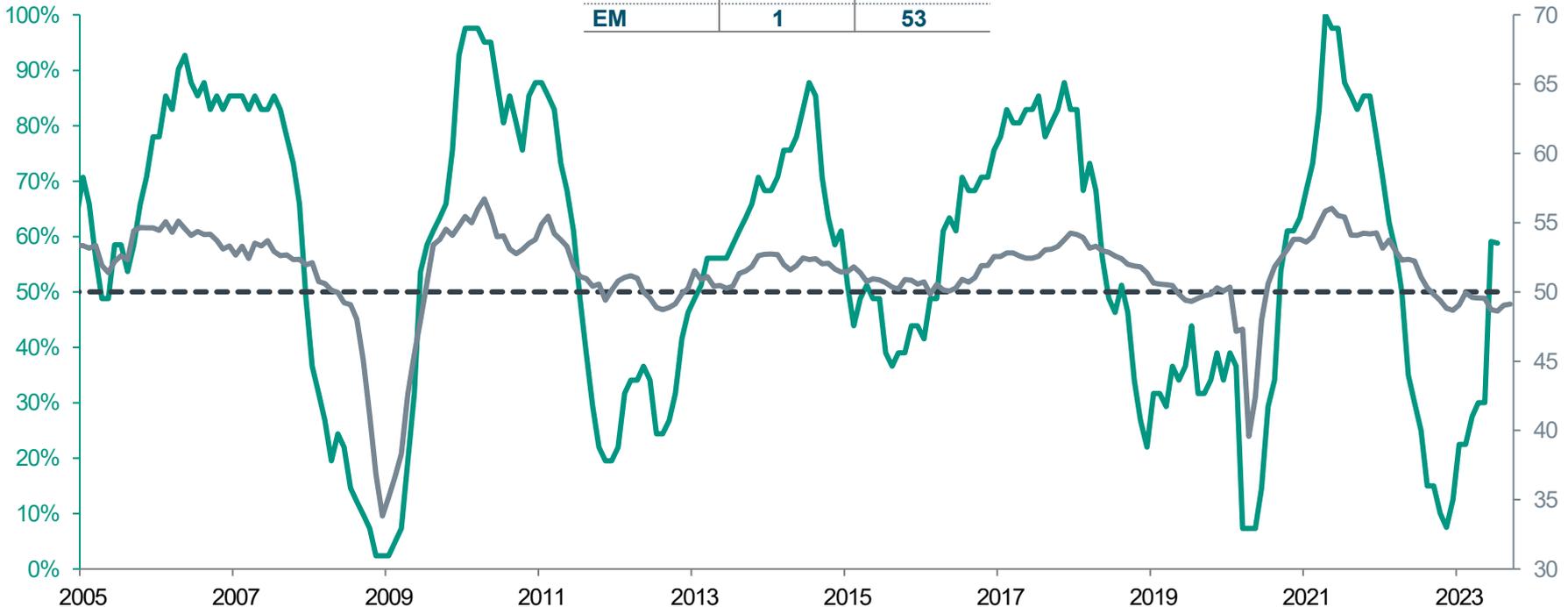
## Global Leading and Manufacturing Indicators

— Global LEIs — Global Manufacturing

Share of Countries

Country PMIs		
	Bullwhip	Services
U.S.	3	55
DM	-4	50
EM	1	53

PMI (> 50 = Expanding)



Global LEIs: Percent of the world's 37 largest economies with rising Leading Economic Indicators over the past six months. PMI: Purchasing managers' index. Readings above 50 indicate expansion. EM: Emerging markets. DM: Developed markets. Bullwhip: New Orders PMI less Inventories PMI (numbers may differ do to rounding). Source: Markit, Institute for Supply Management, S&P Global, Haver Analytics, Fidelity Investments (AART), as of 9/30/23.



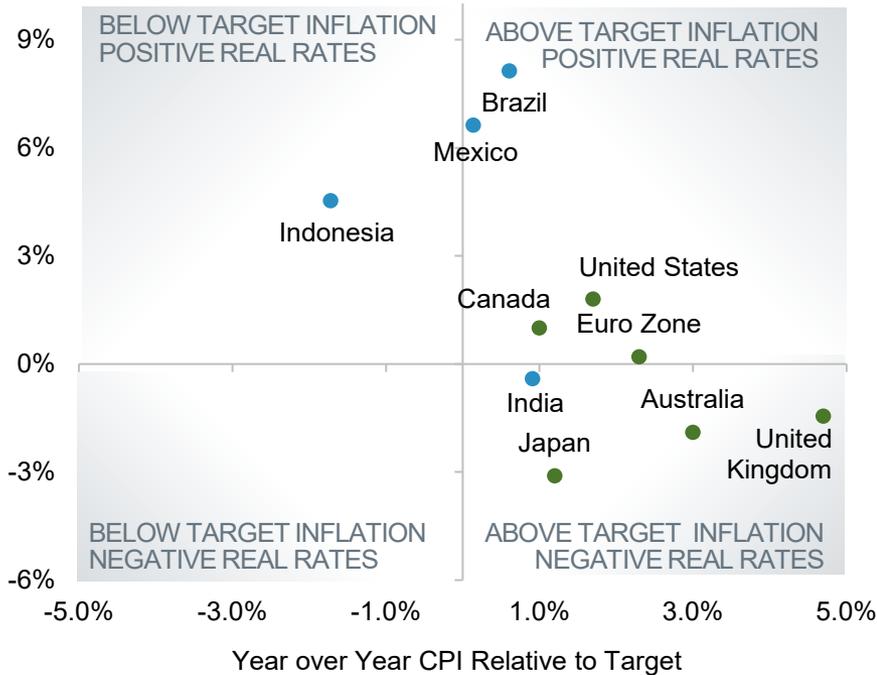
# Global Hiking Cycles and Exposure to Commodities Mixed

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

● EM ● DM

Real Policy Rates

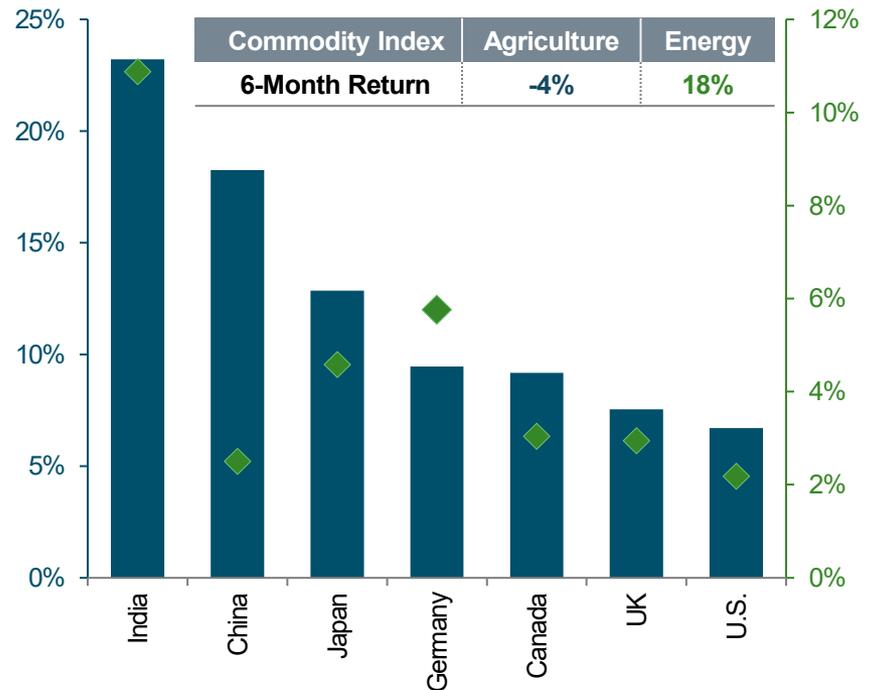


## Household Spending on Food and Energy

■ Food ◆ Energy

Share of Disposable Income

Share of Disposable Income



**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.



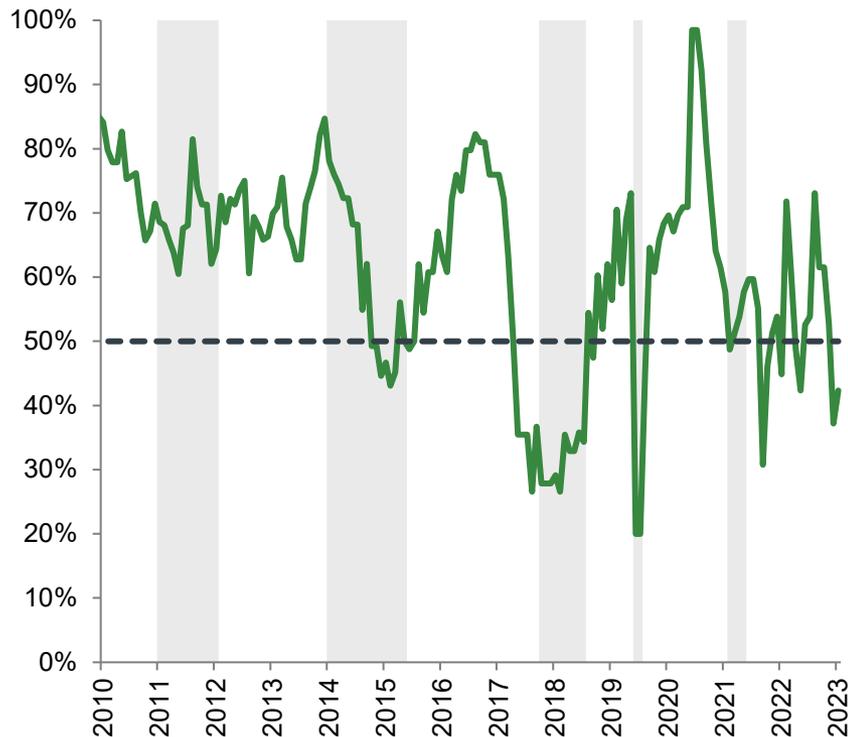
# China: Structural Headwinds Constrain Recovery

China's economic recovery has been volatile and inconsistent despite momentum being positive on a year-over-year basis. Policymakers increased their use of policy tools to support growth which will likely continue. Structural imbalances—such as excess capacity and leverage in the large property sector—pose significant constraints on the potency of stimulus and to a sustained upside for China's growth trajectory.

## China Industrial Activity

— AART Industrial Production Diffusion Index

Percentage of Industries in Expansion



## China: Economic and Policy Trends

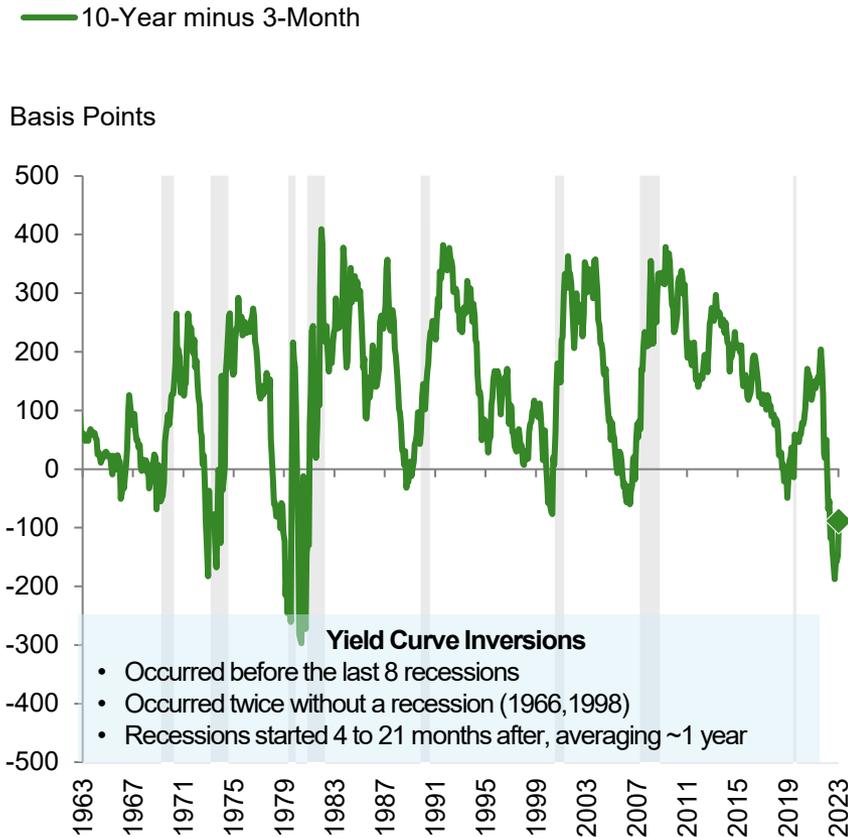
Positive	Negative
Policy easing in manufacturing and consumption sectors (tax cuts, EV subsidies)	Structural imbalances (excess capacity, high debt)
Monetary policy easing	Property overhang (asset value deterioration)
Fiscal policy support and infrastructure investments	Depressed consumer sentiment
Property sector easing (fewer home buying restrictions, relaxation of three red lines)	Geopolitical risk
	Regulatory risk (focus on “common prosperity”)

Gray bars represent growth recessions as defined by AART. LEFT: Source: National Bureau of Statistics, People's Bank of China, Fidelity Investments (AART), as of 9/30/23.

# Deeply Inverted Curve, Tighter Credit Typical of Late Cycle

As is typical during late cycle, the yield curve is inverted and credit standards have tightened. Our preferred yield curve—the 10-year less 3-month Treasury yield—has been inverted for a year and tends to be a reliable leading indicator of recessions. The inverted curve in conjunction with tight monetary policy caused banks to tighten lending standards across multiple loan categories for the fifth consecutive quarter.

