

Commentary | Fourth Quarter 2022

# Quarterly Market Update

## PRIMARY CONTRIBUTORS

**Dirk Hofschire, CFA**

*SVP, Asset Allocation Research*

**Jake Weinstein, CFA**

*Research Analyst, Asset Allocation Research*

**Andrew Garvey**

*Research Analyst, Asset Allocation Research*

**Azize Engin**

*Research Associate, Asset Allocation Research*

**Lisa Emsbo-Mattingly, CBE**

*Director of Asset Allocation Research*



# Challenging Environment amid the Rise in Global Yields

Persistent inflation pressures prompted central banks, including the U.S. Federal Reserve, to tighten monetary policy and push nominal and real (inflation-adjusted) bond yields to their highest levels in more than a decade. The value of the dollar surged, liquidity growth faded, and the energy and food supply shocks exacerbated by the ongoing Russia–Ukraine conflict added to global stagflationary pressures.

## MACRO

## ASSET MARKETS

### Q3 2022

- Global stagflationary stresses intensified amid high inflation, slowing growth.

- Most asset prices dropped, as interest rates and the dollar moved sharply upward.

### OUTLOOK

- The maturing global business cycle is confronting elevated recession pressures, particularly in Europe.
- The U.S. is in the late-cycle expansion phase, with rising but moderate near-term recession risk.
- Policy easing picked up steam in China, but growth headwinds remain formidable.
- The rate of inflation has passed its cyclical peak, but persistent pressures may keep it more elevated than expected.
- The Fed's ramped-up tightening cycle and global rate hikes are dampening liquidity and adding to growth risks.

- Slower liquidity growth, persistent inflation risk, slowing growth momentum, and greater monetary policy uncertainty raise the odds that market volatility will remain elevated.
- Some of these challenging dynamics have been priced into markets, particularly in fixed income.
- Late-cycle positioning implies smaller cyclical tilts; high levels of long-term portfolio diversification remain warranted.

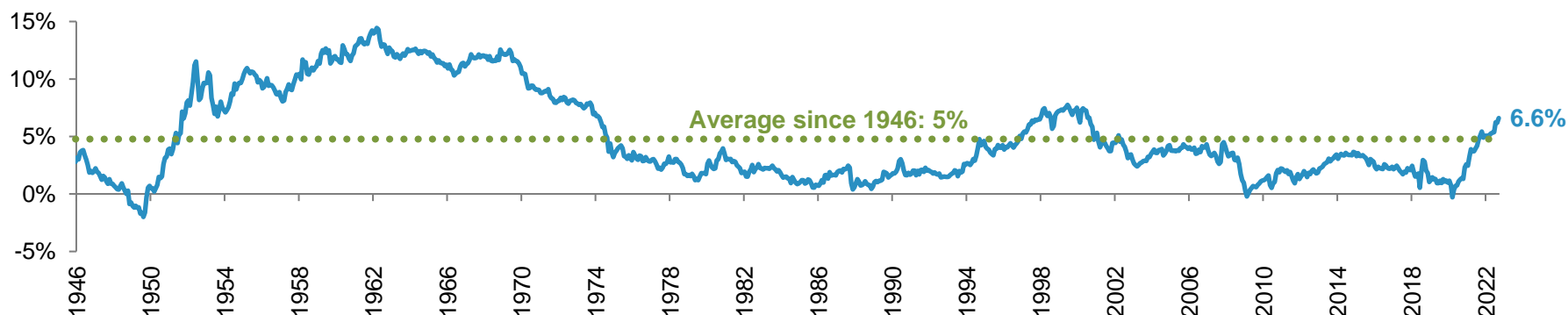
# Widespread Declines across Asset Categories

Nearly all asset categories posted losses during Q3, with non-U.S. equities suffering some of the worst declines amid the dollar's steep ascent. The continued rise in bond yields pushed the prices of most fixed income categories further into negative territory for 2022. Commodity prices experienced declines as well, but they remained a rare bright spot with positive returns for the year-to-date period.

	Q3 2022 (%)	YTD (%)		Q3 2022 (%)	YTD (%)
High-Yield Bonds	-0.7	-14.6	U.S. Corporate Bonds	-4.9	-18.1
U.S. Small Cap Stocks	-2.2	-25.1	Gold	-8.1	-9.2
U.S. Mid Cap Stocks	-3.4	-24.3	Long Government & Credit Bonds	-9.0	-28.9
Commodities	-4.1	13.6	Non-U.S. Developed-Country Stocks	-9.4	-27.1
Emerging-Market Bonds	-4.2	-22.2	Non-U.S. Small Cap Stocks	-9.8	-32.1
Investment-Grade Bonds	-4.8	-14.6	Real Estate Stocks	-9.9	-28.1
U.S. Large Cap Stocks	-4.9	-23.9	Emerging-Market Stocks	-11.6	-27.2

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

Annualized Return Difference



Past performance is no guarantee of future results. It is not possible to invest directly in an index. All indexes are unmanaged. See Appendix for important index information. IG: Investment grade. Assets represented by: Commodities—Bloomberg Commodity Index; Emerging-Market Bonds—JP Morgan EMBI Global Index; Emerging-Market Stocks—MSCI EM Index; Gold—Gold Bullion, LBMA PM Fix; High-Yield Bonds—ICE BofA High Yield Bond Index; Investment-Grade Bonds—Bloomberg U.S. Aggregate Bond Index; Non-U.S. Developed-Country Stocks—MSCI EAFE Index; Non-U.S. Small Cap Stocks—MSCI EAFE Small Cap Index; Real Estate Stocks—FTSE NAREIT Equity Index; U.S. Corporate Bonds—Bloomberg U.S. Credit Index; U.S. Large Cap Stocks—S&P 500®; U.S. Mid Cap Stocks—Russell Midcap® Index; U.S. Small Cap Stocks—Russell 2000® Index; Long Government & Credit Bonds—Bloomberg Long Government & Credit Index.

Source: Bloomberg Finance L.P., Haver Analytics, Fidelity Investments Asset Allocation Research Team (AART), as of 9/30/22.



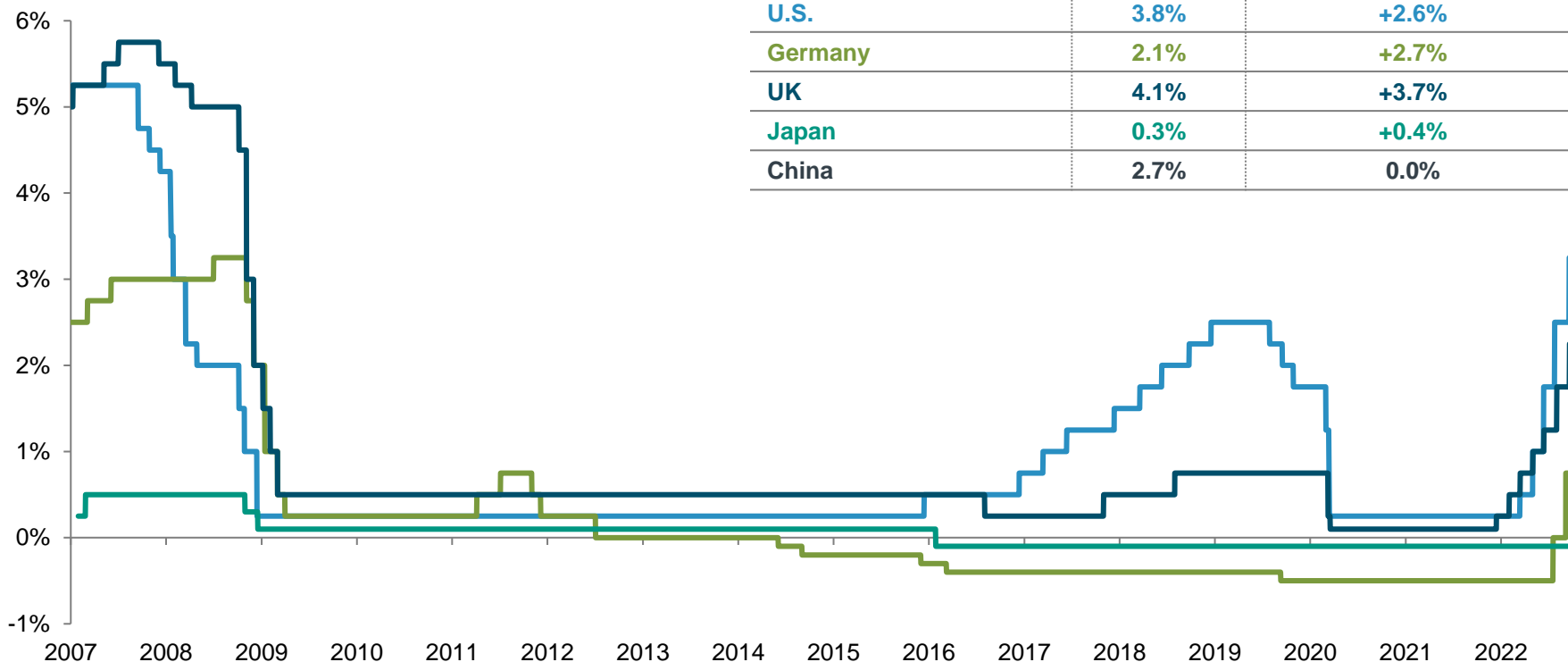
# Global Rate Hikes Marked Abrupt Shift from Zero-Rate Era

Most of the world's central banks shifted to a more aggressive pace of tightening, bringing global short-term interest rates to their highest levels since the global financial crisis in 2008–09. The European Central Bank tightened for the first time in more than a decade, moving its policy rate into positive territory. Japan and China remained outliers to the trend of tighter monetary policy and rising global bond yields.

## Global Short-Term Policy Rates

— U.S. — Eurozone — UK — Japan

Percentage



10-Year Government Bond Yields		
Country	9/30/22	Change from 3/1/20
<b>U.S.</b>	<b>3.8%</b>	<b>+2.6%</b>
<b>Germany</b>	<b>2.1%</b>	<b>+2.7%</b>
<b>UK</b>	<b>4.1%</b>	<b>+3.7%</b>
<b>Japan</b>	<b>0.3%</b>	<b>+0.4%</b>
<b>China</b>	<b>2.7%</b>	<b>0.0%</b>

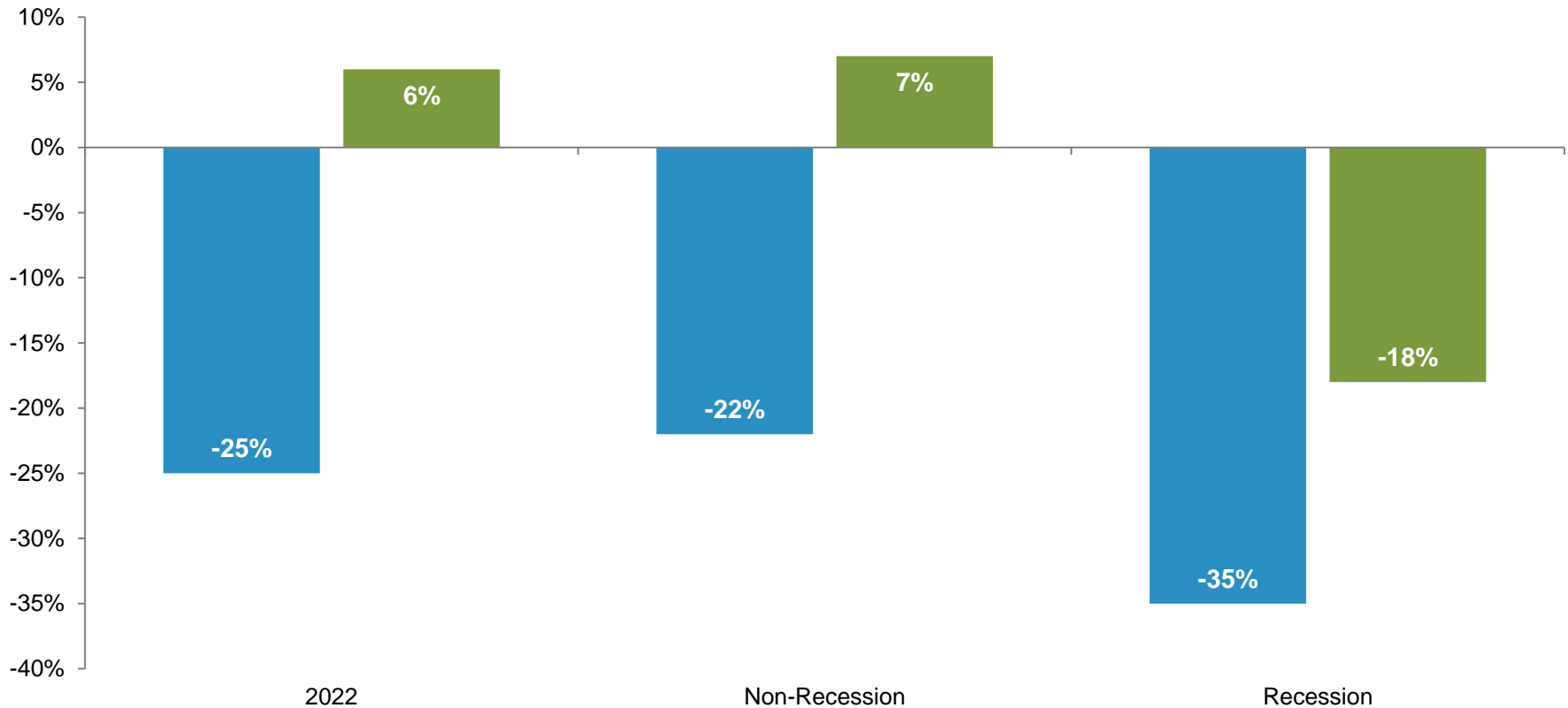
Source: U.S. Federal Reserve Board, ECB, Bank of Japan, Bank Of England, Haver Analytics, Bloomberg Finance L.P., Fidelity Investments (AART), as of 9/30/22.

