Market Analysis / First Quarter 2022

IWM

INDEPENDENT WEALTH MANAGEMENT

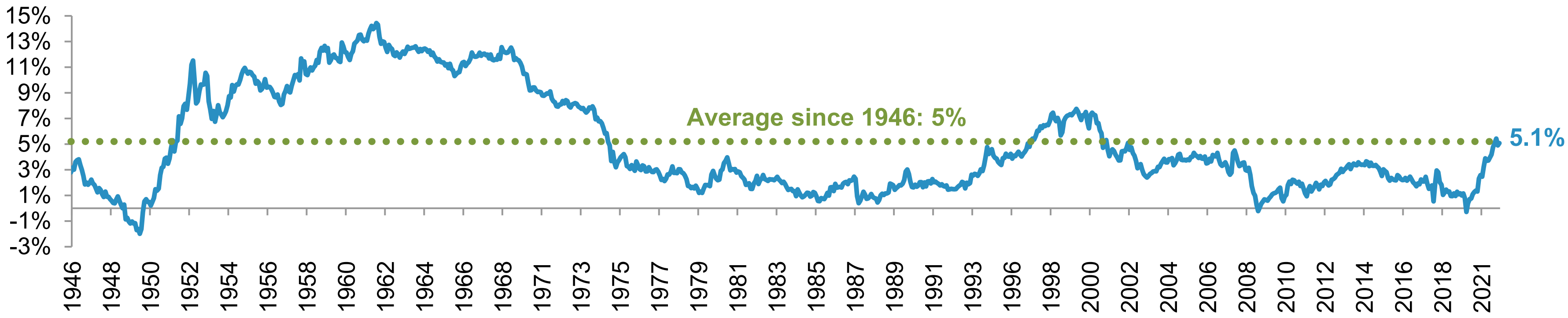
Strong Q4 Rally Caps off Banner Year for U.S. Stocks

Large cap U.S. stocks staged a year-end upswing, underpinning another positive year for global stock prices, but performance was mixed across categories. Investment-grade bonds finished the year in the red amid the modest rise in interest rates, while non-U.S. equity categories lagged as emerging-market stocks dropped due in part to China's downturn. Real estate stocks, commodities, and high-yield bonds all posted solid 2021 returns.

	Q4 2021 (%)	1 Year (%)		Q4 2021 (%)	1 Year (%)
Real Estate Stocks	16.3	43.2	High Yield Bonds	0.7	5.4
U.S. Large Cap Stocks	11.0	28.7	U.S. Corporate Bonds	0.2	-1.1
Commodities	-1.6	27.1	Emerging-Market Bonds	0.0	-1.5
U.S. Mid Cap Stocks	6.4	22.6	Investment-Grade Bonds	0.0	-1.5
U.S. Small Cap Stocks	2.1	14.8	Long Government & Credit Bonds	2.2	-2.5
Non-U.S. Developed-Country Stocks	2.7	11.3	Emerging-Market Stocks	-1.3	-2.5
Non-U.S. Small Cap Stocks	0.1	10.1	Gold	4.1	-3.6

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

Annualized Return Difference



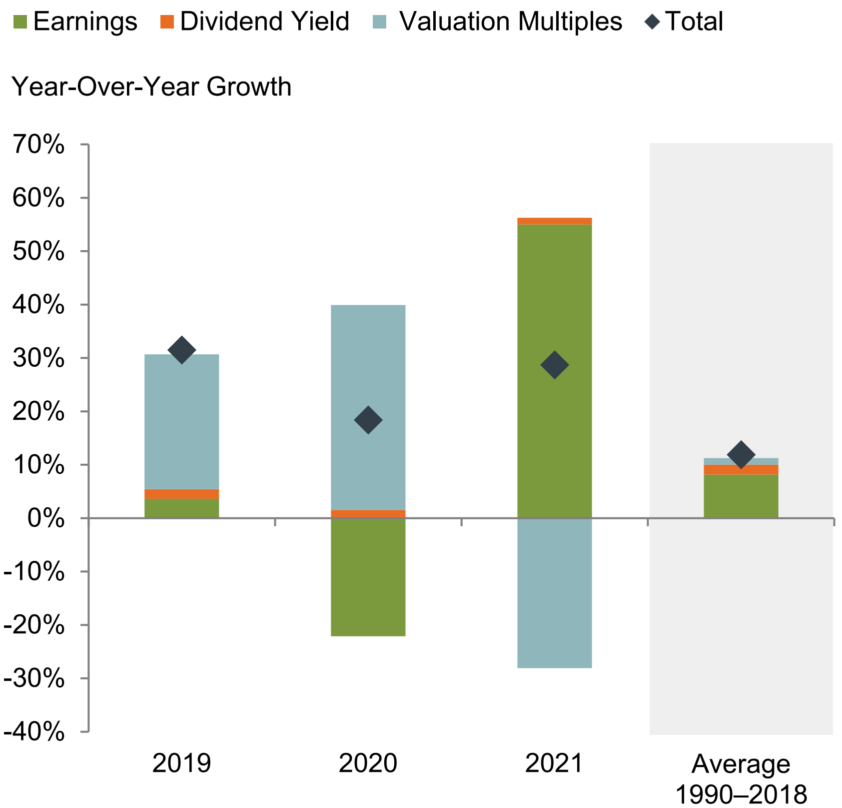
Past performance is no guarantee of future results. It is not possible to invest directly in an index. All indexes are unmanaged. See Appendix for important index information. IG: Investment grade. Assets represented by: Commodities—Bloomberg Commodity Index; Emerging-Market Bonds—JP Morgan EMBI Global 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 12/31/21.

Robust Earnings Recovery Propelled Stock Price Gains

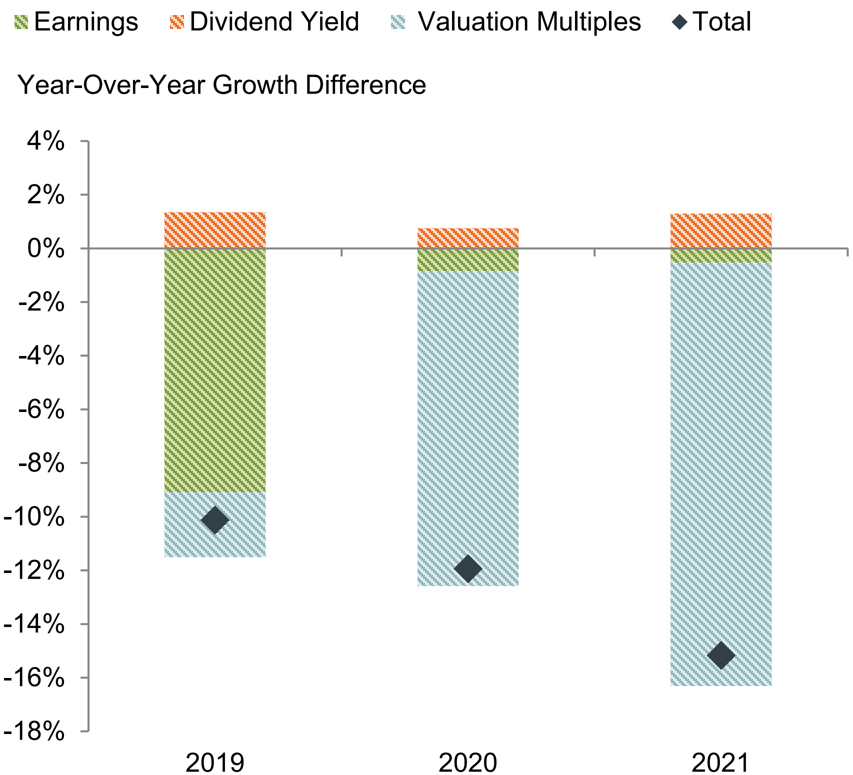
While the 2020 global stock market rally was driven by higher valuation multiples during a profit recession, the 2021 stock price gains were undergirded by a strong rebound in earnings growth. The pattern was typical of U.S. early- to mid-cycle transition, where investor expectations anticipate the profit recovery. Non-U.S. stocks also posted strong profit growth in 2021, but they underperformed U.S. equities due to greater valuation compression.