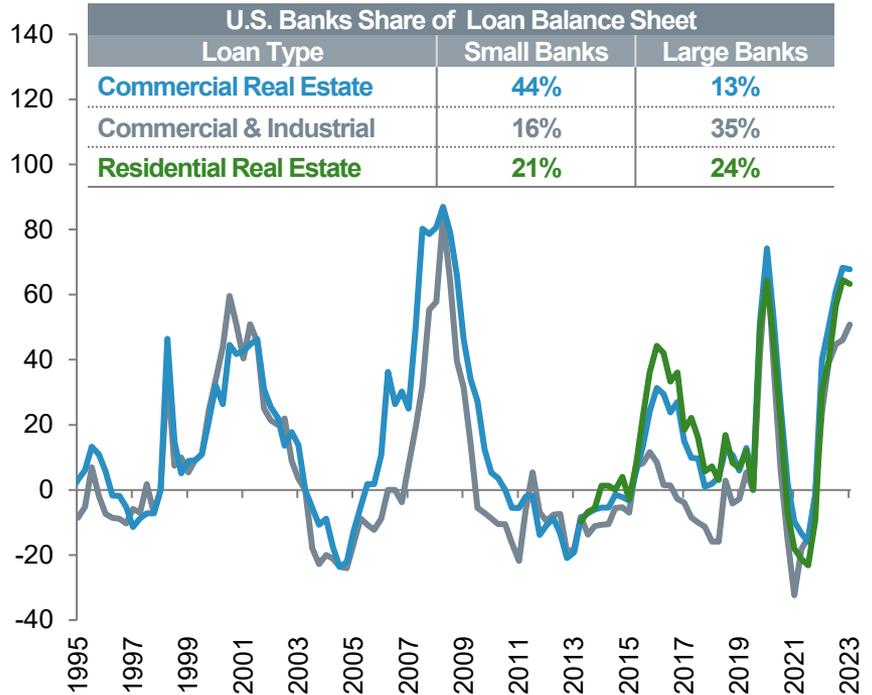
## Treasury Yield-Curve Spread



## U.S. Banks Lending Standards by Loan Type

— Commercial & Industrial      — Commercial Real Estate  
 — Multi-Family Residential

### Share of Banks Tightening

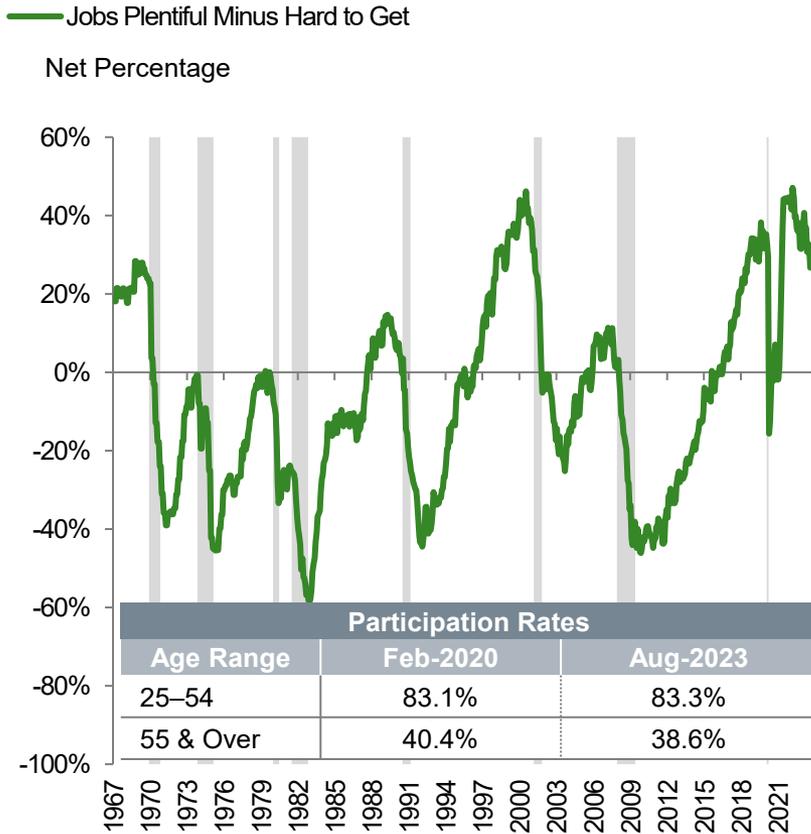


**LEFT:** Shaded areas denote U.S. recession. Diamond depicts the last chart point (as of 9/30/23). Source: U.S. Federal Reserve Board, NBER, Haver Analytics, Fidelity Investments (AART), as of 9/30/23. **RIGHT:** Large Banks: Top 25 U.S. Domestically Chartered ranked by domestic assets. Source: Federal Reserve Board, Haver Analytics, Fidelity Investments (AART), as of 9/30/23.

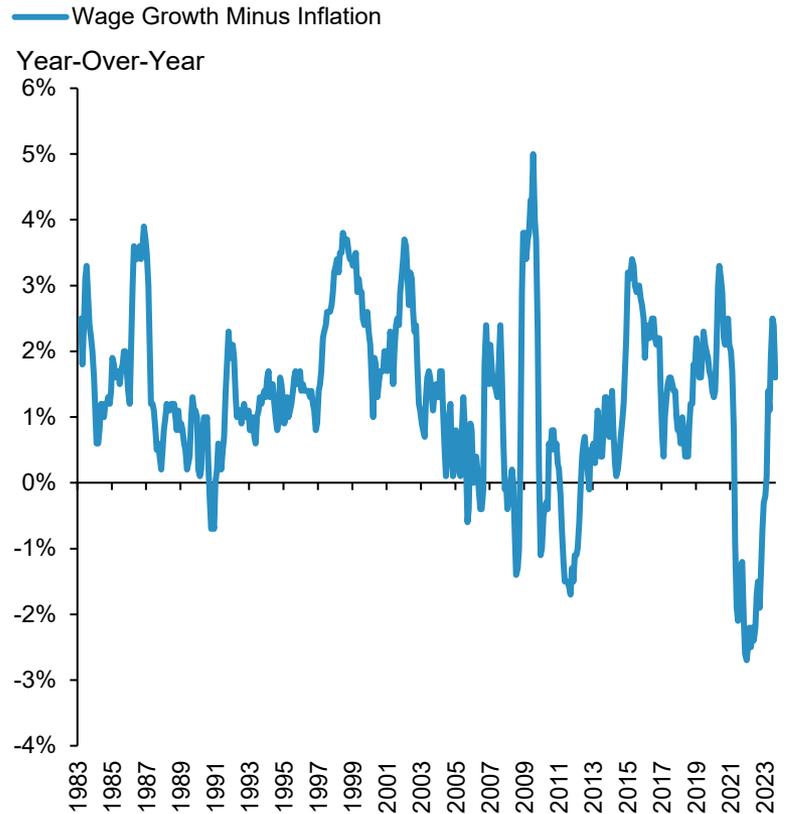
# Modest Cooling in Extremely Tight U.S. Labor Markets

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



## Real Wage Growth



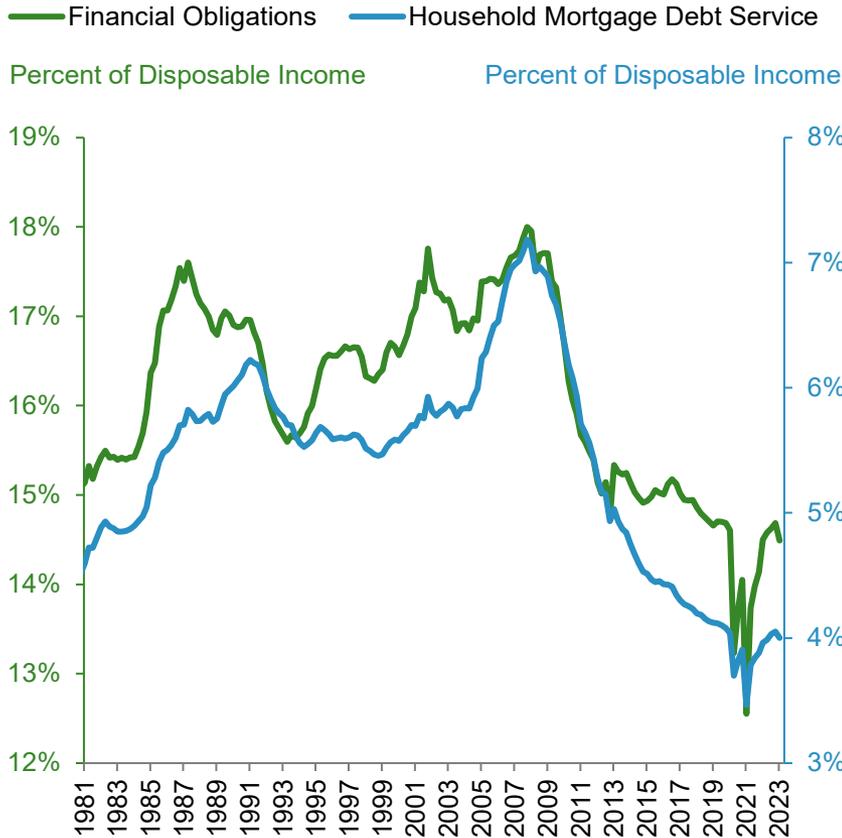
**LEFT:** Shaded areas represent U.S. recessions. Source: Conference Board, National Bureau of Economic Research, Macrobond, Fidelity Investments (AART), as of 9/30/23. **RIGHT:** Real Wage Growth: Atlanta Fed Wage Growth Tracker (Unweighted 3 month moving average) minus year-over-year CPI. Source: Federal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



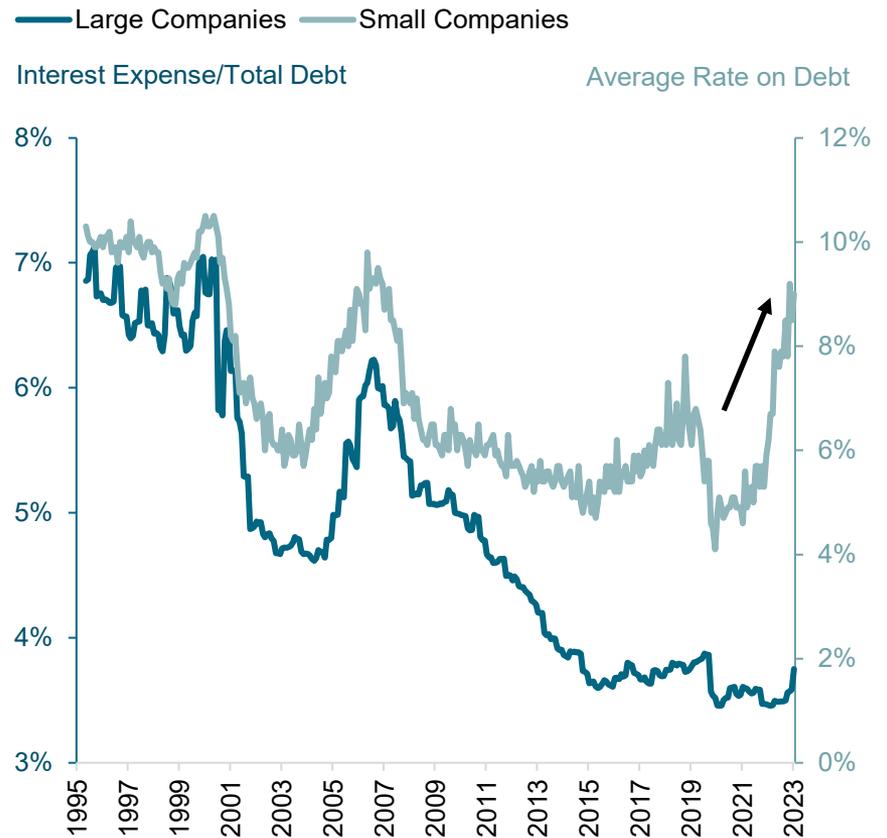
# Rising Cost of Capital in a Low-Rate Sensitive Economy

The U.S. has benefited from extremely low interest rates for the last fifteen years with many consumers locking into long-term fixed-rate mortgages at super low rates, and large companies issuing low-rate, long maturity bonds. As a result, the economy has been less rate sensitive and able to weather rate hikes. Those exposed to higher rates include smaller businesses, which tend to have variable-rate, shorter-maturity debt.

## Consumer Interest Rate Exposure



## Corporate Interest Rate Exposure



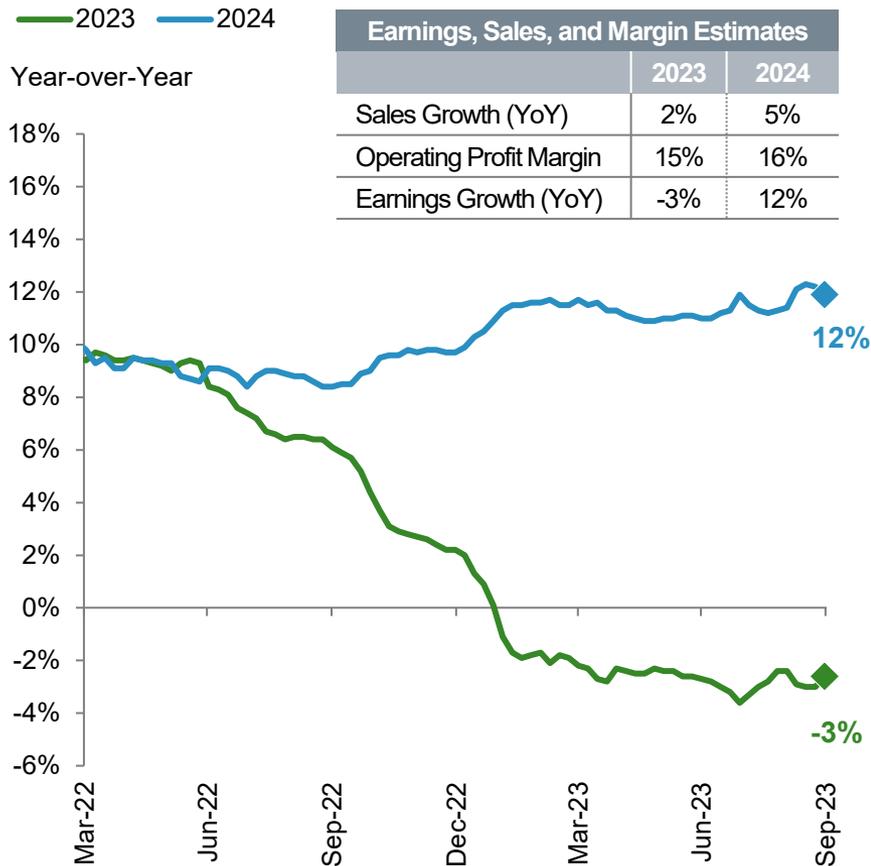
**LEFT:** Financial obligations ratio: automobile lease payments, rental payments on tenant-occupied property, homeowners' insurance and property tax payments relative to disposable personal income. Household Mortgage Debt Service Ratio shown above corresponds to the mortgage debt as a share of disposable income. Source: Federal Reserve, Macrobond, Fidelity Investments (AART) as of 4/30/2023 **RIGHT:** Source: National Federation of Independent Business, Factset, Macrobond, Fidelity Investments (AART) as of 8/31/23



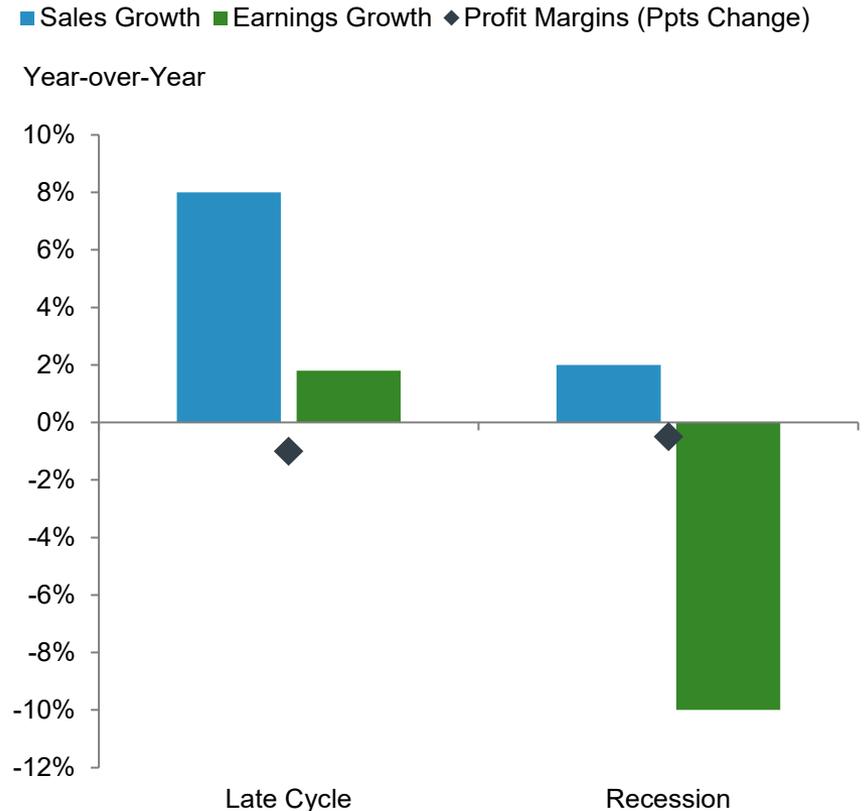
# Market Expects Earnings Rebound in 2024