# How Much Bad News Has the U.S. Bear Market Priced In?

Historically, most bear markets (stock-price declines of 20% or more) coincide with recessionary contractions for the economy and corporate profits. Sometimes bear markets occur without recession, which typically accompanies positive earnings growth and shallower stock-price declines. Through September 2022, stock prices and solid earnings expectations more closely resembled historical non-recession bear markets.

## Median Stock-Price Drawdowns and Earnings Changes During Bear Markets (1872–2022)

■ Stock Price Drawdown ■ Change in Earnings

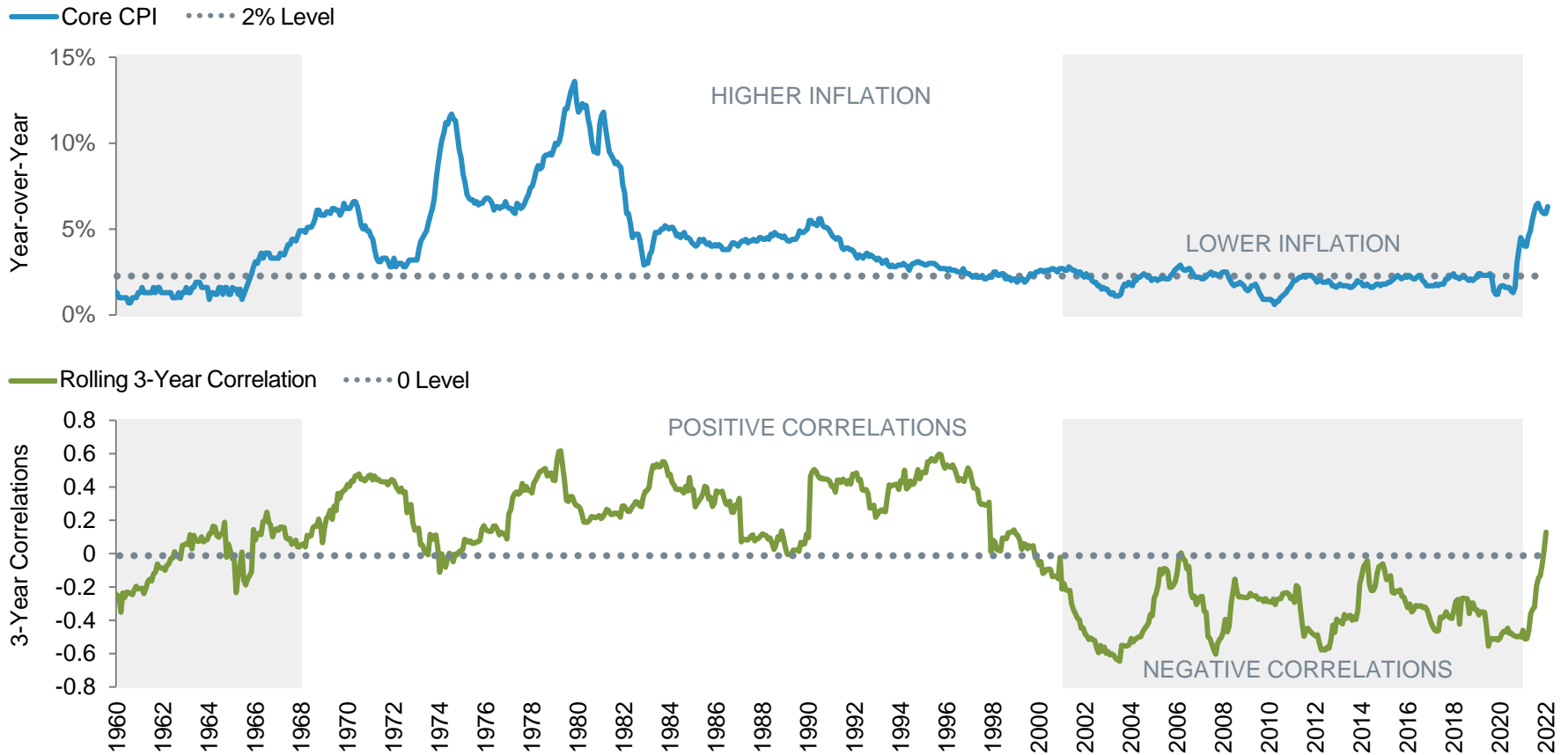


Price changes include intraday trading for the S&P 500 index. 2022 change in earnings is the consensus forecast for 2023. Source: NBER, FactSet, Bloomberg Finance LLC, Haver Analytics, as of 9/30/22.

# High Inflation Drives Positive Stock-Bond Correlations

Over the past 20 years, subdued 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. The 2022 backdrop has been more akin to prior periods of high inflation, which caused rising interest rates, positive stock-bond correlations, and the lack of diversification between stocks and bonds.

## 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. Source: Bureau of Labor Statistics, Haver Analytics, Bloomberg Finance L.P., Fidelity Investments (AART), as of 9/30/22.

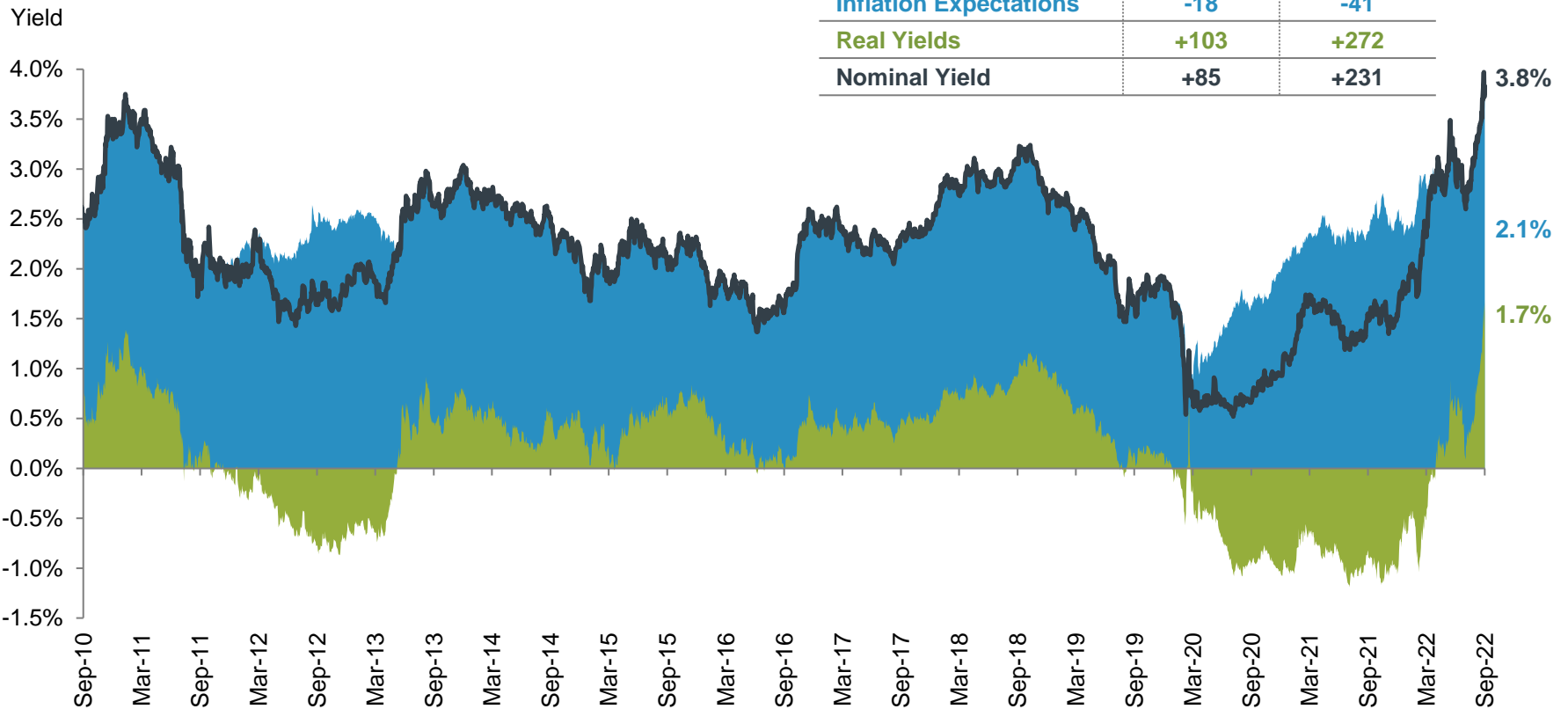


# Real and Nominal Bond Yields Surged to Multiyear Highs

During Q3, nominal 10-year Treasury bond yields reached their highest level in more than a decade. The continued dramatic increase in real yields—the inflation-adjusted cost of borrowing—drove the upswing. Real yields rose to their highest level since 2009, as investors ratcheted up their expectations for the pace and magnitude of monetary tightening, and inflation expectations dropped.