SUMMARY

Decomposition of S&P 500 Returns



Decomposition of Non-U.S. vs. U.S. Relative Returns

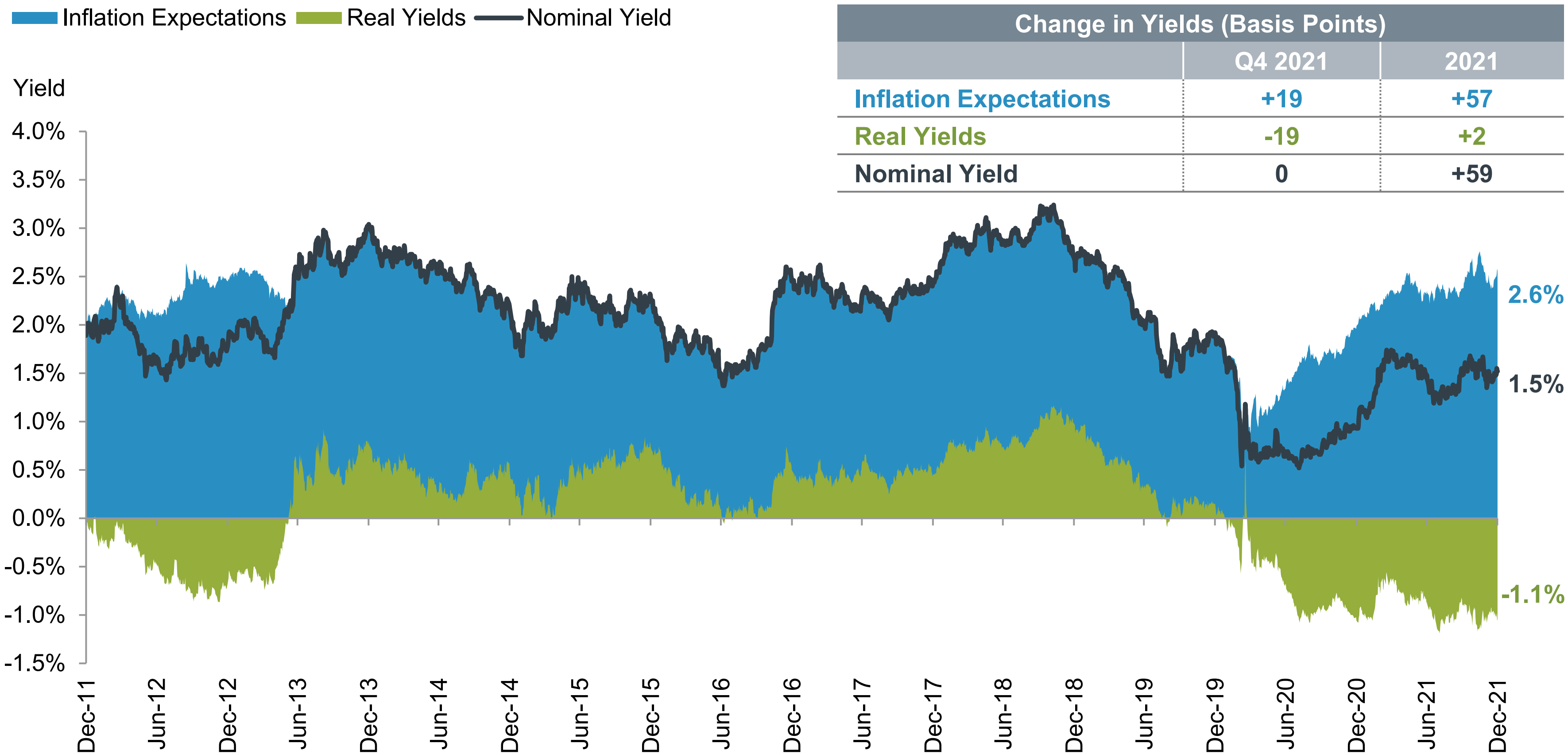


LEFT: Source: Haver Analytics, Standard & Poor, Fidelity Investments, as of 12/31/21. **RIGHT:** Non-U.S. represented by MSCI All Country World Index (ACWI) ex USA Index in local currency minus the decomposition of the S&P 500. Source: Haver Analytics, Standard & Poor, MSCI, Bloomberg Finance L.P., Fidelity Investments (AART), as of 12/31/21.

Real Yields Became Even More Negative during Q4

Nominal 10-year Treasury bond yields barely budged during Q4, but higher inflation expectations pushed real yields—the inflation-adjusted cost of borrowing—even more deeply into negative territory. For the full year, the rise in inflation expectations drove nearly the entire increase in nominal yields from their 2020 historical lows. As of the end of 2021, high inflation expectations and low real yields were at or near multi-year extremes.