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



## 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.

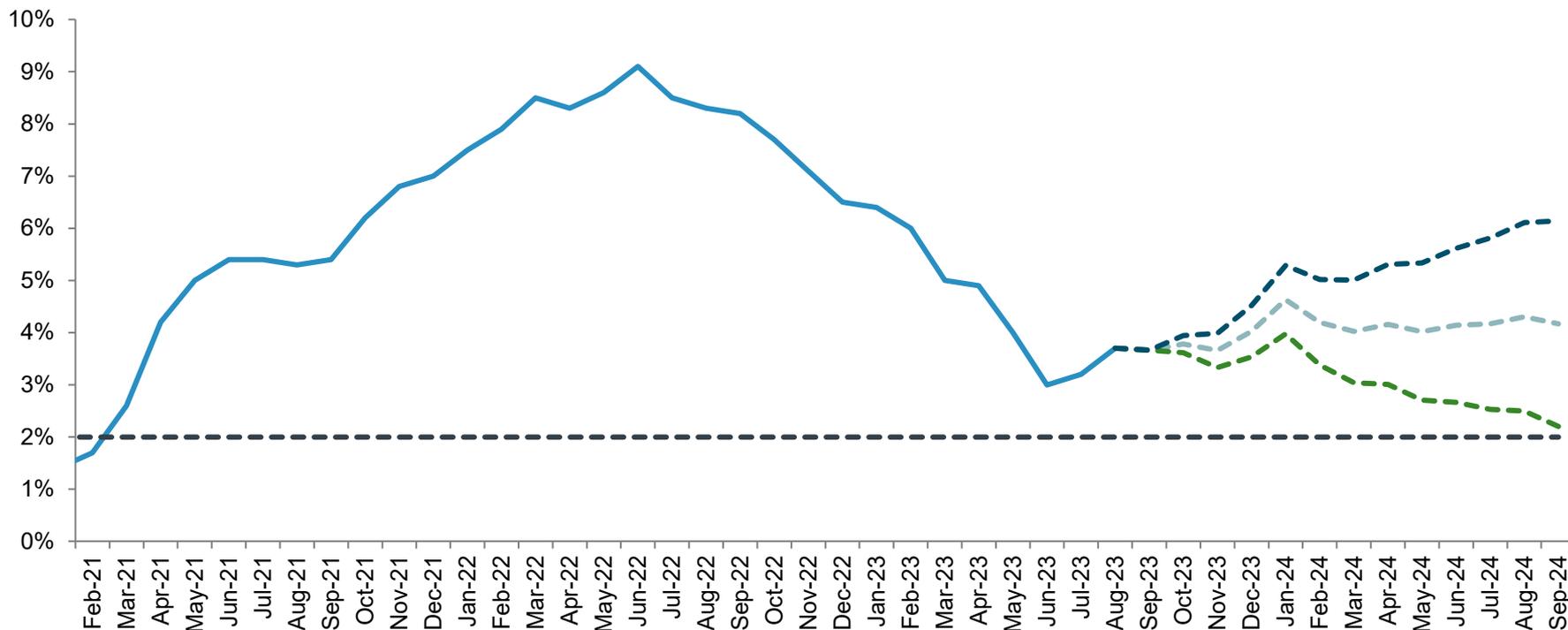
# Easy Disinflation is over; Reaching 2% May be a Challenge

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

— Headline CPI    - - - AART Scenario 1: Baseline    - - - AART Scenario 2: Commodities -30%    - - - AART Scenario 3: Commodities +30%

Year-over-Year



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.



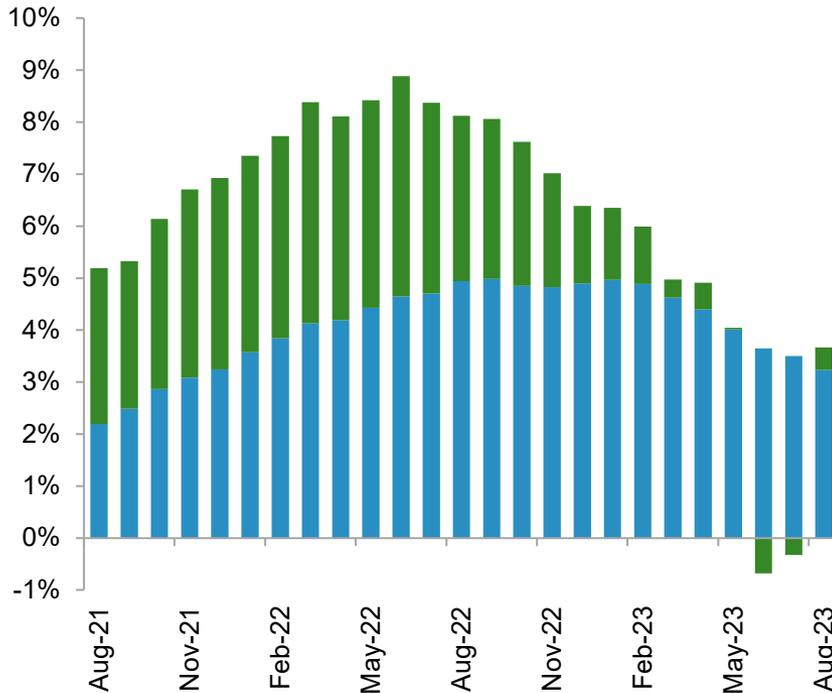
# Persistent Factors Continue to Drive Inflation Pressures

Inflation pressures that tend to be more transitory, such as supply-chain disruptions, continued to fade in recent months. However, categories where price increases tend to be more persistent account for the bulk of current inflation drivers. Core services have fallen faster than labor cost inflation, providing concern that either further core disinflation will be challenging, or the economy is weakening faster than many expect.

## Persistent vs. Transitory Inflation

■ Persistent Inflation ■ Transitory Inflation

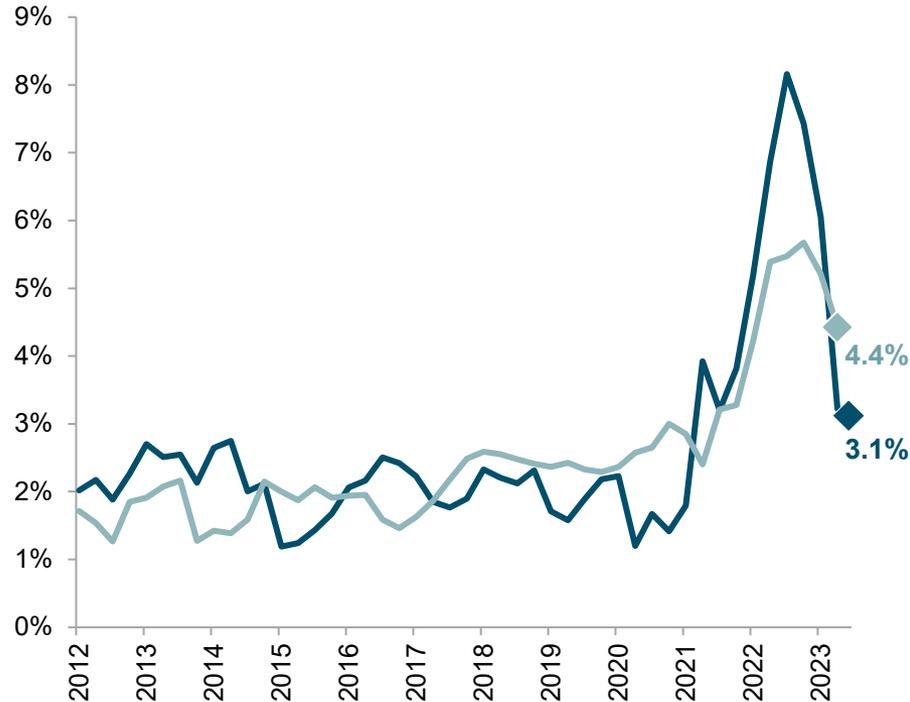
Year-over-Year



## Services Inflation vs. Labor Costs

— CPI Services less Shelter — Labor Costs

Year-over-Year

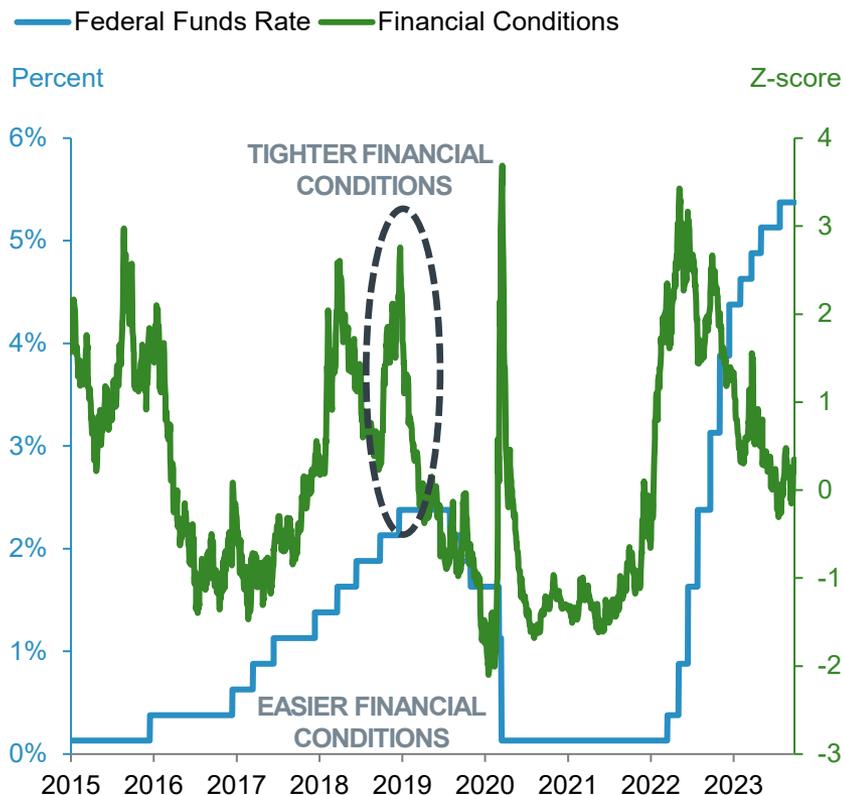


CPI: Consumer Price Index. **LEFT:** Contribution to Year-over-Year CPI over the past 12 months. Persistent Categories include areas where, historically, inflation has taken longer to dissipate, such as Housing and Food & Beverages. Source: Bureau of Labor Statistics, Haver Analytics, Fidelity Investments (AART), as of 8/31/23. **RIGHT:** Unit Labor Costs measured as 4-quarter moving average. Diamonds depict the last chart points (as of 9/30/23). Source: Bureau of Labor Statistics, Haver Analytics, Bloomberg, Fidelity Investments (AART), as of 8/31/23.

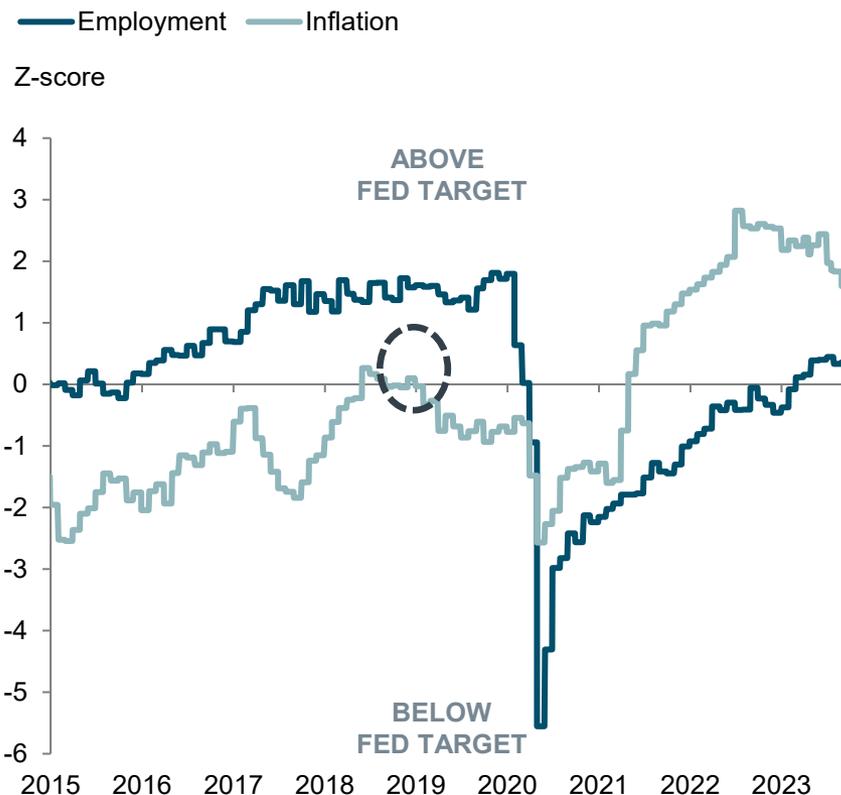
# A Fed Pause May Not Signal a Full-Fledged Response

In the prior rate-hiking cycle that concluded in 2018, a sharp tightening in financial conditions motivated the Fed to abruptly stop raising rates, while benign inflation provided cover for rate cuts in 2019. As of the end of Q3, financial conditions remain easy while inflation is above the Fed's target and labor markets remain tight. While the Fed is likely near the end of its rate-hiking cycle, a sharp pivot to easing may prove difficult.

## Fed Funds Rate vs. Financial Conditions



## Dual Mandate: Employment and Inflation



**LEFT:** Financial Conditions: Indicator part of AART's CRIC framework created using a number of financial conditions indexes and real rates viewed through a Federal Reserve lens. Source: Bloomberg Finance L.P., Federal Reserve Board, Fidelity Investments (AART), as of 6/30/23.

**RIGHT:** Employment/Inflation: Indicators part of AART's CRIC framework created based on an analysis of the Federal Reserve's stated employment and inflation target using a number of different employment and inflation metrics viewed through a Federal Reserve lens. Z-scores measure the number of standard deviations above or below the mean of the sample. Source: Bloomberg Finance L.P., Fidelity Investments (AART), as of 9/30/23.



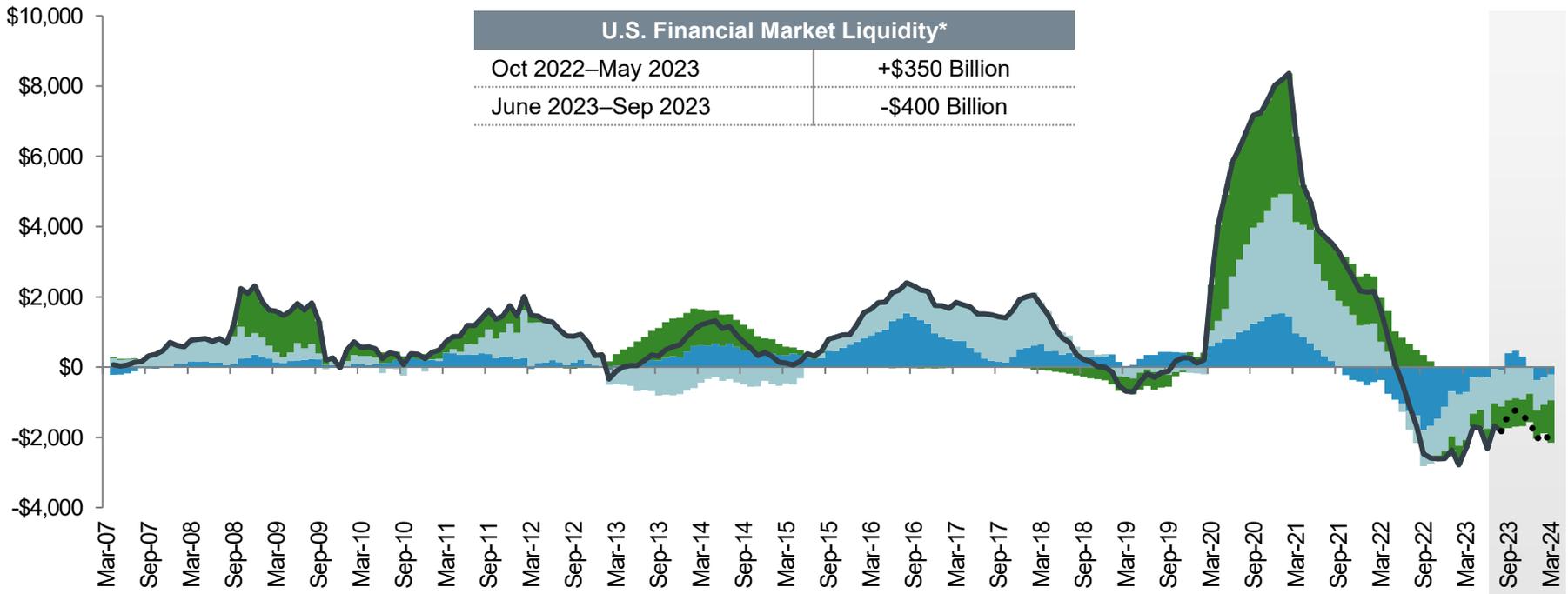
# Central Bank Tightening Starting to Pressure Market Liquidity

Major central banks continued to remove accommodation by shrinking their balance sheets during Q3 through quantitative tightening. This typically reduces financial-market liquidity, but actions from the U.S. Treasury and FDIC in the first half of the year more than offset the liquidity drain. With these one-off factors exhausted, the liquidity backdrop was more challenged during Q3 and may contribute to rising market volatility.