## 10-Year U.S. Government Bond Yields

■ Inflation Expectations ■ Real Yields — Nominal Yield

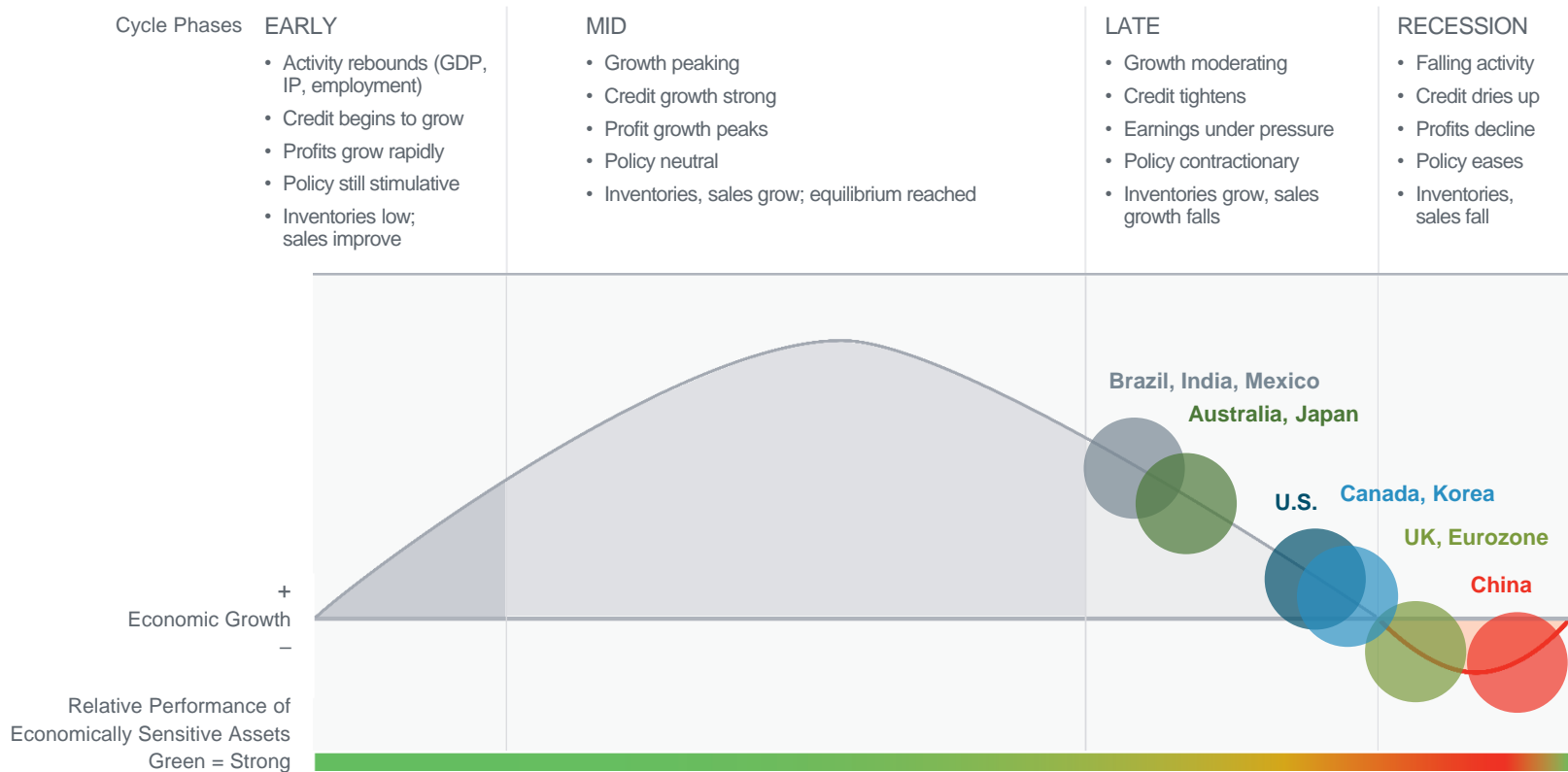


Change in Yields (Basis Points)		
	Q3 2022	YTD
Inflation Expectations	-18	-41
Real Yields	+103	+272
Nominal Yield	+85	+231

# Strengthening Headwinds for Global Business Cycle

Most major economies experienced maturing trends in their business cycles due to high commodity prices and inflationary pressures, slowing industrial activity, and tightening monetary and financial conditions. The U.S. is in the late-cycle expansion phase with rising but moderate recession risk. Europe has likely tipped into recession, and China's increased policy stimulus has yet to pull it out of its growth recession.

## 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 9/30/22.



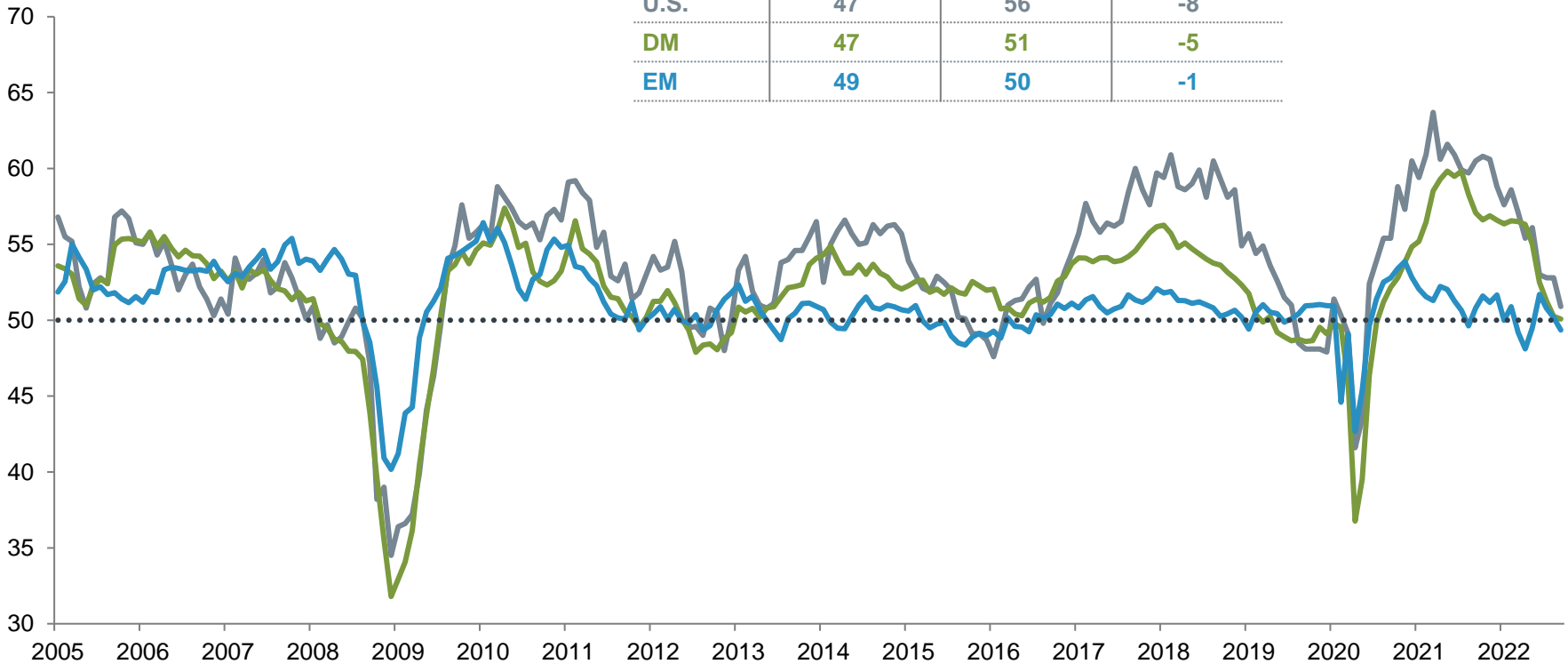
# Global Industrial Cycle Loses Steam

Global manufacturing activity decelerated further during Q3, ending the quarter in roughly neutral territory. With new orders slumping and inventories rising, this negative “bullwhip” effect is a leading signal of more slowing ahead. The re-opening manufacturing boom has now faded, leaving the global economy more dependent on services industries to pick up the slack.

## Global Manufacturing Surveys

— U.S. — DM — EM

PMI (>50 = Expansion)



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 9/30/22.

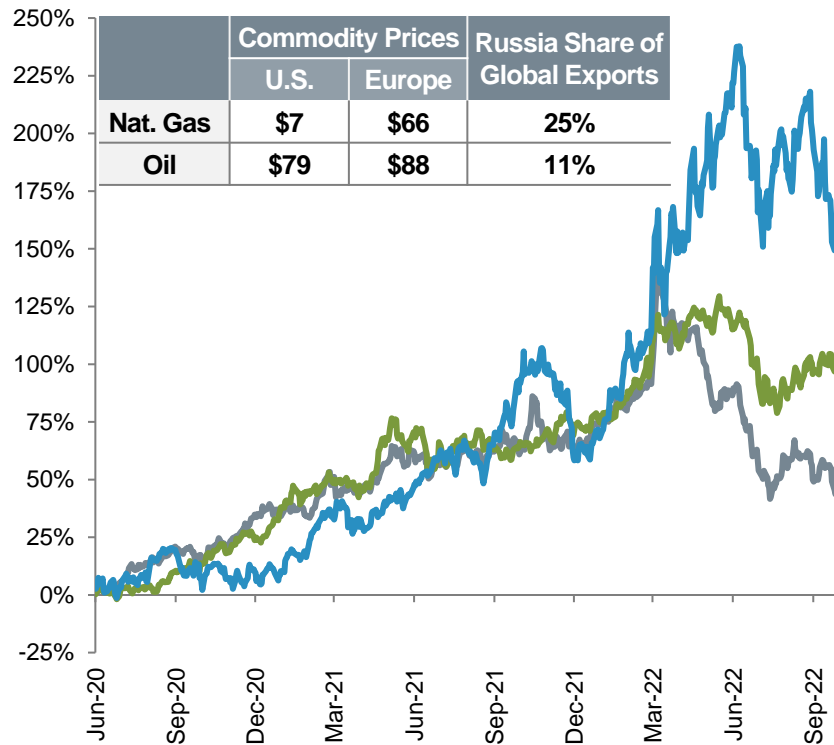
# Commodity Prices: Supply Shocks, Cooling Demand

Commodity prices fell from multiyear highs amid fading global growth momentum. Consumers and businesses continued to face high prices for food and energy, where supplies were particularly disrupted by the Russia–Ukraine war. Europe remains especially vulnerable to energy shortages due to its large exposure to Russian natural gas, while consumers in developing economies suffer the most from food scarcity.

## Commodity Index Returns

— Industrial Metals    — Agriculture    — Energy

Cumulative Total Return

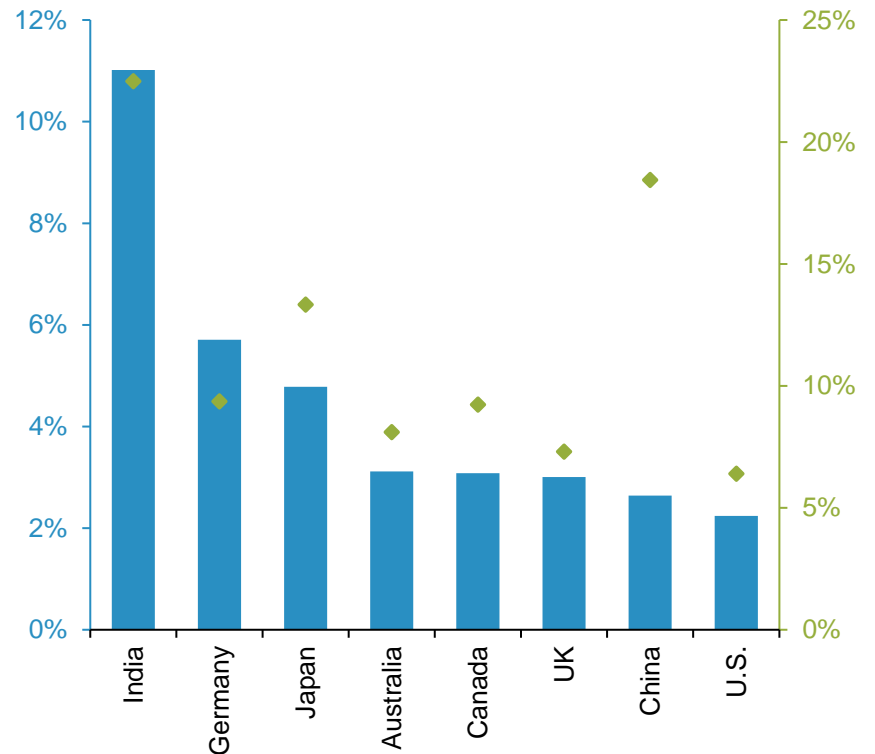


## Energy and Food Spending by Household

■ Energy    ◆ Food

Share of Disposable Income

Share of Disposable Income



**TABLE:** Natural gas prices measured as \$/mmbtu. Oil prices measured as \$/bbl. Past performance is no guarantee of future results. **RIGHT:** 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. **RIGHT:** Food: at home; Energy: utilities, gasoline, gas, oil, water. Share of disposable income calculated from 2019 values. Source: World Bank, JP Morgan, Bloomberg Finance L.P., National statistical agencies, Fidelity Investments (AART), as of 9/30/22.