10-Year U.S. Government Bond Yields



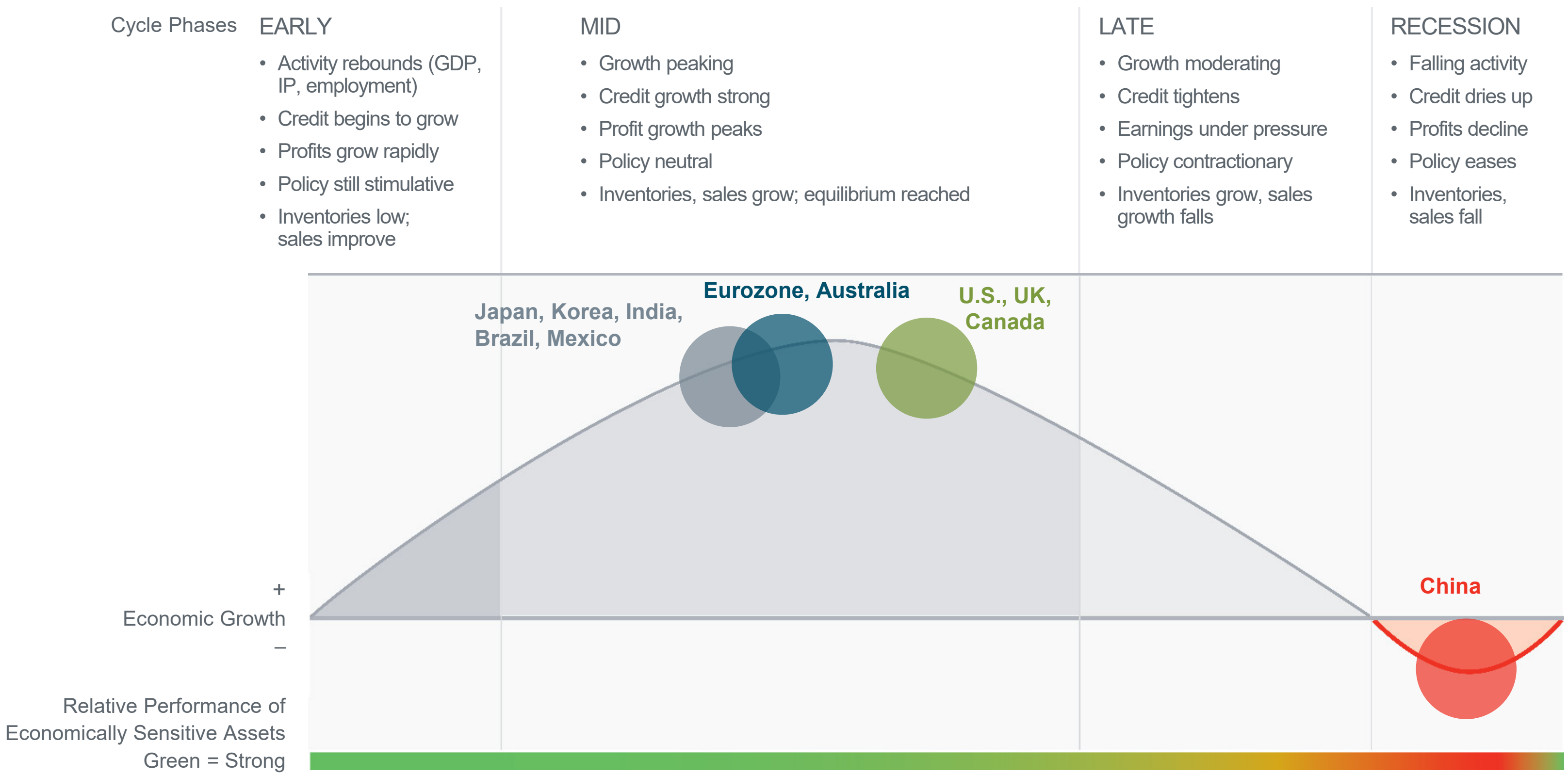
Change in Yields (Basis Points)		
	Q4 2021	2021
Inflation Expectations	+19	+57
Real Yields	-19	+2
Nominal Yield	0	+59

Source: Bloomberg Finance L.P., Fidelity Investments (AART), as of 12/31/21.

Past Peak Growth, but Global Expansion Should Persist

The global economy likely passed its peak rate of growth, but a sustained expansion appears likely. The trajectory of the pandemic will be crucial to the global outlook, with emerging-market economies generally more susceptible to health setbacks. China may be at the trough of its growth recession. Despite some signs of late-cycle pressures in the labor markets, we expect the U.S. mid-cycle backdrop to prevail in 2022.

Business Cycle Framework

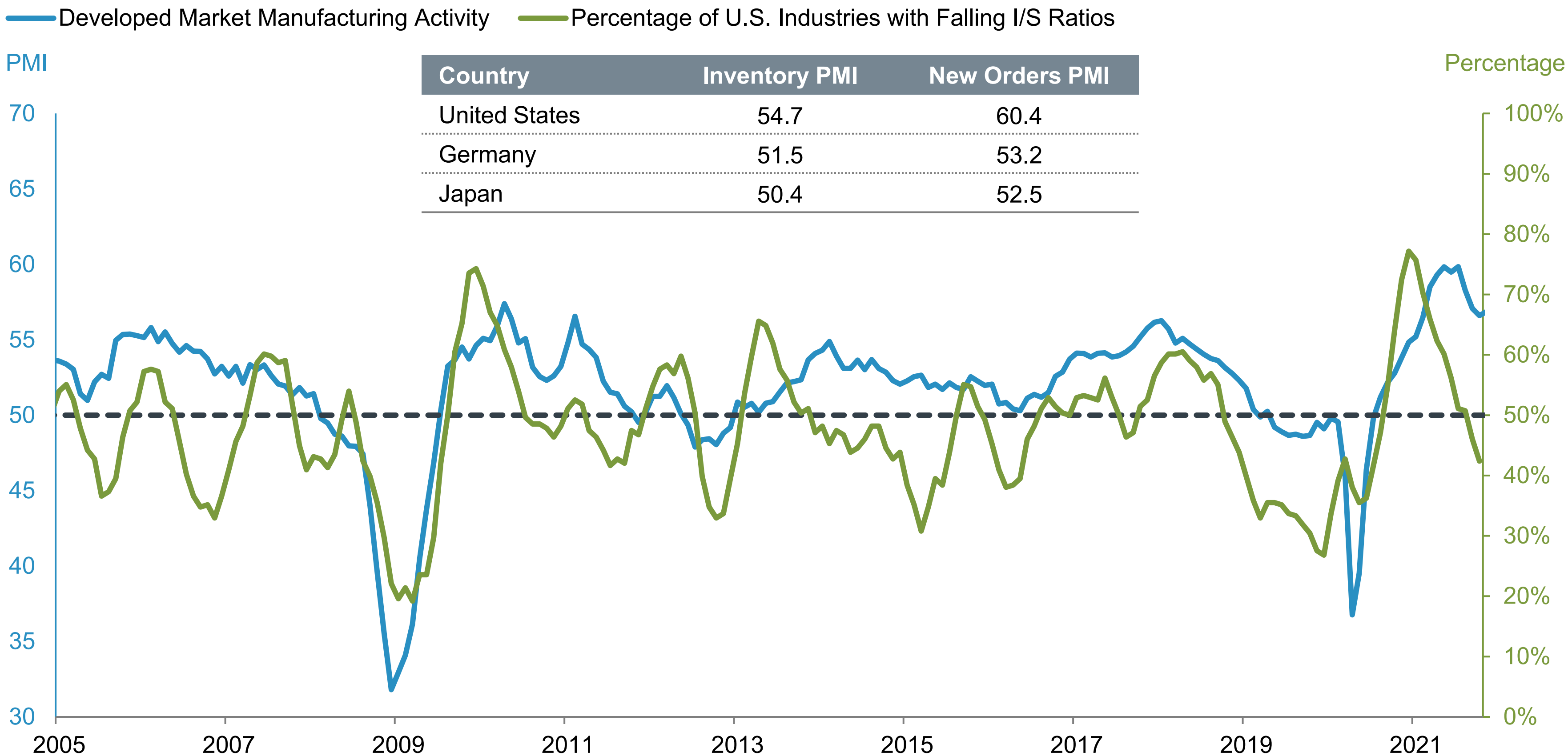


A growth recession is a significant decline in activity relative to a country's long-term economic potential. Note: The diagram above is a hypothetical illustration of the business cycle, the pattern of cyclical fluctuations in an economy over a few years that can influence asset returns over an intermediate-term 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 12/31/21.

Inventory Buildup Suggests Cooling Manufacturing Activity

The lagged impact of China's slowdown implies the peak in global industrial activity is behind us. Inventories relative to sales are rising, suggesting developed-market (DM) manufacturing may decelerate from decade-high activity levels. Bullwhips—leading indicators measuring the gap between new-order demand and the supply of inventories—remain positive but have shrunk and likely represent a mid-cycle headwind for DM.