## Central Bank Balance Sheets

■ U.S. ■ Eurozone ■ Japan — Total

Billions (12-Month Change)

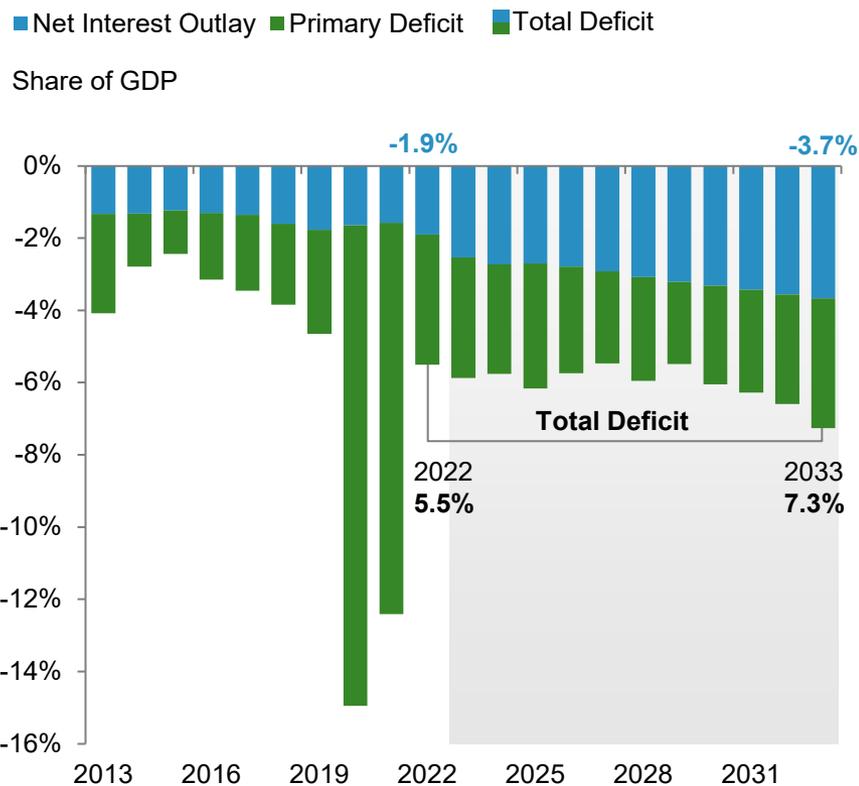


\*U.S. Financial Market Liquidity is Federal Reserve Balance Sheet Assets less Reverse Repo Program (RRP) and Treasury General Account (TGA). Shaded area represents estimates based on the U.S. Federal Reserve conducting \$80 billion of QT per month, the European Central Bank conducting 20 billion euro of QT per month and redeeming Targeted Long-Term Refinancing Operations throughout 2023 based on expected loan maturities, and the Bank of Japan purchasing assets at an average of the prior six months. Source: Federal Reserve, Bank of Japan, European Central Bank, Haver Analytics, Fidelity Investments (AART), as of 8/31/23.

# Fiscal Policy Cyclically Neutral but Long-Term Challenged

Based on government projections, the deficit outlook for fiscal-year 2024 is relatively neutral in terms of its impact on economic growth. However, the medium-term fiscal picture is increasingly challenging, as rising interest payments are forecast to cause deficits to climb over the next decade. Politically, spending cuts have become difficult as mandatory outlays on entitlement programs assume a larger share of fiscal expenses.

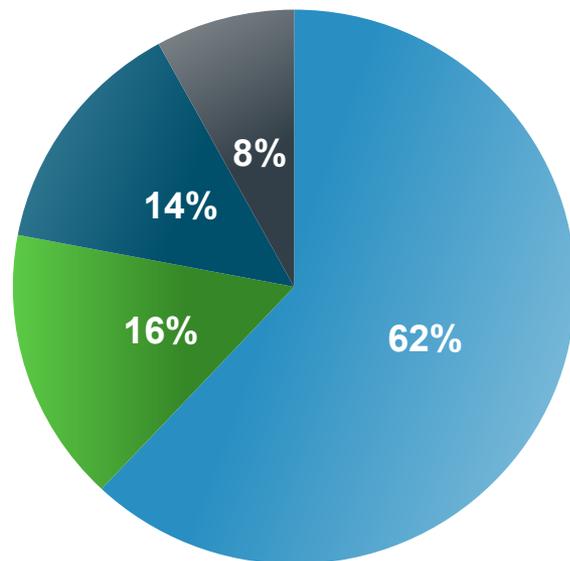
## U.S. Fiscal Deficit



## Categories of Federal Spending, FY 2023

Legend: Mandatory (Blue), Non-defense discretionary (Green), Defense (Dark Blue), Interest (Grey)

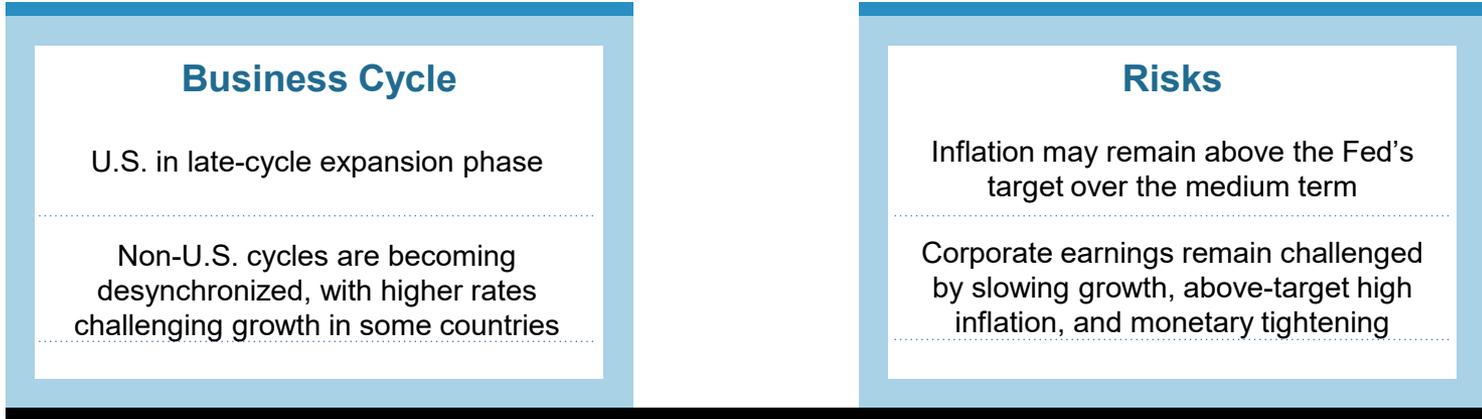
% of Federal Outlays



LEFT: Shaded area represents deficit baseline from the CBO. Primary deficit is the total deficit minus the net interest outlay. Source: Congressional Budget Office, Macrobond, Fidelity Investments (AART), as of 5/12/23. RIGHT: FY is fiscal year. Source: Congressional Budget Office, Fidelity Investments (AART), as of 5/31/23.

# Outlook: Market Assessment

Fidelity's Business Cycle Board, composed of portfolio managers across a variety of asset-allocation strategies, believes the above-target inflation and tightening monetary policy backdrop are contributing to uncertainty regarding the economic and capital markets outlook. Members held differing views on the path of growth and rates but generally held smaller active allocation positions compared with earlier in the cycle.



## Business Cycle

U.S. in late-cycle expansion phase

Non-U.S. cycles are becoming desynchronized, with higher rates challenging growth in some countries

## Risks

Inflation may remain above the Fed's target over the medium term

Corporate earnings remain challenged by slowing growth, above-target high inflation, and monetary tightening

## Asset Allocation Implications

The late-cycle phase warrants smaller active allocation positions

Desynchronized global cycles across major economies provide diversification opportunities

Security selection may present additional return opportunities

# Asset Markets

# 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.,

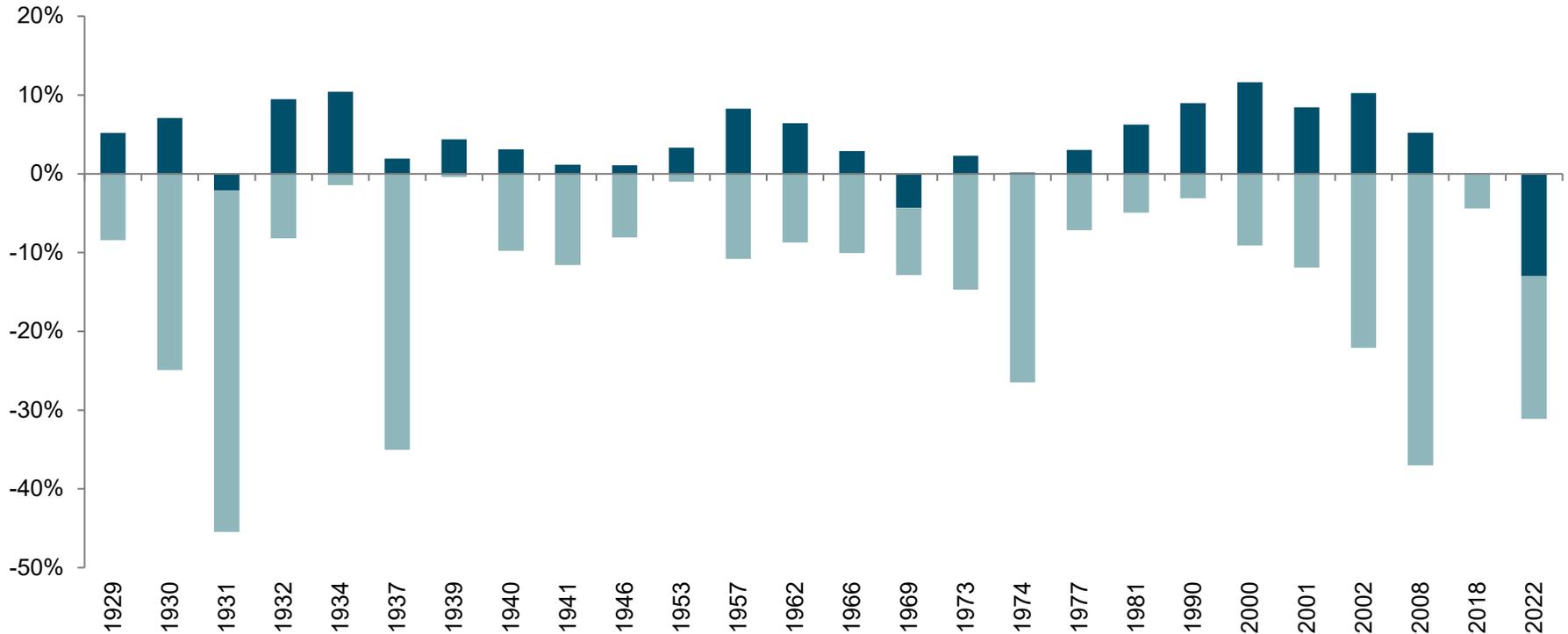
# 2022 Was an Unusually Bad Year for Bonds as Diversifiers

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)

■ Bonds ■ Stocks

Annualized Return



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.

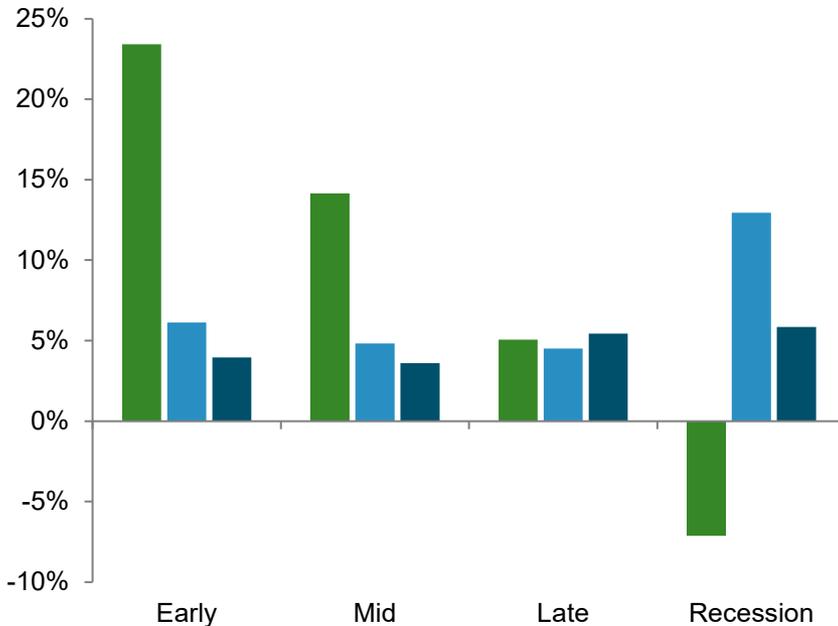
# Business Cycle Important but Dissipates in the Long Run

The business cycle can be a critical determinant of asset performance over the intermediate term. Stocks have consistently outperformed earlier in the cycle, whereas bonds tend to outperform during recessions. While we believe a business cycle approach to actively managed asset allocation can add value, portfolio returns are expected to even out over the long term (20 years), regardless of the starting point of the cycle phase.

## Asset Class Performance by Cycle Phase (1950–2020)

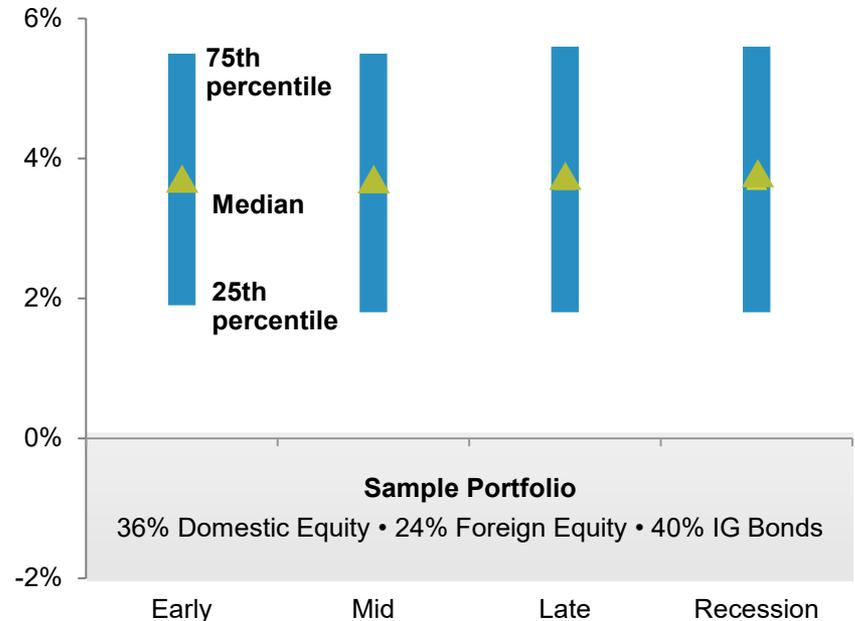
■ U.S. Stocks ■ IG Bonds ■ Cash

Annualized Nominal Return



## 20-Year Portfolio Return Distribution by Cycle Phase Starting Point

Annualized Real Return



For illustrative purposes only. Past performance is no guarantee of future results. Diversification 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. Fidelity proprietary analysis based on Monte Carlo simulations using historical index returns. Domestic Equity—Dow Jones U.S. Total Stock Market Index; Foreign Equity—MSCI ACWI ex USA Index; Investment-Grade (IG) Bonds—Bloomberg U.S. Aggregate Bond Index. Source: Fidelity Investments, Morningstar, Bloomberg Finance L.P., as of 9/30/23.

