Commentary | Second Quarter 2022

Quarterly Market Update

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Market Summary

Volatility Spiked Amid War, Inflation and Rate Increases

Rising bond yields and increased expectations of Fed tightening caused asset prices to stumble out of the 2022 starting blocks. Russia's late-February invasion of Ukraine exacerbated these trends, propelled commodity prices even higher, and injected a stagflationary flavor into the global economic expansion. Near-term recession risk remains low, but multiple sources of uncertainty suggest market volatility may remain elevated.

	MACRO	ASSET MARKETS
Q1 2022	• War and the commodity-price shock sent a stagflationary impulse into global expansion.	• Volatility jumped as both stock and bond prices declined.
OUTLOOK	• The global expansion continues, albeit with greater differentiation among countries and higher stagflation risks. • The U.S. is in a maturing mid-cycle phase with low near-term recession risk. • China's industrial cycle still appears to be bottoming, but COVID and political headwinds are hampering progress. • Inflation rates should moderate from high levels, but inflation risks remain on the upside. • With the first Fed rate hike in the past, monetary policy is shifting to a headwind.	• Monetary policy decisions – especially in the face of more persistent inflation -- are likely to have an increasingly large influence on the swings in near-term asset returns. • Slower liquidity growth, multiple sources of uncertainty, and high asset valuations raise the odds that market volatility will remain elevated. • Cyclical outlook remains constructive, but portfolio diversification is as important as ever.

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

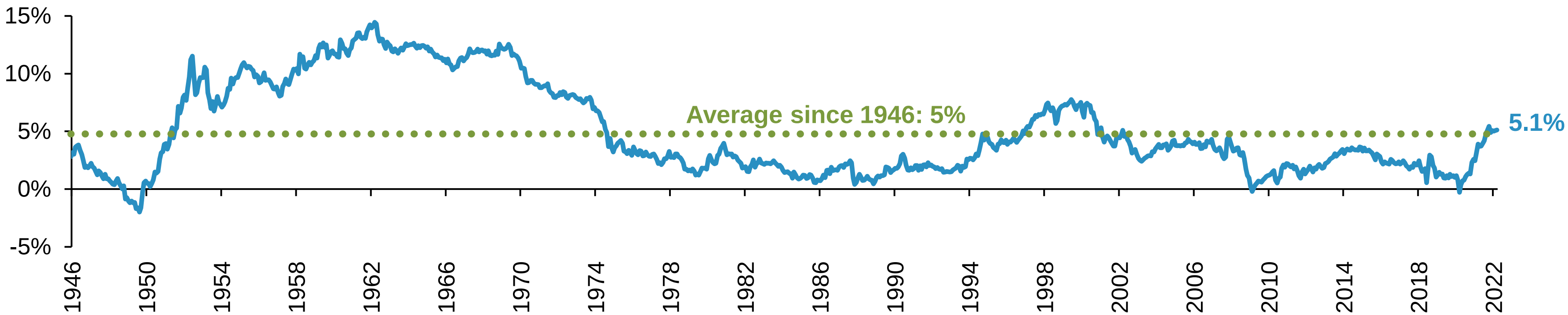
Tough Start for Asset Markets across the Board

High and rising inflation expectations during Q1 proved challenging for almost all major asset categories. Bonds suffered significant losses as projections for rate hikes rose. U.S. stock prices experienced a correction, but they bounced back to post less severe losses and modestly outperformed non-U.S. equities. Commodity prices jumped significantly and cemented their place as the best-performing category over the past one-year period.

	Q1 2022 (%)	1 Year (%)		Q1 2022 (%)	1 Year (%)
Commodities	25.5	49.3	Investment-Grade Bonds	-5.9	-4.2
Gold	5.9	13.5	Emerging-Market Stocks	-7.0	-11.4
Real Estate Stocks	-3.9	26.4	U.S. Corporate Bonds	-7.4	-4.2
High Yield Bonds	-4.5	-0.3	U.S. Small Cap Stocks	-7.5	-5.8
U.S. Large Cap Stocks	-4.6	15.6	Non-U.S. Small Cap Stocks	-8.5	-3.6
U.S. Mid Cap Stocks	-5.7	6.9	Emerging-Market Bonds	-9.3	-6.2
Non-U.S. Developed-Country Stocks	-5.9	1.2	Long Government & Credit Bonds	-11.0	-3.1

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

Annualized Return Difference

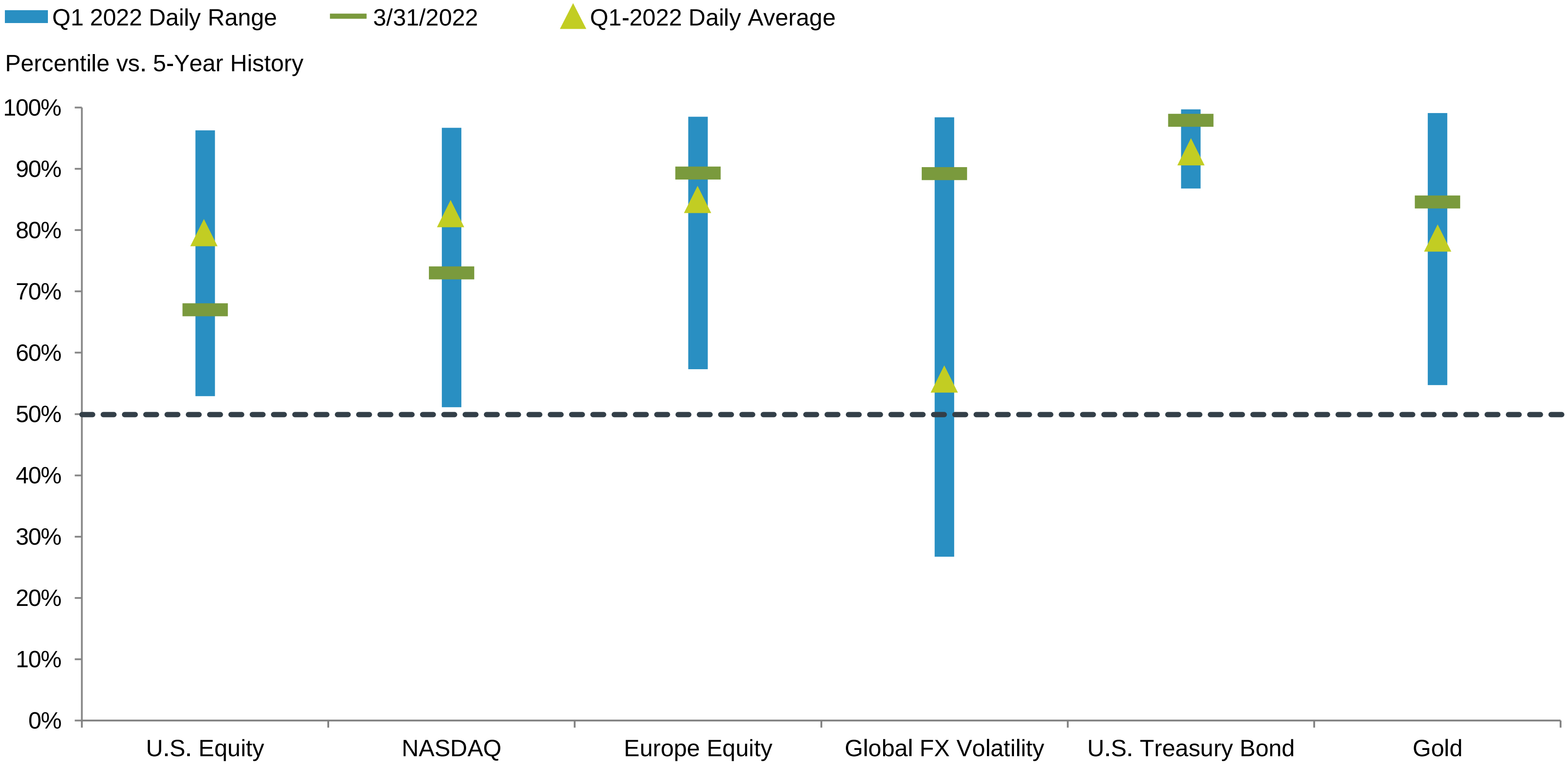


Past performance is no guarantee of future results. It is not possible to invest directly in an index. All indexes are unmanaged. See Appendix for important index information. IG: Investment grade. Assets represented by: Commodities—Bloomberg Commodity Index; Emerging-Market Bonds—JP Morgan EMBI Global 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 3/31/22.

Market Volatility Surged during Q1

After a relatively calm 2021, higher volatility resurfaced across almost all asset markets at the start of 2022. Fluctuations in Treasury-bond prices spiked, as investors grappled with the crosscurrents of higher inflation, the war in Ukraine, and greater expected monetary tightening. Equity prices also swung widely, although volatility levels trended downward toward the end of the quarter.

Volatility Percentiles

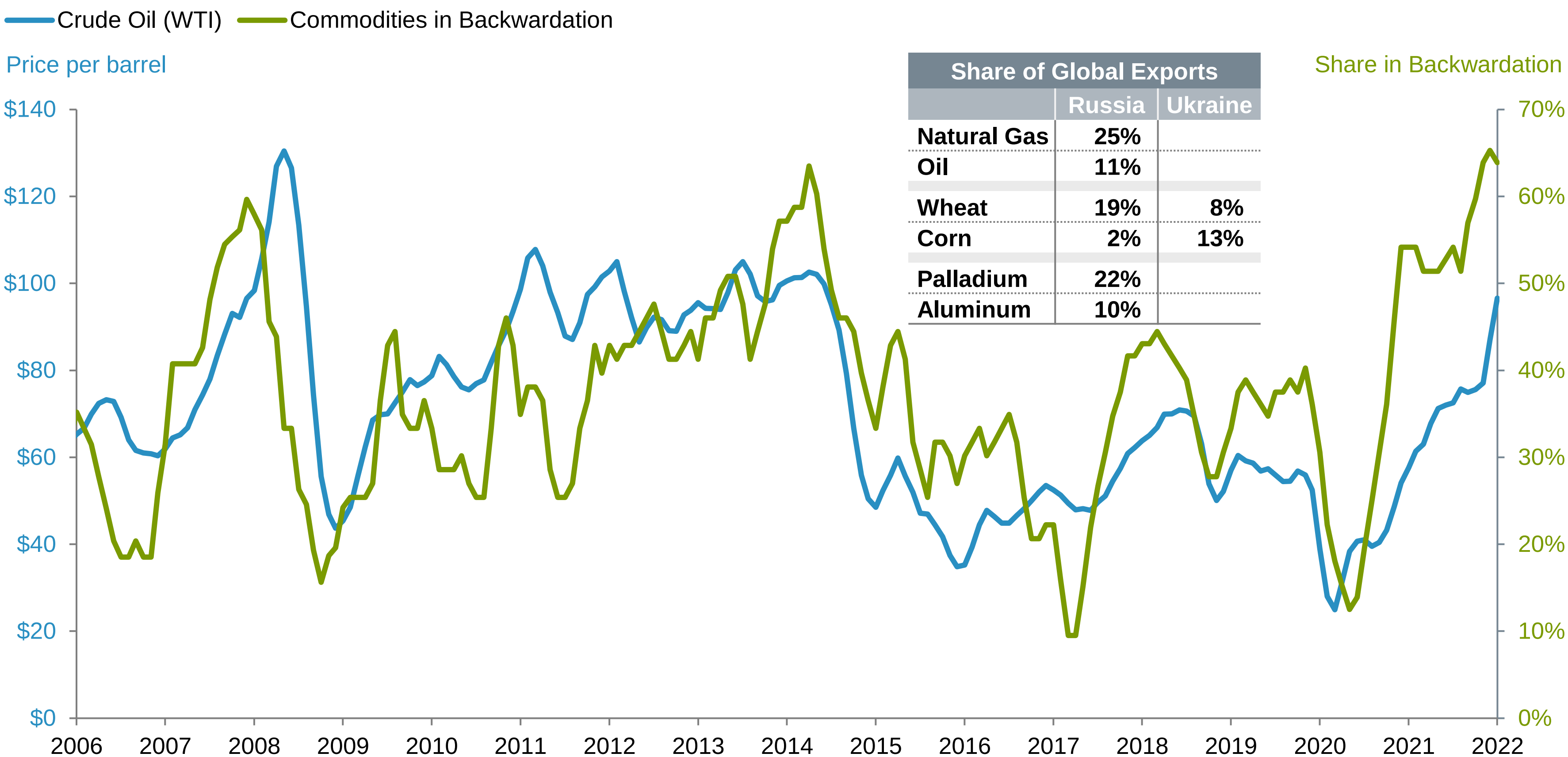


Implied volatility calculated from options markets. Source: Goldman Sachs, Deutsche Borse, JP Morgan, ICE BofAML, Bloomberg Finance L.P., Fidelity Investments (AART), as of 3/31/22.

Supply Shock Intensified Commodity-Price Rally

With many commodity prices already at multi-year highs, the Russian invasion exacerbated tight supply conditions. Russia and Ukraine account for major shares of global exports of energy, agriculture, and industrial metals. The impact from disrupted production, sanctions, and uncertainty sent many commodity prices into backwardation, where acute shortages cause the current prices to go higher than futures prices.

Global Commodity Prices



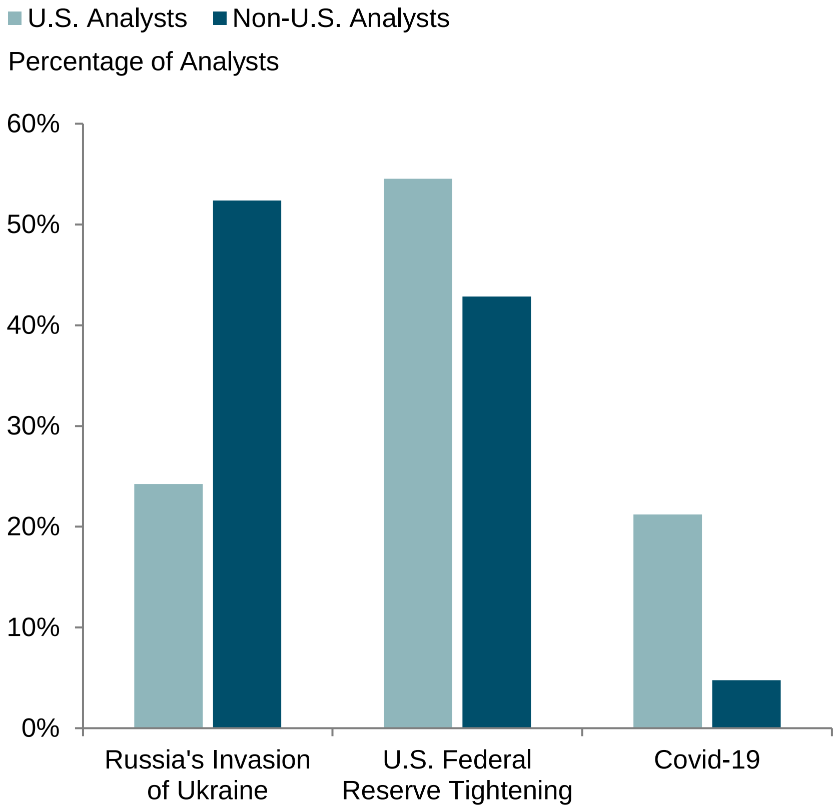
Share of Global Exports	Russia	Ukraine
Natural Gas	25%	
Oil	11%	
Wheat	19%	8%
Corn	2%	13%
Palladium	22%	
Aluminum	10%	

Backwardation: when the current price, or spot price, of an underlying asset is higher than prices trading in the futures market 12 months forward.
Data are 3-month moving averages. Source: World Bank, JP Morgan, Bloomberg Finance L.P., Fidelity Investments (AART), as of 3/31/22.

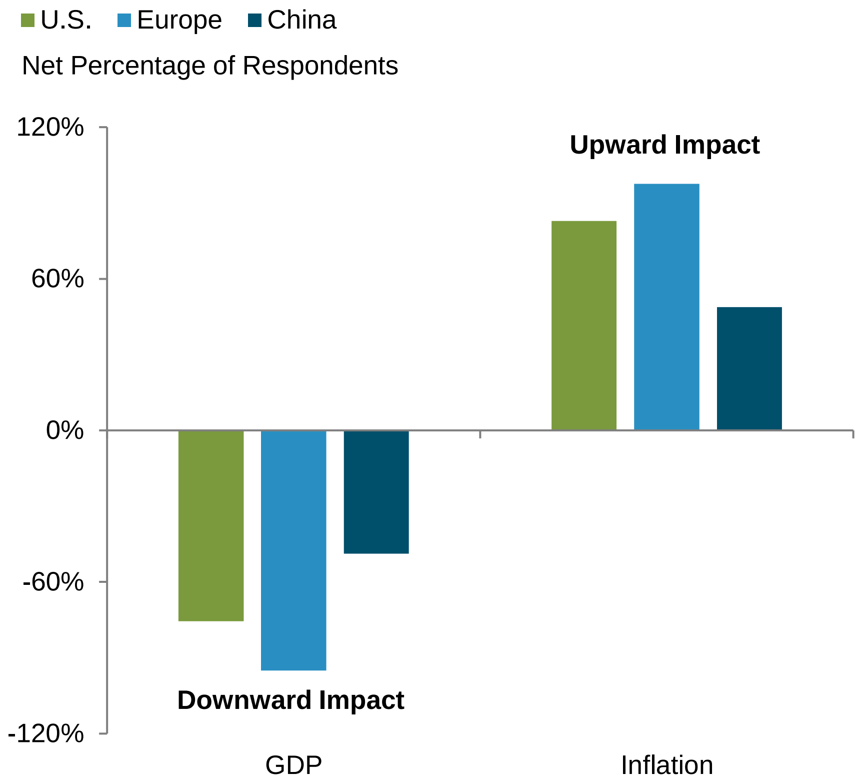
Sentiment: War and Fed-Produced Stagflation Concerns

According to our survey of Fidelity equity and fixed-income analysts, the Federal Reserve's monetary tightening and the war in Ukraine became more impactful than the pandemic in terms of the outlook for corporations. Our survey of non-Fidelity (sell-side) investors showed that most respondents viewed Russia's invasion as a stagflationary event, which lowers growth forecasts and raises inflation expectations.

Fidelity Analyst Survey: What Will Have the Largest Impact on Your Coverage Area?



Sell-Side Survey: Impact of Russia's Invasion?

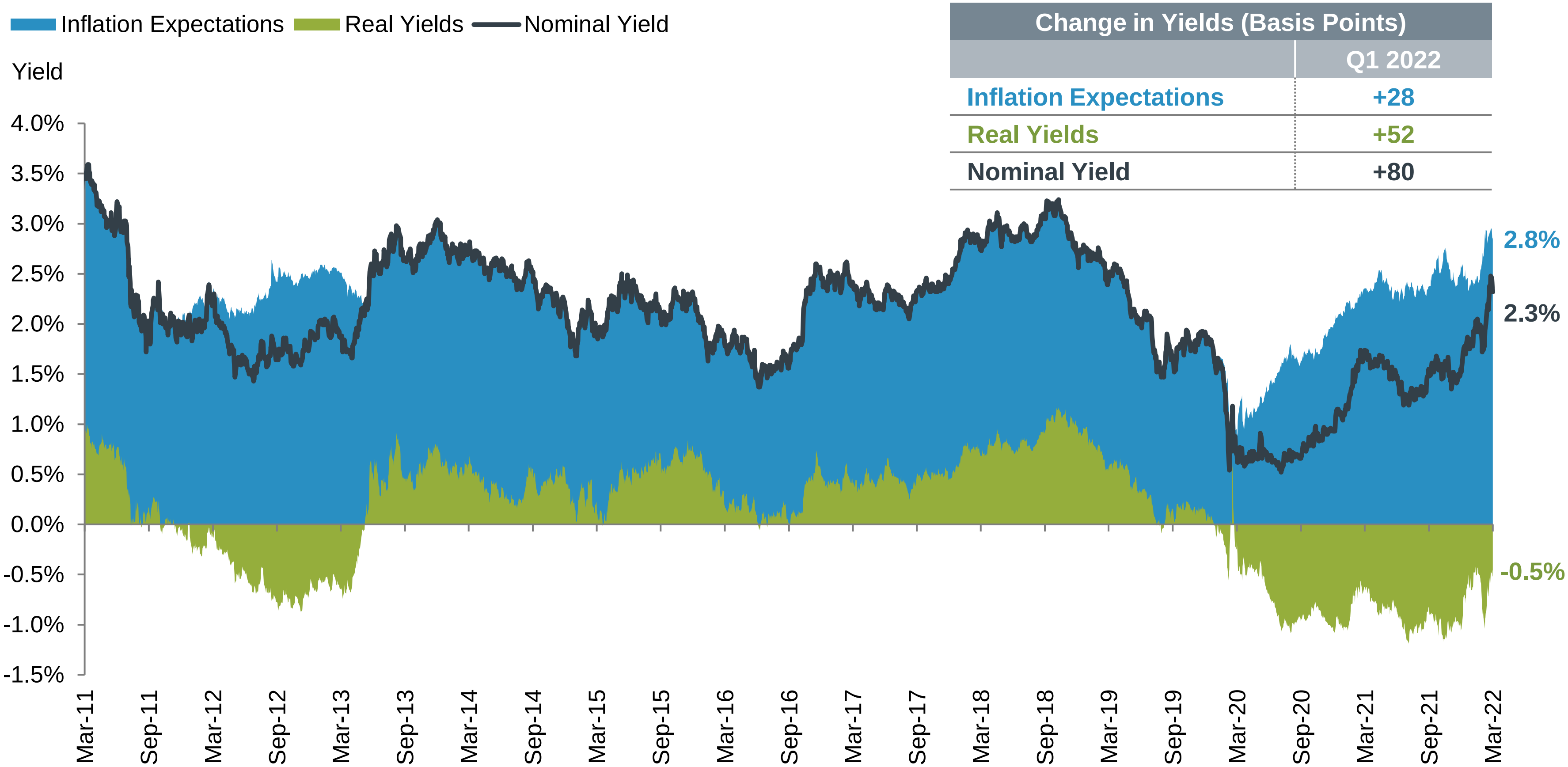


LEFT: Fidelity Analyst Survey: Quarterly survey of equity and fixed income analysts who cover different sectors and regions. Which of the following do you expect to have a bigger impact on your coverage area over the next 6 months? Fidelity Investments (AART), as of 3/31/22.
RIGHT: Sell-Side Survey: Monthly survey of financial research companies outside Fidelity. How do you expect Russia's invasion of Ukraine to effect the following areas?, Fidelity Investments (AART), as of 3/31/22.

