LEADERSHIP SERIES FOURTH QUARTER 2019

Quarterly Market Update

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Fidelity INVESTMENTS

Global Monetary Easing Amid Trade and Growth Headwinds

During Q3, the Federal Reserve and other central banks eased monetary policy in an effort to counter flagging global-growth momentum. However, further escalation of the U.S.-China trade conflict continued to weigh on confidence, and it remains unclear whether monetary easing alone is sufficient to catalyze economic acceleration. The mature global business cycle continues to warrant smaller cyclical allocation tilts.

	MACRO	ASSET MARKETS
Q3 2019	• Monetary policymakers lowered interest rates, but global growth remained tepid.	• Government bond yields continued to drop, and global equity prices were range-bound.
OUTLOOK	• The U.S. is firmly in the late-cycle phase. • Improvement in China's economy has stalled. • Global policy support remains insufficient to reaccelerate global growth. • The global liquidity backdrop remains challenged despite Fed rate cuts. • U.S.-China trade policy uncertainty is an ongoing drag on corporate confidence.	• Late-cycle phases typically exhibit higher volatility along with a more asymmetric risk-return profile. • Wide dispersion of outcomes warrants smaller allocation tilts than earlier in the cycle. • Prioritize diversification amid significant uncertainty.

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

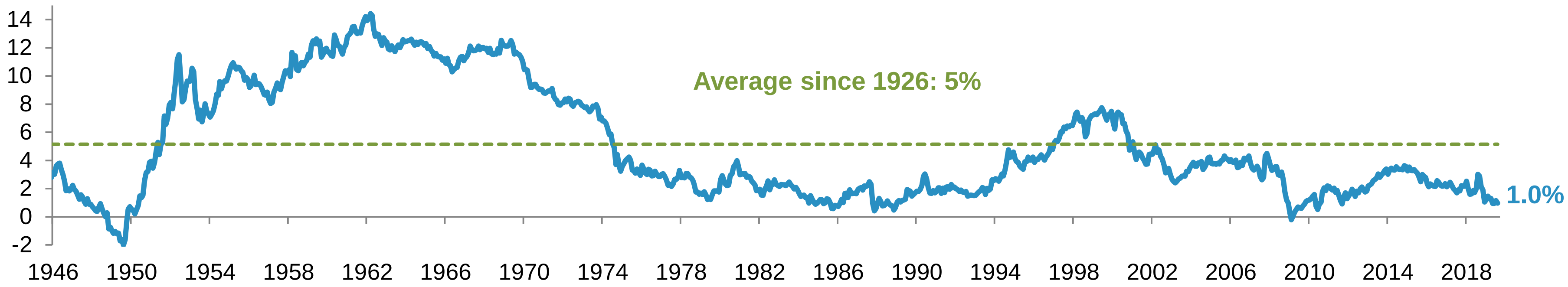
Less Risky Assets Led During Mixed Quarter of Performance

With lackluster global growth and increased policy uncertainty, the continued drop in government bond yields during Q3 spurred gains across less risky bond categories, gold, and interest rate-sensitive equity sectors such as real estate investment trusts (REITs). Year-to-date returns for all major asset categories remained in positive territory, with U.S. stock and bond markets registering strong gains.

	Q3 2019 (%)	YTD (%)		Q3 2019 (%)	YTD (%)
Real Estate Stocks	7.8	27.0	High Yield Bonds	1.2	11.5
Long Government & Credit Bonds	6.6	20.9	U.S. Mid Cap Stocks	0.5	21.9
Gold	4.5	14.8	Non-U.S. Small Cap Stocks	-0.4	12.1
U.S. Corporate Bonds	3.0	12.6	Non-U.S. Developed-Country Stocks	-1.1	12.8
Investment-Grade Bonds	2.3	8.5	Commodities	-1.8	3.1
U.S. Large Cap Stocks	1.7	20.6	U.S. Small Cap Stocks	-2.4	14.2
Emerging-Market Bonds	1.3	12.1	Emerging-Market Stocks	-4.2	5.9

20-Year U.S. Stock Returns Minus IG Bond Returns since 1926

Annualized Return Difference (%)