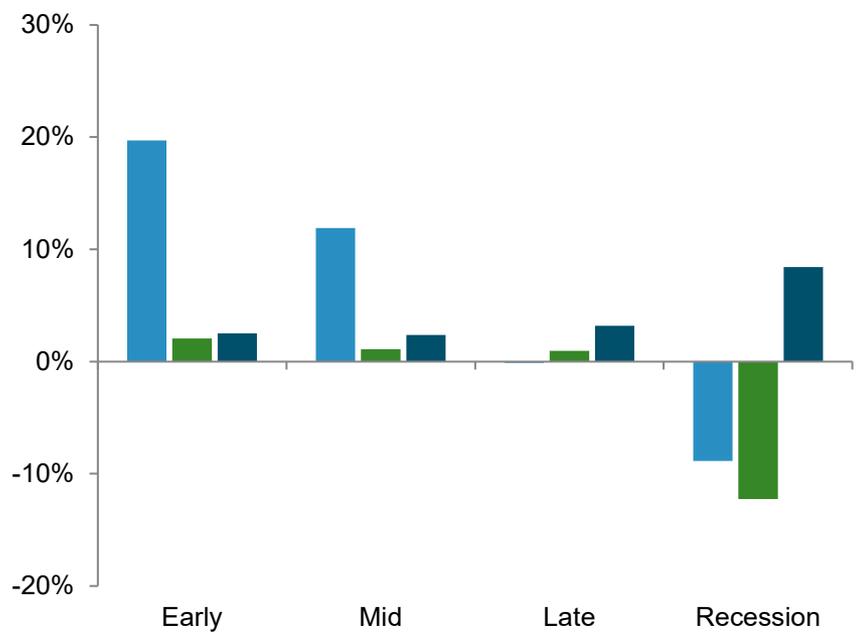
# What High Inflation Implies for a Maturing Business Cycle

Unlike recent business cycles, high inflation has taken root. Historically, during high-inflation regimes, commodities tended to perform better than bonds during late-cycle expansion. However, fixed income tended to outperform once recession risk became dominant. Tilting a portfolio toward more-defensive exposures during recessions may provide diversification benefits regardless of the inflation regime.

## Real Returns in Low-Inflation Regimes (1950–2020)

■ U.S. Equities ■ Commodities ■ Investment-Grade Bonds

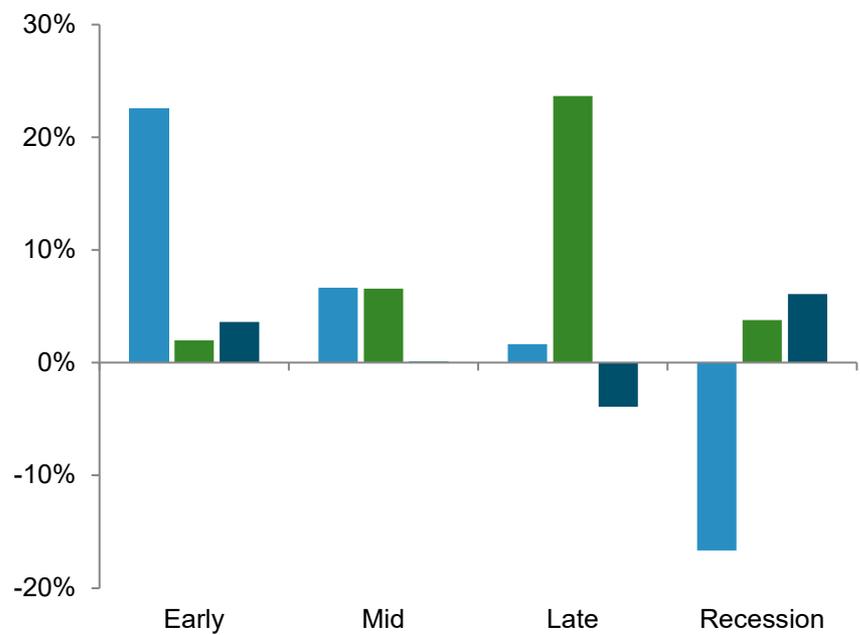
Annualized Average Real Return



## Real Returns in High-Inflation Regimes (1950–2020)

■ U.S. Equities ■ Commodities ■ Investment-Grade Bonds

Annualized Average Real Return



For illustrative purposes only. Past performance is no guarantee of future results. Diversification does not ensure a profit or guarantee against a loss. It is not possible to invest directly in an index. See Appendix for important index information. Fidelity proprietary analysis using historical index returns. Domestic Equity—Dow Jones U.S. Total Stock Market Index; Commodities—Bloomberg Commodity Total Return Index; Investment-Grade (IG) Bonds—Bloomberg U.S. Aggregate Bond Index. Source: Fidelity Investments (AART), as of 9/30/22. Regimes: A period is categorized as a high-inflation regime if the secular component is greater than the long-term average inflation, or a low-inflation regime otherwise.



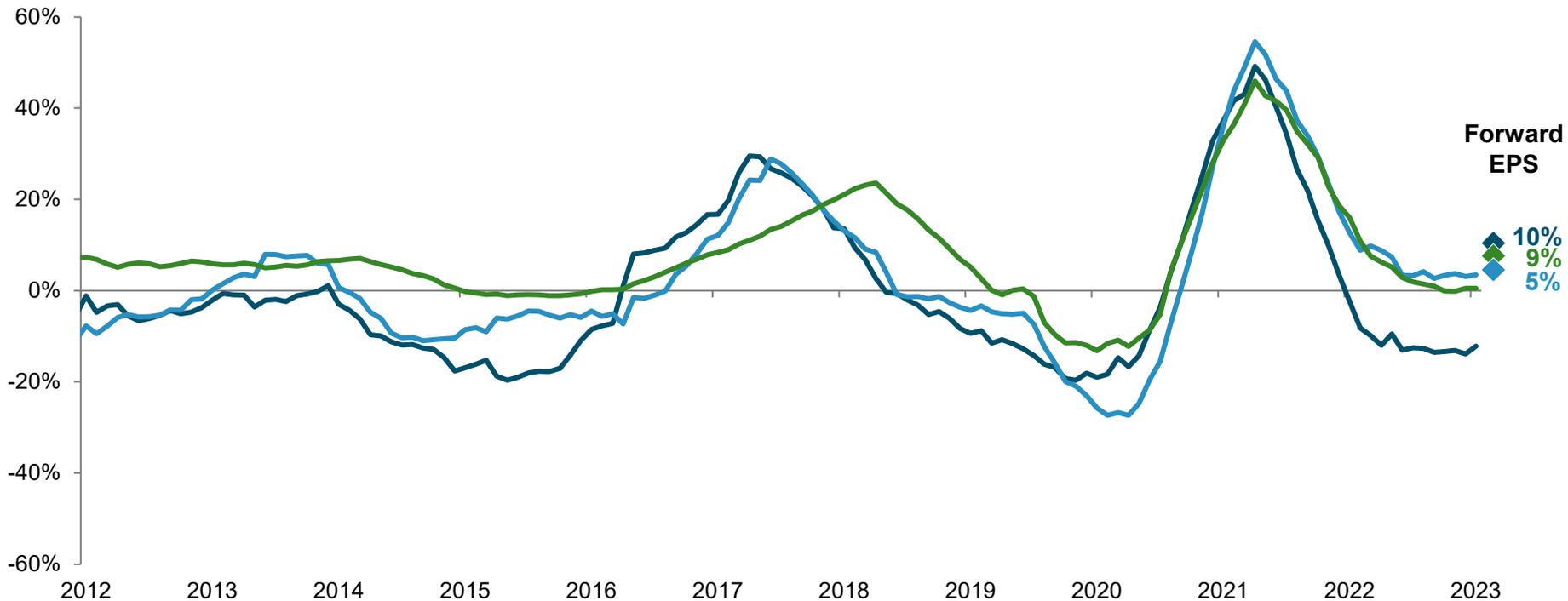
# Global Earnings Deceleration Showed Signs of Bottoming

Global earnings growth, which has been decelerating since 2021, showed signs of stabilizing during Q3. Emerging markets remained laggards, with a double-digit earnings contraction on a year-over-year basis. Earnings growth expectations for the next 12 months remain positive across the world.

## Global EPS Growth (Trailing 12 Months)

— EM — DM — U.S. ◆ Forward

Year-over-Year



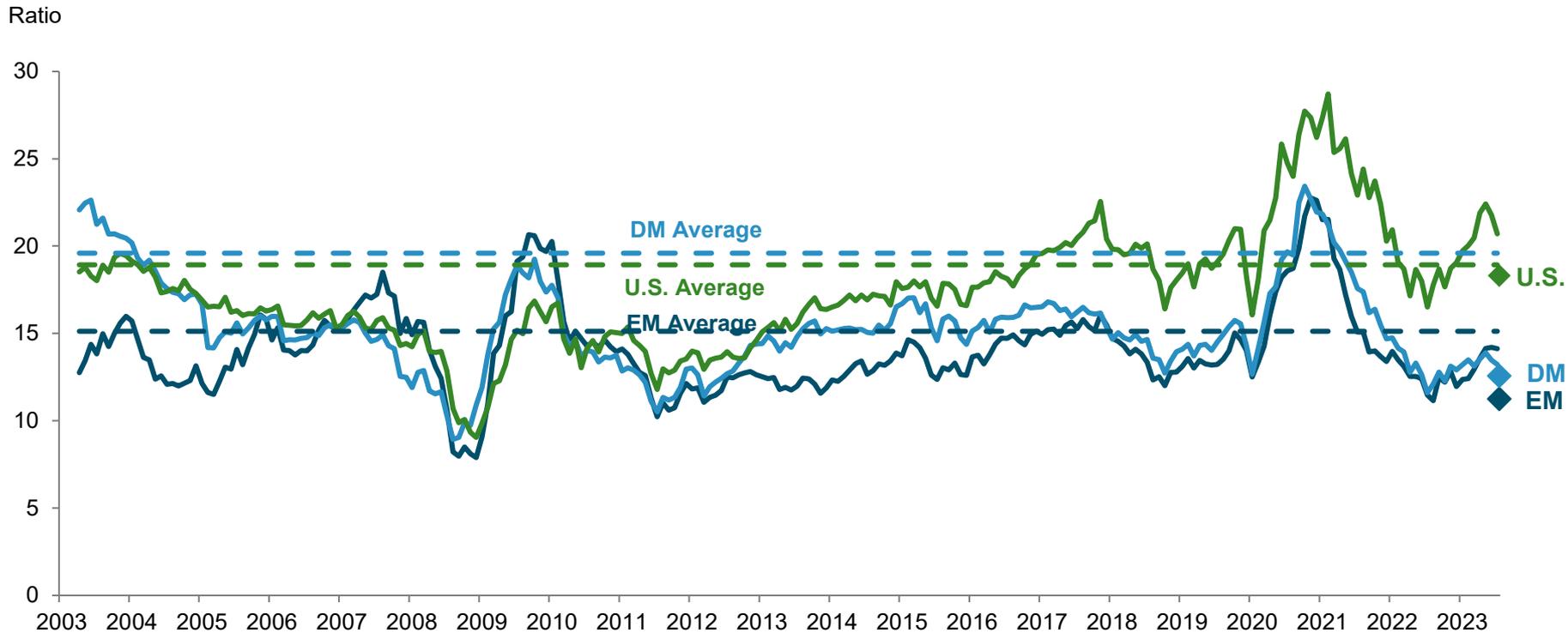
Past performance is no guarantee of future results. DM: Developed markets. EM: Emerging markets. EPS: Earnings per share. Forward EPS: Next 12 months' expectations. Indexes: DM—MSCI EAFE Index; EM—MSCI Emerging Markets Index; U.S.—S&P 500. Source: MSCI, Bloomberg

# U.S. Equity Valuations Cheaper but Relatively Elevated

Valuations fell for the U.S. and developed markets as equity prices fell during Q3. Though down from last quarter, the trailing one-year price-to-earnings (PE) ratio for U.S. stocks remains above its long-term average while non-U.S. stock (developed markets and emerging markets) valuations remained below their long-term averages.

## Global Stock Market P/E Ratios

— EM — DM — U.S. ◆ Forward P/E



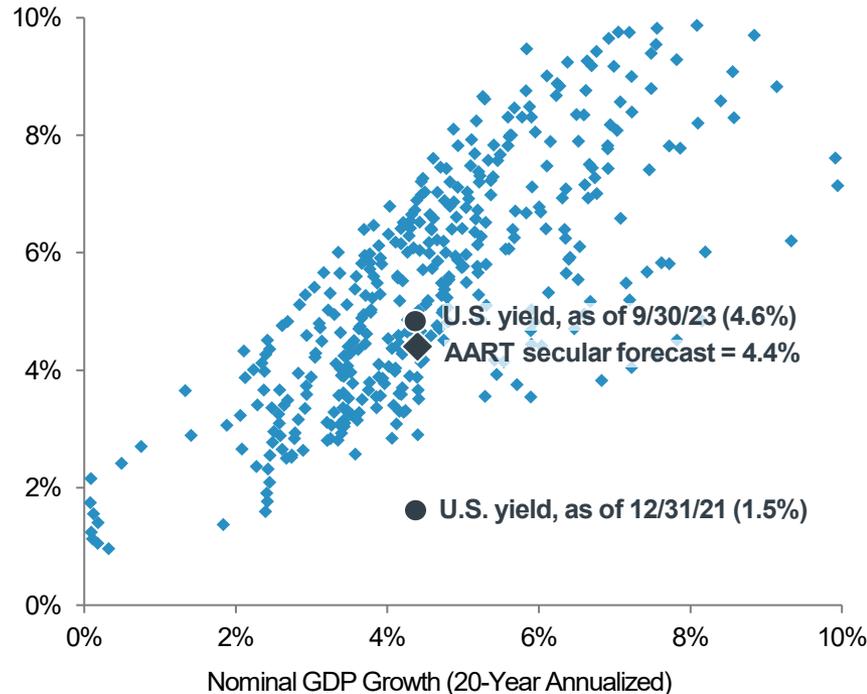
DM: Non-U.S. developed markets. EM: Emerging markets. Chart includes trailing 12-month P/Es. Past performance is no guarantee of future results. It is not possible to invest directly in an index. All indexes are unmanaged. See Appendix for important index information. Price-to-earnings (P/E) ratio (or multiple): Stock price divided by earnings per share, which indicates how much investors are paying for a company's earnings power. Long-term average P/E includes data from 9/30/95 to 9/30/23. Indexes: DM—MSCI EAFE Index; EM—MSCI Emerging Markets Index; U.S.—S&P 500. Source: Factset,

# Relative Valuations May Provide Opportunities Ahead

Rising bond yields and weak non-US equity performance has provided a more attractive entry point for long-term stock and bond investors. Ten-year Treasury yields are now slightly above our secular forecast of 4.4%, a huge improvement from the extreme valuations of the past decade. Based on our long-term expectations, cyclically adjusted price-to-earning ratios for non-U.S. markets provide more attractive opportunities.