Global Manufacturing vs. Inventory Cycle



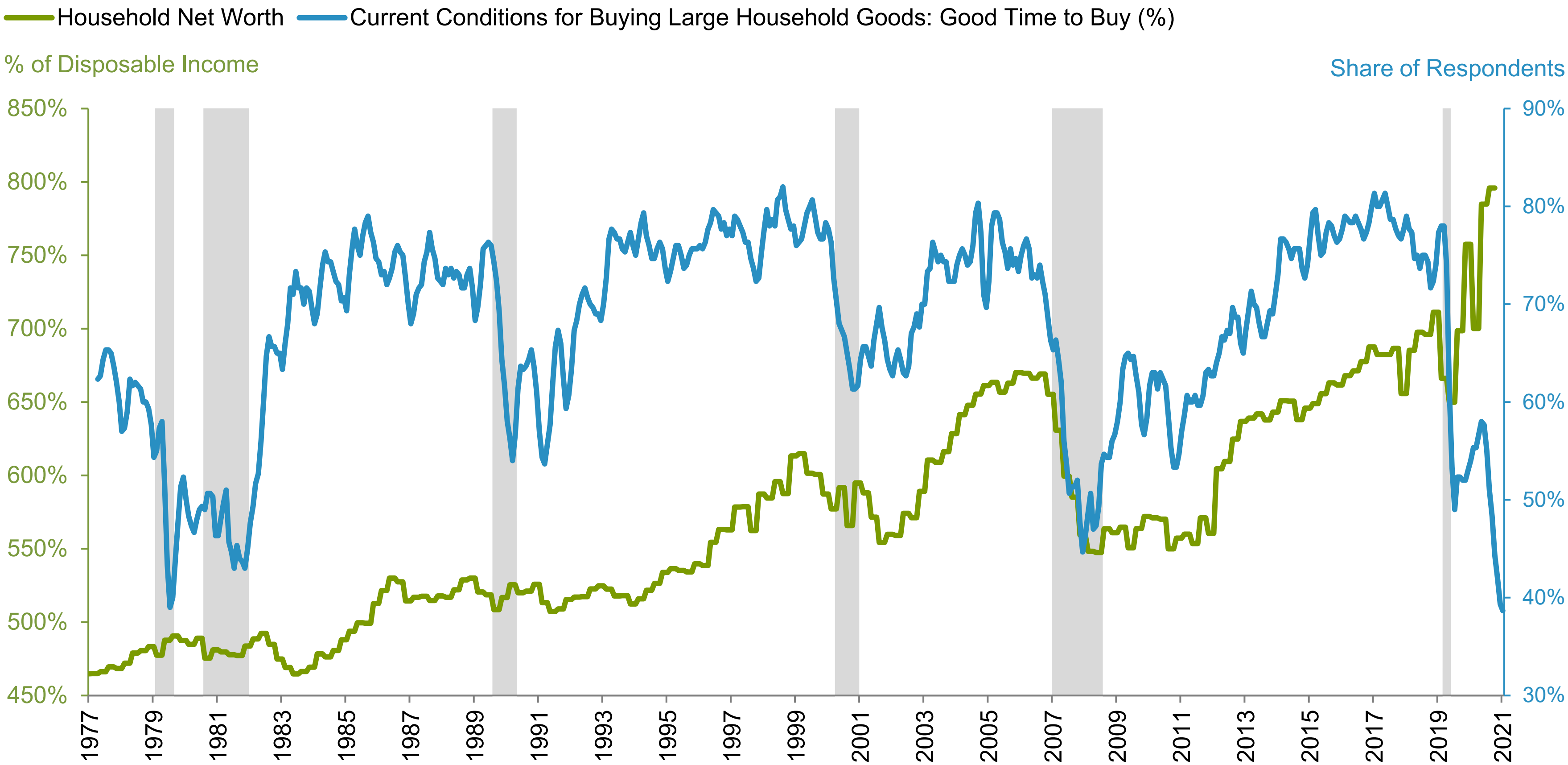
Country	Inventory PMI	New Orders PMI
United States	54.7	60.4
Germany	51.5	53.2
Japan	50.4	52.5

PMI: Purchasing managers' index. **Graph**: I/S: Inventory relative to sales. Six-month moving average of U.S. industries with contracting inventory to sales ratios. Source: Census Bureau, IHS Markit, Haver Analytics, Fidelity Investments (AART), as of 10/31/21. **Table**: Source: IHS Markit, Haver Analytics, Fidelity Investments (AART), as of 12/31/21.

U.S. Consumers Well-Positioned But Inflation Is Painful

The U.S. consumer is bolstered by record-high net worth, pent-up savings, and strong employment markets. However, high inflation has weighed on sentiment as the percentage of consumers viewing the current backdrop as a good time to purchase large household goods hit its lowest point in four decades. Consumer strength supports the mid-cycle backdrop, but more persistent inflation may inhibit real economic growth.