Sharp Rise in Both Nominal and Real Bond Yields

Nominal 10-year Treasury bond yields climbed to their highest level in nearly three years. An increase in real yields—the inflation-adjusted cost of borrowing—drove much of the upswing, as investors ratcheted up their expectations for the pace and magnitude of monetary tightening. Higher inflation expectations also contributed to the rise in yields, ending at their highest point since 2019. Despite the increase, real yields remained negative.

10-Year U.S. Government Bond Yields



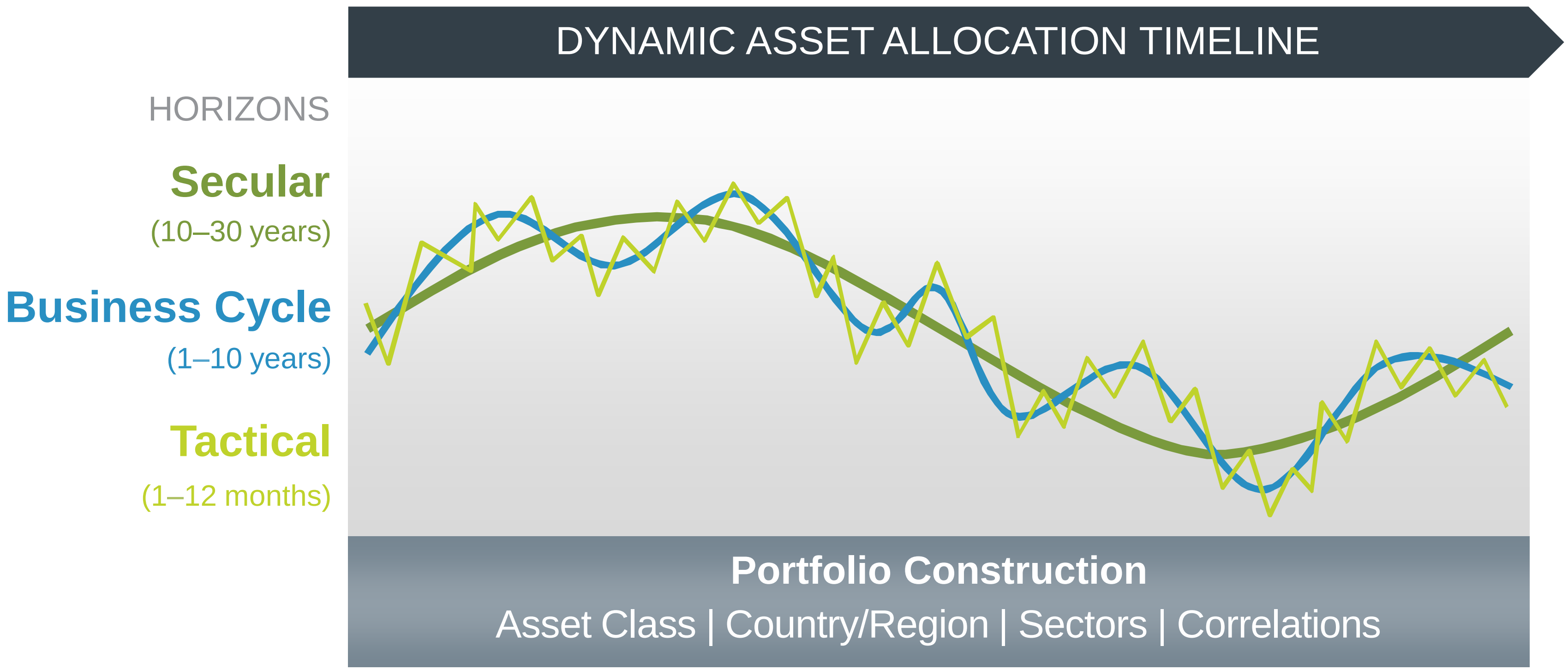
Change in Yields (Basis Points)	
	Q1 2022
Inflation Expectations	+28
Real Yields	+52
Nominal Yield	+80

Source: Bloomberg Finance L.P., Fidelity Investments (AART), as of 3/31/22.

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 various 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).



For illustrative purposes only. Source: Fidelity Investments (AART), as of 3/31/22.

Global Expansion Intact but Facing Multiple Challenges

The global economic expansion continues, but the outlook for the world's major economies has become more complicated and differentiated. Most countries are in a maturing mid-cycle phase, and the near-term risk of recession in the U.S. remains low. COVID poses risks to China's recovery, but the economic reopening should boost Europe. The EU is most exposed to fallout from the war in Ukraine, including higher natural-gas prices.

Business Cycle Framework

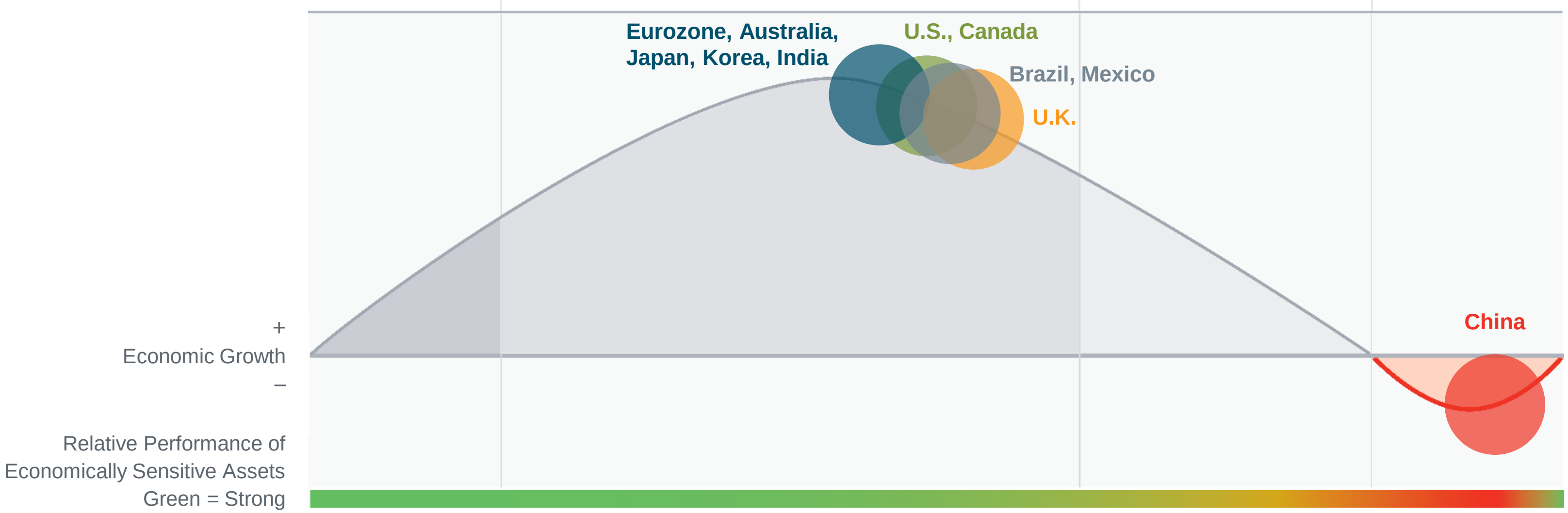
Cycle Phases

EARLY
- Activity rebounds (GDP, IP, employment)
- Credit begins to grow
- Profits grow rapidly
- Policy still stimulative
- Inventories low; sales improve

MID
- Growth peaking
- Credit growth strong
- Profit growth peaks
- Policy neutral
- Inventories, sales grow; equilibrium reached

LATE
- Growth moderating
- Credit tightens
- Earnings under pressure
- Policy contractionary
- Inventories grow, sales growth falls

RECESSION
- Falling activity
- Credit dries up
- Profits decline
- Policy eases
- Inventories, sales fall

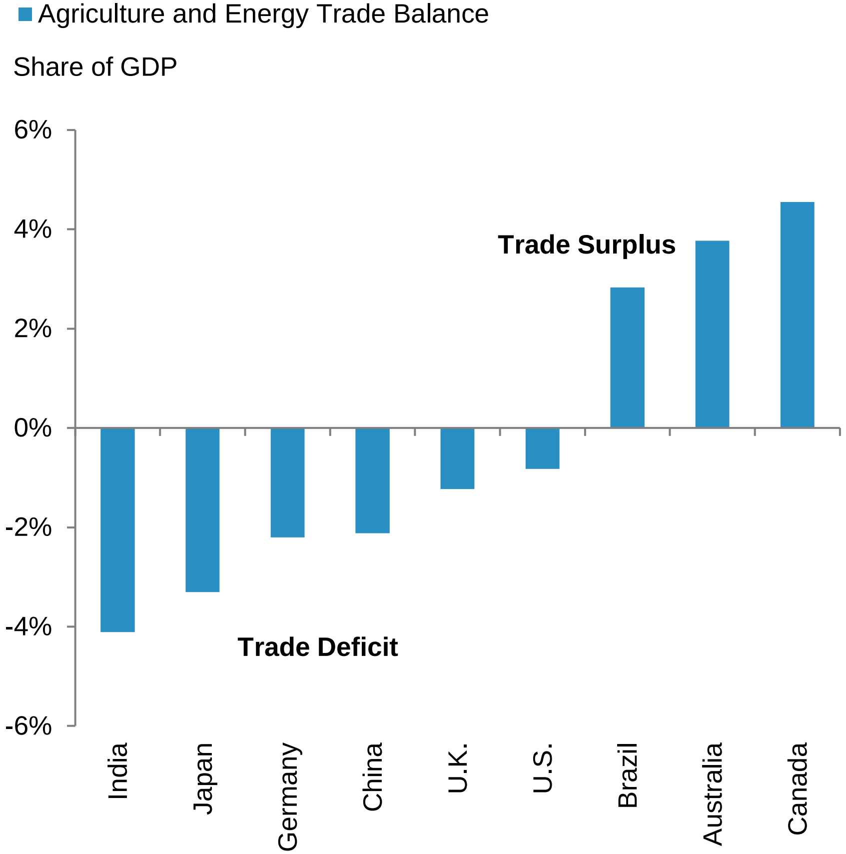


A growth recession is a significant decline in activity relative to a country's long-term economic potential. Note: The diagram above is a hypothetical illustration of the business cycle, the pattern of cyclical fluctuations in an economy over a few years that can influence asset returns over an intermediate-term 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 3/31/22.

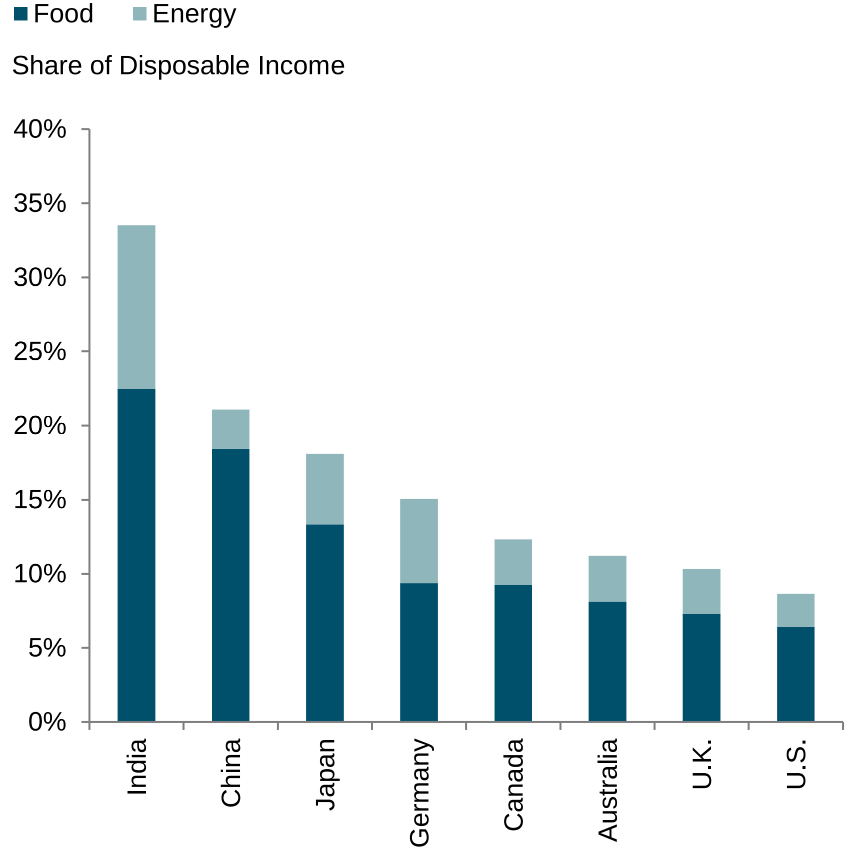
Commodity Impact Varies by Country

High commodity prices support commodity producers but raise costs for consumers. Net commodity exporters such as Canada, Australia, and Brazil benefit from improved terms of trade. Households in emerging economies—such as India and China—spend more of their incomes on food and energy, implying a bigger headwind for EM consumers. The U.S. enjoys commodity self-sufficiency and relatively less consumer impact.

Commodity Trade Balance by Country



Food and Energy Spending by Household



LEFT: Agriculture/forestry/fishing/Food products/beverages, mining/extraction of energy-producing products, electricity, gas. As of 2015 due to data limitations. Fidelity Investments (AART), as of 3/31/22. **RIGHT:** Food: at home; Energy: utilities, gasoline, gas, oil, water. Source**:** National statistical agencies, Fidelity Investments (AART), as of 3/31/22.

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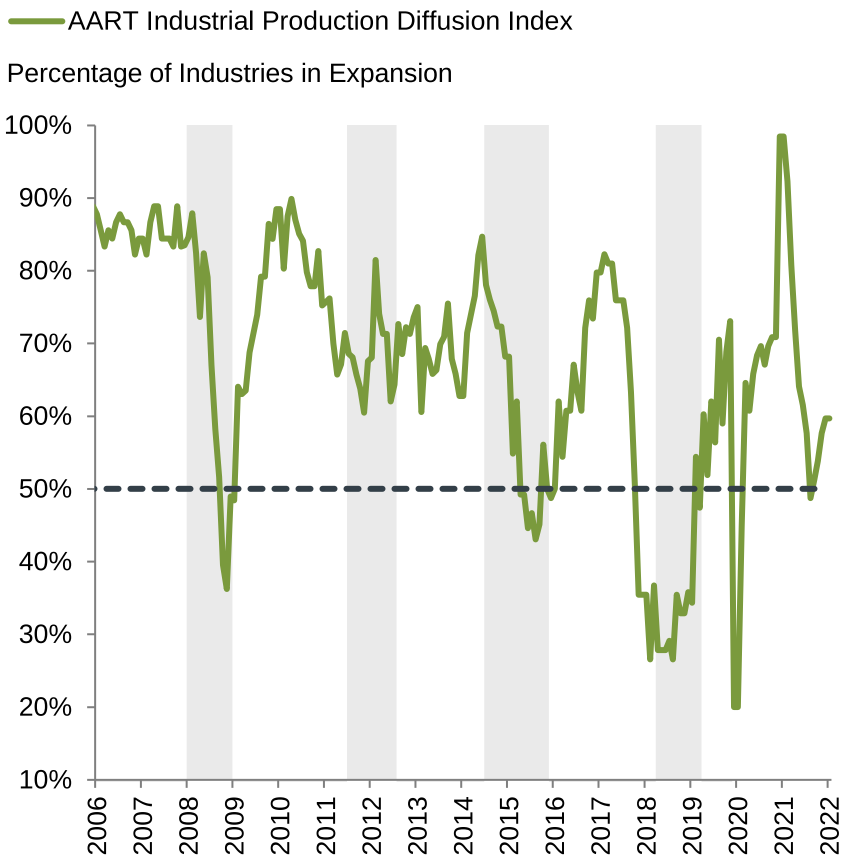
China: Industrial Trough, but Several Crosswinds

China's incipient recovery appears intact as industrial production expanded and fiscal and monetary policy eased. However, several headwinds stunted progress, including widespread weakness in the real estate sector, regulatory uncertainty amid a crackdown on some sectors, and COVID restrictions initiated late in the quarter amid a rising virus count. The upside for China's recovery appears more muted relative to prior cycles.

China: Industrial Production



China: Other Trends

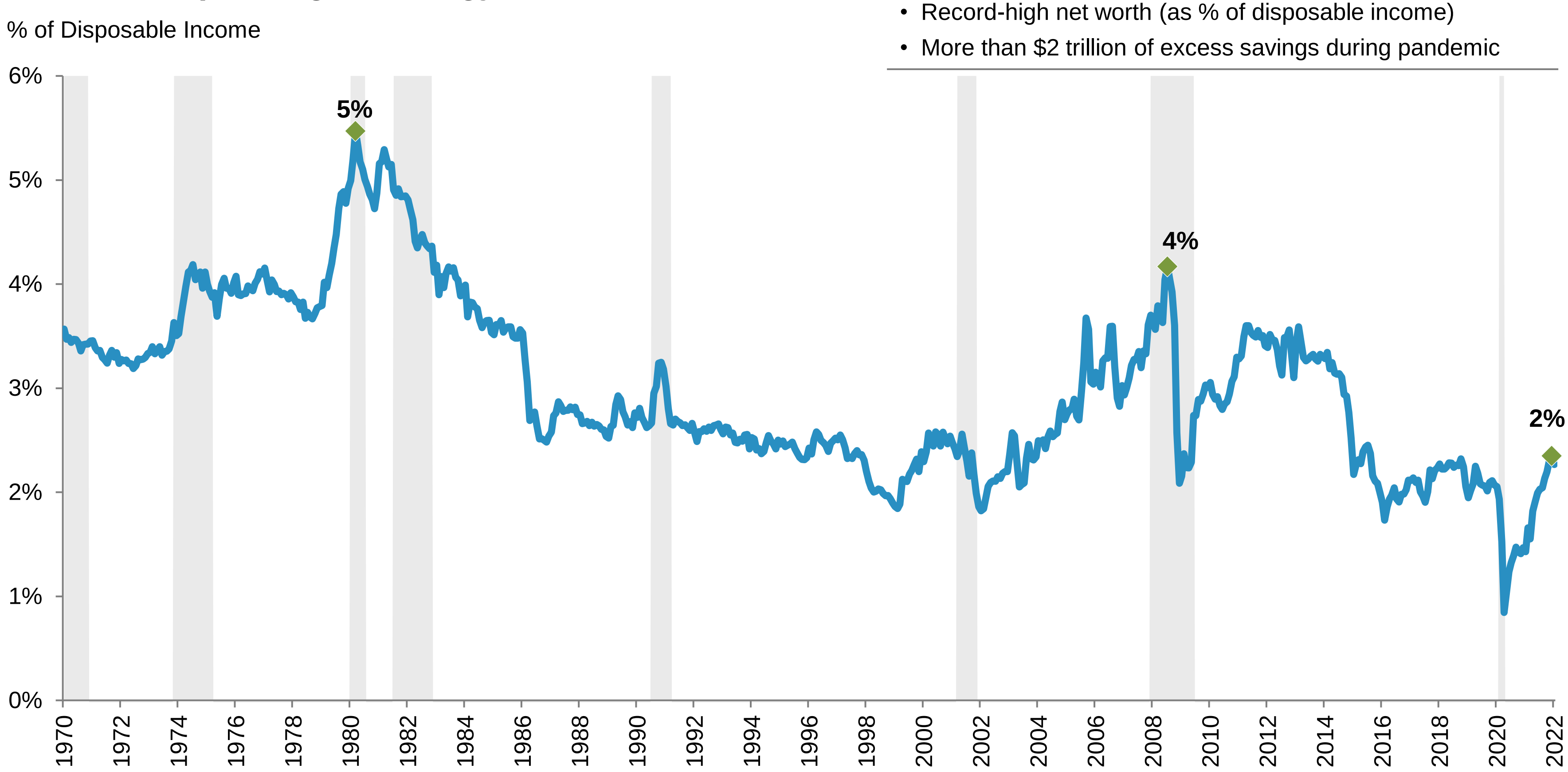
Positive	Negative
Monetary policy easing	Limited nature of policy stimulus
Fiscal policy easing (infrastructure)	COVID lockdowns (lack of immunity)
Localized property sector easing (purchase restrictions)	Regulatory risk (focus on "common prosperity")
	Property sector weakness (developer bankruptcies)
	Geopolitical risk

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 2/28/22.