## 10-Year Sovereign Bond Yields vs. GDP

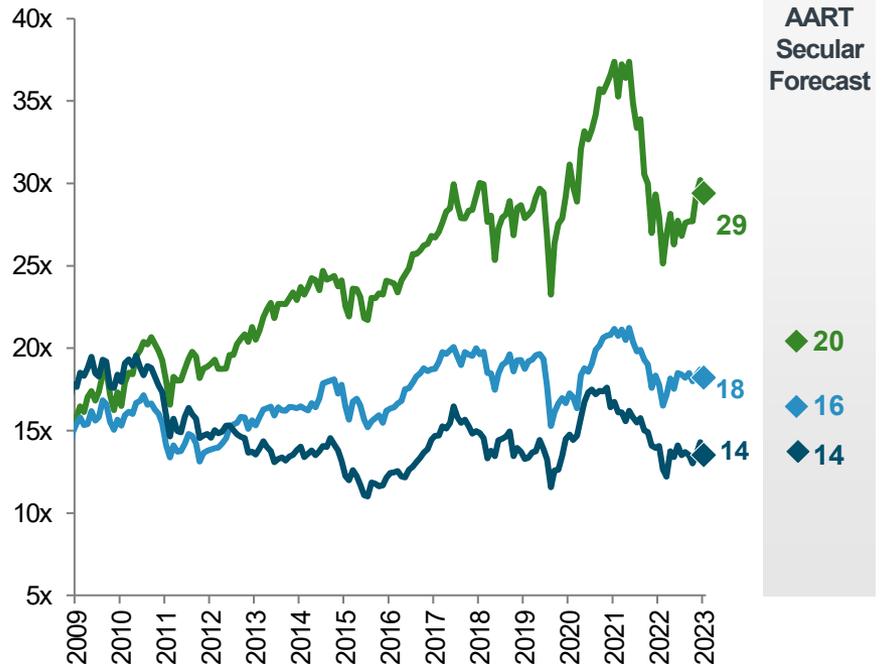
Yield (20-Year Annualized Average)



## Equity Valuations

— U.S. — DM — EM

CAPE Ratio



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. **LEFT:** Highlighted dots are U.S. 10-year Treasury bond yields. AART secular forecast refers to an estimate for U.S. nominal GDP (4.4%). Source: Official Country Estimates, Haver Analytics, Fidelity Investments (AART), as of 9/30/23. **RIGHT:** DM: Developed markets. EM: Emerging markets. Price-to-earnings (P/E) ratio (or multiple): Stock price divided by earnings per share, which indicates how much investors are paying for a company's earnings power. Cyclically adjusted earnings are 10-year averages adjusted for inflation. Source: FactSet, countries' statistical organizations, MSCI, Fidelity Investments (AART), as of 8/31/23.

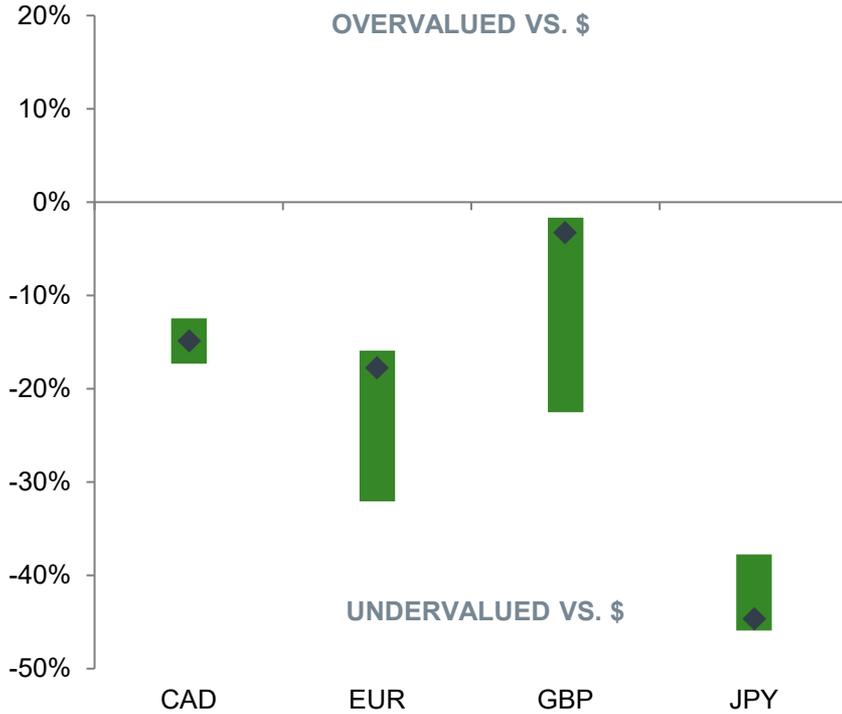


# U.S. Dollar Bolstered by Strong Relative Growth Backdrop

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)

■ Last 12-Month Range    ◆ 8/31/23



## Growth Influences on U.S. Dollar

— Relative Growth    — USD Returns



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

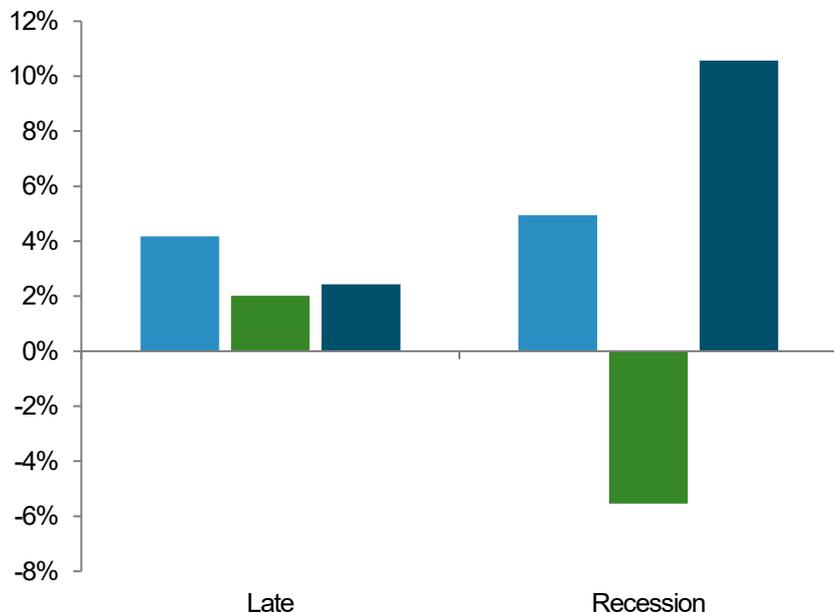
# Decelerating Growth Tends to Support Min Vol Factor

Historically more-defensive factors like min vol tends to outperform as manufacturing activity moderates, overall growth decelerates, and late-cycle dynamics take hold. The defensive min vol factor, in addition to quality, also tends to outperform the market during recessions.

## Factor Returns vs. Market through Cycle (1995–2022)

■ Min Vol ■ Value ■ Quality

Annualized Average Return

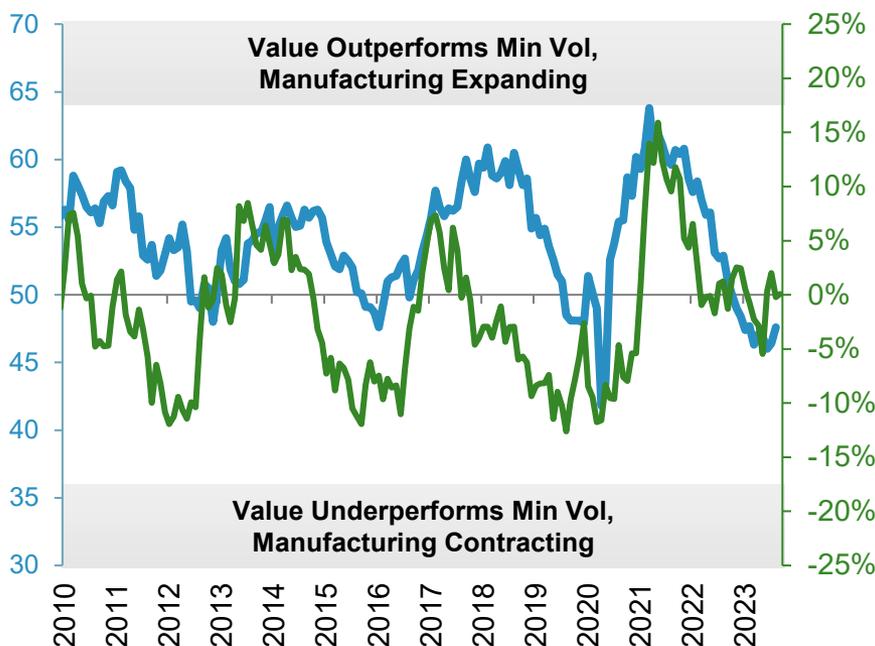


## Relative Performance vs. Manufacturing Cycles

— ISM Manufacturing PMI — Value vs. Min. Vol

PMI (> 50 = Expanding)

12-Month Return Difference



For illustrative purposes only. Past performance is no guarantee of future results. Diversification does not ensure a profit or guarantee against a loss. It is not possible to invest directly in an index. See Appendix for important index information. **LEFT:** Market—MSCI USA Index; Min Vol—MSCI USA Minimum Volatility Index, Value—MSCI USA Value Index. Source: Bloomberg Finance L.P., Fidelity Investments (AART), as of 12/31/22. **RIGHT:** Min Vol—MSCI USA Minimum Volatility Index, Value—MSCI USA Value Index. Source: ISM (Institute for Supply Management), Bloomberg Finance L.P., Haver Analytics, Fidelity Investments (AART), as of 9/30/23.



# Business Cycle Approach to Equity Sectors

A disciplined business cycle approach to sector allocation seeks to generate active returns by favoring industries that may benefit from cyclical trends. Economically sensitive sectors historically have performed better in the early- and mid-cycle phases of an economic expansion. Meanwhile, companies in defensive sectors with relatively more stable earnings growth have tended to outperform in weaker environments.

## Business Cycle Approach to Sectors

Sector	EARLY CYCLE Rebounds	MID CYCLE Peaks	LATE CYCLE Moderates	RECESSION Contracts
Financials	+			-
Real Estate	++	-	+	--
Consumer Discretionary	++		--	
Information Technology	+	+	-	--
Industrials	++			--
Materials	+	--		-
Consumer Staples	--	-	+	++
Health Care	--			++
Energy	--		++	--
Communication Services		+		-
Utilities	--	-	+	++
	Economically sensitive sectors have tended to outperform, while more defensive sectors have tended to underperform.	Making marginal portfolio allocation changes to manage drawdown risk with sectors may enhance risk-adjusted returns during this cycle.	Defensive and inflation-resistant sectors have tended to perform better, while more cyclical sectors underperform.	Since performance generally has been negative during recessions, investors should focus on the most defensive, historically stable sectors.

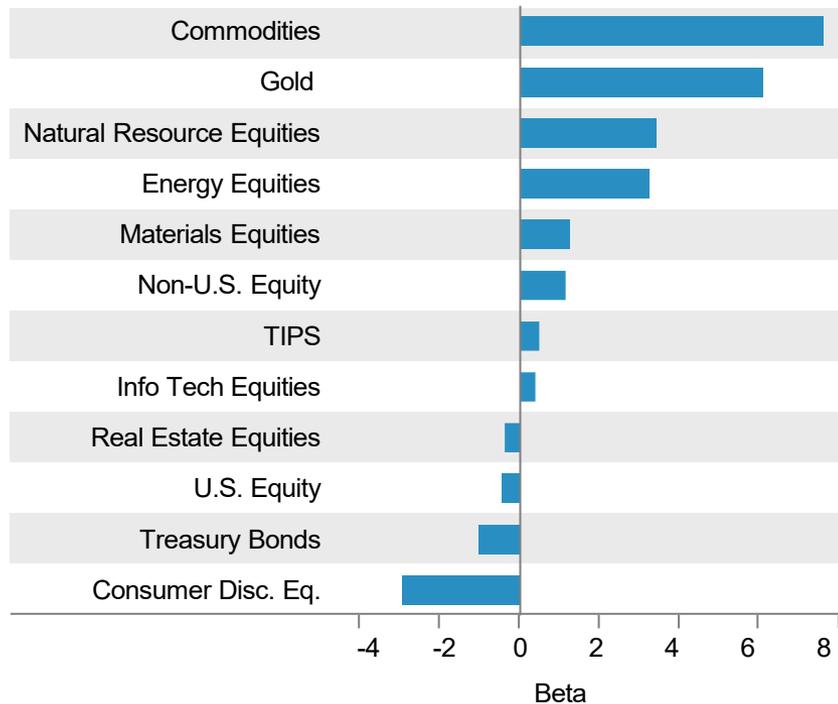
Past performance is no guarantee of future results. Sectors as defined by GICS. White line is a theoretical representation of the business cycle as it moves through early, mid, late, and recession phases. Green- and red-shaded portions above represent over- or underperformance, respectively, relative to the broader market; unshaded (white) portions suggest no clear pattern of over- or underperformance. Double +/- signs indicate that the sector is showing a consistent signal across all three metrics: full-phase average performance, median monthly difference, and cycle hit rate.

36 A single +/- indicates a mixed or less consistent signal. Return data from 1962 to 2021. Source: Fidelity Investments (AART), as of 9/30/23.

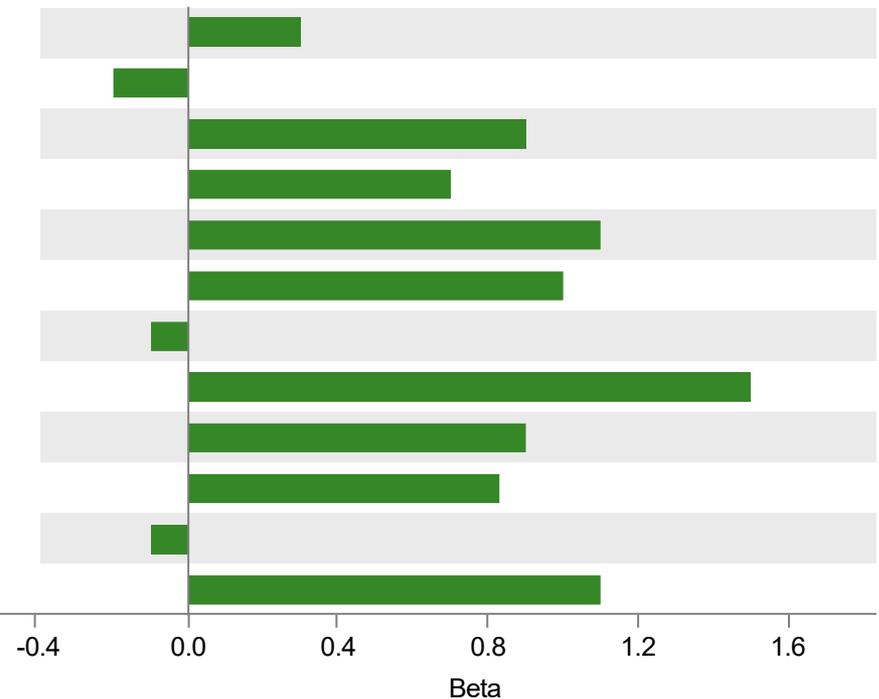
# Inflation-Sensitive Assets Can Help Provide Diversification

The potential for a sustained period of higher inflation presents risks for a multi-asset portfolio. Inflation-resistant assets, including commodities and commodity-producer equities, can help hedge against surprise increases in inflation while providing potential for capital appreciation in a high nominal-growth environment. Inflation-hedging fixed income assets, such as TIPS\*, have provided better diversification than Treasuries.