U.S. Household Wealth and Consumer Sentiment

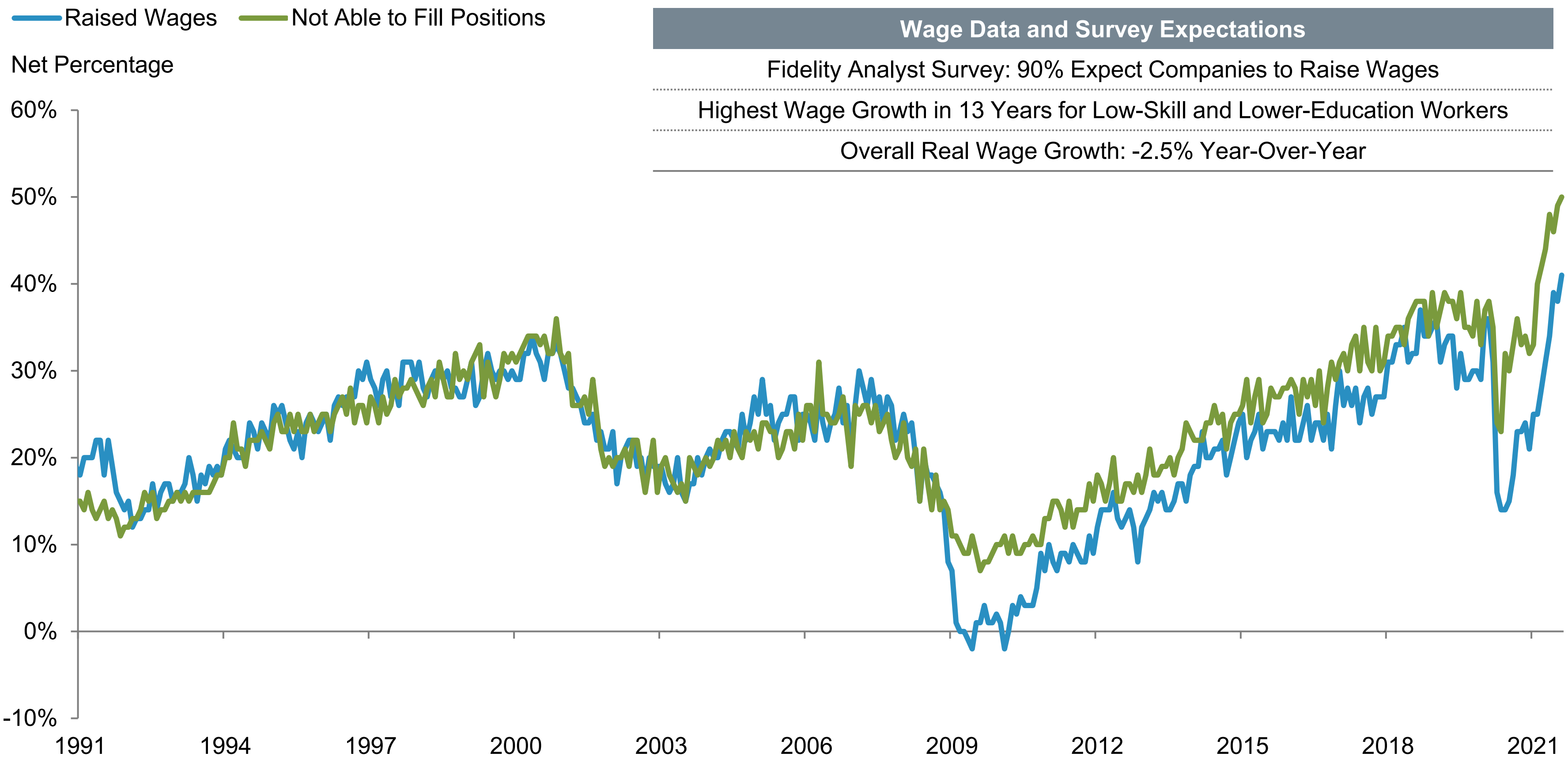


Gray bars indicate U.S. recessions. Source: Federal Reserve Board, University of Michigan, Haver Analytics, Fidelity Investments (AART), as of 11/30/21.

Rising Wages and Labor Shortages Hurting Businesses

Many businesses continued to struggle with tight labor markets and rising wages, especially for workers at the low end of the skills and education spectrum. This dynamic was particularly acute for small businesses, with the NFIB's small business survey near record highs on the number of members raising wages and unable to fill open positions. High inflation ate away at wages, with real wage growth turning negative for the year.

U.S. Small Business Views of Labor and Wages



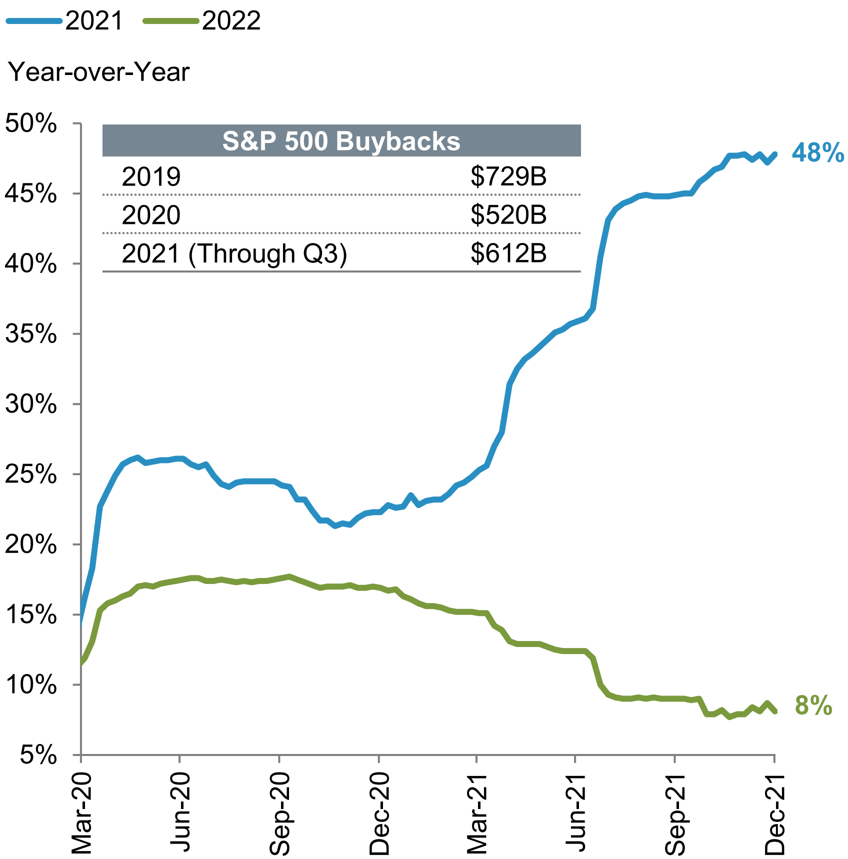
Wage Data and Survey Expectations
Fidelity Analyst Survey: 90% Expect Companies to Raise Wages
Highest Wage Growth in 13 Years for Low-Skill and Lower-Education Workers
Overall Real Wage Growth: -2.5% Year-Over-Year

NFIB: National Federation of Independent Business. GRAPH: Raised Wages: Over the past three months (monthly survey). Net Percentage: Raising wages minus not raising wages and not able to hire minus able to higher. Source: National Federation of Independent Business, Haver Analytics, Fidelity Investments (AART), as of 11/30/21. TABLE: Fidelity Analyst Survey: Quarterly survey of fixed income and equity analysts who cover different sectors and regions. Wage date from Atlanta Fed wage tracker. Sources: Haver Analytics, Federal Reserve Bank of Atlanta Fidelity Investments, (AART), as of 12/31/21.

Corporate Profits Beat Expectations, Upside Now Harder

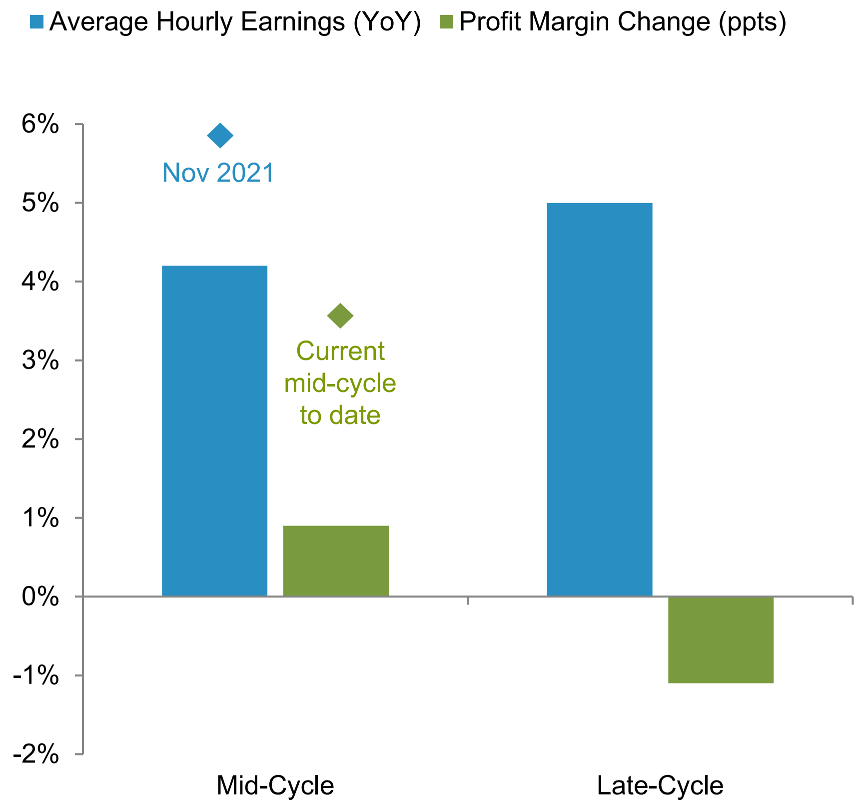
The nearly 50% rebound in corporate earnings during 2021 far exceeded expectations amid accelerating sales growth and greater corporate pricing power. With profit margins back to all-time highs and having already outpaced typical mid-cycle gains—and facing unusually high wage pressures—it may prove more challenging to expand them going forward. Investors expect slower, but still solid, high single-digit profit growth in 2022.