U.S. Consumers in Better Shape Than Prior Oil Shocks

With energy prices rising, U.S. consumers are spending more to drive cars and heat their homes. Despite the sharp upward move, consumers still spend much less on energy as a portion of their incomes relative to prior oil-price shocks in the 1970s or 2008. Consumers are also cushioned by strong employment markets, record-high net worth, and more than $2 trillion in excess savings accumulated during the pandemic.

Consumer Spending on Energy



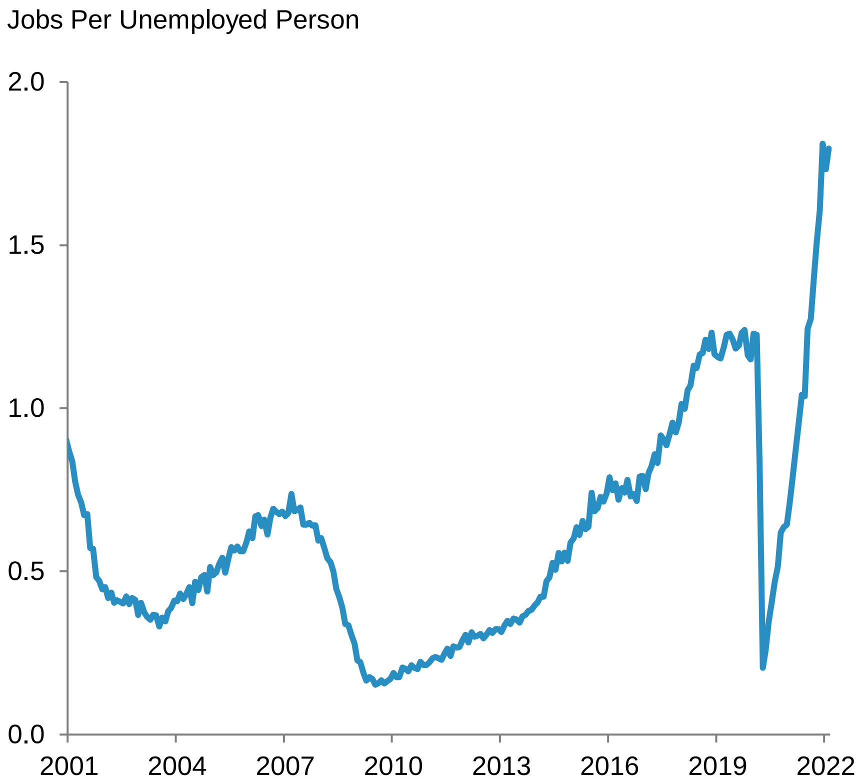
Consumer Financial Position
• Record-high net worth (as % of disposable income)
• More than $2 trillion of excess savings during pandemic

Gray bars represent recessions. Source: Bureau of Economic Analysis, NBER, Fidelity Investments (AART), as of 2/28/22. Green diamonds represent energy cost as a % of disposable income in 1980, 2009, and 2021, respectively.

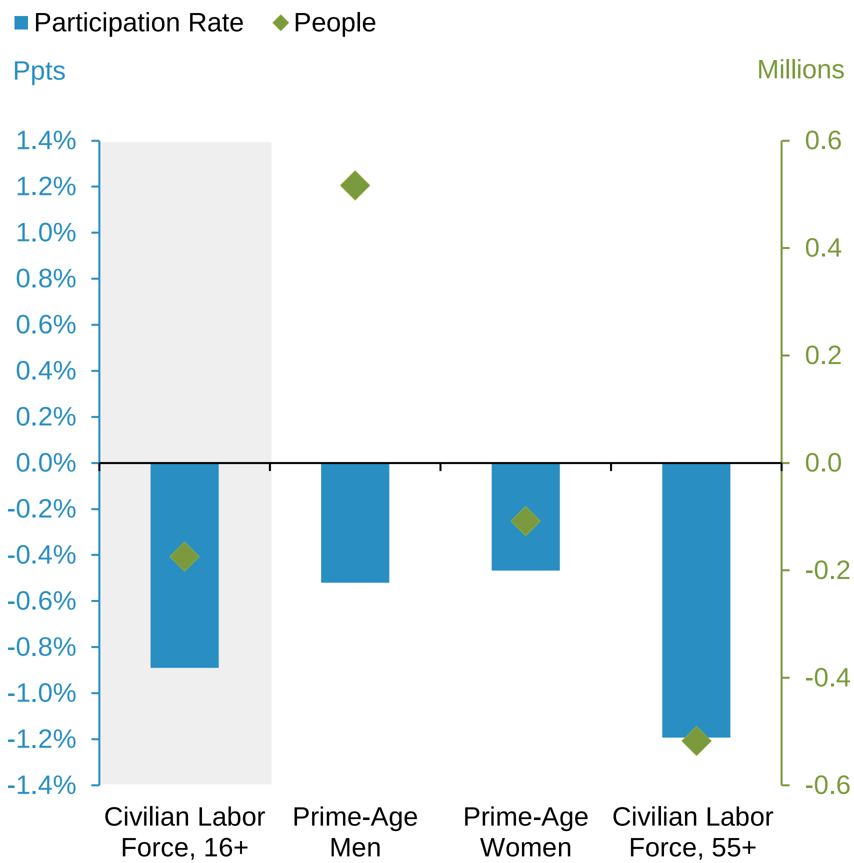
Tight Labor Market as Participation Continues to Improve

With nearly two job openings for every unemployed person, the labor market remains very tight. While six million people have rejoined the labor force after departing during the pandemic, labor force participation remains below pre-pandemic levels. We expect worker shortages will continue to improve; however, some workers—especially older ones—might not return, implying tight labor-market conditions may persist.

Job Openings



Change in Labor Force Relative to Feb. 2020

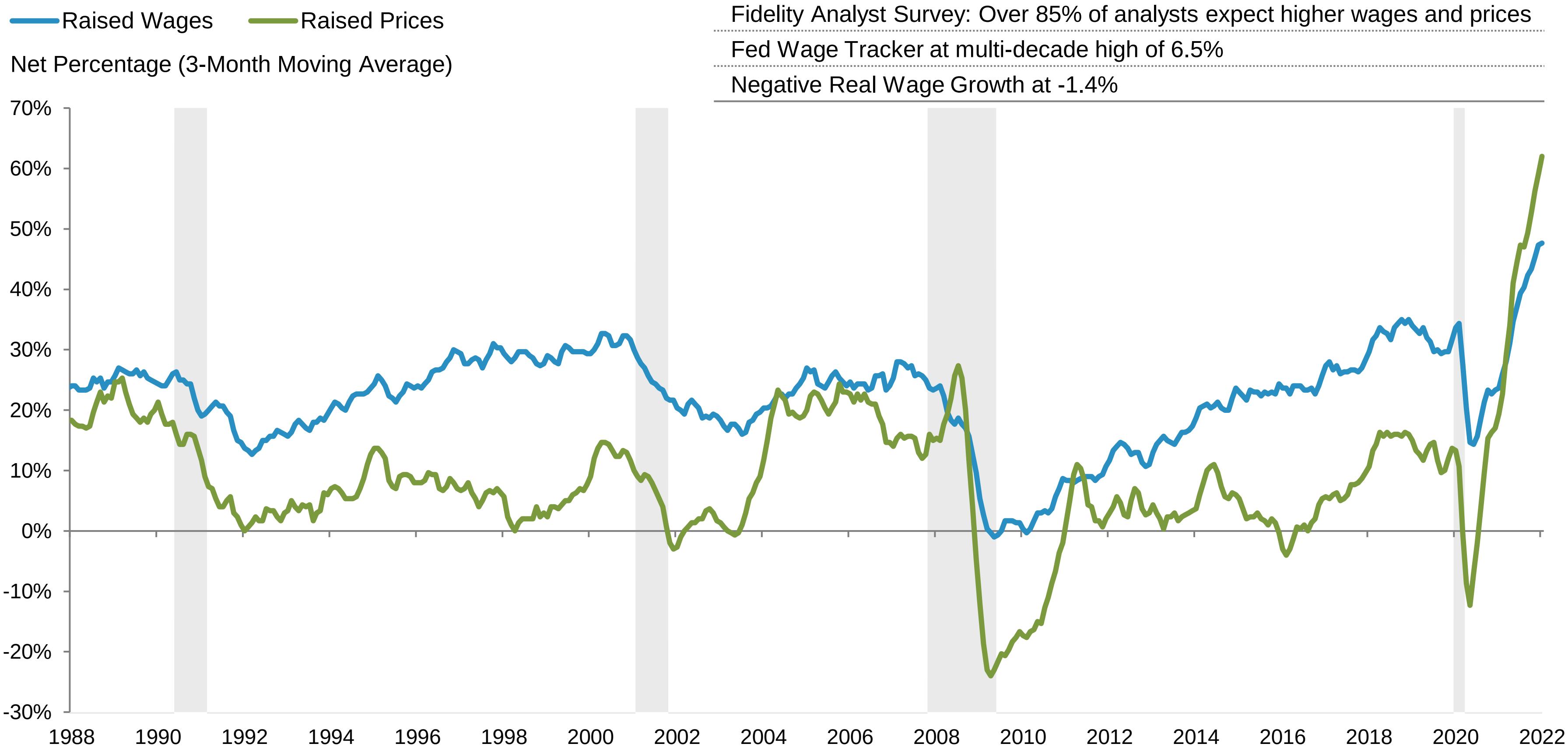


LEFT: total job openings divided by total unemployment. Source: Bureau of Labor Statistics, Haver Analytics, Fidelity Investments (AART), as of 2/28/22. **RIGHT**: Ppts: Percentage points. Seasonally adjusted data. Prime age comprises individuals 25 to 54 years old. Source: Bureau of Labor Statistics, Haver Analytics, Fidelity Investments (AART), as of 3/31/22.

Wage Pressures Hurt, but Businesses Show Pricing Power

Many businesses continued to struggle with tight labor markets, as unfilled positions remained elevated and wage growth reached multi-decade highs. This dynamic was particularly acute for small businesses, with the NFIB's survey showing a rapid rise in the number of small businesses raising wages and prices charged to customers. The ability of businesses to pass along higher prices remains key to the profit outlook.

U.S. Small Business Wage and Price Survey



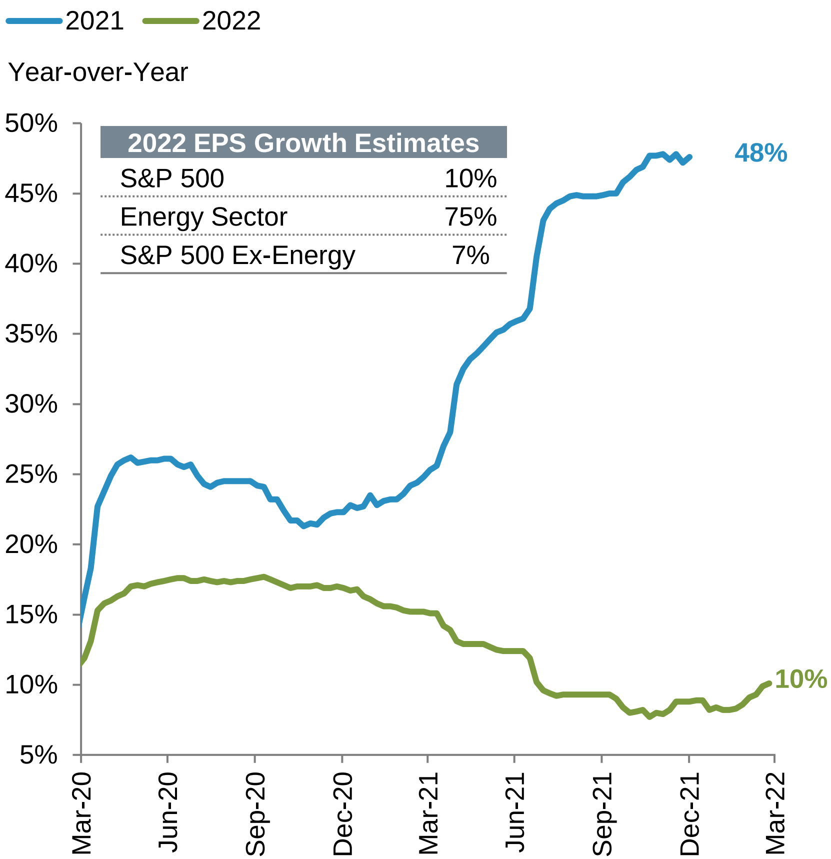
Prices and Wage Survey Highlights
Fidelity Analyst Survey: Over 85% of analysts expect higher wages and prices
Fed Wage Tracker at multi-decade high of 6.5%
Negative Real Wage Growth at -1.4%

CHART: Net Percentage: Raising wages/prices minus not raising wages/prices over past three months. Gray bars represent recessions. Source: National Federation of Independent Business, NBER, Haver Analytics, Fidelity Investments (AART), as of 2/28/22. **TABLE:** Fidelity Analyst Survey: Quarterly survey of equity and fixed income analysts who cover different sectors and regions. Fed Wage Tracker: Atlanta Fed overall year-over-year weighted. Real Wage: Wage tracker growth minus CPI-U year-over-year change. Source: Federal Reserve Bank of Atlanta, Bureau of Labor Statistics, Haver Analytics, Fidelity Investments (AART), as of 3/31/22.

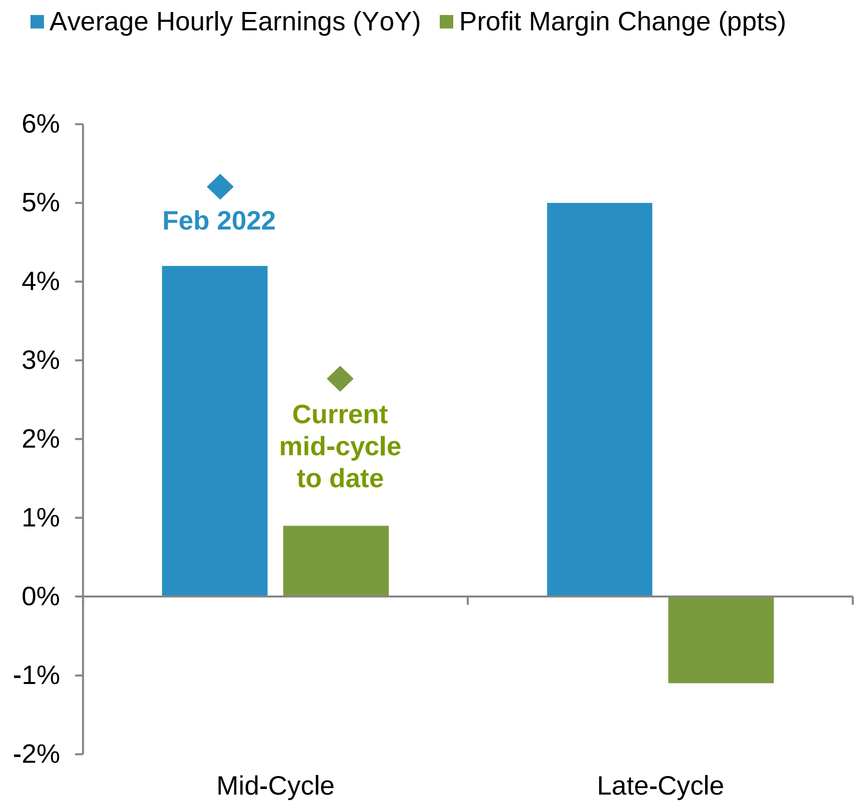
Corporate Profits Remain Firm, Upside Now Harder

After expanding nearly 50% during 2021, investors continue to expect solid profit growth in 2022.[1] Earnings expectations for the S&P 500 rose modestly during Q1, in large part due to higher hopes for profit growth in the energy sector. Amid high input costs and wage pressures, it may prove challenging for companies to expand profit margins after already outpacing their typical mid-cycle gains.

S&P 500 Earnings Expectations



Wage Growth and Profit Margins (1950–2021)

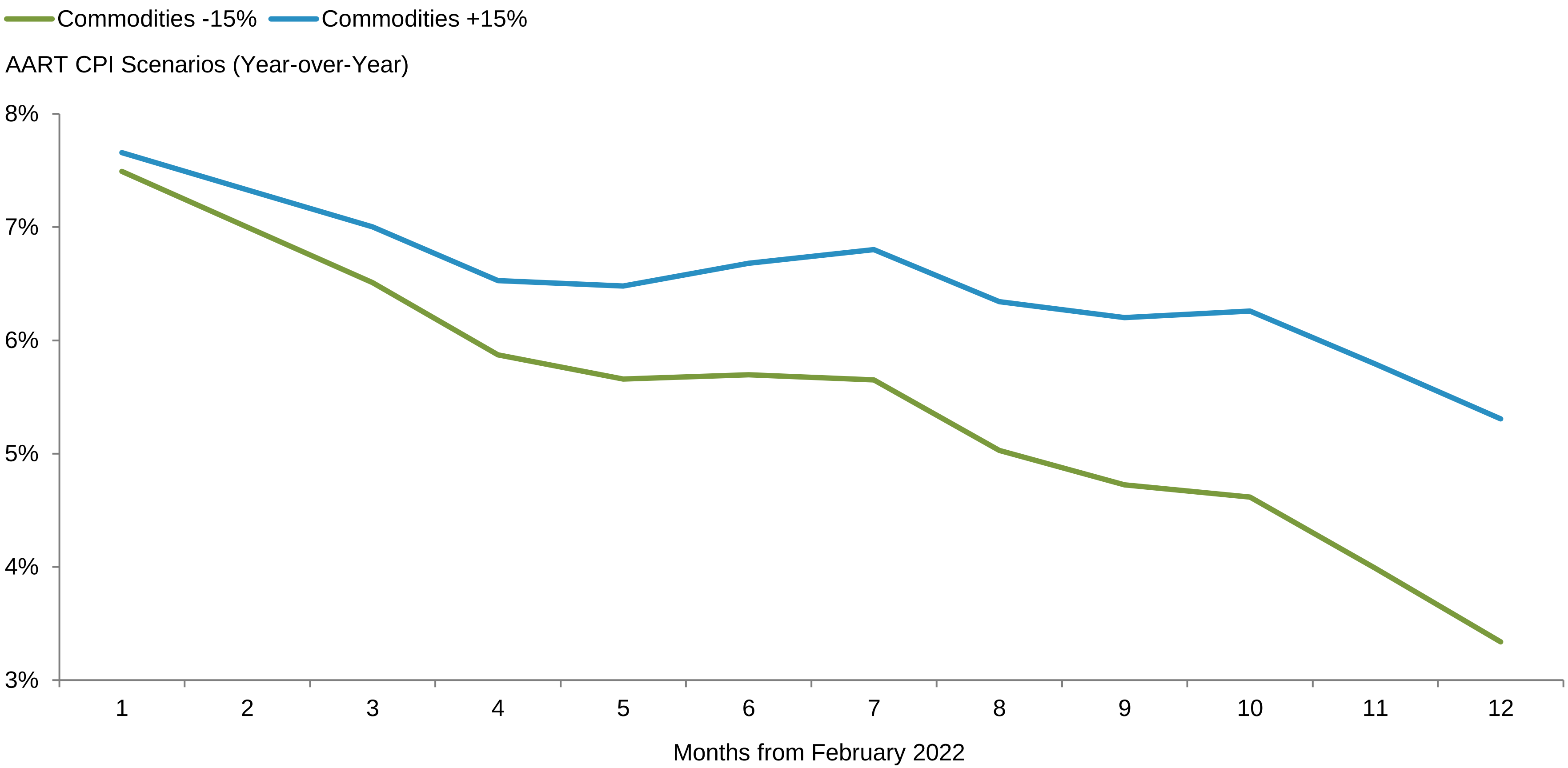


LEFT: Street estimates. Source: Bloomberg Financial LP, Fidelity Investments (AART), as of 3/31/22.
RIGHT: Source: Bureau of Economic Analysis, Fidelity Investments (AART), as of 2/28/22.
1. Source: Bloomberg Finance LLC.