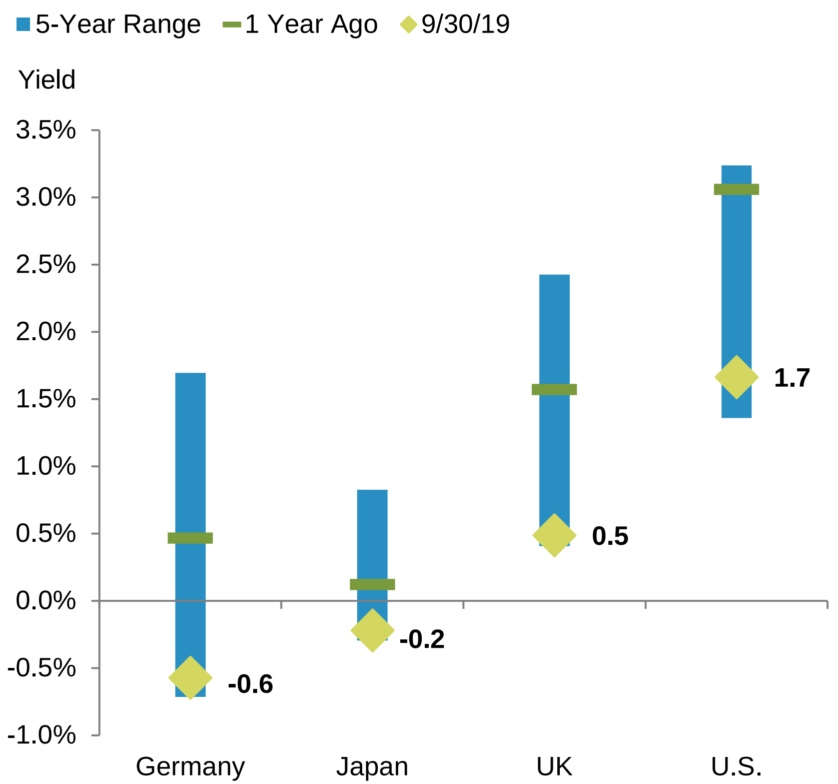
Past performance is no guarantee of future results. It is not possible to invest directly in an index. All indexes are unmanaged. See Appendix for important index information. Assets represented by: Commodities—Bloomberg Commodity Index; Emerging-Market Bonds—JP Morgan EMBI Global Index; Emerging- Market Stocks—MSCI EM Index; Gold—Gold Bullion, LBMA PM Fix; High-Yield Bonds—ICE BofAML High Yield Bond Index; Investment-Grade Bonds— Bloomberg Barclays 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 Barclays U.S. Credit Index; U.S. Large Cap Stocks—S&P 500® Index; U.S. Mid Cap Stocks—Russell Midcap Index; U.S. Small Cap Stocks—Russell 2000 Index; Long Government & Credit Bonds—Bloomberg Barclays Long Government & Credit Index. Source: Bloomberg Finance L.P., Haver Analytics, Fidelity Investments Asset Allocation Research Team (AART), as of 9/30/19.

SUMMARY

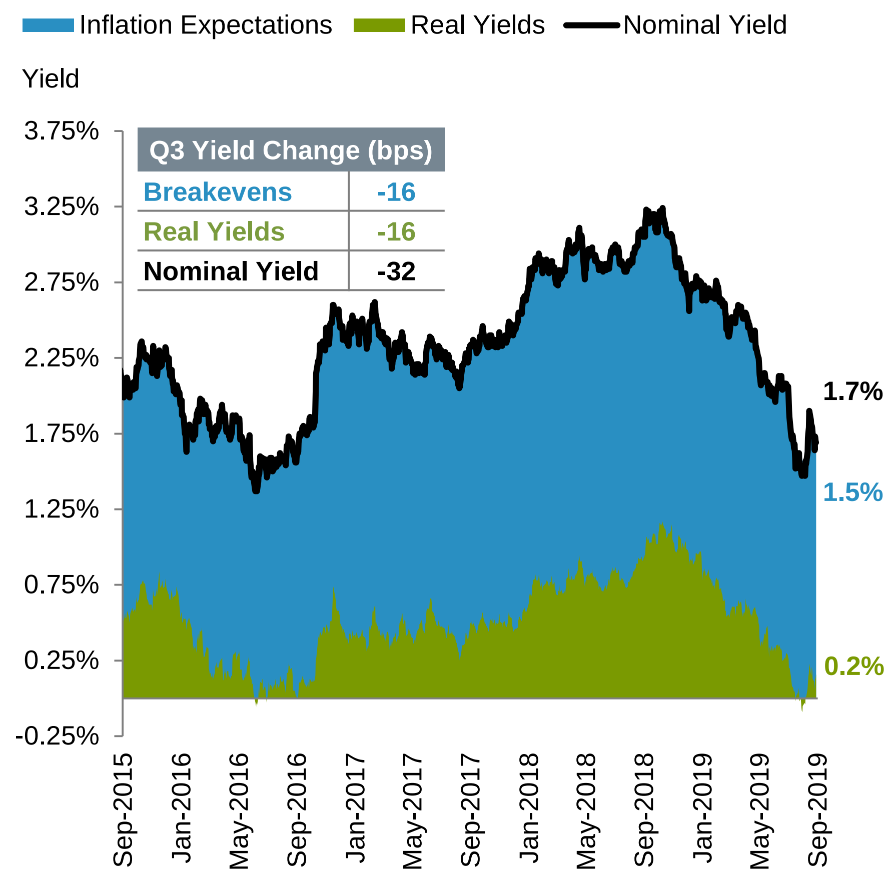
Falling Government Bond Yields Around the World