## Return Sensitivity to Inflation Surprises (1972–2022)



## Return Sensitivity to Growth Surprises (1972–2022)



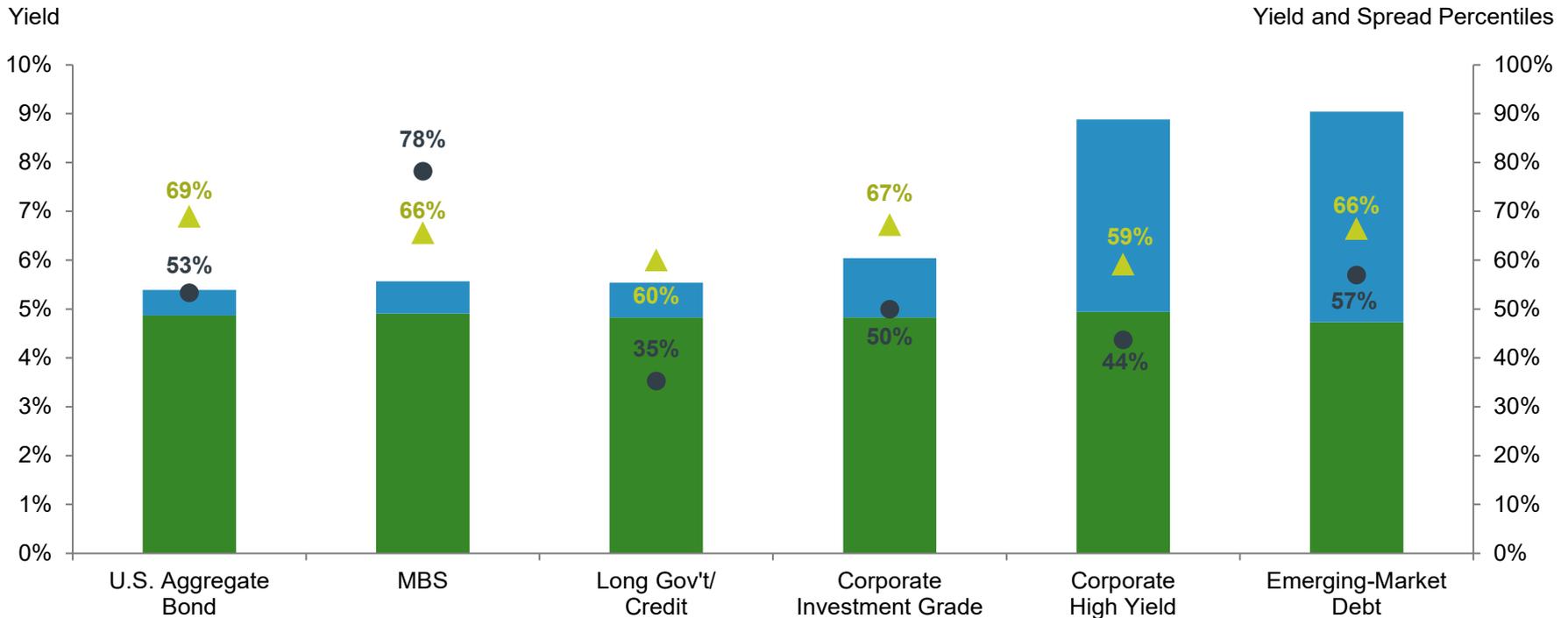
Past performance is no guarantee of future results. Diversification does not ensure a profit or guarantee against loss. \*TIPS are Treasury Inflation-Protected Securities. Inflation sensitivity measured relative to CPI, an index that tracks the percentage change in the price of a specified "basket" of consumer goods and services. Growth sensitivity measured relative to the Purchasing Manager's Index (PMI) that shows the prevailing trends in the manufacturing and service sectors. Beta is a measure of a variable's sensitivity (response) relative to changes (volatility) in a reference (benchmark), which has a beta of 1. Indexes: U.S. Equity—Dow Jones U.S. Total Stock Market Index<sup>SM</sup>; Non-U.S. Equity (EM+DM)—MSCI ACWI ex USA Index; Commodities—Bloomberg Commodity Index Total Return<sup>SM</sup>. Commodity sectors represent categories within the Bloomberg Commodity Index Total Return<sup>SM</sup>. Equity sectors represent categories within MSCI as defined by the Global Industry Classification Standard (GICS<sup>®</sup>). See Appendix for index definitions and other important information. Source: Bureau of Labor Statistics, Fidelity Investments; data 1/1/72 through 2/28/22.

# 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)

■ Treasury Rates ■ Credit Spread ▲ Yield Percentile ● Spread Percentile



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.

# Long-Term Themes

# Secular Trends Present New Challenges for Asset Markets

We believe shifting long-term trends in economic and policy conditions imply a secular regime change for financial markets. Record-high debt and widespread aging demographics create challenges for fiscal and monetary policy, while more unstable geopolitics and peaking global integration represent a different direction from recent decades. Inflation, policy, and profit risks warrant higher levels of strategic diversification.

Broad Secular Trends	Secular Factors	Impact	RESULTS
 Unprecedented Debt Levels   Widespread Aging Demographics   Peak Globalization   Geopolitical Instability	Monetary policy	More uncertain with bigger swings between financial repression and fighting inflation	Inflation and interest rates more volatile
	Fiscal policy	Higher structural deficits	Policy and political risks higher
	Labor force	Supply constrained	Financial fragility
	Supply-chain self sufficiency, reliability	Less goods and labor disinflation	Profit-margin pressures
	National security-oriented policies	Business backdrop less market-driven	Higher asset price volatility
			Lower global asset correlations
			<b>Shows Need for Strategic Diversification:</b> More nuanced diversification and less reliance on simple extrapolation of past trends

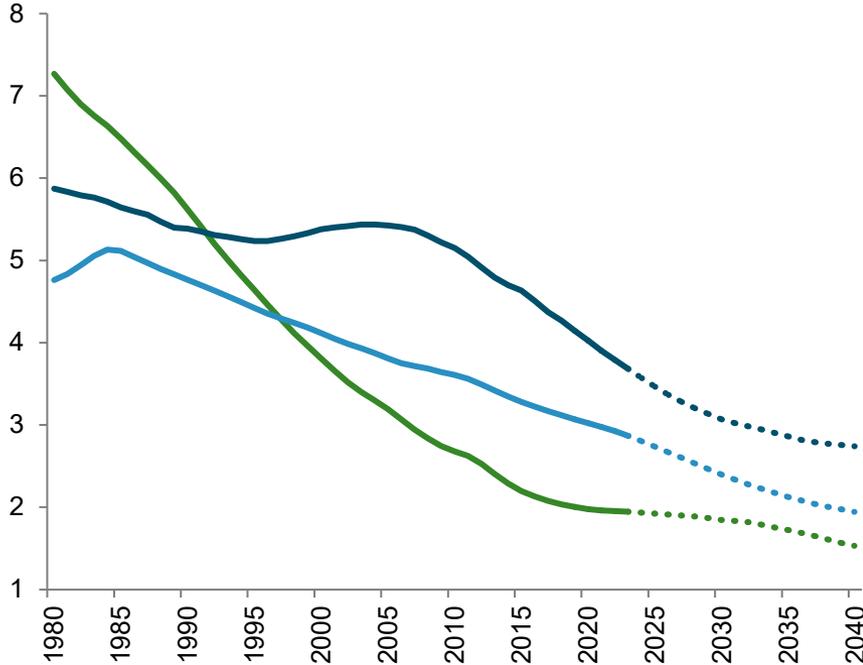
# Unprecedented Debt Levels amid Aging Demographics

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

— Japan — Eurozone — U.S.

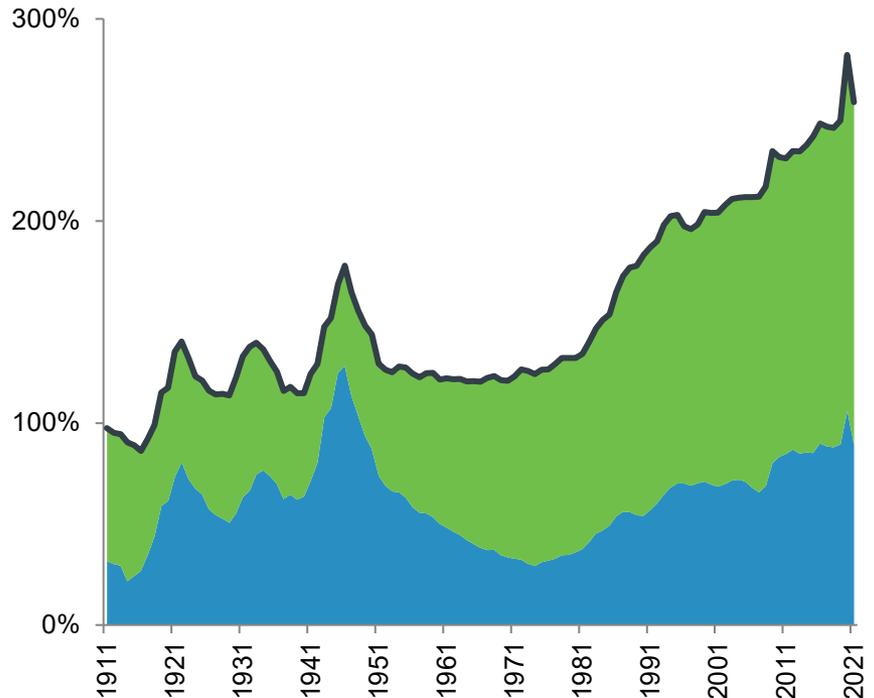
Workers/Retirees



## Global Debt as a Share of GDP

■ Public ■ Private

Percentage



**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.

# Geopolitical Risk: More Great Powers, Less Stability

The Ukraine war is a stark reminder that we've shifted to a secular environment of higher geopolitical risk. The distribution of power among the world's great powers determines the structure of the world order, and in recent decades, we enjoyed a stable, unipolar backdrop under U.S. global dominance. Today, power has become more evenly distributed among a number of countries, leaving the backdrop inherently more unstable.

## UNIPOLAR

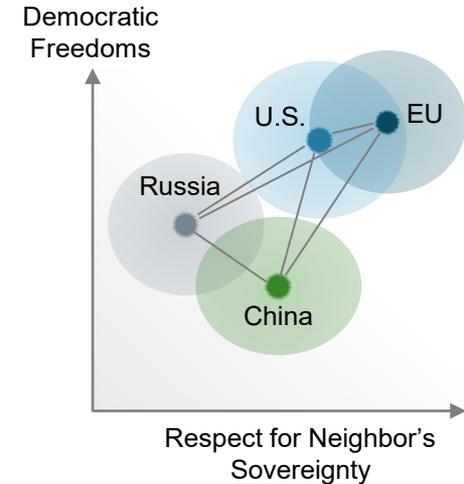
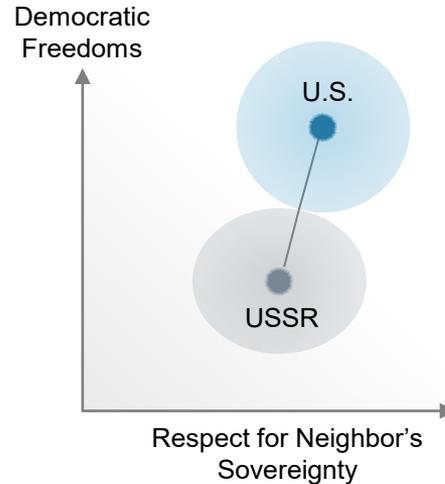
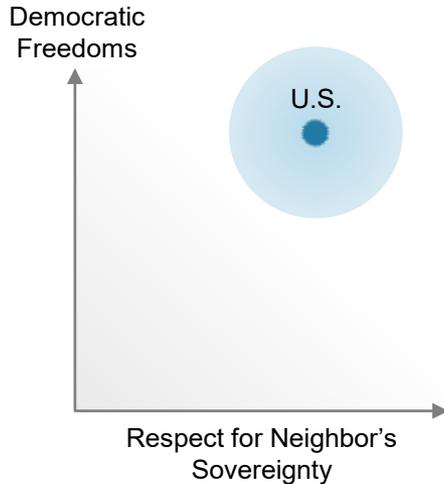
## BIPOLAR

## MULTIPOLAR

**Very Stable**  
1990s–Early 21st Century

**Pretty Stable**  
1960s–1980s

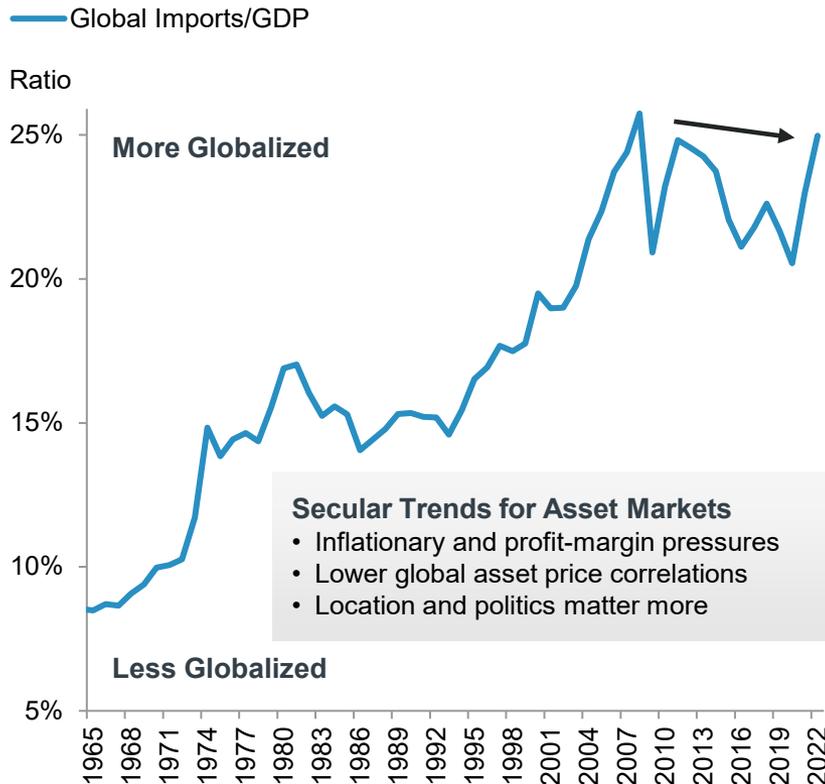
**Unstable**  
Today



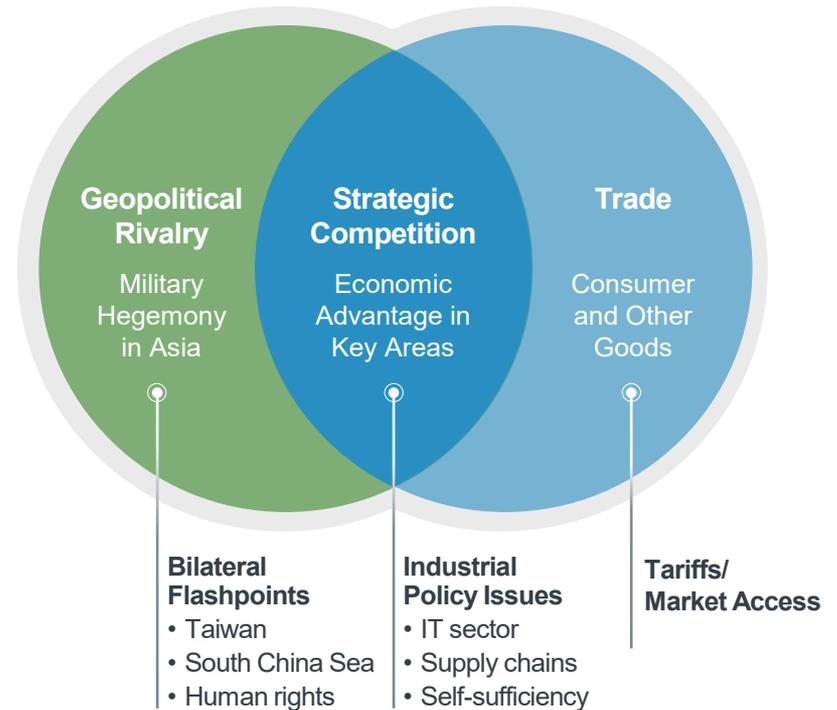
# U.S.-China Friction at Heart of Managed Globalization Trend

After decades of rapid global integration, economic openness has stalled in recent years. The deepening U.S.–China rivalry creates friction at the center of the globalized trading system, and it implies continued political risk for commercial activities, such as the bipolarization of the tech industry. The more domestic politics and location matter, the greater the potential benefits and active opportunities from global asset diversification.