S&P 500 Earnings Expectations



S&P 500 Buybacks	
2019	$729B
2020	$520B
2021 (Through Q3)	$612B

Wage Growth and Profit Margins (1950–2021)

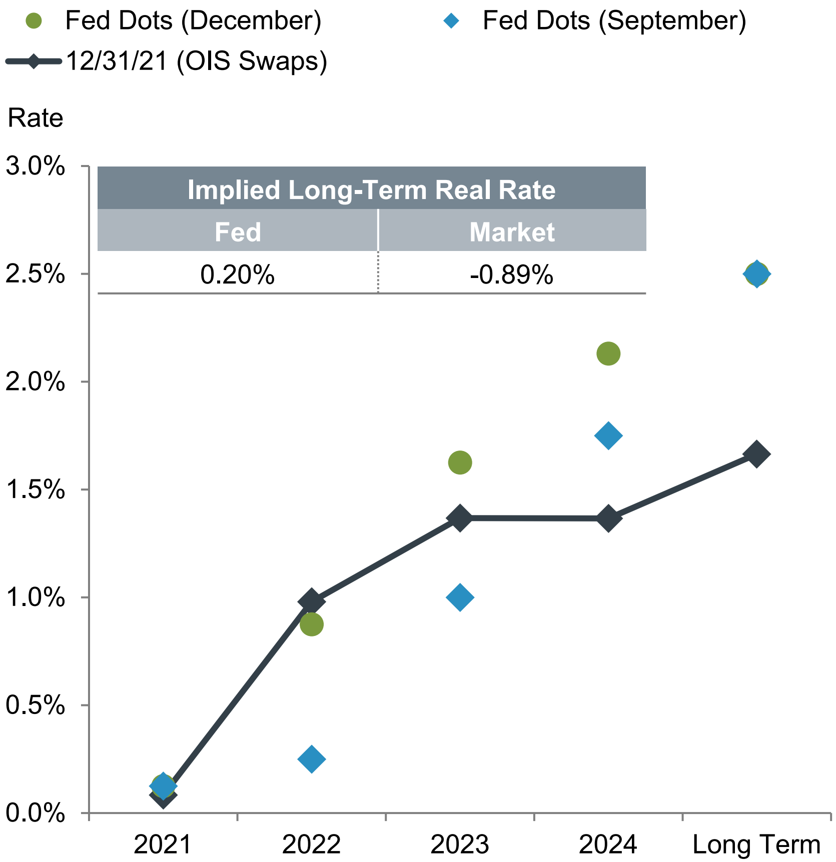


LEFT: Street estimates. Source: Bloomberg Financial LP, Fidelity Investments (AART), as of 12/31/21.
RIGHT: Source: Bureau of Economic Analysis, Fidelity Investments (AART), as of 11/30/21.

The Federal Reserve Signals Tightening Ahead

During Q4, the Fed signaled its intent to begin reducing the extraordinary monetary accommodation that has facilitated extremely easy financial conditions. Fed members raised their rate-hike guidance during Q4 on inflation concerns. Market expectations are in line with Fed projections for roughly three hikes in 2022, but investors foresee fewer hikes thereafter and a long-term future that never reaches positive real rates.

Fed and Market Rate Guidance



Implied Long-Term Real Rate	
Fed	Market
0.20%	-0.89%

Financial Conditions

LEFT: OIS: Overnight Indexed Swaps. Dots: Federal Open Market Committee members' median rate projection. Source: Federal Reserve Board, Bloomberg Financial L.P., Fidelity Investments (AART), as of 12/31/21. **Table:** Federal Reserve long-term real rate calculated using long-term projection minus St. Louis Fed 5Y5Y inflation forecast. Market calculated using 10Y1M OIS minus 5Y5Y inflation swap.
RIGHT: GS: Goldman Sachs. Sources Bloomberg Financial L.P., Goldman Sachs, Fidelity Investments (AART), as of 12/31/21.

Fidelity INVESTMENTS

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 the mid-cycle expansion phase. Board members recognize asset valuations are elevated and believe security selection may provide additional return opportunities. Risks to the outlook include a faster than expected tightening of financial conditions.

Business Cycle

U.S. in the mid-cycle expansion phase

Easy financial conditions are providing companies access to capital

Risks

Supply-side issues negatively affect growth and inflation

Financial conditions may tighten more than expected

Mixed vaccination rates across countries may result in uneven rates of recovery

Asset Allocation Implications

An overweight to risk assets remains generally appropriate

Tightening of financial conditions may contribute to volatility

Emphasize a focus on diversified and disciplined investment strategies

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

Inflation-Resistant Categories Led 2021 Gains

Asset categories that tend to do well during periods of higher inflation topped the performance board in 2021, including energy, real estate, and Canadian equities, as well as commodity prices. Treasury Inflation Protected Securities (TIPS) proved the best-performing fixed income category. A strong Q4 rally for U.S. large cap, technology, and quality stocks completed a strong year for those areas.

U.S. Equity Styles Total Return

	Q4	2021
Large Caps	11.0%	28.7%
Growth	10.9%	25.8%
Value	7.5%	25.4%
Mid Caps	6.4%	22.6%
Small Caps	2.1%	14.8%

U.S. Equity Sectors Total Return

	Q4	2021
Energy	7.9%	54.4%
Real Estate	17.5%	46.1%
Financials	4.5%	34.9%
Info Tech	16.7%	34.5%
Materials	15.2%	27.3%
Health Care	11.2%	26.1%
Consumer Discretionary	12.8%	24.4%
Communication Services	0.0%	21.6%
Industrials	8.6%	21.1%
Consumer Staples	13.3%	18.6%
Utilities	12.9%	17.7%

International Equities and Global Assets Total Return

	Q4	2021
ACWI ex USA	1.8%	7.8%
Canada	7.2%	26.0%
Europe	5.7%	16.3%
EAFE	2.7%	11.3%
EAFE Small Cap	0.1%	10.1%
Japan	-4.0%	1.7%
EMEA	-2.4%	18.0%
Emerging Markets	-1.3%	-2.5%
EM Asia	-1.0%	-5.1%
Latin America	-2.7%	-8.1%
Commodities	-1.6%	27.1%
Gold	4.1%	-3.6%

U.S. Equity Factors Total Return

	Q4	2021
Quality	12.9%	32.2%
Value	9.9%	31.0%
Yield	9.6%	29.7%
Size	7.4%	26.5%
Low Volatility	10.5%	24.1%
Momentum	9.9%	22.7%