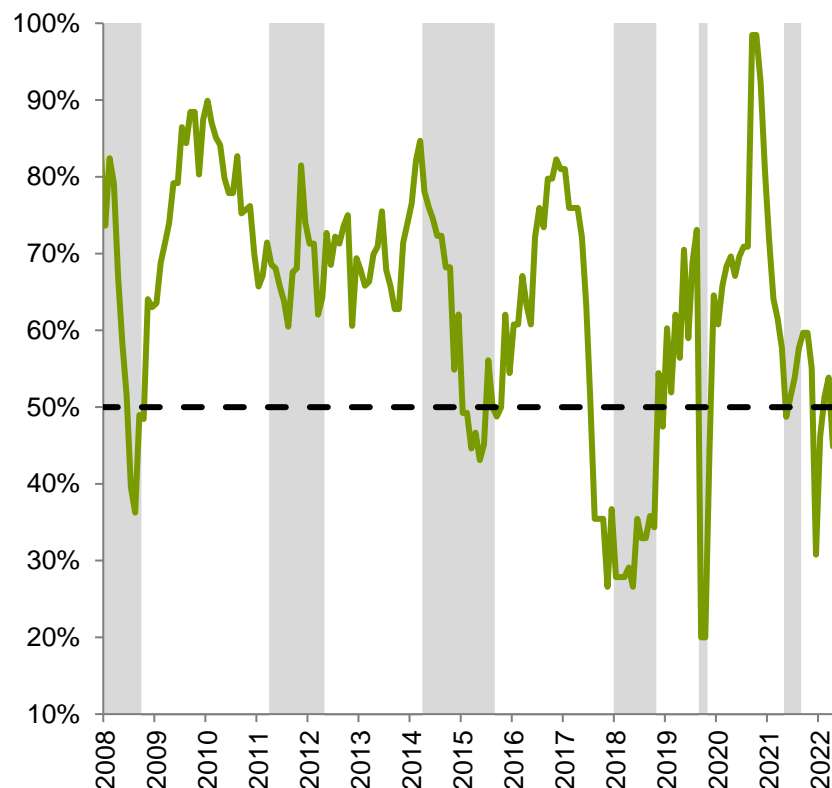
# China: More Policy Easing, But Recovery Elusive So Far

China's industrial activity remained stagnant despite some easing of COVID lockdowns and stepped-up policy stimulus during Q3. China introduced fiscal and monetary policy easing measures, including targeted support for manufacturing, property, and consumer spending. However, property-sector weakness, the uncertainty around zero-COVID policy, and regulatory risk are combining to blunt the impact of policy easing.

## China: Industrial Production

— AART Industrial Production Diffusion Index

Percentage of Industries in Expansion



## China: Other Trends

Positive	Negative
Monetary policy easing	COVID risk (continuation of “zero-Covid”)
Fiscal policy support and infrastructure investments	Regulatory risk (focus on “common prosperity”)
Property sector easing (fewer home-buying restrictions)	Structural imbalances (excess leverage, real-estate construction)
Policy easing in manufacturing and consumption sectors (tax cuts, EV subsidies)	Geopolitical risk
Targeted relaxation of COVID policy (such as HK)	

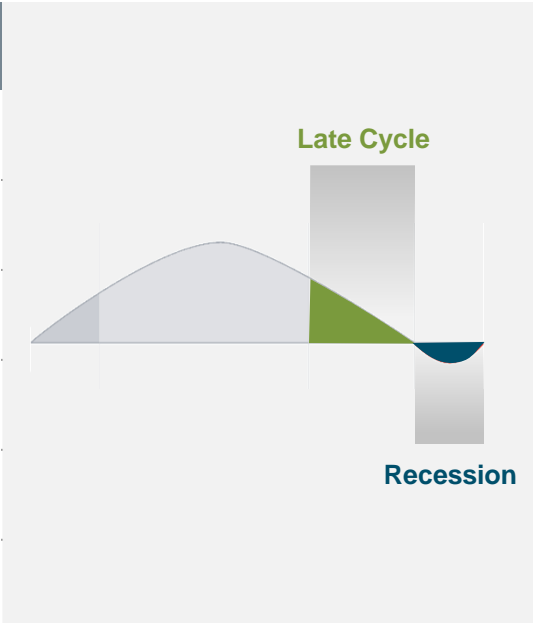
Gray bars represent growth recessions as defined by AART. LEFT: Source: National Bureau of Statistics, People's Bank of China, Fidelity Investments (AART), as of 8/31/22.

# Historical Patterns: Late Cycle vs. Recession

Historically, the late-cycle expansion phase is characterized by a moderation in the pace of growth, whereas the recession that follows is an outright decline in activity. Late cycle often experiences tight labor markets, declining profit margins, rising inventories, contractionary monetary policy, and an inverted yield curve. Recession typically involves accelerating job losses, declining profits, and a shift toward monetary easing.

## Typical Business Cycle Conditions by Phase

Indicator	Late Cycle	Recession
Overall growth	Pace moderates	Activity falls
Employment	Labor markets tight and peaking; job losses begin to rise	Job losses accelerate
Credit conditions	Tighten; yield curve flattens and inverts	Access to credit dries up
Monetary policy	Fed tightening becomes contractionary	Fed eases
Corporate profits	Growth under pressure; profit margins decline	Decline
Inventories	Rise relative to sales	Fall while sales also fall



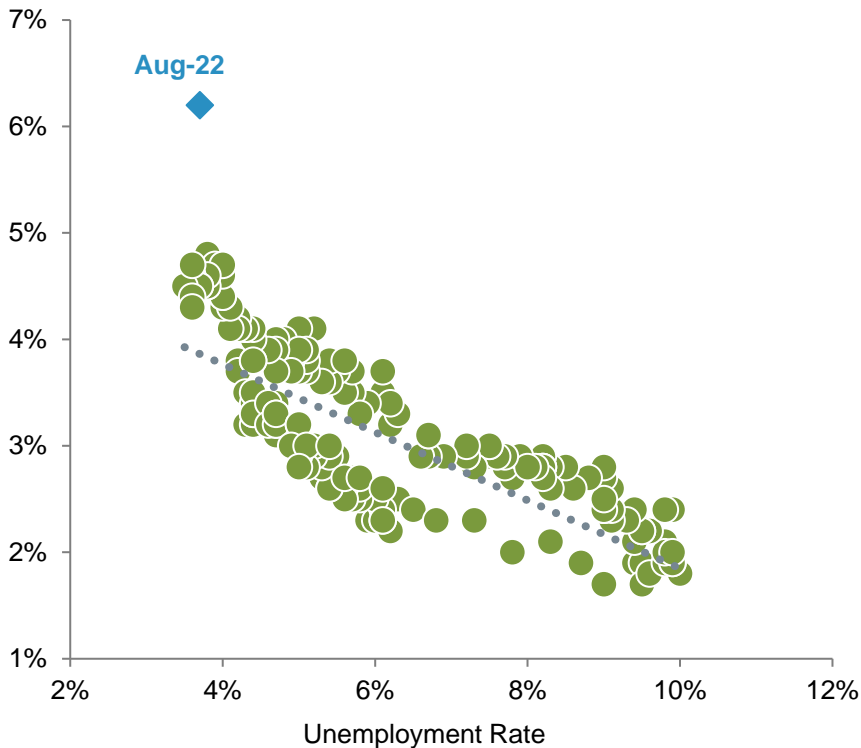
# Employment Conditions Still Support U.S. Consumer

Labor markets remain extremely tight, with job openings near record levels and the 3.7% unemployment rate near multi-decade lows. Tight employment conditions continue to put pressure on firms to raise wages, and nominal wage growth remains near multi-decade highs. Consumers face a mixed outlook, however, as high inflation rates eat into savings and discretionary spending and outpace income gains.

## U.S. Unemployment and Job Openings

● 2001–2019 ◆ Aug-22

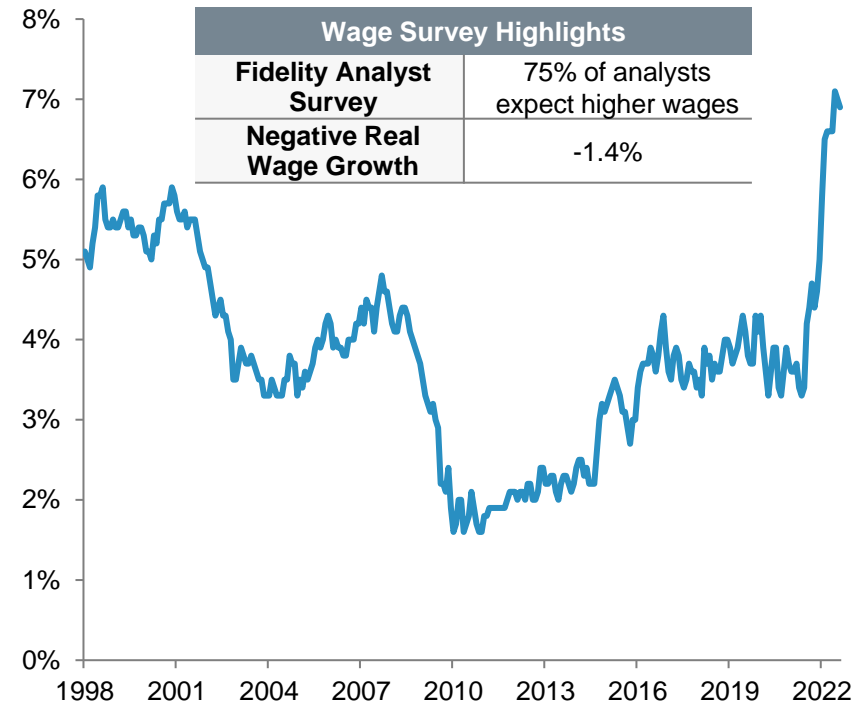
Job Openings Rate



## U.S. Wage Growth

— Atlanta Fed Wage Tracker

Year-over-Year



**LEFT:** Jobs Openings Rate: Job Openings/(Total Employment + Job Opening Levels). Source Bureau of Labor Statistics, Haver Analytics, Fidelity Investments (AART) as of 9/30/22. **RIGHT:** Year-over-Year 3-month moving average weighted overall wage tracker. **TABLE:** Fidelity Analyst Survey: Quarterly survey of equity and fixed income analysts who cover companies in different sectors and regions. Real Wage: Wage tracker growth minus CPI-U year-over-year change. Source: Federal Reserve Bank of Atlanta, Haver Analytics, Fidelity Investments (AART), as of 9/30/22.



# Long-Term Trends Reinforce Labor Market Tightness

Economic slowing may loosen employment markets in the near term, but several long-term factors may keep labor conditions tighter than usual. Aging demographic trends restrain the supply of workers, due to slower working-age population growth and lower labor-force participation rates. Reshoring of supply chains and fiscal spending on infrastructure may increase the demand for manufacturing and other related workers.