Government bond yields continued to decline amid concerns about global economic weakness, trade confrontation, and low inflation. Yields on 10-year government bonds in Germany and Japan fell further into negative territory. The drop in U.S. 10-year yields resulted from a decline in both inflation expectations and real interest rates, with both measures decreasing to near multi-year lows.

10-Year Government Bond Yields



10-Year U.S. Treasury Bond Yields

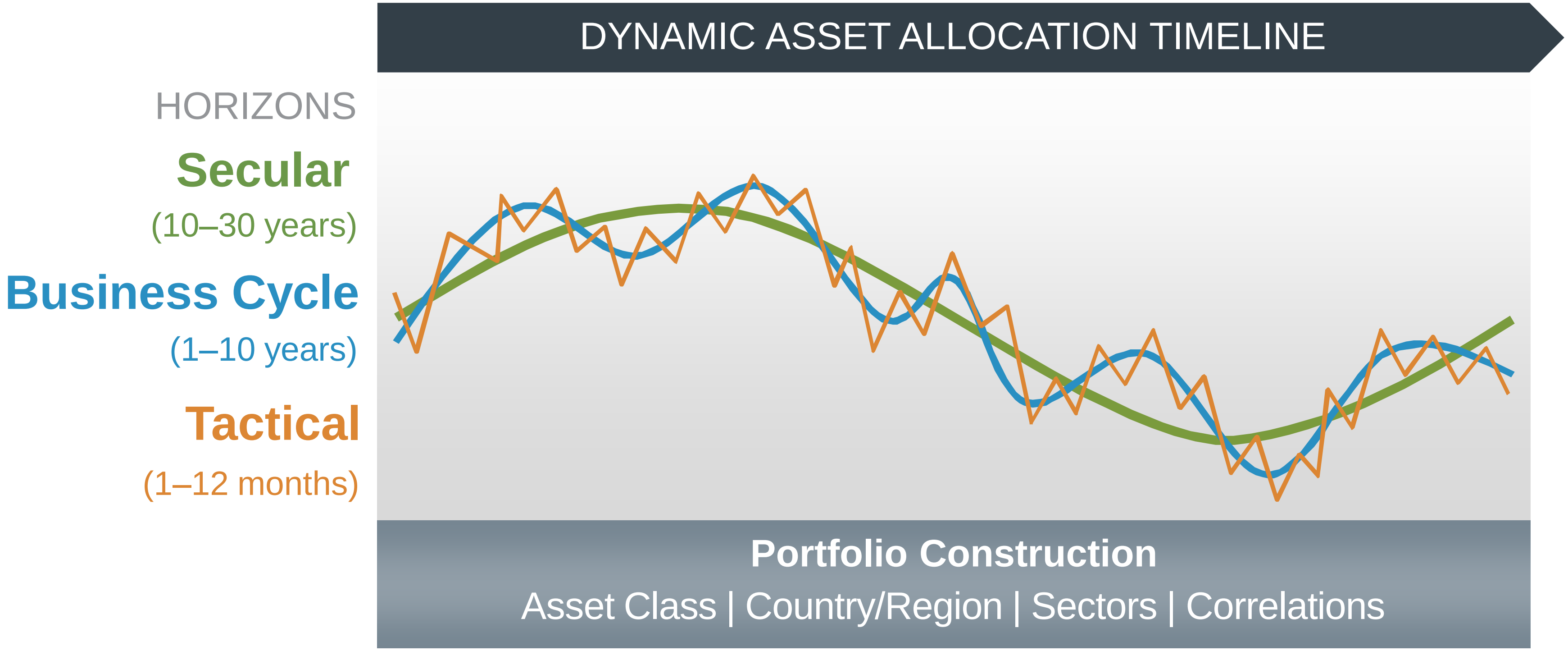


 LEFT and RIGHT: Source: Bloomberg Finance L.P., Fidelity Investments (AART), as of 9/30/19.