Inflation to Moderate, but Commodity Prices a Wild Card

We expect consumer inflation rates to moderate over the next 12 months from the four-decade high of nearly 8% posted in February. However, tremendous volatility and uncertainty in the commodity markets broaden the range of our estimates. We generally believe cyclical inflation risks remain on the upside.

Impact of Commodity Prices on Inflation Estimates

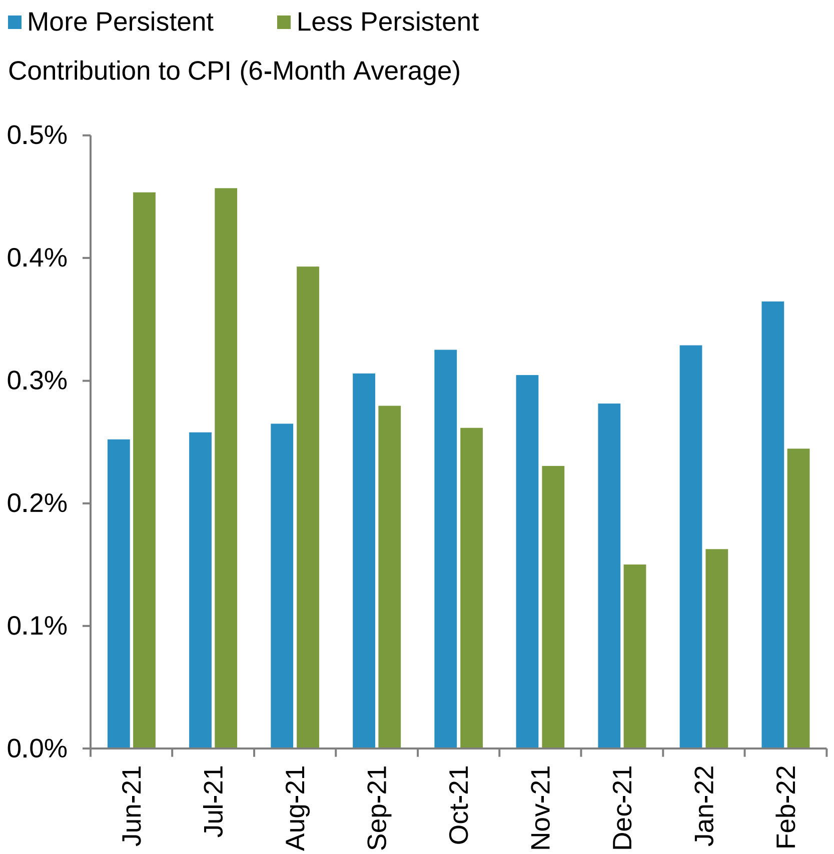


CPI: Consumer Price Index. Commodity prices are represented by the Bloomberg Commodity Index (BCOM) and their hypothetical changes over the next year are assumed to occur equally throughout the year. Source: Bureau of Labor Statistics, Bloomberg, Haver Analytics, Fidelity Investments (AART), as of 2/28/22.

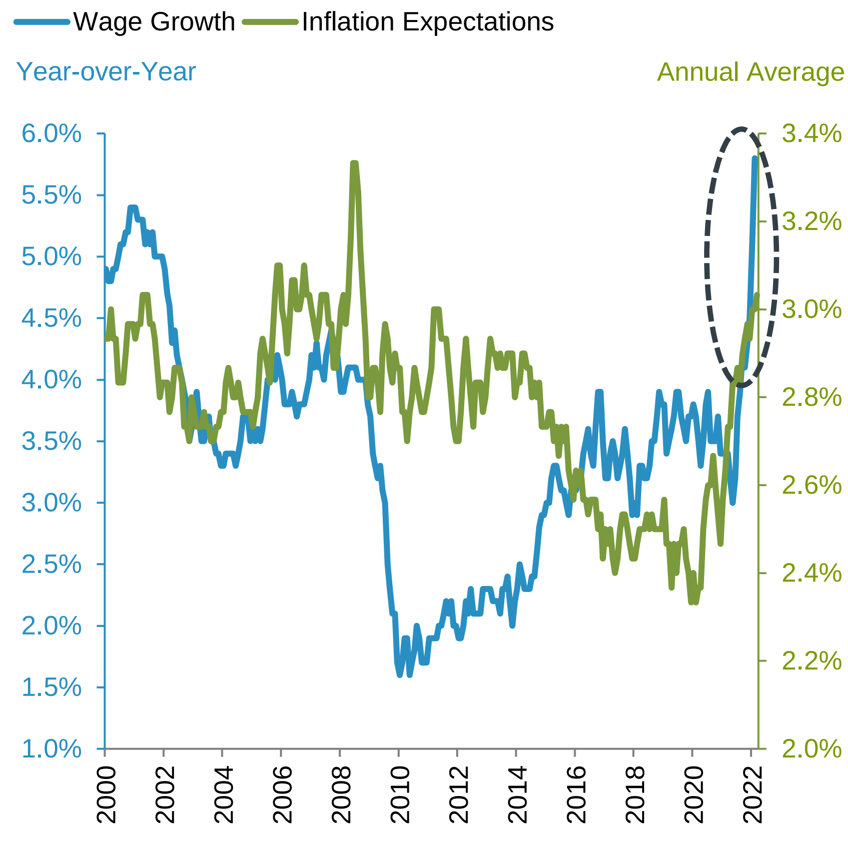
Inflation Pressures Becoming More Persistent

There are some signs that the most extreme supply-related pressures are easing, but categories where price changes tend to be more persistent—such as housing and food—now account for a larger portion of inflationary pressures. Continued increases in wage growth and inflation expectations represent a worrisome trend that over time could become a self-reinforcing wage-price spiral that leads to persistently high inflation.

Persistent vs. Transitory Inflation Contribution



Wages and Price Expectations

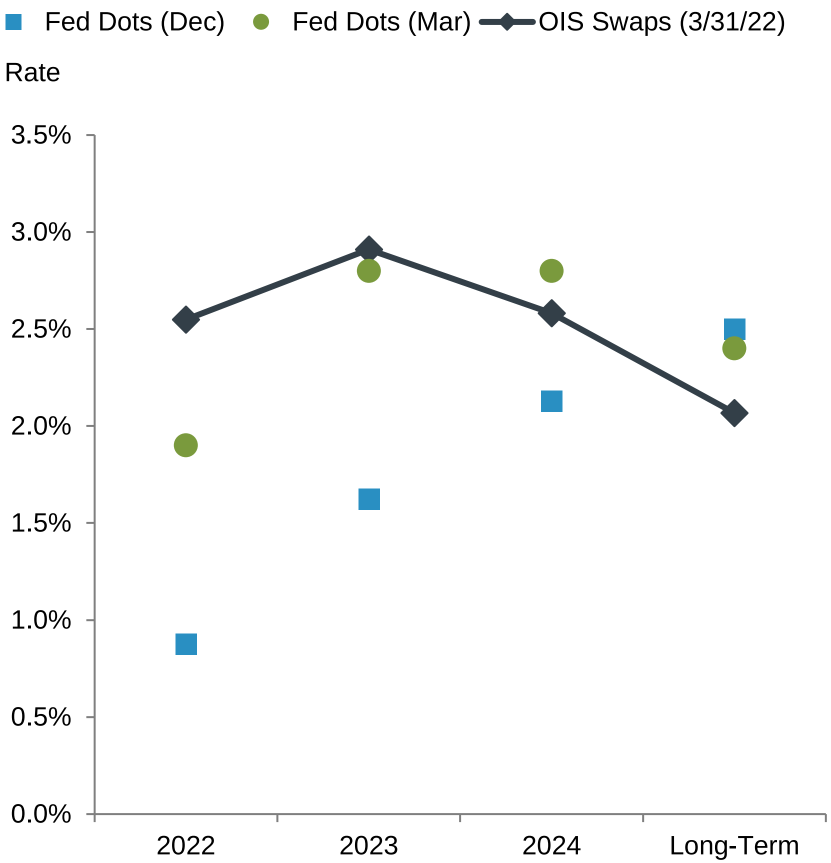


LEFT: CPI: Consumer Price Index. More Persistent Categories include areas where, historically, inflation has taken longer to dissipate, such as Housing and Food & Beverages. Source: Bureau of Labor Statistics, Haver Analytics, Fidelity Investments (AART), as of 2/28/22. **RIGHT:** Inflation expectations are measured by a 3-month moving average of the University of Michigan's 5-10Y inflation expectations survey. Wage growth is represented by the Atlanta Fed's 3-month moving average of median wage growth (annualized). Source: Bloomberg, Haver Analytics, Fidelity Investments (AART), as of 2/28/22.

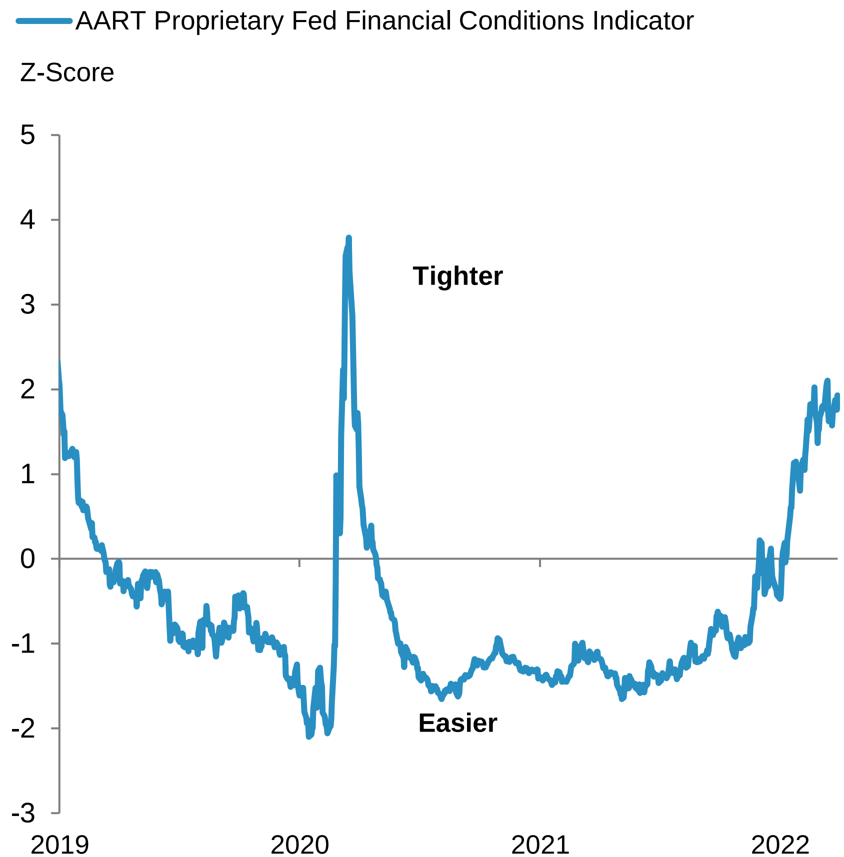
The Federal Reserve "Lifted Off"; More Hikes Signaled

The Fed ended QE and raised interest rates for the first time since the pandemic began. It again raised its rate-hike guidance for 2022 and 2023, with the 2023 level now above its projected long-term rate. The market expects monetary tightening to be even more aggressive during 2022. With financial conditions already deteriorating, the Fed appears complacent that the economy can weather significant monetary tightening.

Fed Rate Guidance vs Market Expectations



Financial Conditions

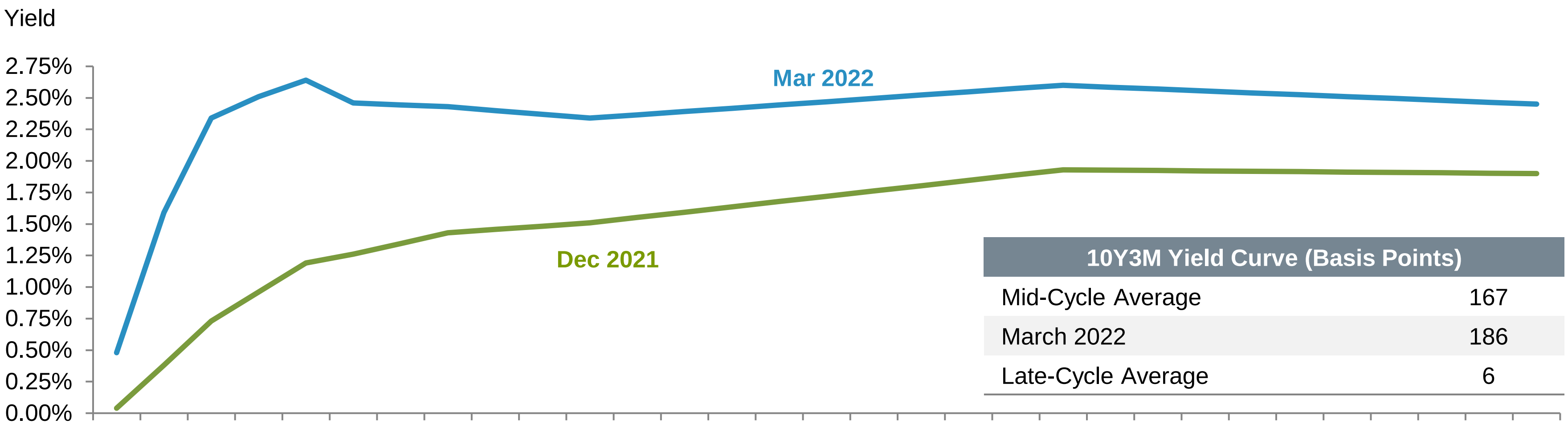


LEFT: Dots: Federal Open Market Committee members' median projection. OIS: Overnight Index Swaps Source: Federal Reserve Board, Bloomberg Financial L.P., Fidelity Investments (AART), as of 3/31/21. **RIGHT:** AART Proprietary index: looks at a number of different financial conditions indicators through a Fed lens. Sources Bloomberg Financial L.P., Fidelity Investments (AART), as of 3/31/22.

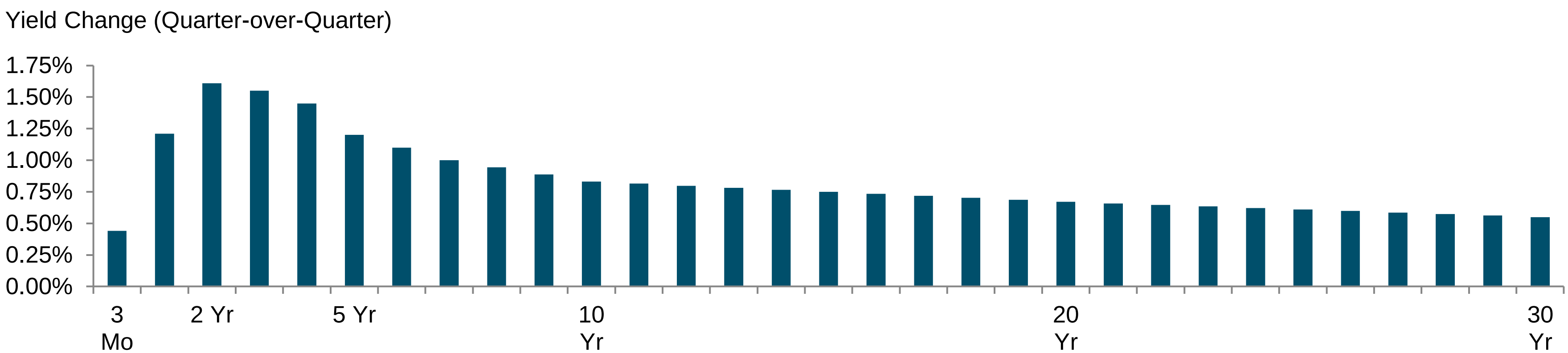
Will Higher Yields and a Flatter Curve Disrupt the Cycle?

Bond yields spiked significantly higher across the curve, especially at the shorter end with 2-year Treasuries rising 160 basis points—their fastest 3-month pace since 1994. This resulted in a significantly flatter yield curve that inverted at some points. Although an inverted yield curve has often preceded recessions, our preferred recession signal is the 10-year less 3-month yield spread, which remained positively sloped.

U.S. Treasury Yield Curve



10Y3M Yield Curve (Basis Points)	
Mid-Cycle Average	167
March 2022	186
Late-Cycle Average	6

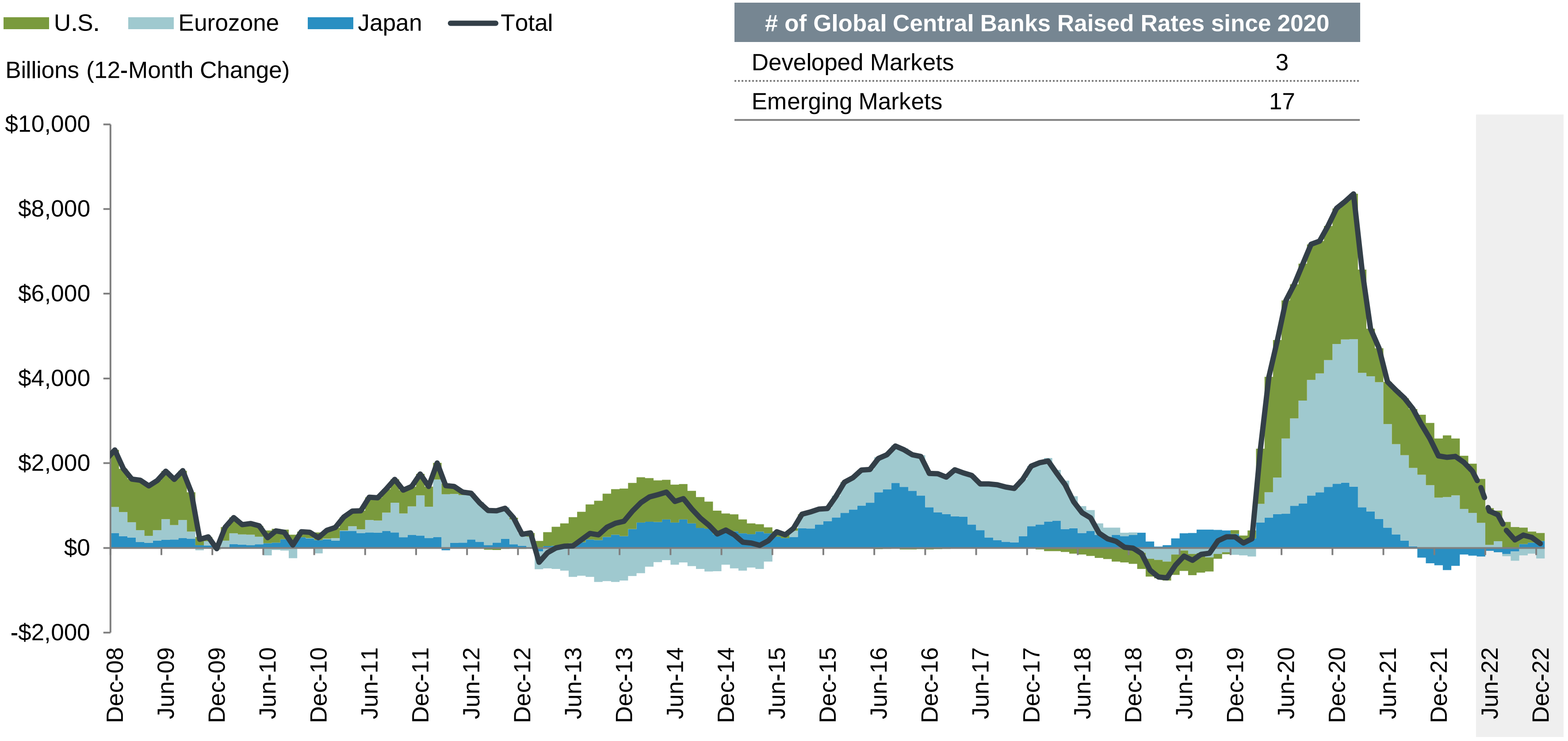


Source: Bloomberg Financial L.P., Fidelity Investments (AART), as of 3/31/22.