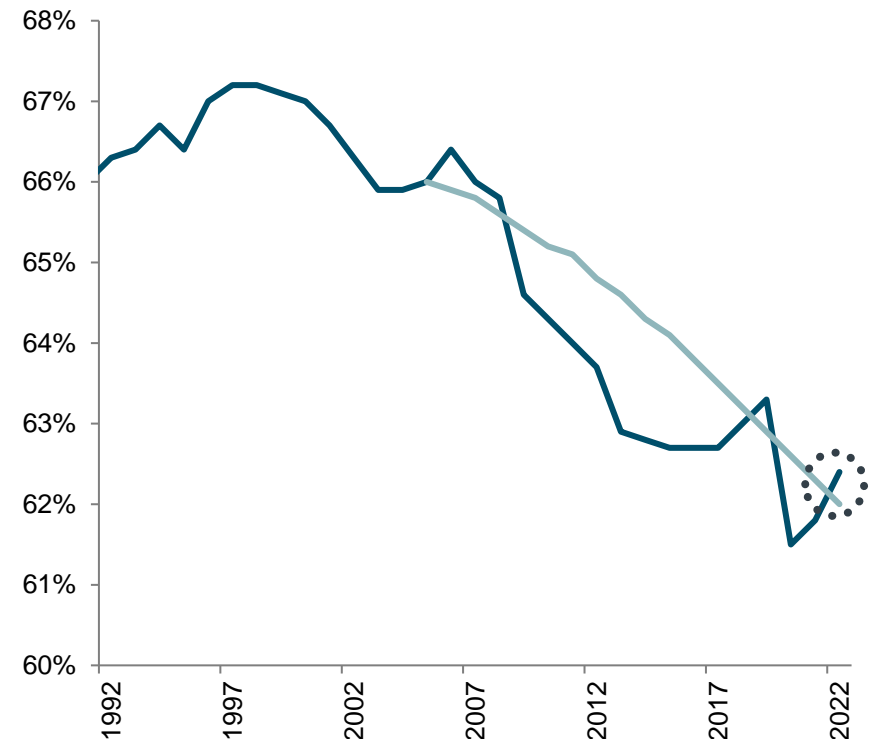
## Secular Influences on U.S. Labor Markets

Secular Factors	Long-Term Trends
<b>RESTRAINED SUPPLY</b>	
<b>Demographics</b>	<ul style="list-style-type: none"> <li>• Aging population: Lower participation rate</li> <li>• Slower working-age population growth</li> </ul>
<b>Immigration</b>	<ul style="list-style-type: none"> <li>• Slower pace of inbound migrant workers</li> </ul>
<b>Income Gains for Lower Tiers</b>	<ul style="list-style-type: none"> <li>• Higher wages lead to reduced hours, fewer multiple job workers</li> </ul>
<b>Health Headwinds</b>	<ul style="list-style-type: none"> <li>• Long COVID</li> <li>• Rising disabilities, deaths of despair<sup>1</sup></li> </ul>
<b>INCREASED DEMAND</b>	
<b>Onshoring/Reshoring</b>	<ul style="list-style-type: none"> <li>• Increased demand for domestic manufacturing workers</li> </ul>
<b>Fiscal Policy</b>	<ul style="list-style-type: none"> <li>• Multiyear spending on infrastructure, manufacturing, clean energy, etc.</li> </ul>
<b>Employer Hoarding</b>	<ul style="list-style-type: none"> <li>• Higher threshold for layoffs?</li> </ul>

## Labor Force Participation Rate

— Actual — Demographic Projection

Labor Force / Working-Age Population



LEFT: 1) Deaths of despair refers to deaths related to substance abuse or suicides. Source: Fidelity Investments (AART), as of 6/30/22.

RIGHT: Source: Demographic projection: Fidelity calculation. Labor Force: Census Bureau, Bureau of Labor Statistics, Haver Analytics, Fidelity Investments (AART), as of 8/31/22.

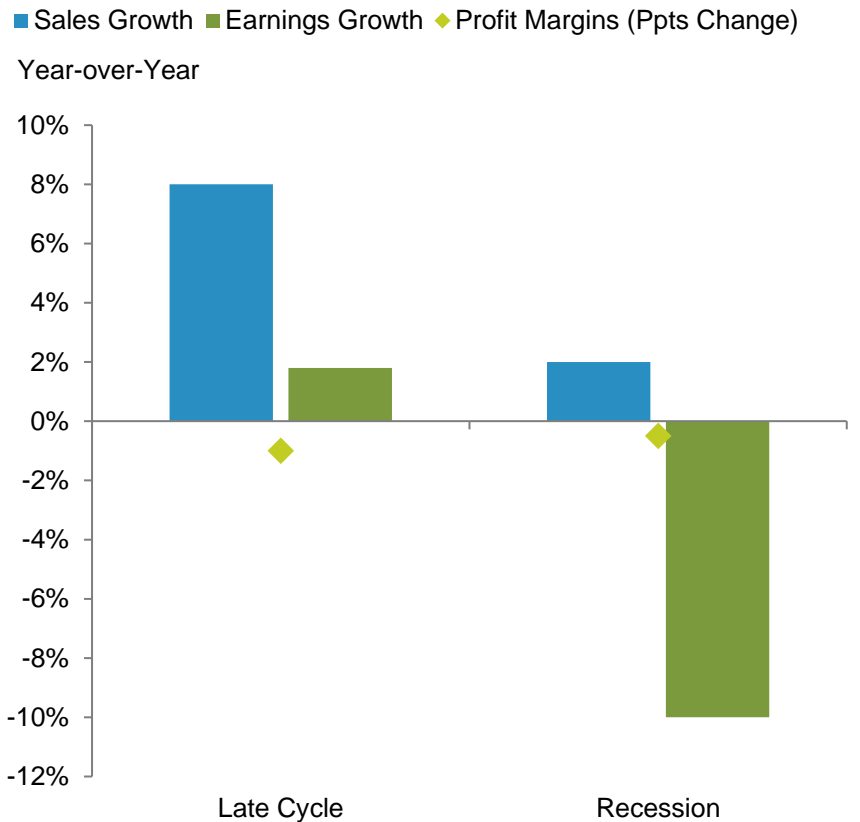
# Profit Growth Remains Positive; Margins under Pressure

During a typical late cycle, top-line sales growth tends to hold up, but rising input costs reduce profit margins and pressure earnings growth. Despite rising costs, profits have stayed positive, with market expectations for full-year 2022 earnings growth remaining around 10%. Estimates for 2023 profit growth have been revised lower this year, but they remain higher than both historical late-cycle and recession averages.

## S&P 500 Earnings Growth Expectations



## Business Cycle Averages (1950–2020)



LEFT: street estimates. Source: Bloomberg Financial LP, Fidelity Investments (AART), as of 9/30/22. RIGHT: ppts: percentage points. Source: Bureau of Economic Analysis, Fidelity Investments (AART), as of 9/30/22.

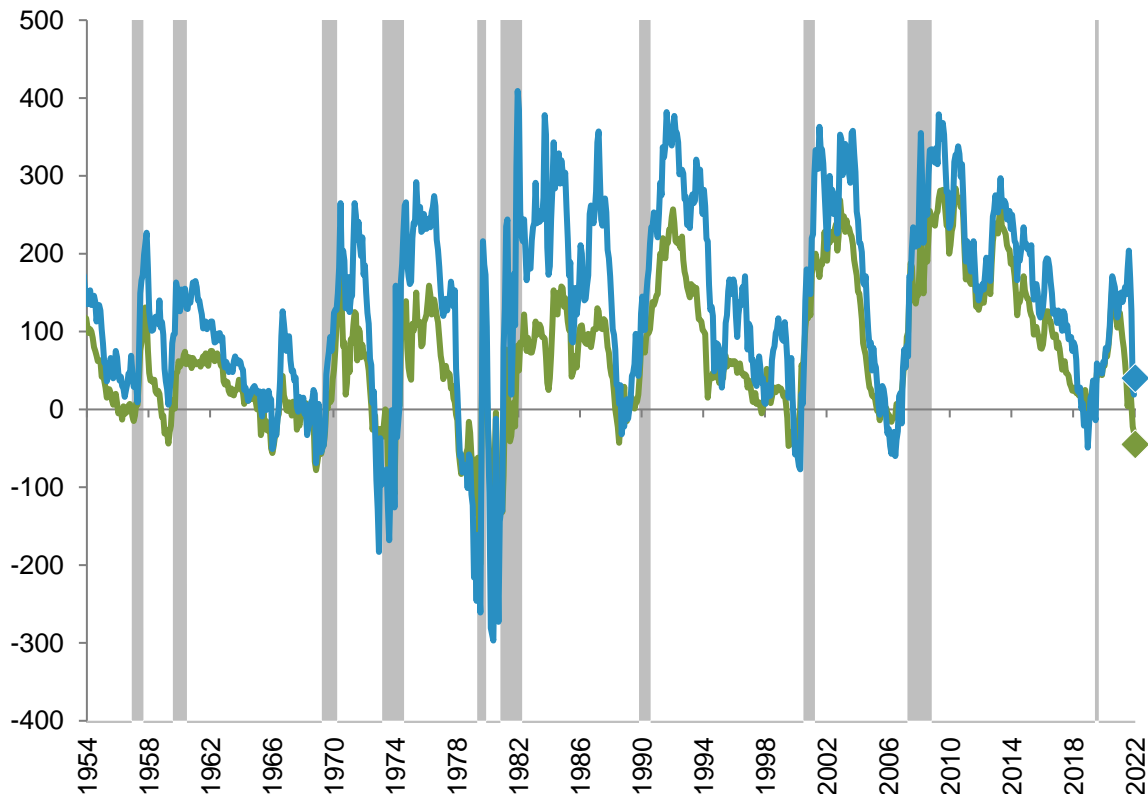
# Yield Curve and Credit: Maturing but Not Recessionary

Typical late-cycle patterns include an inverted yield curve. Some yield curves such as the 10-year less 2-year Treasury yield, have inverted, but our preferred yield curve—the 10-year less 3-month Treasury yield—remained positively sloped as of the end of Q3. The yield curve could invert during 2022 as the Fed continues to hike short-term rates. An inverted curve historically leads recessions by an average of one year.

## Treasury Yield-Curve Spreads

— 10-Year minus 2-Year — 10-Year minus 3-Month

Basis Points



## Yield-Curve Inversions since 1950 (10-year minus 3-month)\*

- Occurred before the last 8 recessions
- Occurred twice without a recession (1966, 1998)
- Peak inversion ranged from 35 to 373 basis points
- Recessions started 4 to 21 months after, averaging ~1 year

**+53 bps as of 9/30/22**



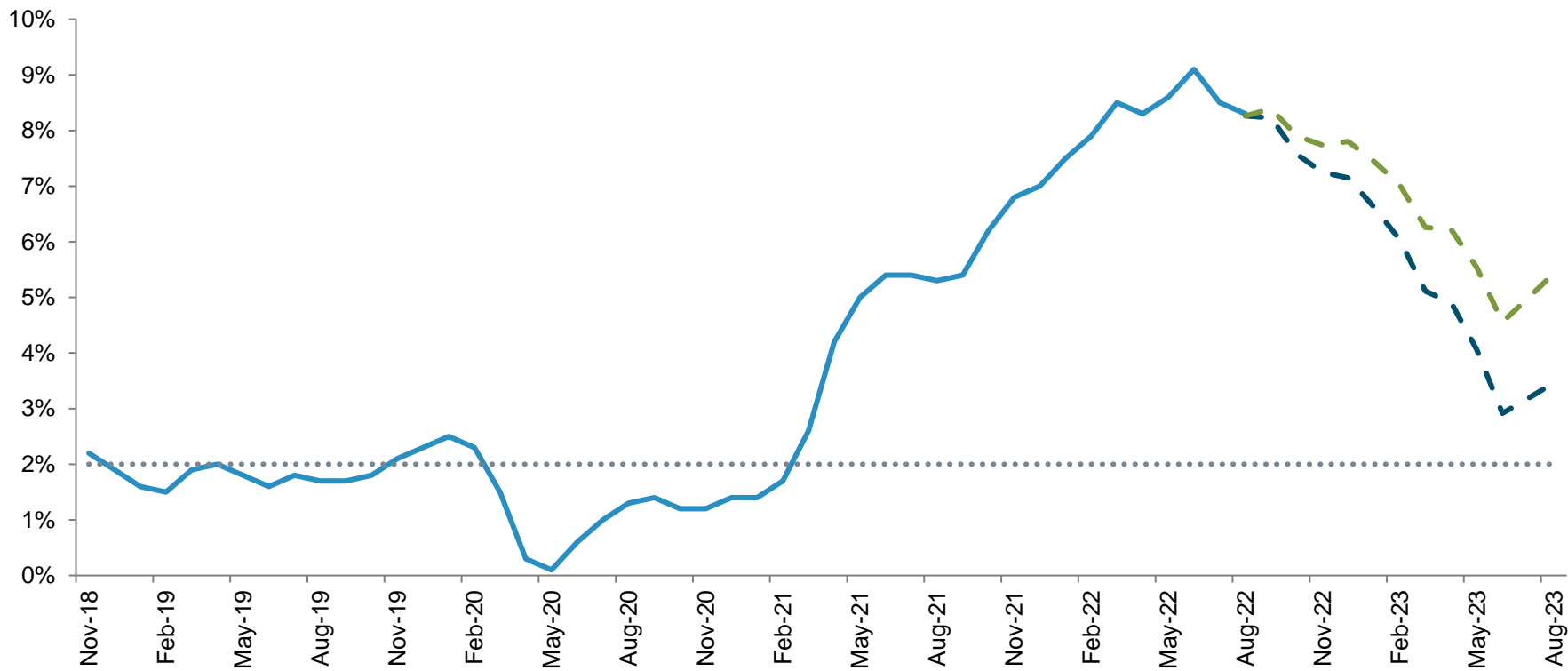
# Inflation to Moderate, but Commodity Prices a Wild Card

We expect consumer inflation rates to moderate over the next 12 months after hitting a mid-year, multi-decade peak. However, inflation rates may have a hard time returning to the low-inflation environment of the past two decades. Some commodity demand destruction is likely with the slowing global economy, but continued volatility and uncertainty in the commodity markets broadens the range of our estimates.