## Trade Globalization



## U.S.–China Relationship



# Secular Inflation Risks Confront Monetary Policymakers

Several long-term trends have become more inflationary in recent years, raising the odds that we've entered a medium-term, high-inflation regime. These factors include supply-side pressures from deglobalization and aging demographics, accommodative fiscal policies, and decelerating long-term productivity rates. U.S. consumers' long-term inflation expectations are at decade highs.

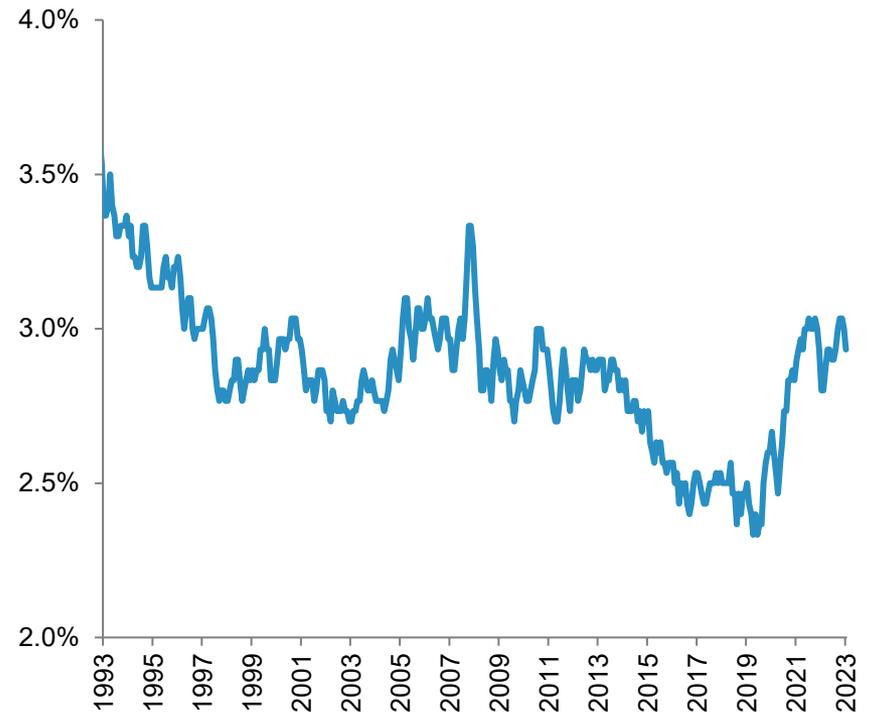
## Possible Secular Impact on Inflation

Secular Factors	Long-Term Trends	Risks to Inflation
<b>Policy</b>	Fed tolerates higher inflation	↑
	More-accommodative fiscal policy	↑
<b>Peak Globalization</b>	• More-expensive goods & labor	↑
	• Geopolitical friction	↑
<b>Aging Demographics</b>	Older adults:	
	• Spend less (reducing demand)	↓
	• Work less (reducing supply)	↑
<b>Technological Progress</b>	Artificial intelligence, robots	↓
	Declining long-term productivity	↑
<b>Climate Change</b>	More-volatile weather, supply damage	↑
	Greater innovation/R&D in clean energy	↓

## Consumer Long-Term Inflation Expectations

— Expected Inflation Rate Next 5–10 Years

3-Month Average



LEFT: Diversification does not ensure a profit or guarantee against a loss. Source: Fidelity Investments (AART), as of 12/31/22. RIGHT: University of Michigan Survey of Consumers. Source: University of Michigan, Haver Analytics, Fidelity Investments (AART), as of 9/30/23.

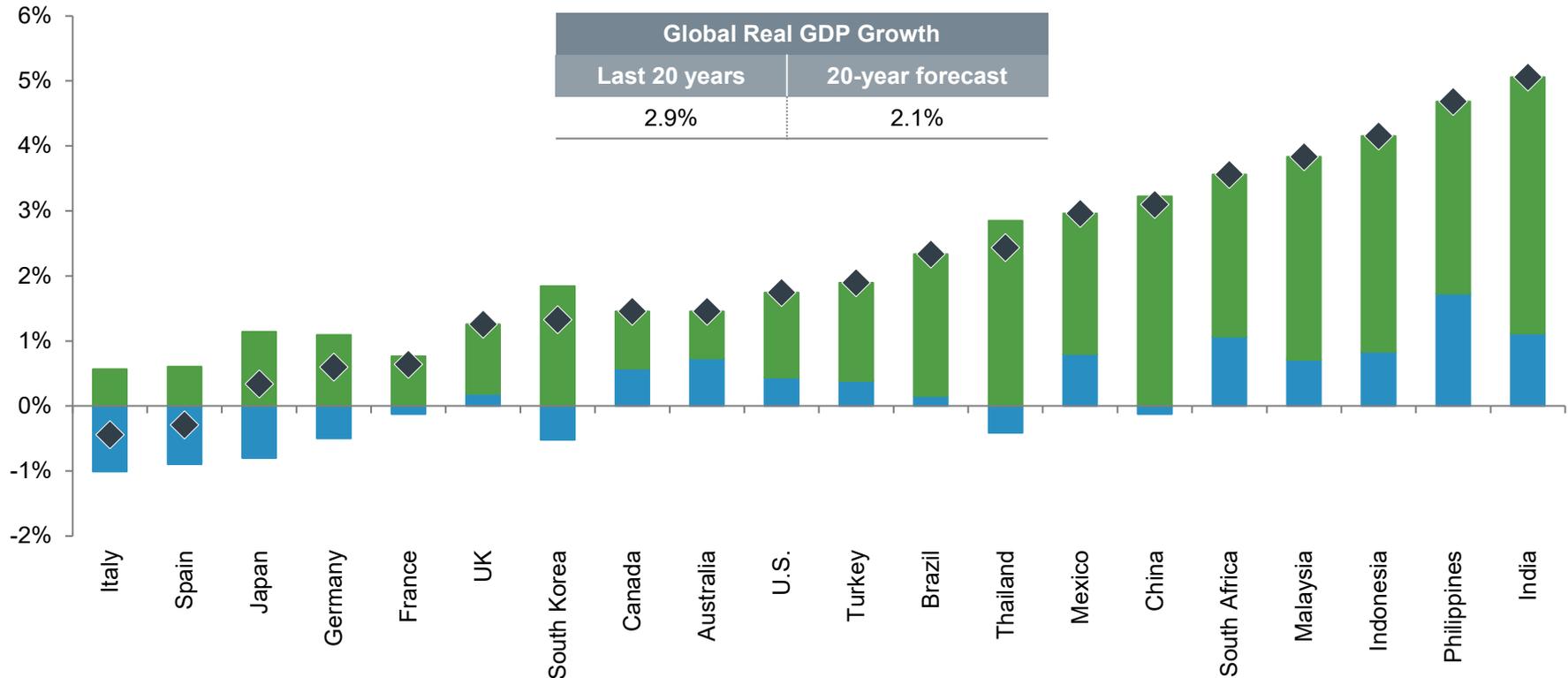
# Secular Forecast: Slower Global Growth, EM to Lead

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.

## Real GDP 20-Year Growth Forecasts

■ Productivity Growth ■ Labor Force Growth ◆ Total Growth

Annualized Rate



Past performance is no guarantee of future results. EM: Emerging markets. GDP: Gross domestic product.

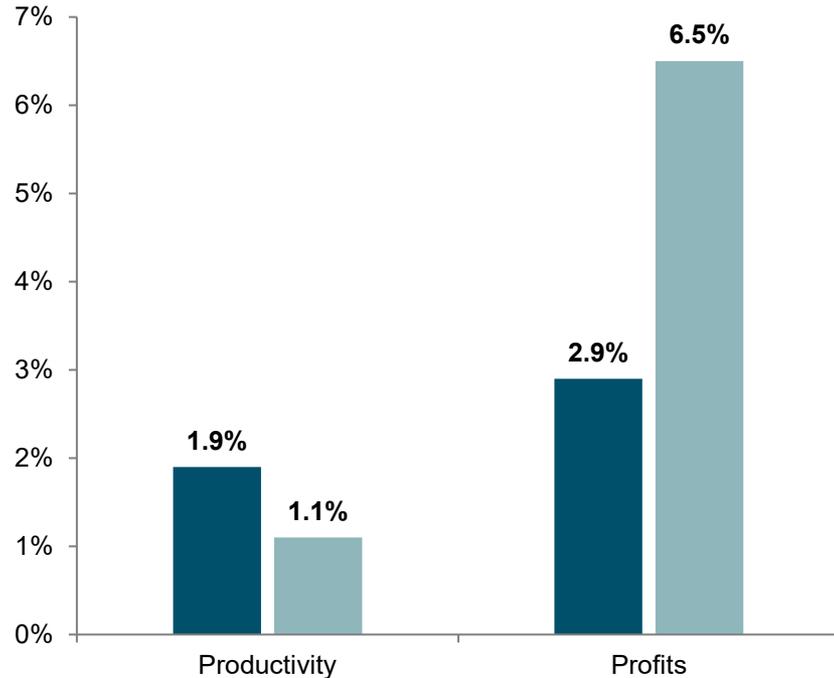
# Change in Corporate Behavior on the Horizon?

Over the past two decades, corporations were able to generate record-high profit growth despite productivity growth sinking to post-war lows. Businesses reduced costs by globalizing supply chains and taking advantage of record-low interest rates. With rates now higher and globalization past its peak, corporations may raise their capital expenditures from record-low levels, which could boost the productivity outlook.

## Real Productivity Growth vs. Real Profit Growth

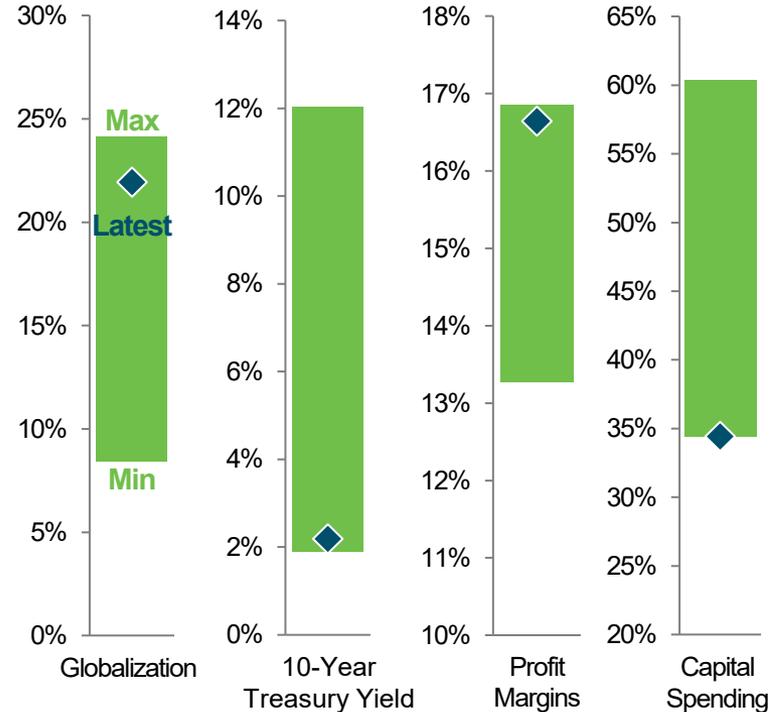
■ Historical Average (1950–2021) ■ Last Decade (2012–2021)

Annualized growth



## Range of Corporate Indicators, 1962–2022

Five-Year Moving Averages



**LEFT:** Productivity is real GDP per hour. Profits are real S&P 500 earnings per share. Source: Bureau of Economic Analysis, Bureau of Labor Statistics, Standard and Poor's, Haver Analytics, Fidelity Investments (AART), as of 12/31/21. **RIGHT:** Globalization measured as global imports/GDP. Profit margins measured as EBITDA/Sales. Capital spending is relative to EBITDA and excludes financials and real estate. Exhibit compiled using annual data. Source: IMF, World Bank, Federal Reserve Board, Fidelity Investments (AART), as of 12/31/22.

# Strategic Opportunities amid Productivity Upside Scenarios

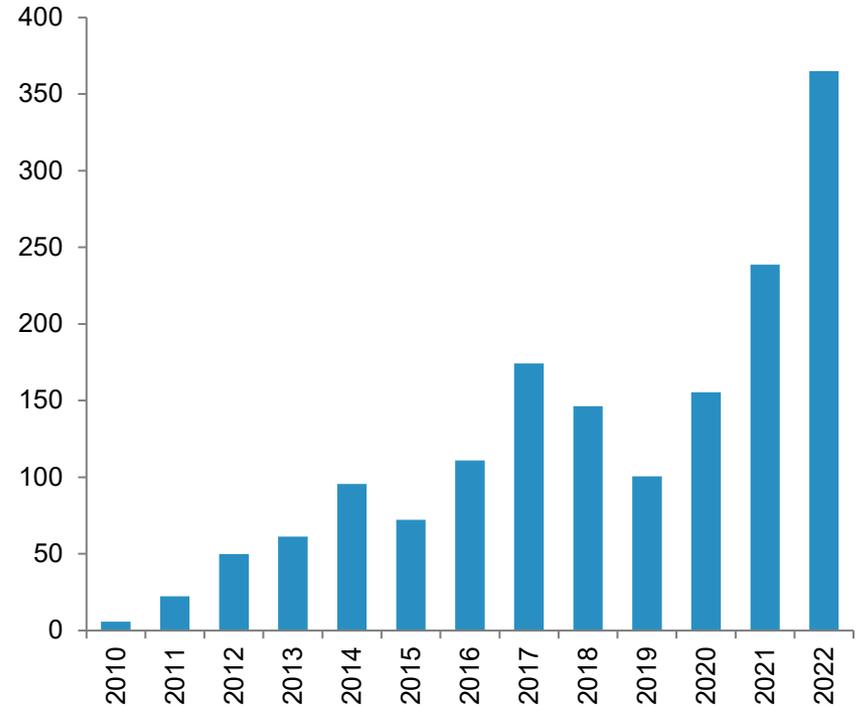
With long-term productivity rates slumping at multi-decade lows, a number of potential catalysts could boost productivity over the next decade. For instance, private and public investments to reshore manufacturing activities, mitigate the impact of climate change, and expand the use of AI have picked up steam. Secular changes may provide greater global active opportunities across regions, countries, industries, and companies.

## Examples of Strategic Opportunities

Global opportunities	Capex, innovation, and shifting market leadership opportunities
Lower asset correlations increase the benefits of geographic diversification	<b>Environmental</b> Climate mitigation and adaptation, decarbonization
Greater active opportunities across regions, countries, industries, and companies	<b>Reshoring and near-shoring</b> Regionalization, supply-chain resilience
Non-aligned countries as key beneficiaries	<b>National security</b> Energy, critical resources, defense, cyber
	<b>Artificial intelligence</b> Sector-specific automation, wider adoption

## U.S. Jobs Created from Reshoring and FDI

Thousands



FDI is Foreign Direct Investment. Diversification and asset allocation do not ensure a profit or guarantee against loss. LEFT: Source: Fidelity Investments (AART) as of 6/30/23. RIGHT: Based on reshoring announcements by U.S. headquartered companies and FDI by foreign companies that are shifting production or sourcing from offshore to the U.S. Source: Reshoring Initiative, Fidelity Investments (AART), as of 12/31/22.

# 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<sup>®</sup>** 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<sup>®</sup>), 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<sup>SM</sup>** 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<sup>®</sup> National Association of Real Estate Investment Trusts (NAREIT<sup>®</sup>) 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<sup>®</sup> NAREIT<sup>®</sup> 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>.

# 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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