Central Bank Tightening Implies a Liquidity Headwind

After pumping trillions of dollars of liquidity into financial markets during the past two years, global central banks have pivoted toward monetary tightening. So far, 20 central banks have raised interest rates to combat inflation. The ECB is tapering QE, and the Fed may begin to reduce the size of its balance sheet this year. Liquidity growth is transitioning to become a headwind, raising the odds of elevated market volatility.

Central Bank Balance Sheets



# of Global Central Banks Raised Rates since 2020	
Developed Markets	3
Emerging Markets	17

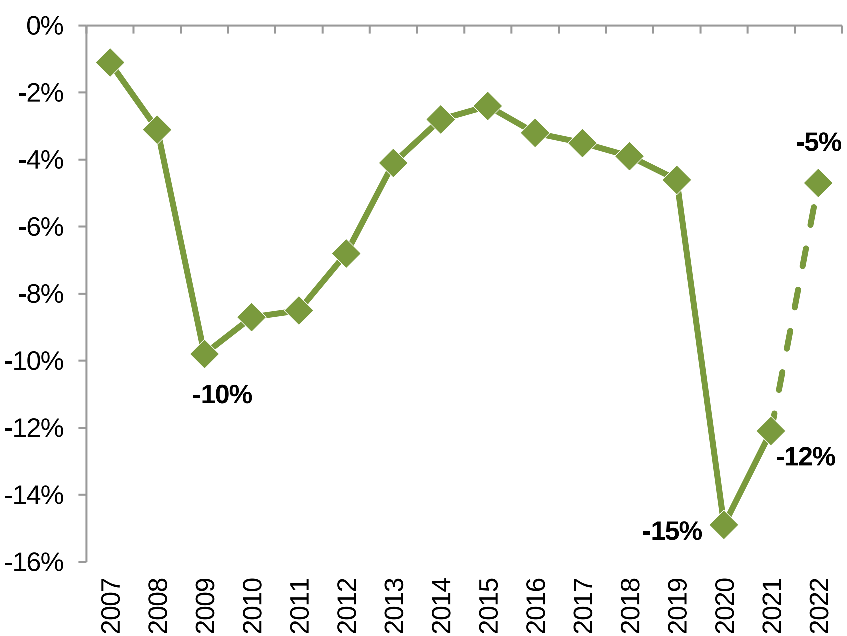
Gray bar represents projected balances. QE: Quantitative easing. Dashed line and shaded area represent estimates based on the U.S. Federal Reserve maintaining a constant balance sheet during 2022, the European Central Bank tapering ordinary QE and its Pandemic Emergency Purchase Program in Q2 2022 and redemptions of Targeted Long-Term Refinancing Operations throughout 2022 based on the March 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 2/28/22. TABLE: Emerging-market countries include Brazil, Peru, Poland, Russia, South Africa, and others, as of 3/31/22.

Fiscal Drag in 2022, but Higher Multi-Year Multiplier Mix

After nearly $3 trillion of emergency stimulus in FY 2021, the budget deficit is set to shrink considerably and offer less fiscal support in 2022. Legislation approved in 2021 provides more than half a trillion dollars of extra multi-year spending on infrastructure, which traditionally has a high multiplier effect on near-term growth. Any additional multi-year spending or tax increases will depend on negotiations among Congressional Democrats.

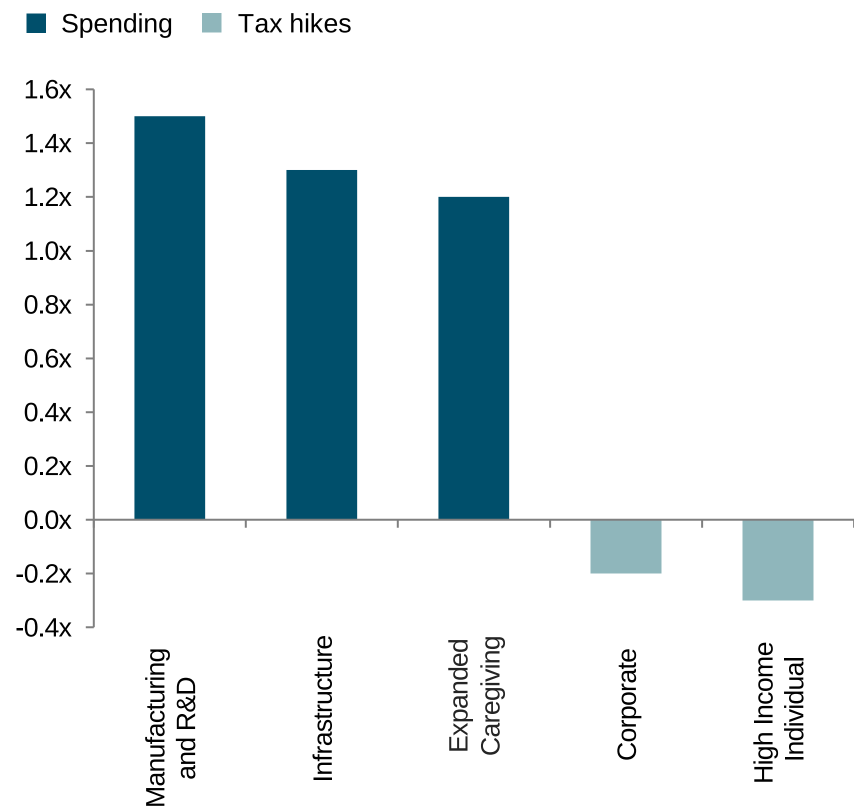
U.S. Fiscal Deficit

Share of GDP



Fiscal Multipliers

Ratio



LEFT Dashed line projection represents updated deficit baseline from the Committee for a Responsible Federal Budget (CRFB) using CBO July GDP forecasts. Source: CRFB, Congressional Budget Office, Haver Analytics, Fidelity Investments (AART), as of 11/15/21.

RIGHT: R&D: Research and development. Multipliers are rough estimates of how much a dollar of spending or tax changes would impact GDP based on historical averages. Sources: Congressional Budget Office, Richmond Federal Reserve, Fidelity Investments (AART), as of 9/30/21.

Outlook: Market Assessment

Fidelity's Business Cycle Board, composed of portfolio managers responsible for a variety of global asset allocation strategies, believes the U.S. economy is in a mature mid-cycle expansion. Board members recognize security selection may provide additional return opportunities. If the secular backdrop is changing as members expect, diversification will become both more important and more difficult to achieve.

Business Cycle

U.S. in mid-cycle expansion phase with some sectors exhibiting late-cycle trends

Consumers are seeing wage growth, but inflation is negatively impacting real incomes and spending power

Risks

Supply-side issues continue to negatively affect growth and inflation

Financial conditions are likely to tighten as the Fed raises rates

The trajectory of the Ukraine/Russia conflict is a key source of risk

Asset Allocation Implications

An overweight to risk assets remains generally appropriate

Maintain exposure to inflation-resistant assets

Emphasize a focus on diversified and disciplined investment strategies if the economy is entering a high inflation regime

For illustrative purposes only. Diversification does not ensure a profit or guarantee against a loss. Source: Fidelity Investments (AART), as of 3/31/22.

Asset Markets

Commodities Started off Strong During Volatile Quarter

Asset categories that benefited from higher inflation led the markets during a Q1 when most categories finished in negative territory. Commodities and energy stocks posted strong gains, and regional equities in Latin America and Canada registered positive returns. Value stocks and higher dividend payers held up better than other styles and factors. Shorter-duration leveraged loans and inflation-resistant TIPS led fixed-income assets.

U.S. Equity Styles Total Return

	Q1 2022(%)	1 Year (%)
Value	-0.8%	11.1%
Large Caps	-4.6%	15.6%
Mid Caps	-5.7%	6.9%
Small Caps	-7.5%	-5.8%
Growth	-9.3%	12.9%

U.S. Equity Sectors Total Return

	Q1 2022(%)	1 Year (%)
Energy	39.0%	64.0%
Utilities	4.8%	19.9%
Consumer Staples	-1.0%	16.1%
Financials	-1.5%	14.6%
Industrials	-2.4%	6.1%
Materials	-2.4%	13.9%
Health Care	-2.6%	19.1%
Real Estate	-6.3%	25.6%
Info Tech	-8.4%	20.9%
Consumer Discretionary	-9.0%	9.8%
Communication Services	-11.9%	-0.9%

International Equities and Global Assets Total Return

	Q1 2022(%)	1 Year (%)
ACWI ex USA	-5.4%	-1.5%
Canada	4.6%	20.2%
EAFE	-5.9%	1.2%
Japan	-6.6%	-6.5%
Europe	-7.4%	3.5%
EAFE Small Cap	-8.5%	-3.6%
Latin America	27.3%	23.5%
Emerging Markets	-7.0%	-11.4%
EM Asia	-8.7%	-15.2%
EMEA	-13.7%	-5.7%
Commodities	25.5%	49.3%
Gold	5.9%	13.5%

U.S. Equity Factors Total Return

	Q1 2022(%)	1 Year (%)
Yield	4.1%	20.9%
Value	-2.0%	15.7%
Size	-4.0%	7.1%
Low Volatility	-4.1%	15.7%
Momentum	-4.7%	14.7%
Quality	-6.2%	17.0%

Fixed Income Total Return

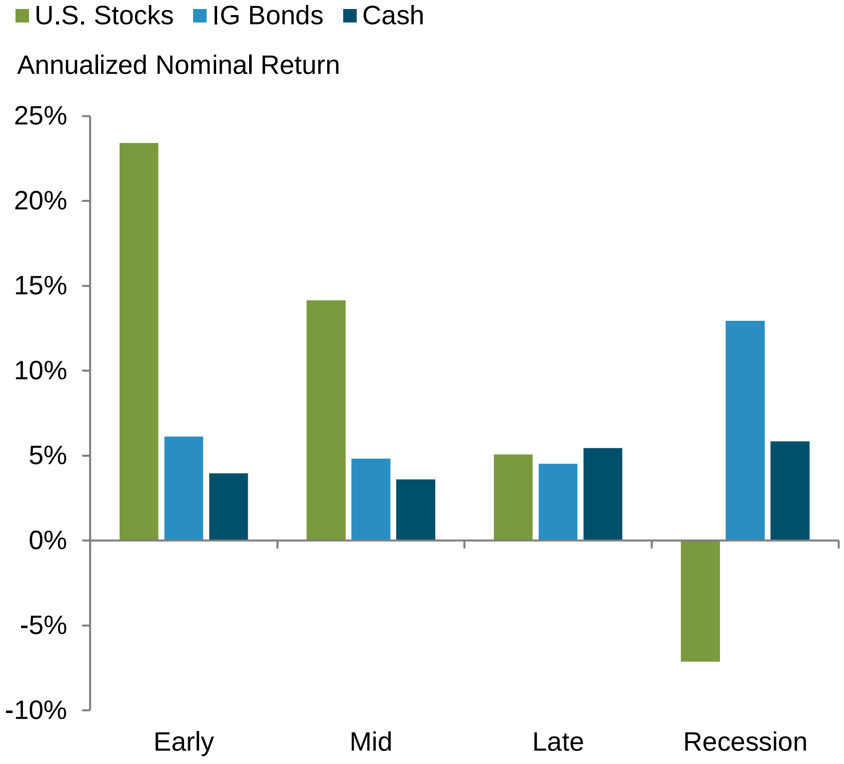
	Q1 2022(%)	1 Year (%)
Leveraged Loan	-0.1%	3.3%
ABS	-2.9%	-3.1%
TIPS	-3.0%	4.3%
Agency	-4.2%	-3.9%
High Yield	-4.5%	-0.3%
MBS	-5.0%	-4.9%
Treasuries	-5.6%	-3.7%
CMBS	-5.6%	-4.5%
Aggregate	-5.9%	-4.2%
Municipal	-6.2%	-4.5%
Credit	-7.4%	-4.2%
EM Debt	-9.3%	-6.2%
Long Govt & Credit	-11.0%	-3.1%

EAFE: Europe, Australasia, and the Far East. EM: Emerging markets. EMEA: Europe, the Middle East, and Africa. For indexes and other important information used to represent above asset categories, see Appendix. Past performance is no guarantee of future results. It is not possible to invest directly in an index. All indexes are unmanaged. Sector returns represented by S&P 500 sectors. Sector investing involves risk. Because of its narrow focus, sector investing may be more volatile than investing in more diversified baskets of securities. Source: Bloomberg Finance L.P., Fidelity Investments (AART), as of 3/31/22.

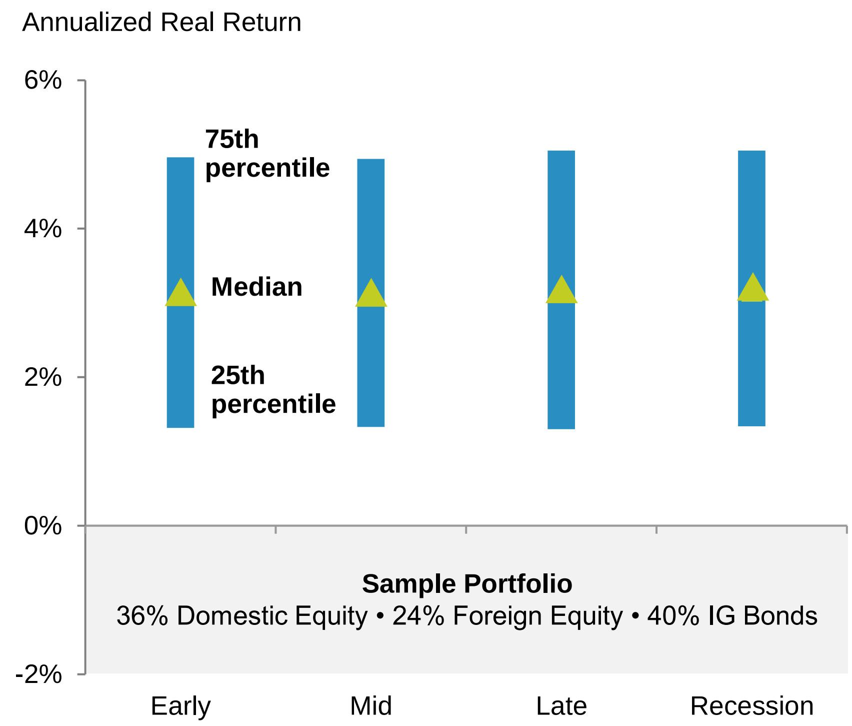
Business Cycle Important But Dissipates in the Long Run

The business cycle can be a critical determinant of asset performance over the intermediate term. Stocks have consistently performed better earlier in the cycle, whereas bonds tend to outperform during recession. 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 (1950–2021)



20-Year Portfolio Return Distribution by Cycle Phase Starting Point

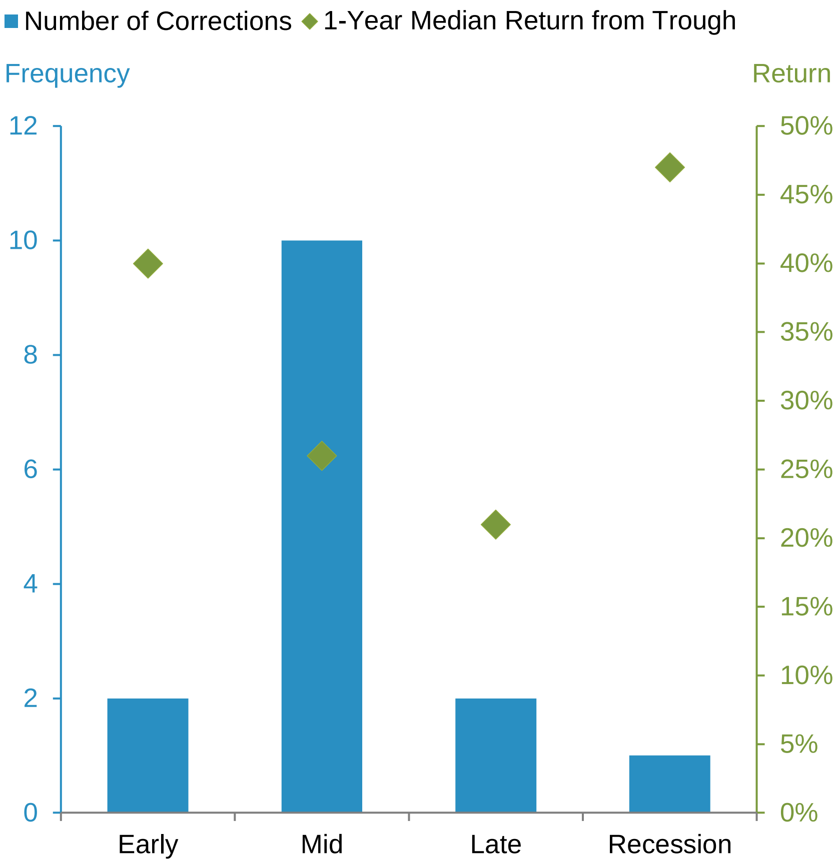


For illustrative purposes only. Past performance is no guarantee of future results. Diversification does not ensure a profit or guarantee against a loss. It is not possible to invest directly in an index. All indexes are unmanaged. See Appendix for important index information. Fidelity proprietary analysis 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 3/31/22.

Stock Market Corrections Common in Mid Cycle

The mid-cycle phase of the U.S. business cycle historically has provided a positive backdrop for the performance of riskier asset classes. However, stock market corrections (drawdowns of between 10% and 20%) have occurred more frequently in mid cycle. This volatility often has been relatively short-lived, with the market typically recovering and going on to surpass its prior peak.

S&P 500 Market Corrections Since 1950



Mid-Cycle Corrections

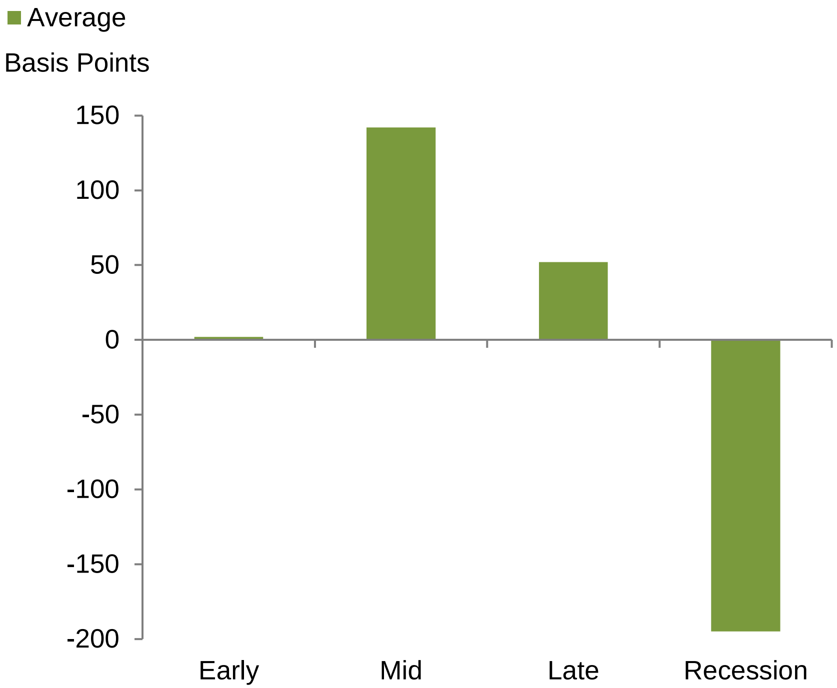
Short, Frequent, and Opportunistic
Average duration 4 months peak to trough
Average 13% drawdown
67% of corrections during mid cycle
8 market corrections over last two mid cycles
26% median 1-year return from trough

Correction defined as a 10% to 20% market decline from peak to trough. Bear market defined as drawdown greater than 20%. Source: Bloomberg Financial L.P., Fidelity Investments (AART), as of 12/31/21.