## Inflation Estimates under Different Commodity Price Scenarios

— Headline CPI — AART Scenario 1: Commodities -15% — AART Scenario 2: Commodities +15%

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 8/31/22.

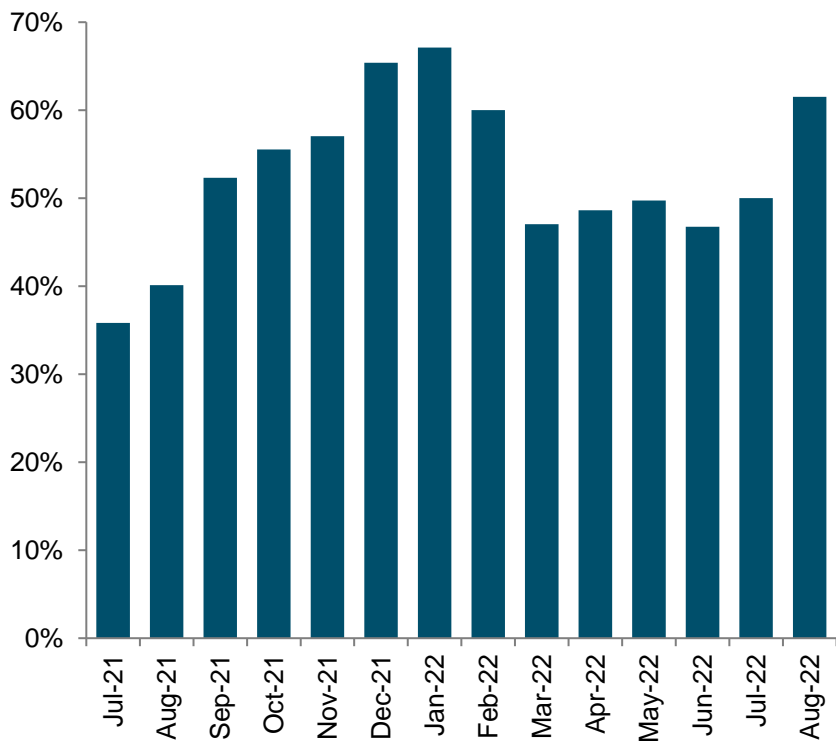


# Inflation Drivers Peaking but Stubbornly Persistent

Some sources of inflation, such as manufacturing supply-chain disruptions, have abated. However, categories where price increases tend to more persistent, such as food and housing, account for a larger proportion of current inflation drivers. The Fed has more influence over the demand-side inflation drivers that have yet to significantly decelerate, which may create greater pressure to maintain tighter monetary policy for longer.

## Persistent Inflation Contribution

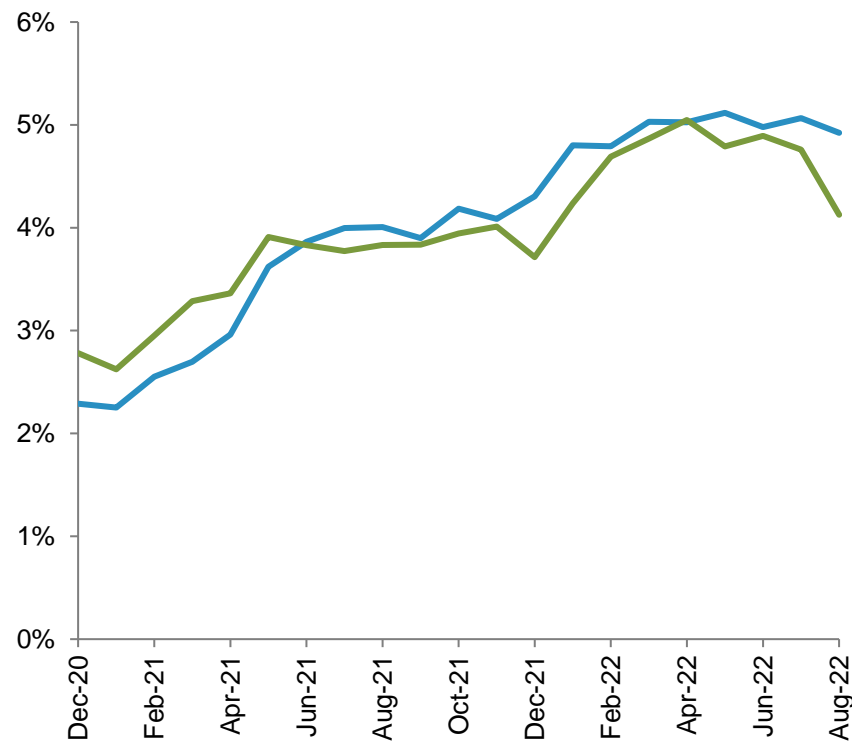
Contribution to Inflation



## Inflation Pressures by Degree of Fed Sway

Fed Control/Influence No Fed Control/Influence

Contribution to Expected Inflation



CPI: Consumer Price Index. **LEFT:** Contribution to expected CPI indicates the expected contribution to Year-over Year CPI over the next 6 months. Based on the categorization of key inflation drivers in our proprietary inflation models, evaluated by whether monetary policy has direct control of inflation drivers, some influence over them, or neither. Fidelity Investments (AART), as of 9/30/21. **RIGHT** More 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 9/30/22.



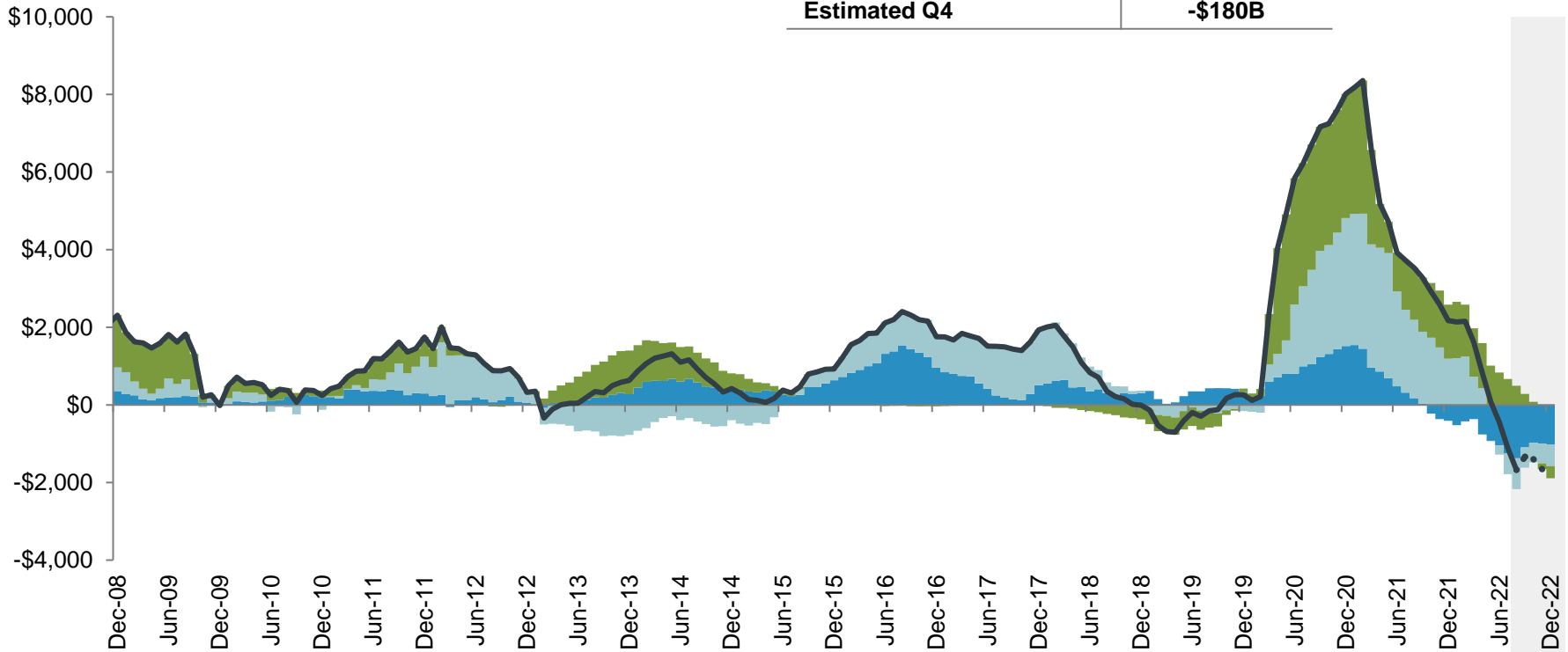
# Central Bank Tightening Implies a Liquidity Headwind

After pumping trillions of dollars of liquidity into financial markets the past two years, global central banks have pivoted toward monetary tightening. At least 24 central banks have raised interest rates to combat inflation, the ECB is tapering its quantitative easing program, and the Fed accelerated the reduction of its balance sheet in September. Weakening liquidity growth may contribute to elevated market volatility.

## Central Bank Balance Sheets

U.S. Eurozone Japan Total

Billions (12-Month Change)



### Change in Federal Reserve Treasury Holdings

YTD through Sep 2022	-\$44B
Estimated Q4	-\$180B

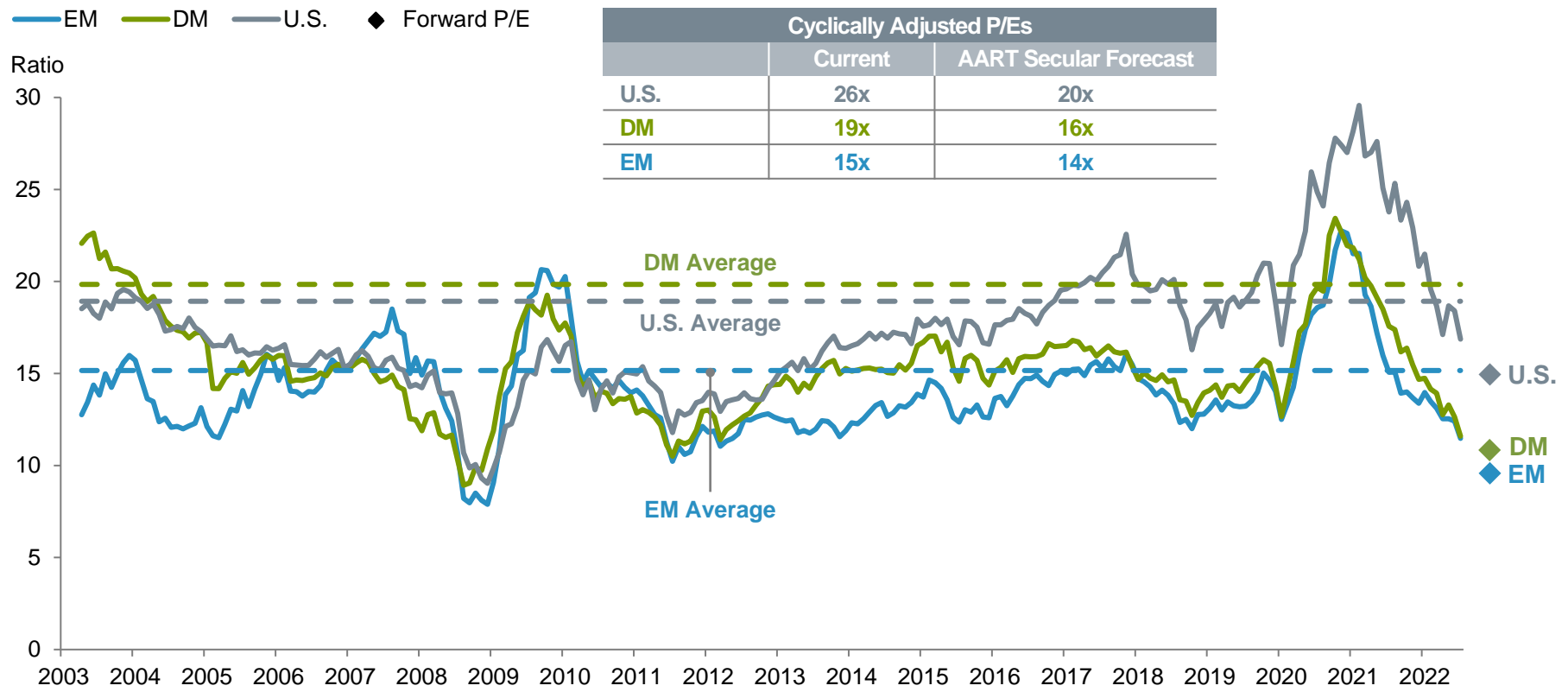
**CHART:** Gray bar to the right represents projected balances. QE: Quantitative easing. Dashed line and shaded area represent estimates based on the U.S. Federal Reserve's Quantitative Tightening guidance during 2022, the European Central Bank maintaining asset holdings in 2022 and redeeming Targeted Long-Term Refinancing Operations throughout 2022 based on the 25<sup>th</sup> percentile of the June 2022 ECB Survey of Monetary Analysts, and the Bank of Japan purchasing assets at an average of prior 6 months. Source: Federal Reserve, Bank of Japan, European Central Bank, Haver Analytics, Fidelity Investments (AART), as of 8/31/22. **TABLE:** Source: U.S. Federal Reserve Board, Fidelity Investments (AART), as of 9/30/22.