Fixed Income Total Return

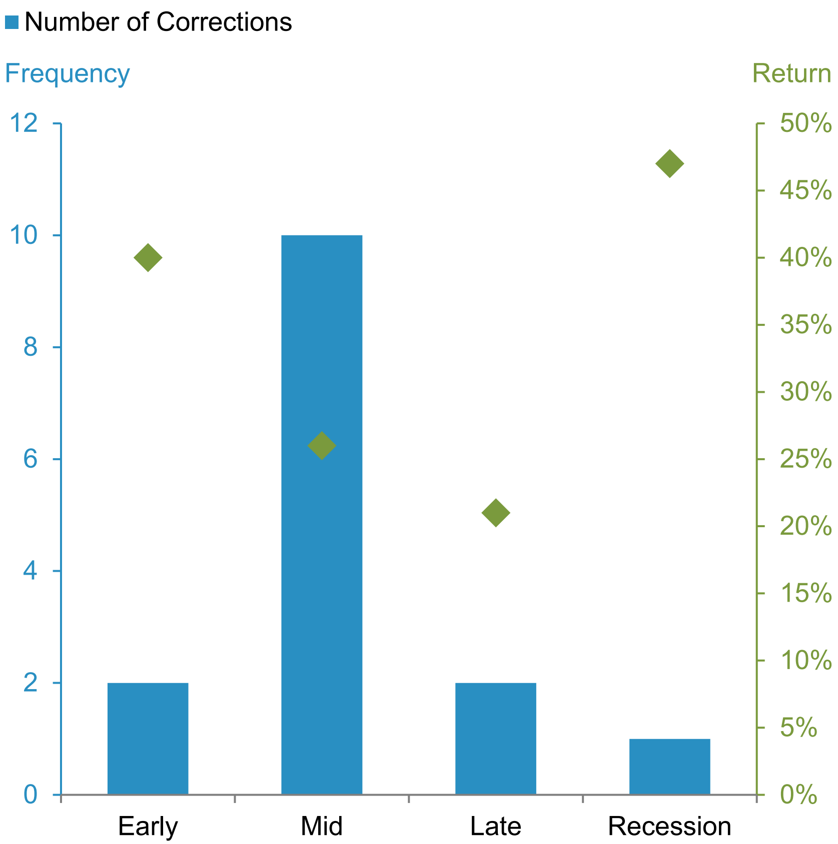
	Q4	2021
TIPS	2.4%	6.0%
High Yield	0.7%	5.4%
Leveraged Loan	0.7%	5.2%
Municipal	0.7%	1.5%
ABS	-0.6%	-0.3%
MBS	-0.4%	-1.0%
Credit	0.2%	-1.1%
CMBS	-0.6%	-1.2%
Agency	-0.6%	-1.3%
EM Debt	0.0%	-1.5%
Aggregate	0.0%	-1.5%
Treasuries	0.2%	-2.3%
Long Govt & Credit	2.2%	-2.5%

EAFE: Europe, Australasia, and the Far East. EM: Emerging markets. EMEA: Europe, the Middle East, and Africa. For indexes and other important information used to represent above asset categories, see Appendix. Past performance is no guarantee of future results. It is not possible to invest directly in an index. All indexes are unmanaged. Sector returns represented by S&P 500 sectors. Sector investing involves risk. Because of its narrow focus, sector investing may be more volatile than investing in more diversified baskets of securities. Source: Bloomberg Finance L.P., Fidelity Investments (AART), as of 12/31/21.

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

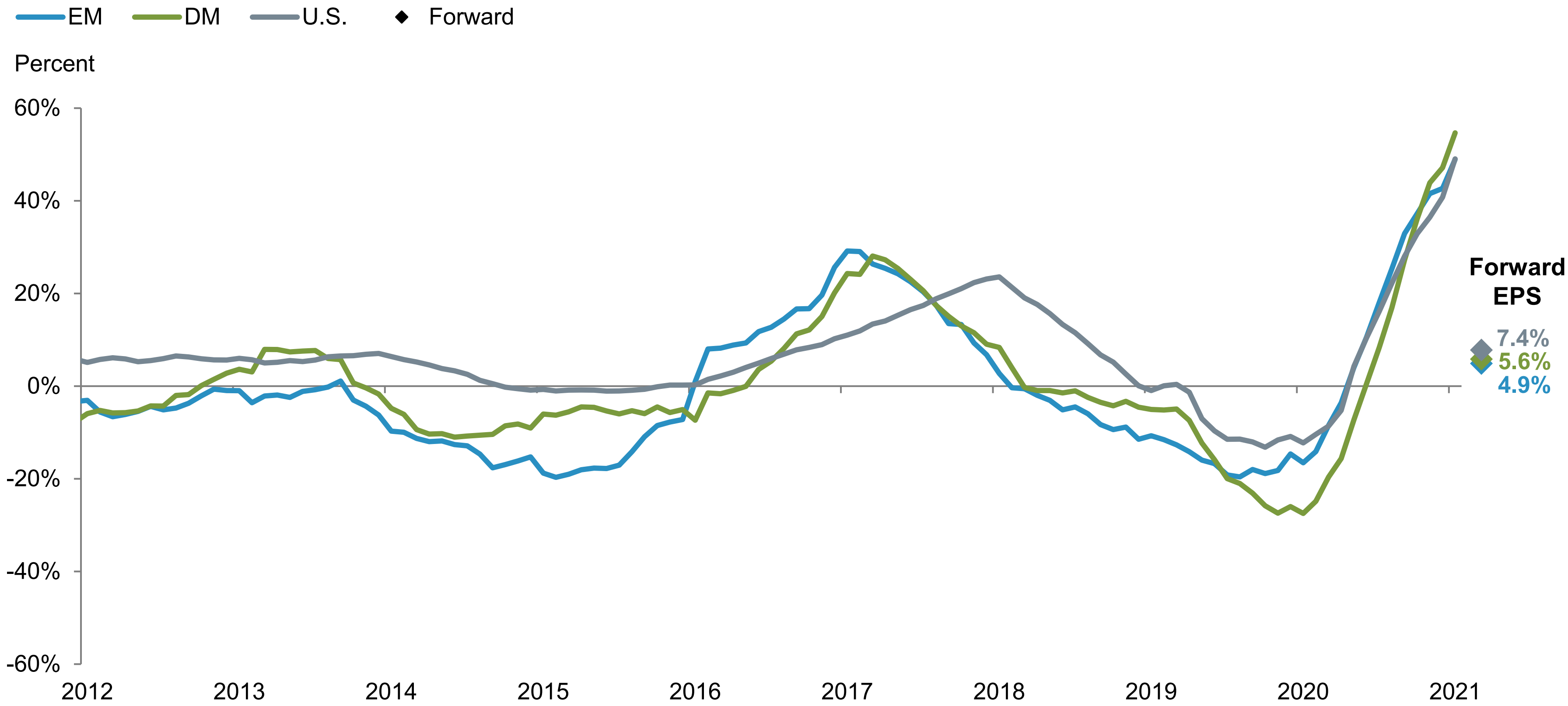
Short, Frequent, and Opportunistic
Average duration 4 months peak to trough
Average 13% drawdown
67% of corrections during mid cycle
8 market corrections over last two mid cycles
26% median 1-year return from trough

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.