First Fed Rate Hike Typically Not a Show-Stopper

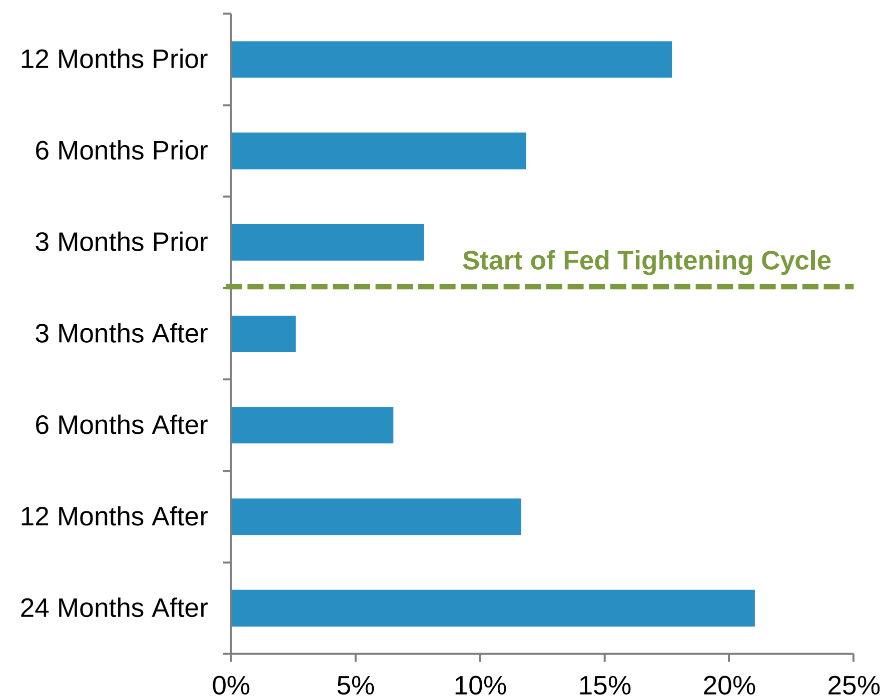
Historically, it is most common for the Federal Reserve to start raising interest rates during the mid cycle, hiking short-term rates an average of nearly 150 basis points during the mid-cycle phase. Since 1950, U.S. stocks have on average posted solid returns prior to and following the Fed's first hike of a tightening cycle, as the market tends to digest the shift in monetary policy within the context of a continued economic expansion.

Fed Funds Rate Change per Business Cycle, 1950–2021



Frequency of First Rate Hike	Early	Mid	Late	Recession
	29%	64%	7%	0%

Equity Performance around Fed Tightening Cycles, 1950–2021

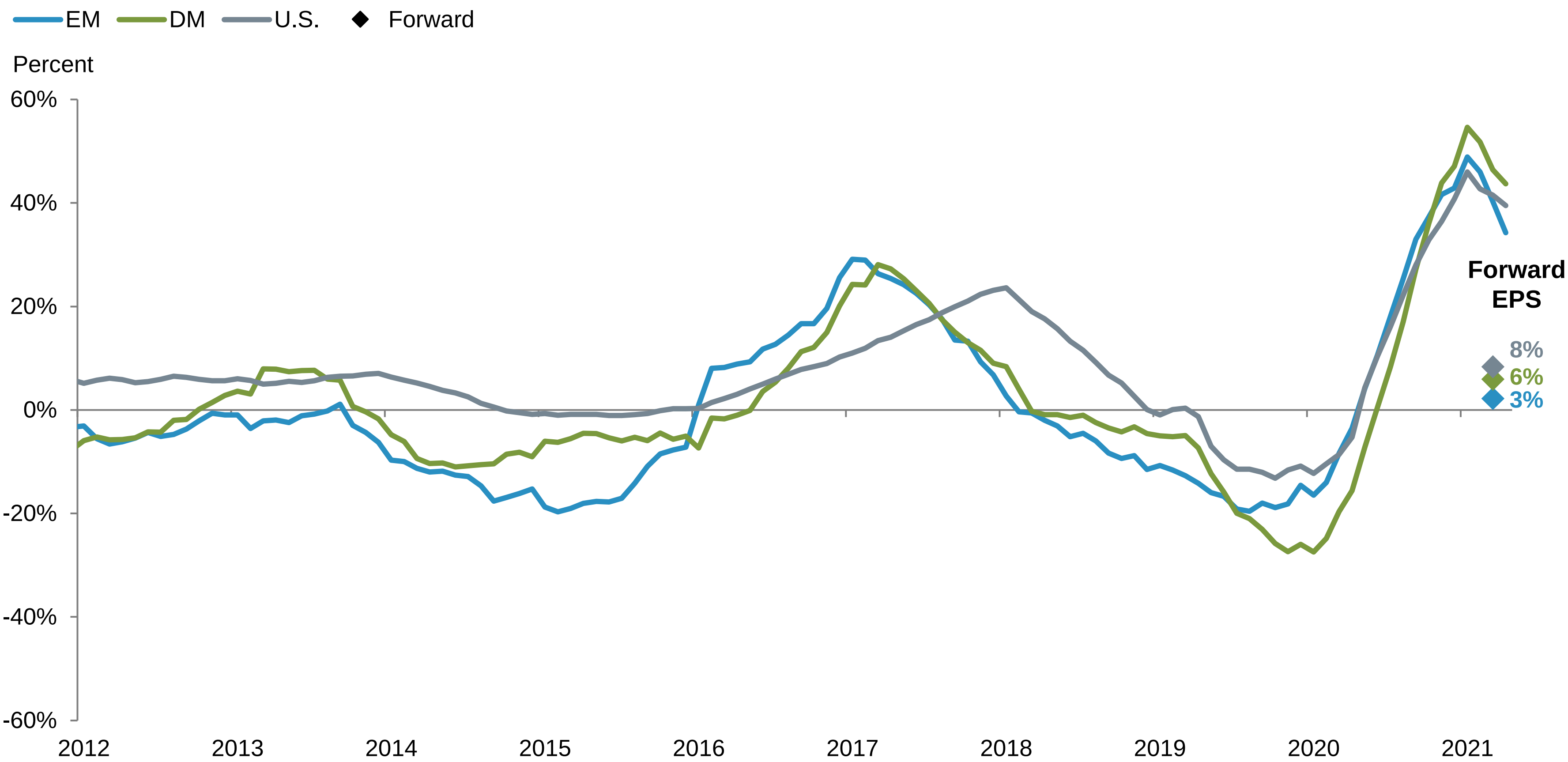


 Past performance is no guarantee of future results. Equity performance represented by S&P 500. Source: Fidelity Investments (AART), as of 12/31/21.

Global Earnings Growth Moderated

Global earnings growth slowed to start the year, as growth moderated from the decade-high rates registered during the earnings recovery in 2021. More moderate growth is expected this year across all major categories of global equities—U.S., non-U.S. developed markets, and emerging markets—with forward estimates in the single digits.

Global EPS Growth (Trailing 12 Months)

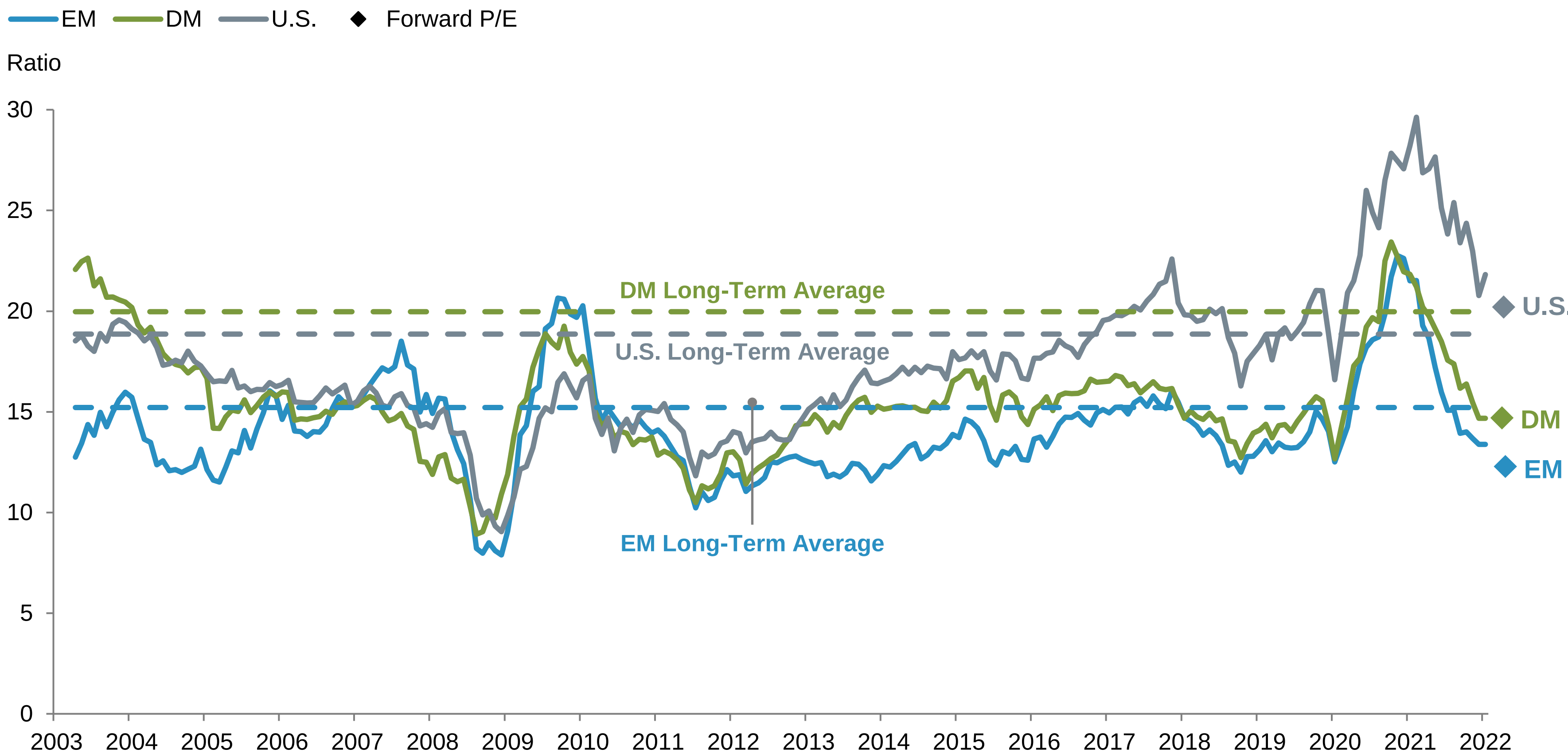


Past performance is no guarantee of future results. DM: Developed markets. EM: Emerging markets. EPS: Earnings per share. Forward EPS: Next 12 months expectations. Indexes: DM—MSCI EAFE Index; EM—MSCI Emerging Markets Index; U.S.—S&P 500. Source: MSCI, Bloomberg Finance L.P., Fidelity Investments (AART), as of 3/31/22.

Valuations Dropped amid Equity-Price Declines

The broad equity sell-off caused valuations for all categories of global stocks to decline during Q1. The price-to-earnings ratios for both DM and EM are below their long-term averages, while the U.S. remains above its average. Trailing earnings valuations are now roughly in line with forward P/E expectations.

Global Stock Market P/E Ratios (Trailing 12 Months)

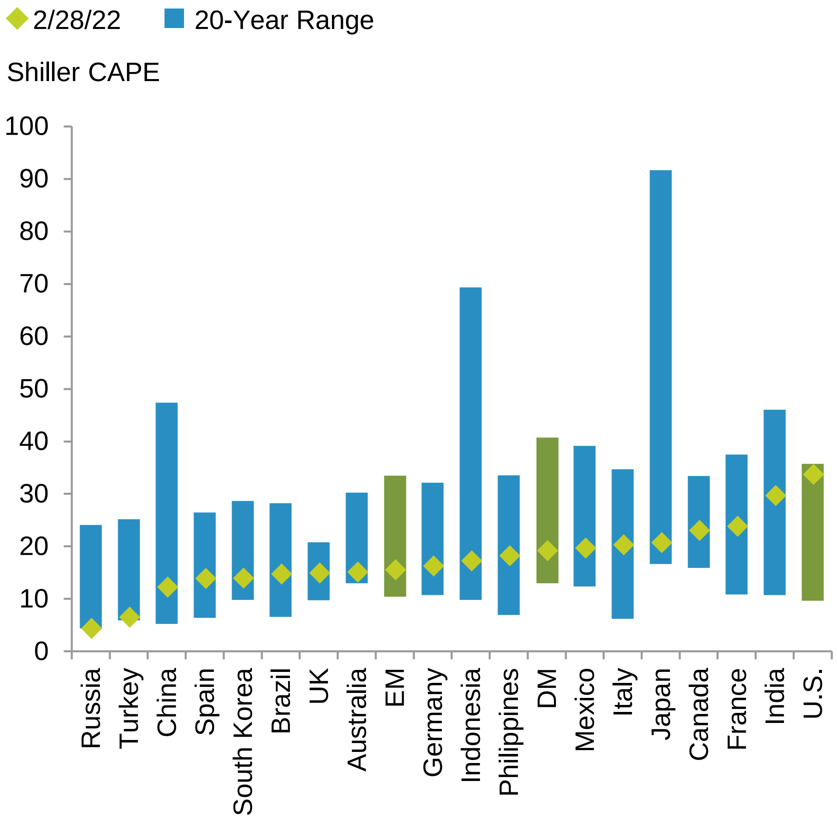


DM: Non-U.S. developed markets. EM: Emerging markets. Past performance is no guarantee of future results. It is not possible to invest directly in an index. All indexes are unmanaged. See Appendix for important index information. Price-to-earnings (P/E) ratio (or multiple): Stock price divided by earnings 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 6/30/21. Indexes: DM—MSCI EAFE Index; EM—MSCI Emerging Markets Index; U.S.—S&P 500. Source: Bloomberg Finance L.P., Fidelity Investments (AART), as of 3/31/22.

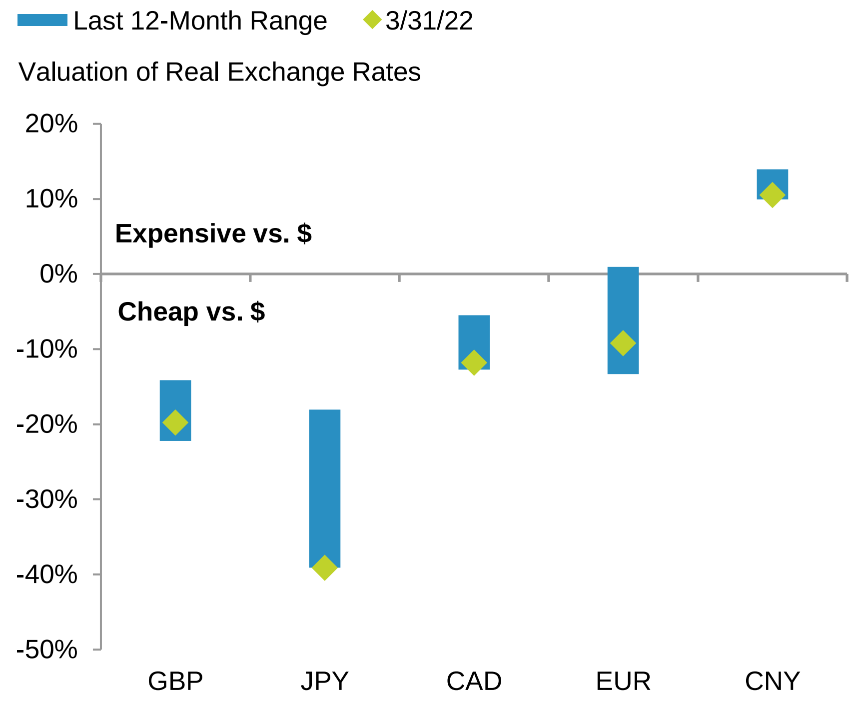
Dollar Strengthened, Non-U.S. Assets Relatively Attractive

Cyclically adjusted P/E (CAPE) ratios for non-U.S. equities remained below U.S. valuations. During Q1, the U.S. dollar rose against most major developed-market currencies, and the valuation of the dollar's real exchange rate remains expensive, particularly against the Japanese yen. These valuation metrics indicate a relatively favorable long-term backdrop for non-U.S. stocks and currencies.

Cyclically Adjusted P/Es



Valuation of Major Currencies vs. USD

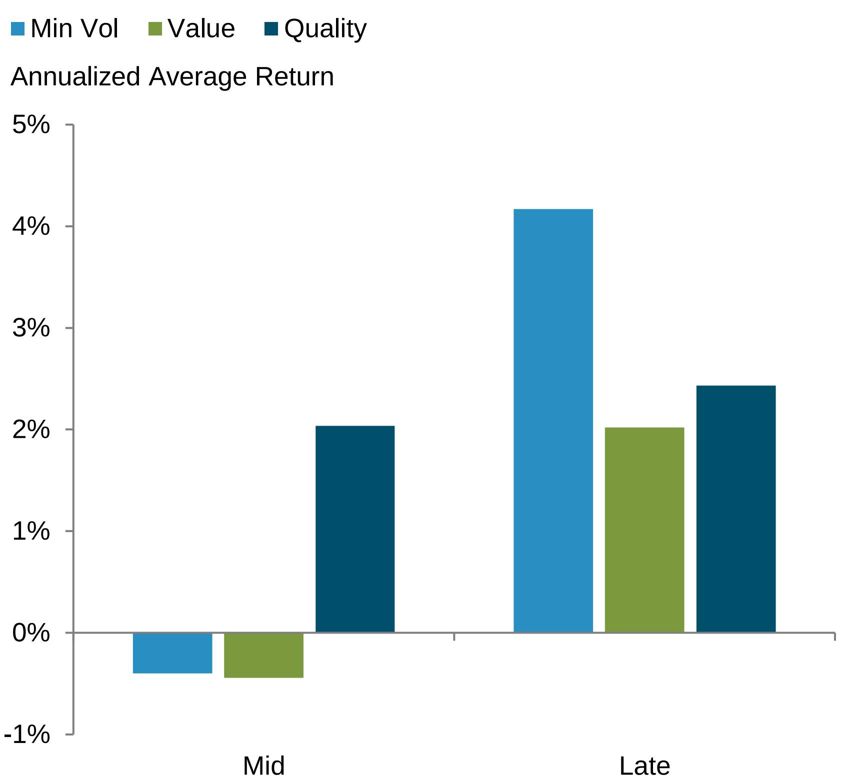


DM: Developed markets. EM: Emerging markets. Past performance is no guarantee of future results. It is not possible to invest directly in an index. All indexes are unmanaged. See Appendix for important index information. **LEFT:** Price-to-earnings (P/E) ratio (or multiple): stock price divided by earnings 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, Haver Analytics, Fidelity Investments (AART), as of 2/28/22. **RIGHT:** GBP—British pound; JPY—Japanese yen; CAD—Canadian dollar; EUR—euro; CNY—Chinese yuan. Source: Federal Reserve Board, Haver Analytics, Fidelity Investments (AART), as of 3/31/22.

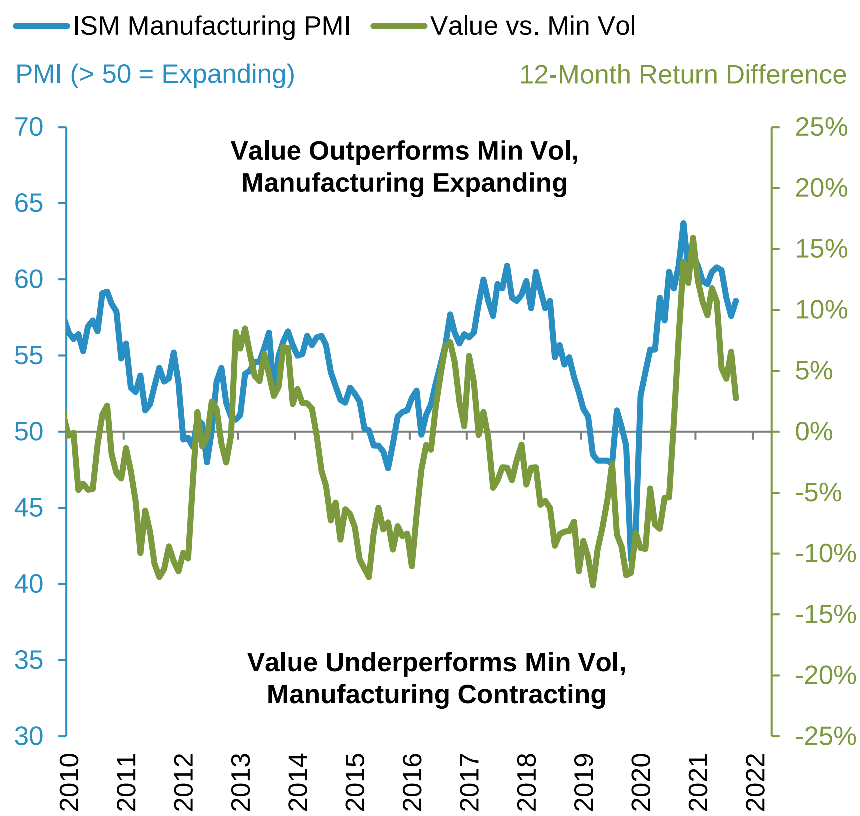
Decelerating Growth May Support Min Vol Factor

Historically, the quality factor has been a leading performer during full mid-cycle periods. More defensive factors like min vol tend to benefit relative to more cyclical factors like value when growth decelerates, manufacturing activity moderates, and the cycle eventually matures into a late-cycle phase. The current mix of mid- and late-cycle dynamics may support both the quality and min vol factors.