# Valuations Compressed; Non-U.S. Equities More Attractive

The continued broad equity sell-off caused valuations for all categories of global stocks to fall further in Q3. The price-to-earnings (PE) ratios for all major categories of global equities—U.S., non-U.S. developed markets, and emerging markets—are below their long-term averages. Using cyclically adjusted earnings, however, PE ratios appear expensive relative to our long-term forecasts, with non-U.S. equities offering better valuations.

## Global Stock Market P/E Ratios



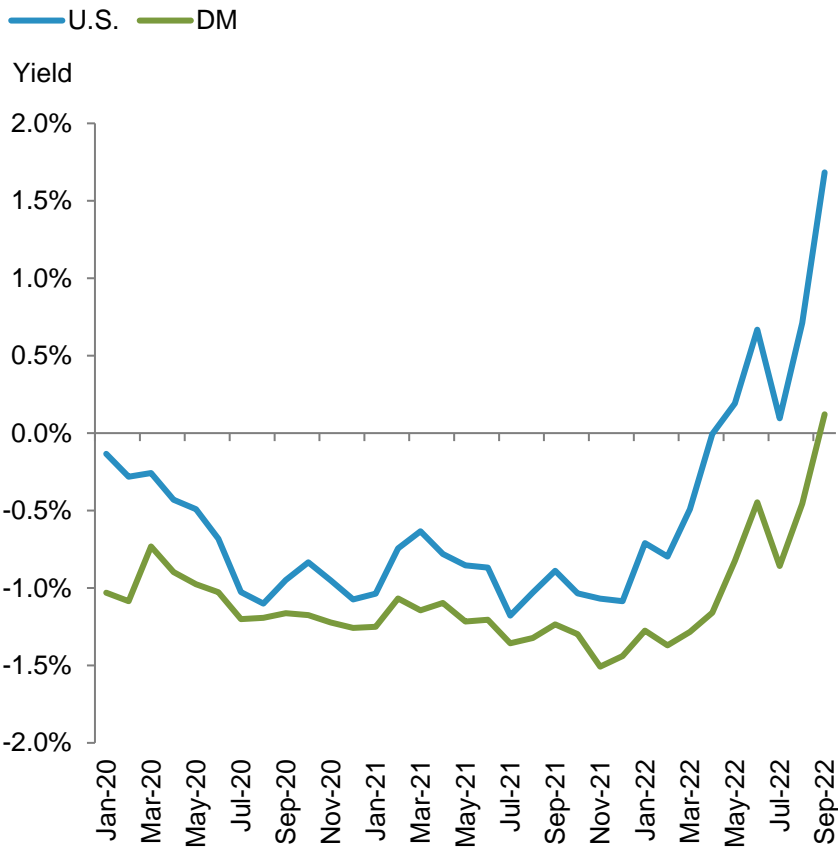
DM: Non-U.S. developed markets. EM: Emerging markets. Chart includes Trailing 12-month P/Es. Table includes Shiller CAPEs defined as Price/(Average of last 10 Years of Earnings per Share). Past performance is no guarantee of future results. It is not possible to invest directly in an index. All indexes 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 9/30/22. Indexes: DM—MSCI EAFE Index; EM—MSCI Emerging Markets Index; U.S.—S&P 500. Source: Factset, Bloomberg Finance L.P., Fidelity Investments (AART), as of 9/30/22.



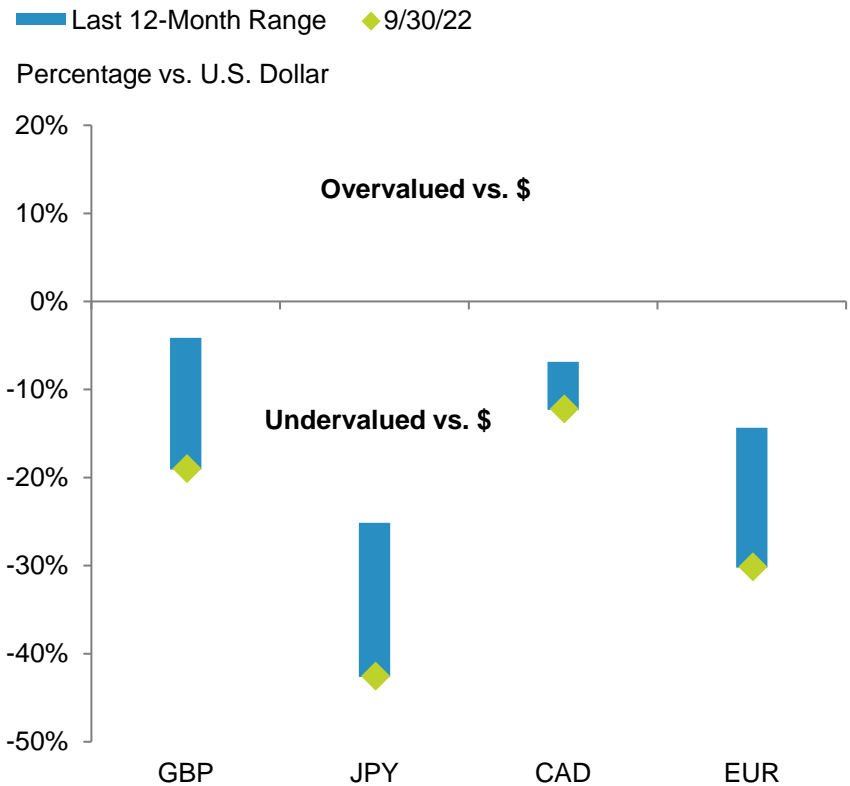
# Multiyear Dollar High; Other Currency Valuations Attractive

The U.S. dollar strengthened to a multi-decade high against most major currencies. Among the factors supporting near-term dollar strength include rising U.S. real bond yields that offer attractively positive yield differentials relative to other developed-economy markets. Longer-term fundamentals are more favorable for non-U.S. currencies, particularly the Japanese yen, which finished Q3 at undervalued levels.

## 10-Year Real Yields: U.S. vs. DM Economies



## FX Valuation: Purchasing Power Parity (PPP)



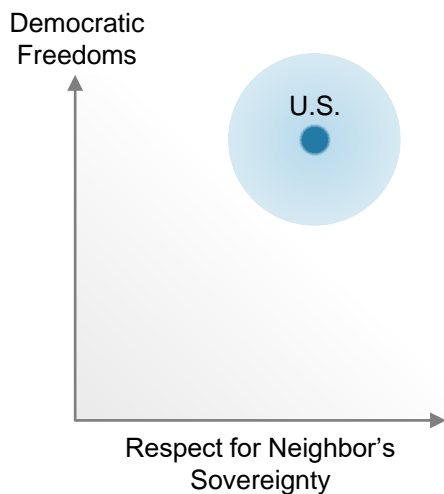
**LEFT:** DM: Developed Markets. Real yields are calculated by subtracting the 10-year breakeven from the 10-year nominal yield. The DM real yield is a simple average of the real yields of the following areas: Canada, Eurozone, Japan and United Kingdom.. Sources: Bloomberg, Fidelity Investments as of 9/30/22. **RIGHT**—Sources: Bloomberg, Haver Analytics and Fidelity Investments, as of 9/30/22.