Global Earnings Growth Reaches Decade-High Levels

The sharp rebound in earnings growth reached decade-high rates on a year-over-year basis across all major global categories: U.S., non-U.S. developed markets, and emerging markets. Forward-looking earnings expectations indicate analysts believe that earnings may converge to a lower rate over the next 12 months, with consensus forecasts for U.S. earnings growth slightly above the others.

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 12/31/21.

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 suggested 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.

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 dis-inflation 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.

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

2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Legend
26%	56%	32%	35%	35%	40%	5%	79%	28%	8%	20%	39%	28%	5%	21%	38%	0%	36%	38%	43%	REITs
10%	47%	26%	21%	33%	16%	-20%	58%	27%	8%	19%	34%	14%	3%	18%	30%	-2%	31%	20%	29%	Large Cap Stocks
4%	39%	21%	14%	27%	12%	-26%	37%	19%	4%	18%	33%	13%	1%	18%	26%	-2%	26%	18%	27%	Commodities
-2%	37%	18%	12%	22%	11%	-34%	32%	18%	4%	18%	32%	12%	1%	12%	22%	-3%	26%	18%	26%	Growth Stocks
-6%	31%	17%	7%	18%	7%	-36%	28%	17%	2%	16%	23%	11%	1%	12%	15%	-4%	26%	14%	25%	Value Stocks
-9%	31%	11%	5%	16%	6%	-36%	27%	16%	2%	16%	19%	6%	0%	11%	15%	-4%	22%	8%	17%	60% Large Cap 40% IG Bonds
-15%	29%	11%	5%	12%	5%	-37%	26%	15%	0%	16%	7%	5%	-4%	9%	13%	-9%	22%	8%	15%	Small Cap Stocks
-16%	28%	9%	5%	11%	2%	-38%	20%	15%	-4%	15%	3%	3%	-4%	8%	9%	-11%	18%	6%	11%	Foreign-Developed Country Stocks
-20%	24%	8%	4%	9%	-1%	-38%	19%	12%	-12%	11%	-2%	-2%	-5%	7%	8%	-11%	14%	3%	5%	High-Yield Bonds
-22%	19%	7%	3%	4%	-2%	-43%	18%	8%	-13%	4%	-2%	-4%	-15%	3%	4%	-11%	9%	-3%	-2%	Investment-Grade Bonds
-28%	4%	4%	2%	2%	-16%	-53%	6%	7%	-18%	-1%	-10%	-17%	-25%	2%	1%	-14%	8%	-8%	-3%	Emerging-Market Stocks

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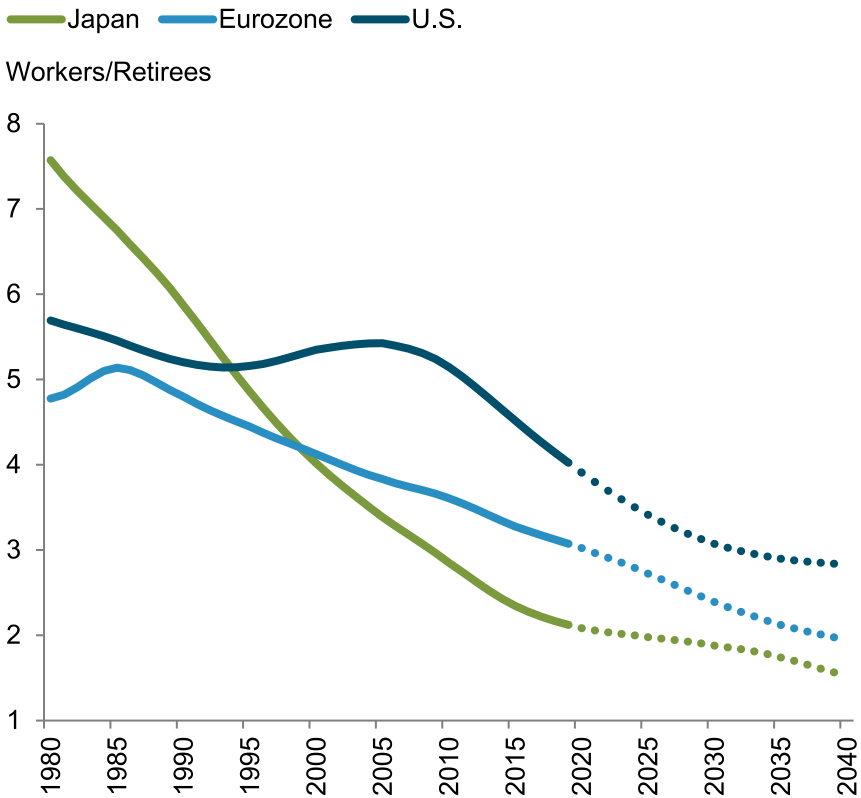
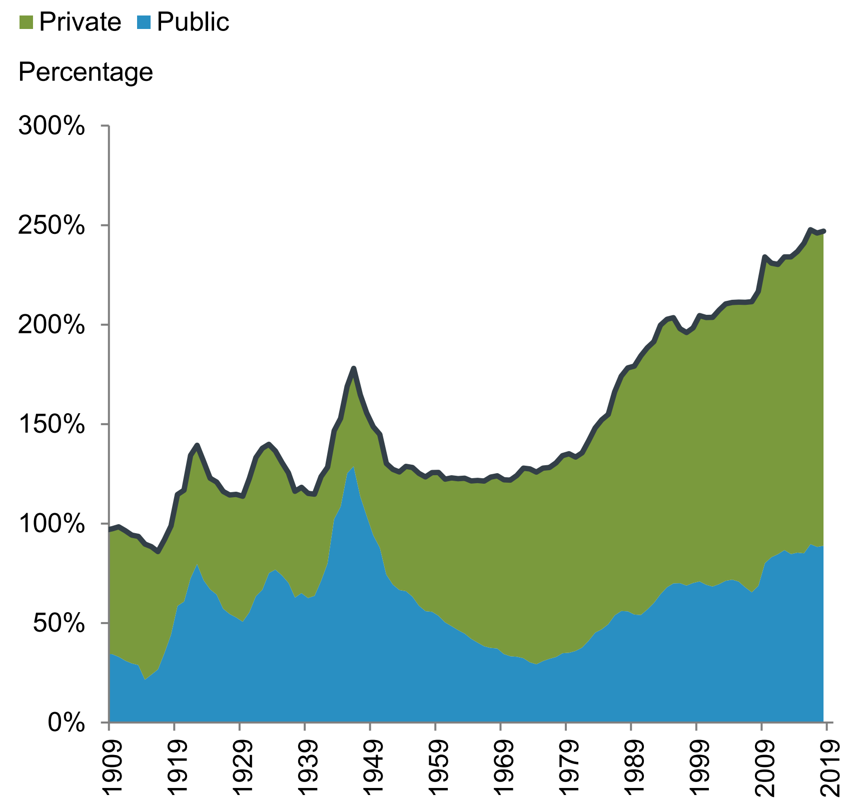
Unprecedented Debt Levels amid Aging Demographics

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.

Appendix: Important Information

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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 23 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.

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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.

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