Factor Returns vs. Market Through Cycle (1995–2022)



Relative Performance vs. Manufacturing Cycles



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 3/31/22. **RIGHT**: Min Vol—MSCI USA Minimum Volatility Index, Value– MSCI USA Value Index. Source: Institute for Supply Management, Bloomberg Finance L.P., Haver Analytics, Fidelity Investments (AART), as of 2/28/22.

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

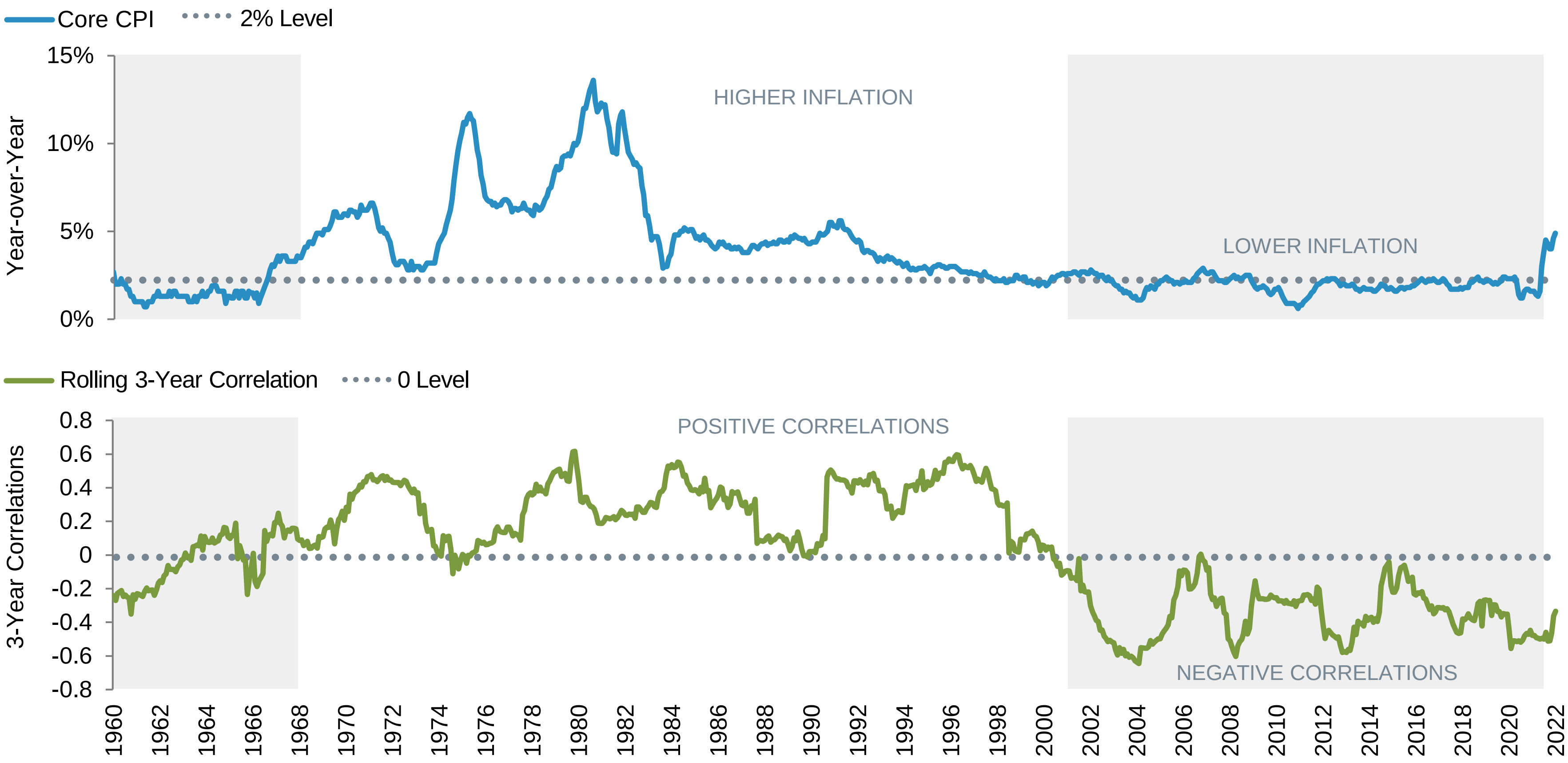
Sector	EARLY CYCLE Rebounds	MID CYCLE Peaks	LATE CYCLE Moderates	RECESSION Contracts
Financials	+			
Real Estate	++			--
Consumer Discretionary	++	-	--	
Information Technology	+	+	--	--
Industrials	++			--
Materials	+	--	+	
Consumer Staples			++	++
Health Care	--		++	++
Energy	--		++	
Communication Services		+		-
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 respectively represent over- or underperformance 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. A single +/– indicates a mixed or less consistent signal. Return data from 1962 to 2020. Source: Fidelity Investments (AART), as of 3/31/22.

Stock-Bond Diversification Highest When Inflation Is Tame

Over the past 20 years, U.S. core inflation rarely stayed above 2%. In this environment, correlations between U.S. stocks and Treasury bonds were negative, providing strong portfolio diversification. Historically, higher inflation—such as during the 1970s—generated headwinds for both stocks and bonds and led to higher return correlations and diminished diversification benefits.

Stock and Treasury Bond Correlations vs. Inflation

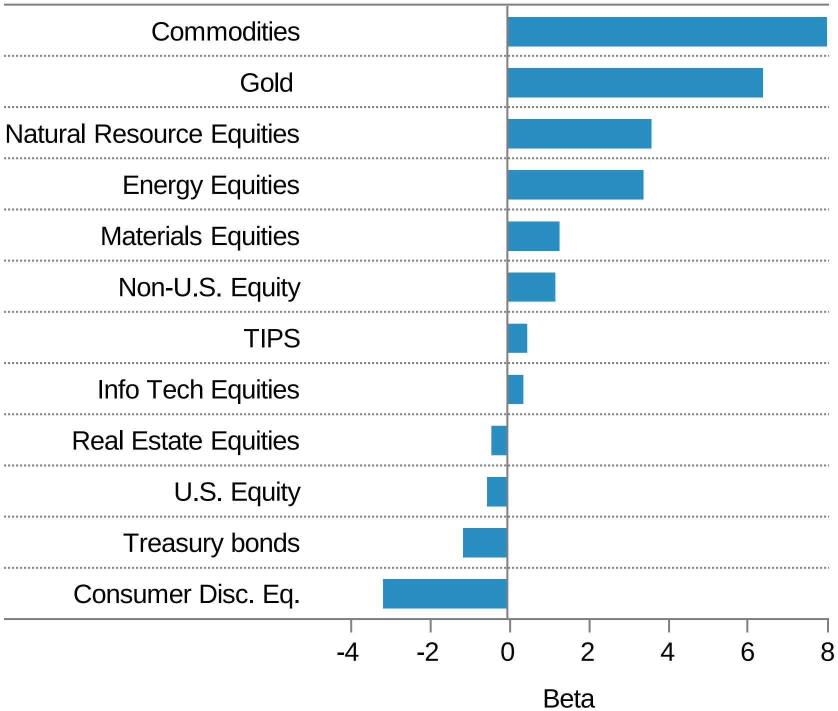


Past performance is no guarantee of future results. Diversification does not ensure a profit or guarantee against loss. Fidelity Investments proprietary analysis of historical asset class performance is not indicative of future performance. Source: Bureau of Labor Statistics, Haver Analytics, Bloomberg Finance L.P., Fidelity Investments (AART), as of 2/28/22.

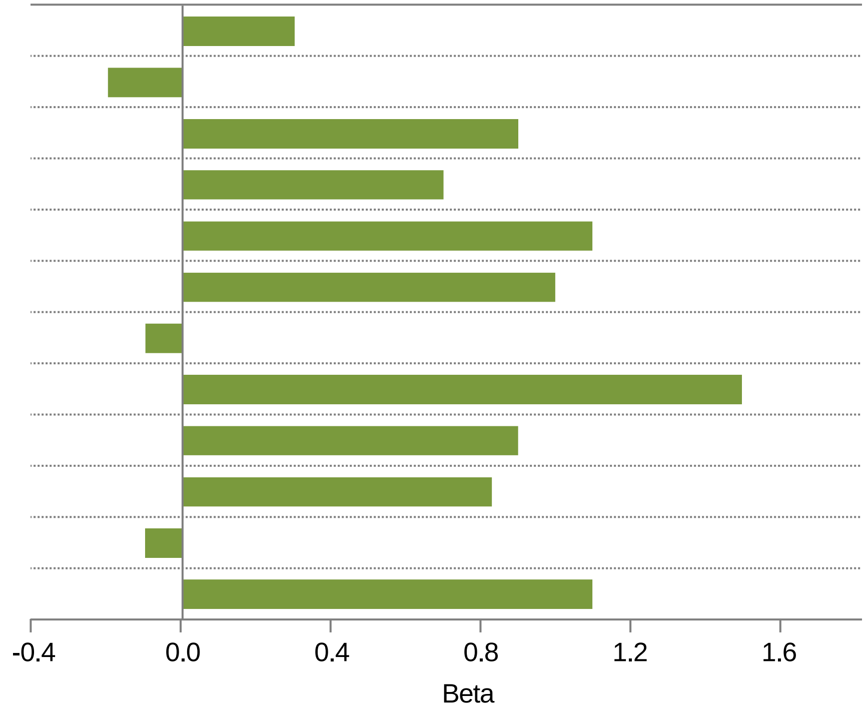
Inflation-Sensitive Assets Can Help Provide Diversification

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)

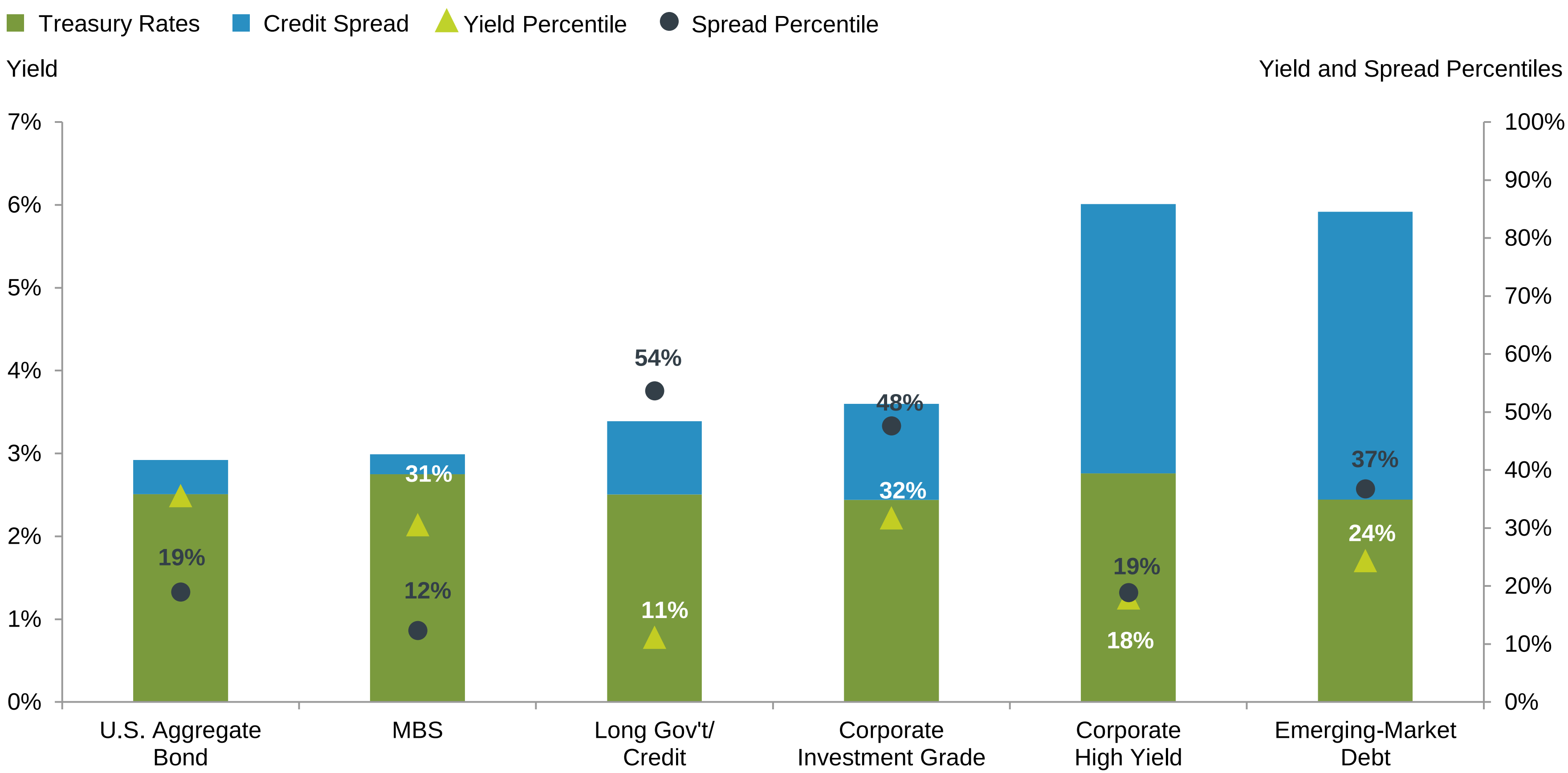


Past performance is no guarantee of future results. Diversification does not ensure a profit or guarantee against loss. Inflation sensitivity measured relative to CPI, an index that tracks the percentage change in the price of a specified "basket" of consumer goods and services. Growth sensitivity measured 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℠; Non-U.S. Equity (EM+DM)—MSCI ACWI ex USA Index; Commodities—Bloomberg Commodity Index Total Return℠. Commodity sectors represent categories within the Bloomberg Commodity Index Total Return℠. 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.

Rates and Spreads Are Higher but Remain Low vs. History

Both interest rates and credit spreads increased during Q1 across most bond categories. Although higher rates and spreads caused yields to move up and out of their bottom decile relative to history, bond yields remain at the low end of their multi-decade range. Credit spreads in most categories, particularly high-yield corporate bonds, remain below their historical averages.

Fixed Income Yields and Spreads (1993–2022)



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 2022. MBS: Mortgage-backed securities. Treasury rates different across asset classes due to different duration for each index. Source: Bloomberg Finance L.P., Bank of America Merrill Lynch, JP Morgan, Fidelity Investments (AART), as of 3/31/22.

Long-Term Themes

Challenging Secular Trends Turbo-Charged by Pandemic

We believe the long-standing regime of investment-friendly political and economic conditions is under increasing duress. Many secular trends that suggest rising long-term risks have been exacerbated during the pandemic, including record-high debt and inequality, extraordinary monetary and fiscal policies, and rising de-globalization pressures. Inflation, policy, and profit risks warrant high levels of strategic diversification.

LONG-TERM

Broad Secular Changes	Secular Factors	Pre-pandemic Trends	Pandemic Impact
Unprecedented Accumulation of Debt	Debt	Record high levels	Even higher
Rising Populist Demands	Monetary policy	Financial repression Tolerance for higher inflation	Even more extreme
Geopolitical Instability	Fiscal policy	Large deficits	More public spending, higher multiplier
Anti-Globalization Pressure	De-globalization pressures	Goods/labor disinflation ending	Even greater: Supply-chain shocks, self-sufficiency motivation
Widespread Aging Demographics	Inequality	Record high levels	Wages/labor share rising
	Aging demographics	Elderly people spend less (reducing demand) and work less (reducing supply)	Older workers leave labor force

RESULTS

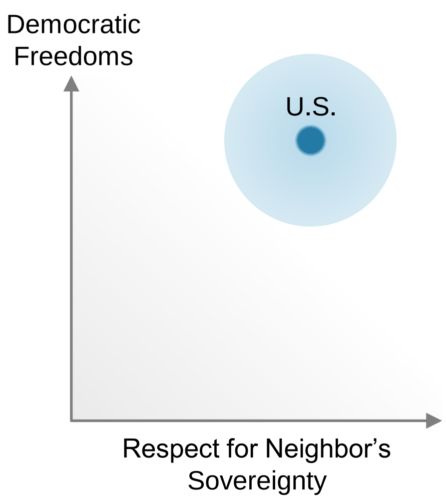
- Inflation Risk
- Policy Risk
- Financial Fragility
- Profit-margin Pressures
- Higher Nominal Growth
- **Shows Need for Strategic Diversification**

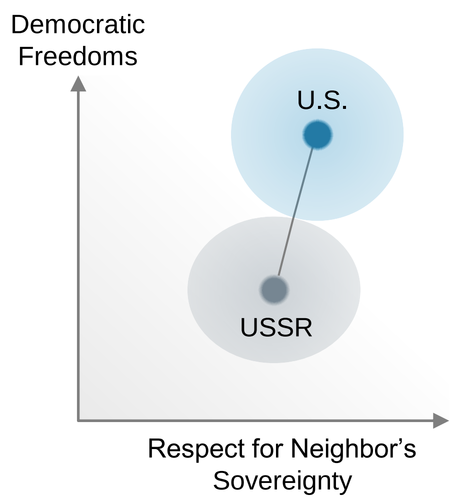
Diversification does not ensure a profit or guarantee against loss. Source: Fidelity Investments (AART), as of 12/31/21.

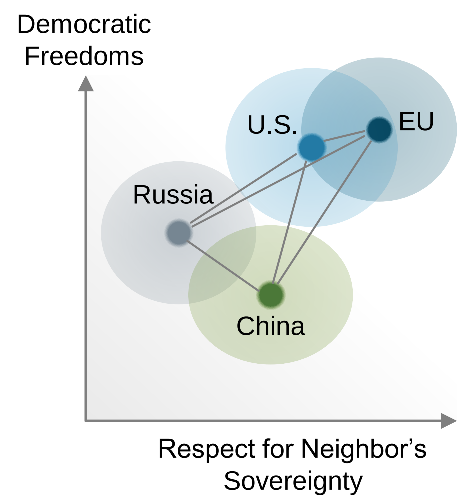
Geopolitical Risk: More Great Powers, Less Stability

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	MULTI-POLAR
Very Stable	**Pretty Stable**	**Unstable**
1990s–early 21st C.	**1960s–1980s**	**Today**





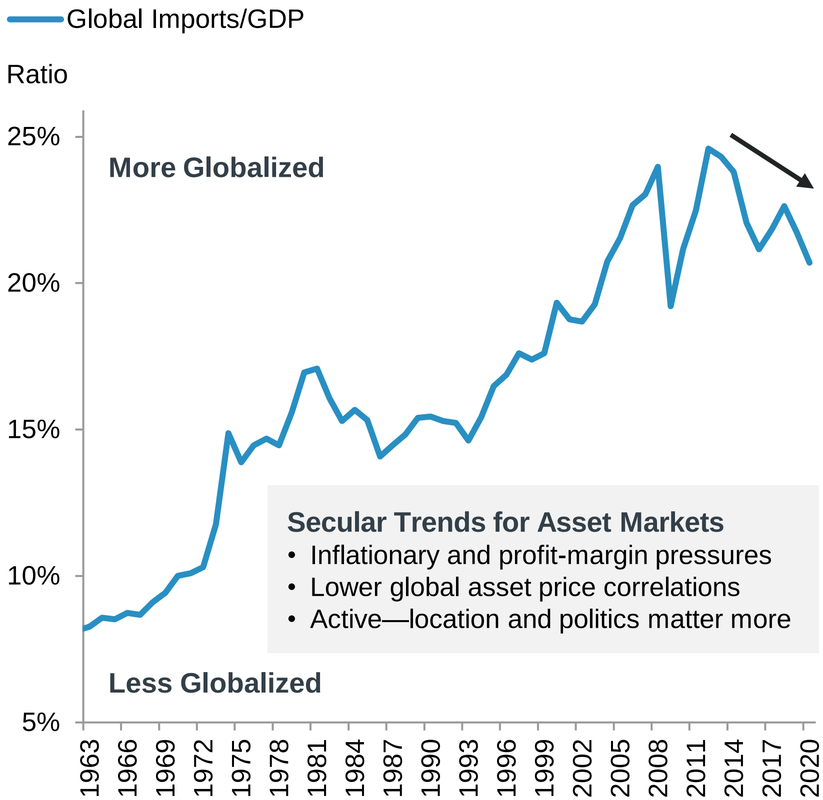


Source: Fidelity Investments (AART), as of 3/31/22.