# 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.

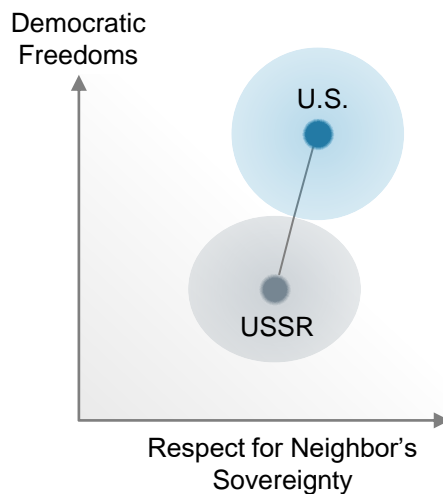
## UNIPOLAR

**Very Stable**  
1990s–Early 21st C.



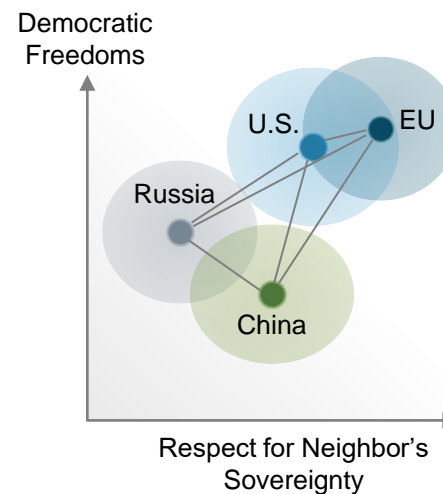
## BIPOLAR

**Pretty Stable**  
1960s–1980s



## MULTI-POLAR

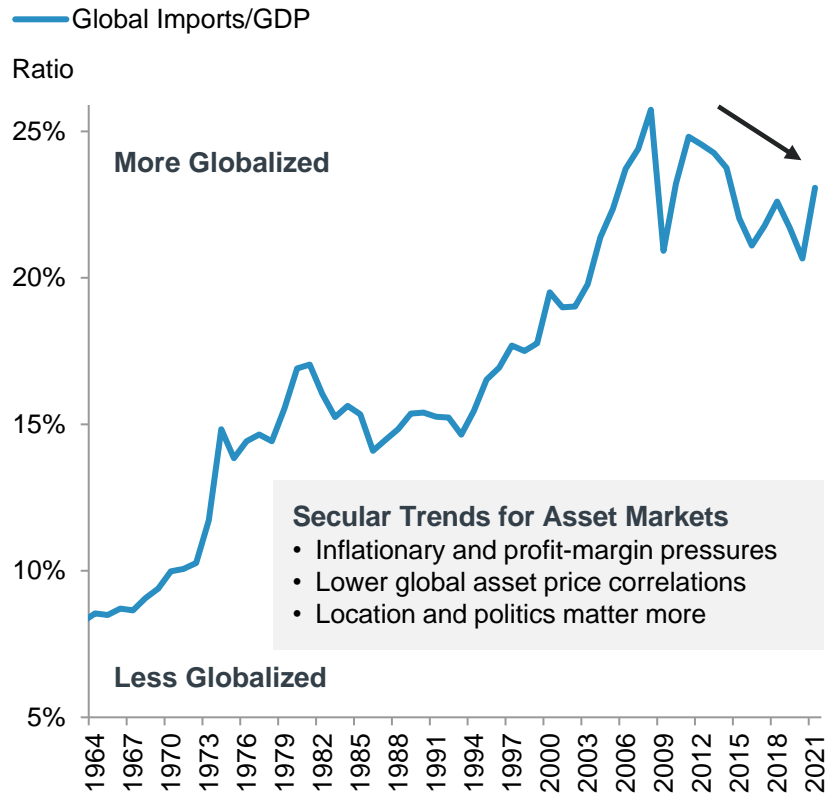
**Unstable**  
Today



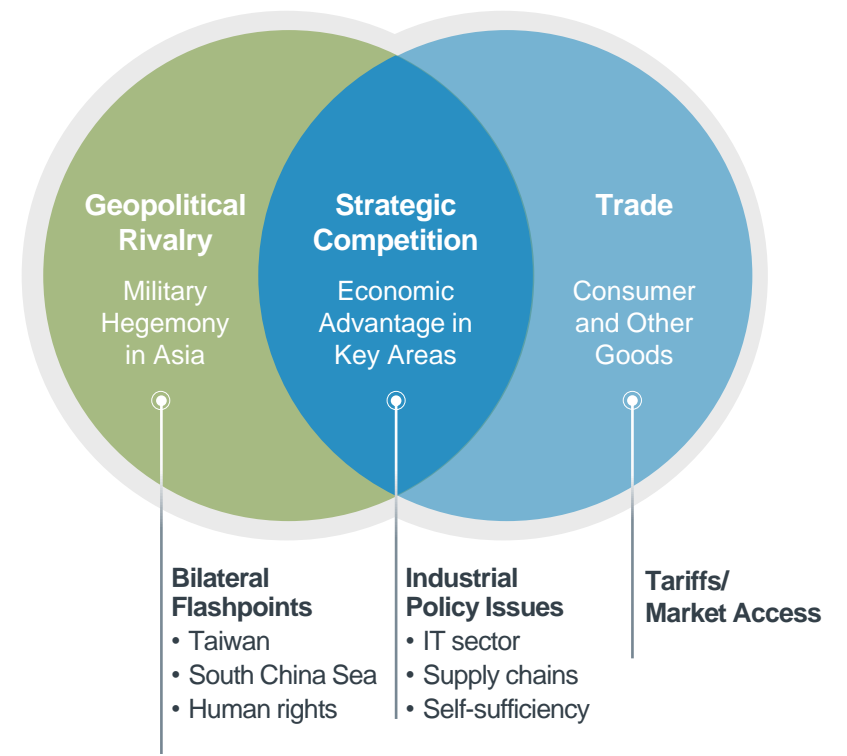
# Geopolitical Risk at the Center of Deglobalization Trend

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

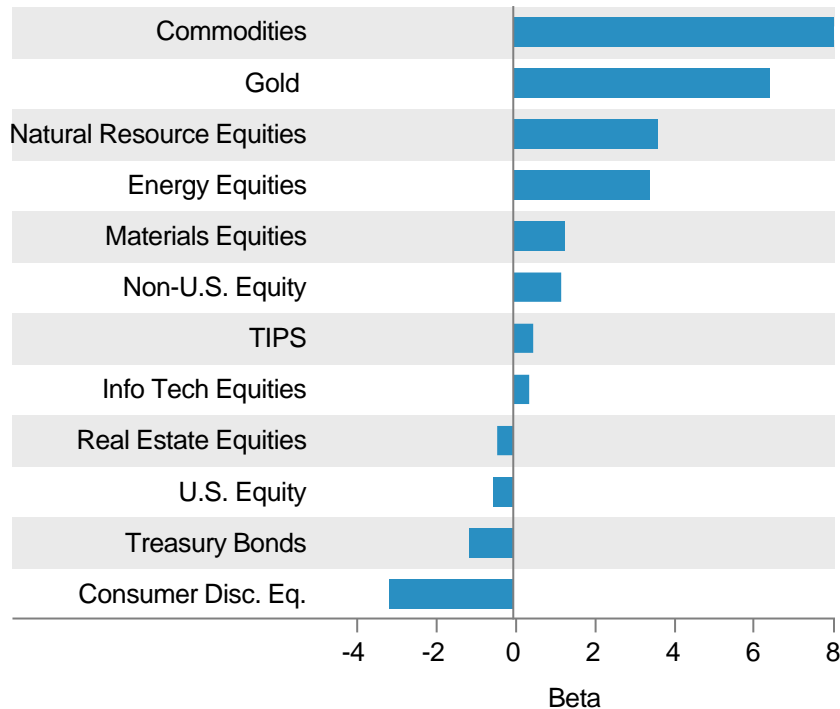


Diversification does not ensure a profit or guarantee against a loss. Source: International Monetary Fund (IMF), World Bank, Haver Analytics, Fidelity Investments (AART), as of 9/30/22.

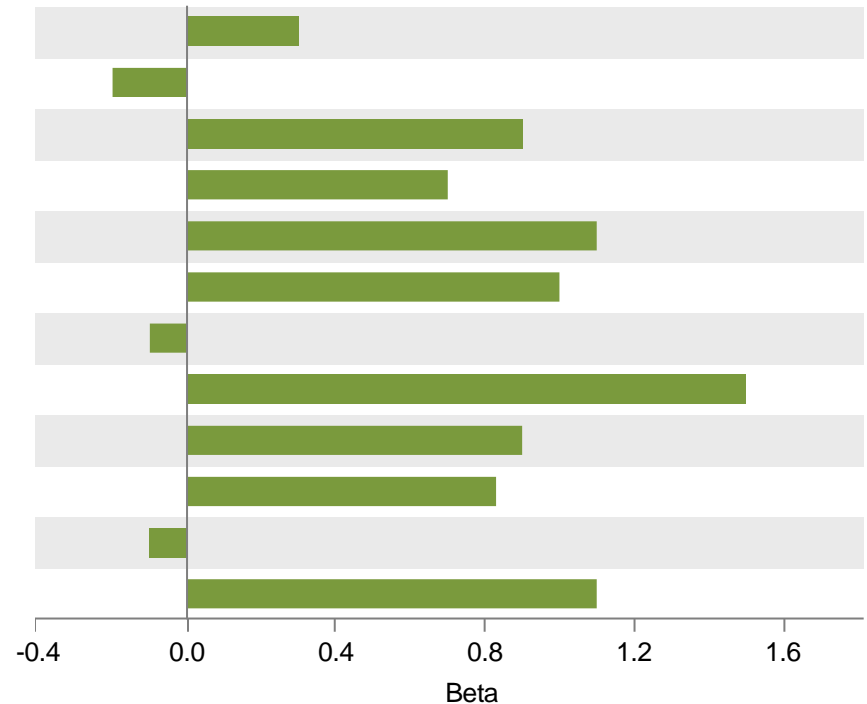
# Inflation-Sensitive Assets Can Help Provide Diversification

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 Treasury bonds.

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



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



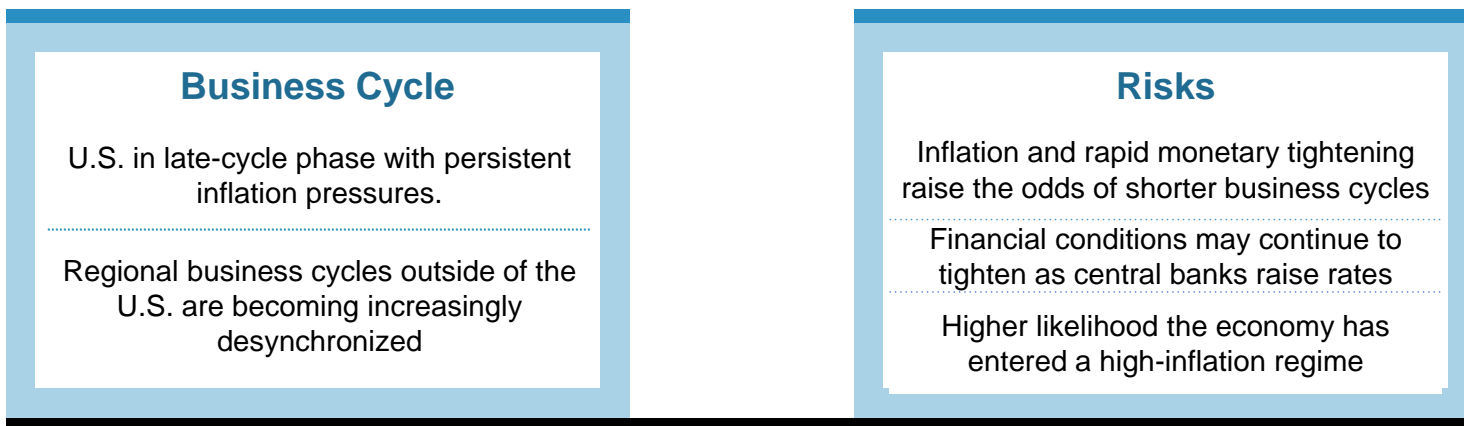
Past performance is no guarantee of future results. Diversification does not ensure a profit or guarantee against loss. Inflation sensitivity measured relative to CPI, an index that tracks the percentage change in the price of a specified "basket" of consumer goods and services. Growth sensitivity measured 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®). See appendix for index definitions and other important information.

Source: Bureau of Labor Statistics, Fidelity Investments; data 1/1/72 through 2/28/22



# Outlook: Market Assessment

Fidelity's Business Cycle Board, composed of portfolio managers across a variety of global asset allocation strategies, believes the U.S. economy is in the late-cycle expansion phase. Board members mentioned growing risks to the expansion, including tighter financial conditions and persistently high inflation. Most members have reduced active risk and believe security selection may present opportunities.



## Asset Allocation Implications

The late-cycle phase warrants smaller active allocation positions

Fixed income valuations provide an improved risk-reward tradeoff

Emphasize a focus on diversified and disciplined investment strategies

# Appendix: Important Information

Information presented herein is for discussion and illustrative purposes only and is not a recommendation or an offer or solicitation to buy or sell any securities. Views expressed are as 9/30/22, 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.

*Information provided in this document is for informational and educational purposes only. To the extent any investment information in this material is deemed to be a recommendation, it is not meant to be impartial investment advice or advice in a fiduciary capacity and is not intended to be used as a primary basis for you or your client's investment decisions. Fidelity and its representatives may have a conflict of interest in the products or services mentioned in this material because they have a financial interest in them, and receive compensation, directly or indirectly, in connection with the management, distribution, and/or servicing of these products or services, including Fidelity funds, certain third-party funds and products, and certain investment services.*

Investment decisions should be based on an individual's own goals, time horizon, and tolerance for risk. Nothing in this content should be considered legal or tax advice, and you are encouraged to consult your own lawyer, accountant, or other advisor before making any financial decision. These materials are provided for informational purposes only and should not be used or construed as a recommendation of any security, sector, or investment strategy.

Fidelity does not provide legal or tax advice and the information provided herein is general in nature and should not be considered legal or tax advice. Consult with an attorney or a tax professional regarding your specific legal or tax situation.

**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 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 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 Bond 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 U.S. Treasury. **Bloomberg Long U.S. Government Credit Index** includes all publicly issued U.S. government and corporate securities that have a remaining maturity of 10 or more years, are rated investment grade, and 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 Index**, and its country sub-indices, tracks total returns for the U.S. dollar-denominated debt instruments issued by emerging-market sovereign and quasi-sovereign entities, such as Brady bonds, loans, and Eurobonds.

**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<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® 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>.

# Appendix: Important Information

The Chartered Financial Analyst® (CFA®) designation is offered by CFA Institute. To obtain the CFA charter, candidates must pass three exams demonstrating their competence, integrity, and extensive knowledge in accounting, ethical and professional standards, economics, portfolio management, and security analysis, and must also have at least four years of qualifying work experience, among other requirements. CFA® and Chartered Financial Analyst® are registered trademarks owned by CFA Institute.

Third-party marks are the property of their respective owners; all other marks are the property of FMR LLC.

Fidelity Institutional® provides investment products through Fidelity Distributors Company LLC; clearing, custody, or other brokerage services through National Financial Services LLC or Fidelity Brokerage Services LLC (Members NYSE, SIPC).

Personal and workplace investment products are provided by Fidelity Brokerage Services LLC, Member NYSE, SIPC.

Institutional asset management is provided by FIAM LLC and Fidelity Institutional Asset Management Trust Company.

© 2022 FMR LLC. All rights reserved.

1050486.1.1