Geopolitical Risk at the Center of De-Globalization Trend

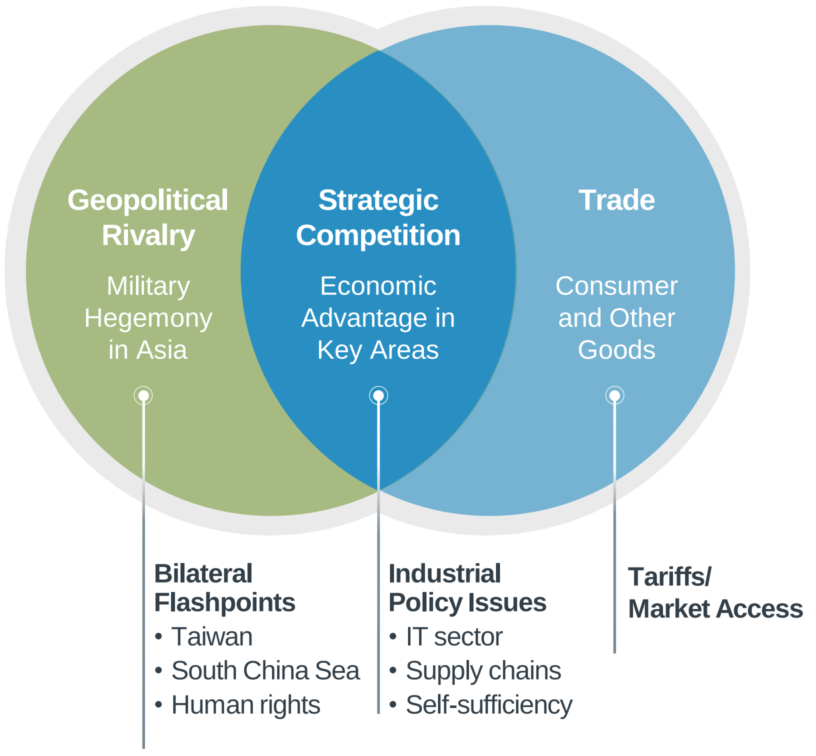
After decades of rapid global integration, economic openness has stalled in recent years. The deepening U.S.-China rivalry creates friction at the center of the globalized trading system, and it implies continued political risk for commercial activities such as the bipolarization of the tech industry.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

Trade Globalization



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

U.S.-China Relationship



Diversification does not ensure a profit or guarantee against loss. Source: International Monetary Fund (IMF), World Bank, Haver Analytics, Fidelity Investments (AART), as of 12/31/21.

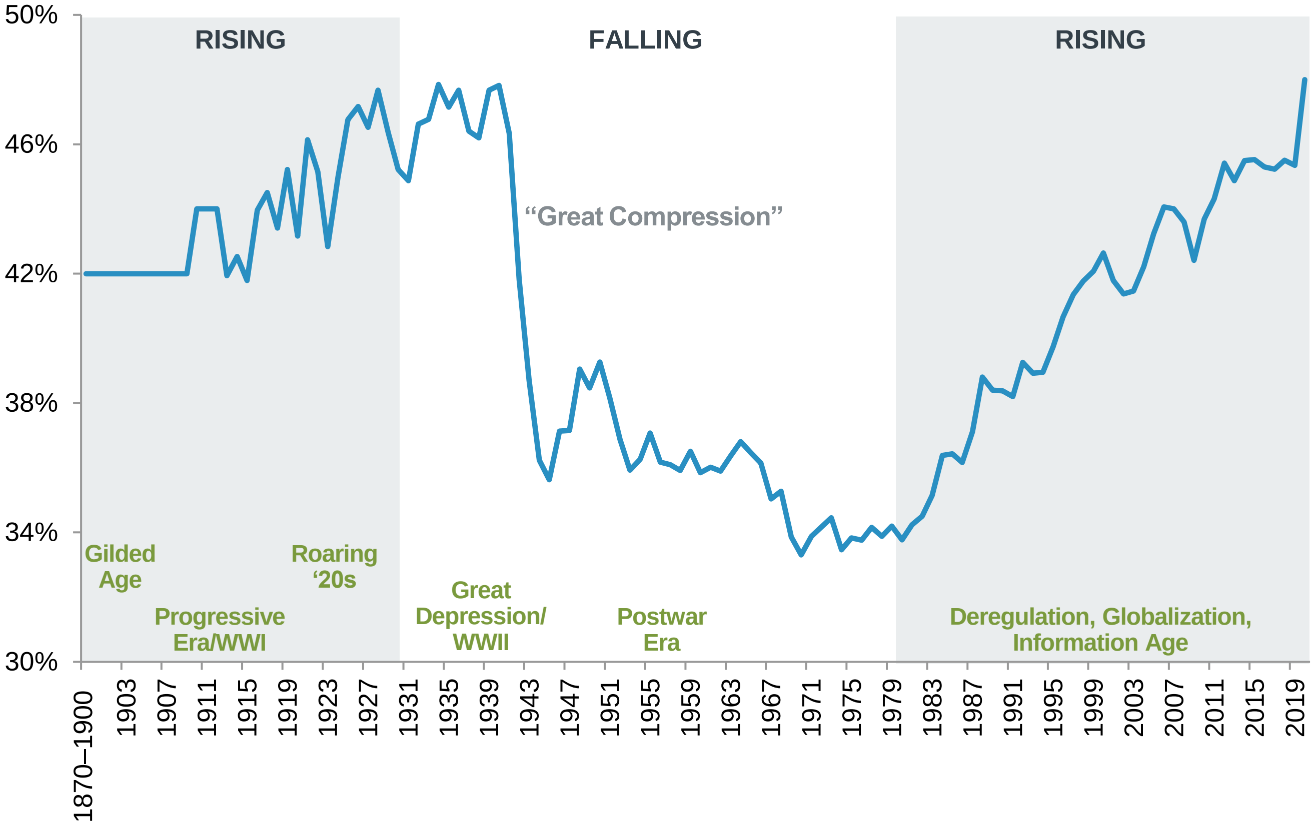
Policy Shift Toward Addressing Record-High Inequality

After decades of rapid technological change and policies that concentrated economic gains in the upper tiers, income inequality has reached 100-year highs. Political trends are shifting toward policy changes aimed at reducing inequality, directionally similar to the postwar "Great Compression" era. This may include broad public investments, a more progressive tax regime, and greater support for low- and middle-income workers.

LONG-TERM

U.S. Income Inequality

Top 10% Earners' Share of Total Income



Modern Era Policies (1980–Present)

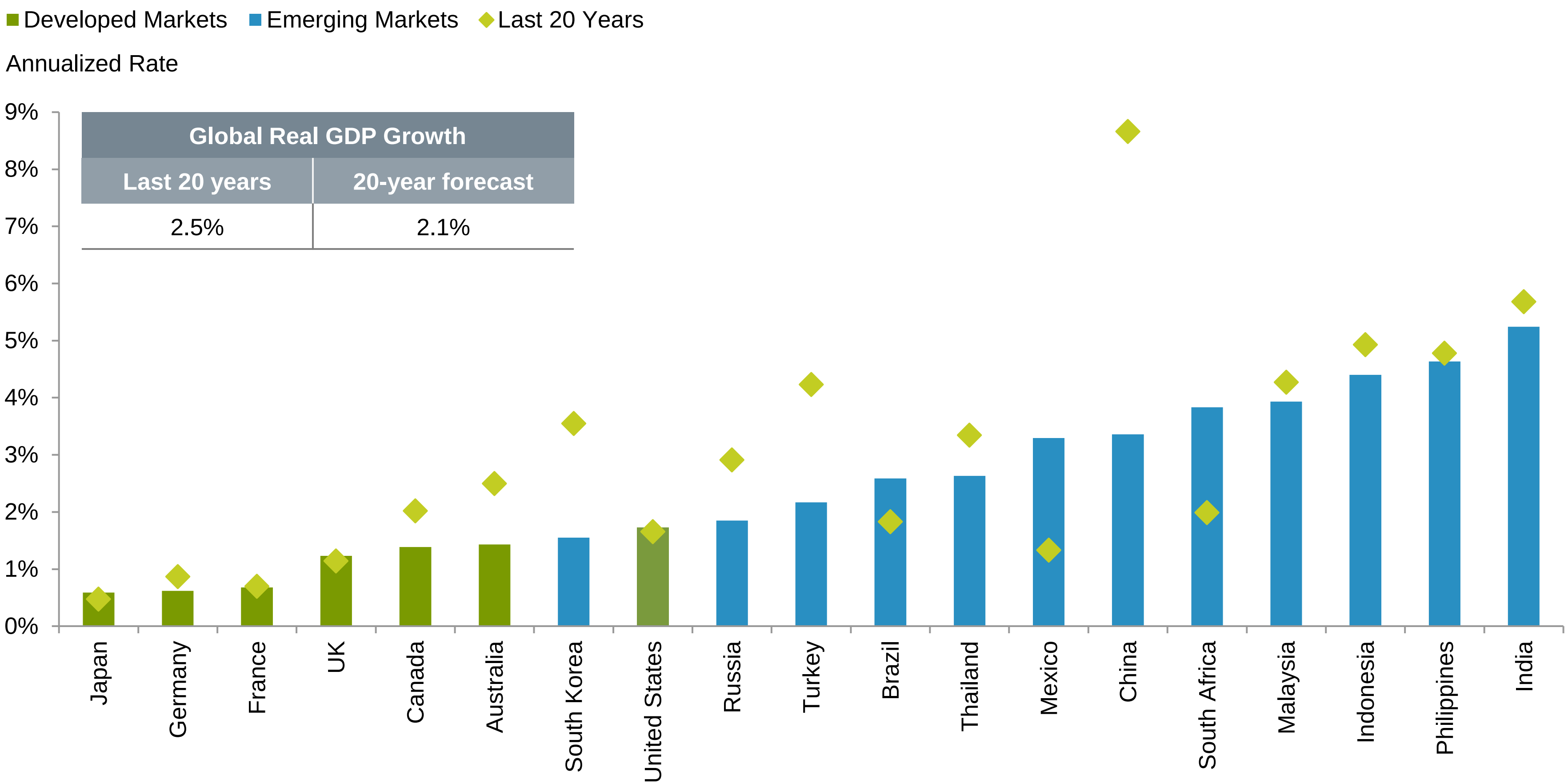
- Rapid globalization, immigration
- Corporate power, de-unionization
- Less progressive tax rates
- Declining public investment
- Easy monetary policy
- High costs for education, health care
- Oligopolistic markets

Source: World Inequality Database, T. Piketty Capital and Ideology HUP 2020, Fidelity Investments (AART), as of 12/31/20.

Secular Forecast: Slower Global Growth, EM to Lead

Slowing labor force growth and aging demographics are expected to tamp down global growth over the next two decades. 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 vs. History



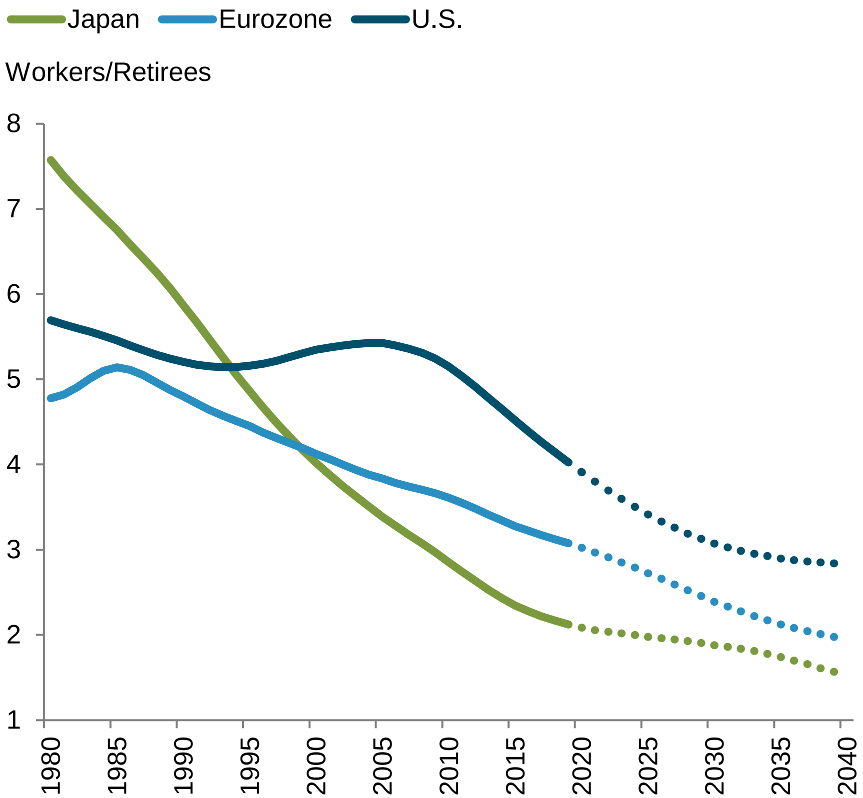
Global Real GDP Growth	
Last 20 years	20-year forecast
2.5%	2.1%

Past performance is no guarantee of future results. EM: Emerging markets. GDP: Gross domestic product.
Source: OECD, Fidelity Investments (AART), as of 5/31/21.

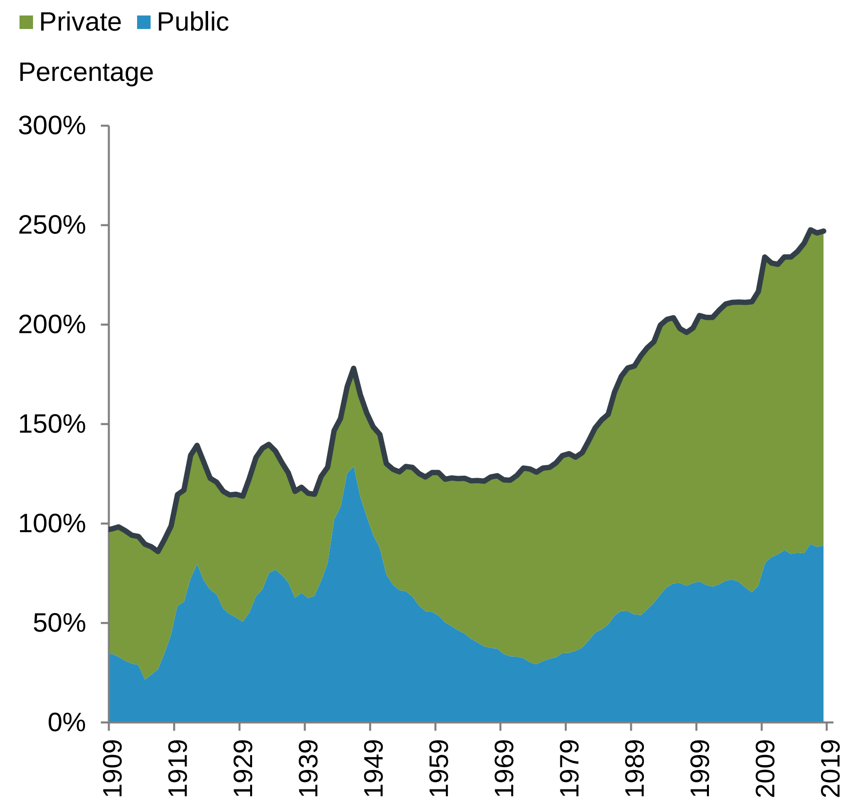
Unprecedented Debt Levels amid Aging Demographics

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 levels of monetary accommodation, leaving the system more dependent than ever on low interest rates.

Demographic Support Ratio



Global Debt as a Share of GDP



LEFT: The demographic support ratio is calculated as the number of workers (15–64 years old)/number of retirees (65 and older). Dotted line represents a projection. Source: United Nations, Haver Analytics, Fidelity Investments (AART), as of 10/31/19.
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 12/31/19.

Secular Inflation Risks Are Rising, Worsened by Pandemic

The pre-pandemic trend of rising long-term inflationary pressures has been exacerbated over the past two years. The use of low interest rates and high fiscal deficits appears entrenched, supply-side pressures from de-globalization trends are manifest, and the exit of older workers from the labor force underscores that aging demographics are not inherently deflationary. Secular inflation risks imply a need for greater diversification.

Possible Secular Impact on Inflation

Secular Factors	Pre-Pandemic Trends	Risks to Inflation	Pandemic Impact	Inflation Impact
Policy	Fed tolerates higher inflation More stimulative fiscal policy	↑ ↑	Even easier policies Boosted consumer demand	↑ ↑
Peak Globalization	More expensive goods/labor	↑	Shock to extended supply chains Increased self-sufficiency motivation	↑ ↑
Aging Demographics	Older adults: • Spend less (reducing demand) • Work less (reducing supply)	 ↓ ↑	Worker shortage: Older workers leave labor force	↑
Technological Progress	More robots, Amazon effect Declining long-term productivity	↓ ↑	Greater use of tech Labor market skills mismatch	↓ ↑
Climate Change	More volatile weather, supply damage Greater innovation/R&D in clean energy	↑ ↓	?	?

 Diversification does not ensure a profit or guarantee against loss. Source: Fidelity Investments (AART), as of 12/31/21.

Performance Rotations Underscore Need for Diversification

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

Periodic Table of Returns

2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	YTD	Legend
56%	32%	35%	35%	40%	5%	79%	28%	8%	20%	39%	28%	5%	21%	38%	0%	36%	38%	43%	26%	Commodities
47%	26%	21%	33%	16%	-20%	58%	27%	8%	19%	34%	14%	3%	18%	30%	-2%	31%	20%	29%	-1%	Value Stocks
39%	21%	14%	27%	12%	-26%	37%	19%	4%	18%	33%	13%	1%	18%	26%	-2%	26%	18%	27%	-4%	REITs
37%	18%	12%	22%	11%	-34%	32%	18%	4%	18%	32%	12%	1%	12%	22%	-3%	26%	18%	26%	-5%	High-Yield Bonds
31%	17%	7%	18%	7%	-36%	28%	17%	2%	16%	23%	11%	1%	12%	15%	-4%	26%	14%	25%	-5%	Large Cap Stocks
31%	11%	5%	16%	6%	-36%	27%	16%	2%	16%	19%	6%	0%	11%	15%	-4%	22%	8%	17%	-5%	60% Large Cap 40% IG Bonds
29%	11%	5%	12%	5%	-37%	26%	15%	0%	16%	7%	5%	-4%	9%	13%	-9%	22%	8%	15%	-6%	Foreign-Developed Country Stocks
28%	9%	5%	11%	2%	-38%	20%	15%	-4%	15%	3%	3%	-4%	8%	9%	-11%	18%	6%	11%	-6%	Investment-Grade Bonds
24%	8%	4%	9%	-1%	-38%	19%	12%	-12%	11%	-2%	-2%	-5%	7%	8%	-11%	14%	3%	5%	-7%	Emerging-Market Stocks
19%	7%	3%	4%	-2%	-43%	18%	8%	-13%	4%	-2%	-4%	-15%	3%	4%	-11%	9%	-3%	-2%	-8%	Small Cap Stocks
4%	4%	2%	2%	-16%	-53%	6%	7%	-18%	-1%	-10%	-17%	-25%	2%	1%	-14%	8%	-8%	-3%	-9%	Growth Stocks

Past performance is no guarantee of future results. Diversification/asset allocation does not ensure a profit or guarantee against 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 3/31/22.

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 3/31/22, 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.

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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 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.

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 27 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-indexes, 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℠ 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.

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

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