Fidelity INVESTMENTS

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).

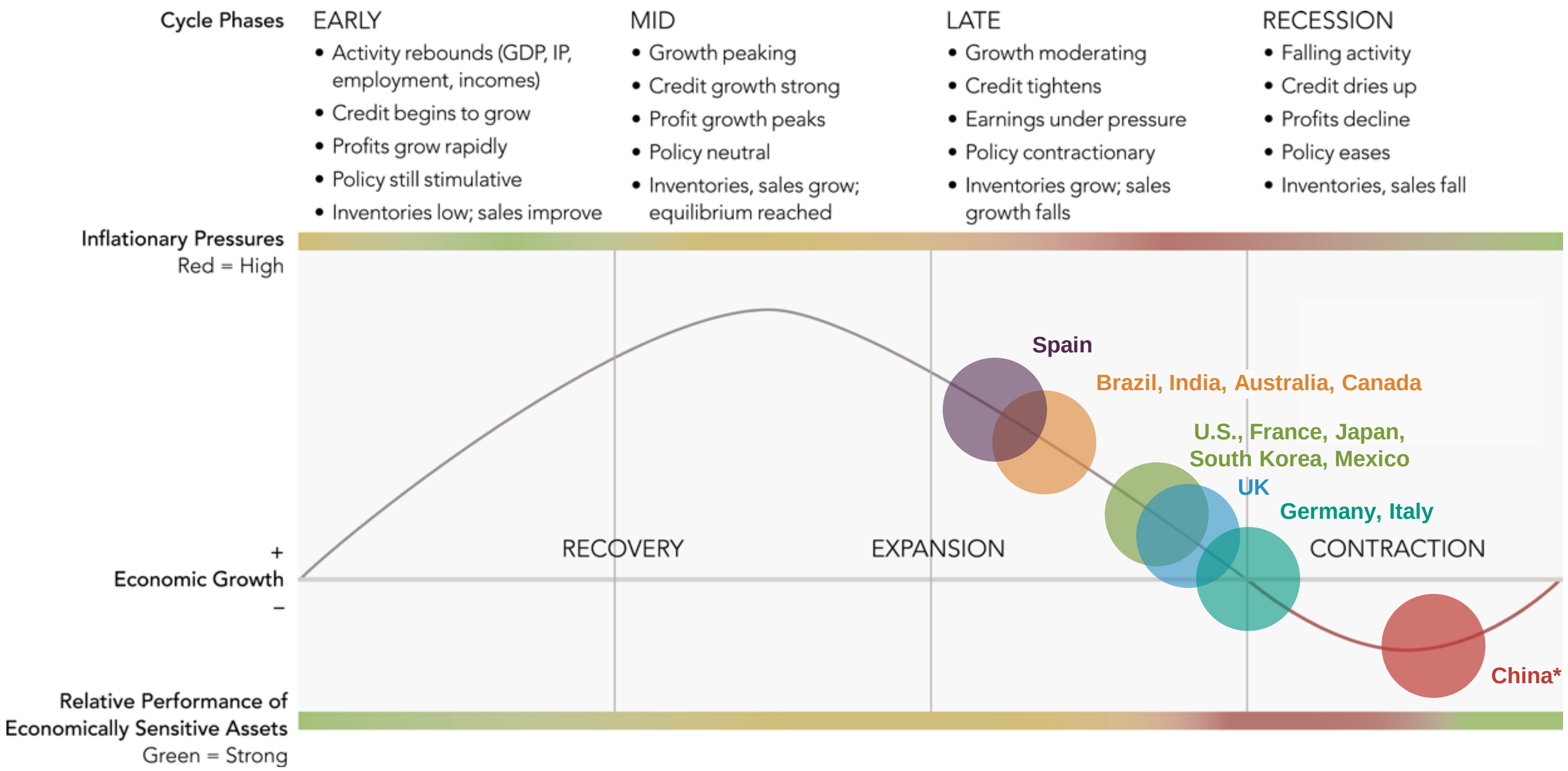


For illustrative purposes only. Source: Fidelity Investments (AART), as of 9/30/19

Mature U.S. and Global Business Cycles

The global business cycle continues to mature, with the U.S. and most major economies in the late-cycle phase. China's economy has stabilized, but a reacceleration from its growth recession has remained elusive. Overall, a global industrial and trade recession has shown few signs of abating, and it remains to be seen whether policy easing measures will prove sufficient to stimulate a sustained global reacceleration.

Business Cycle Framework

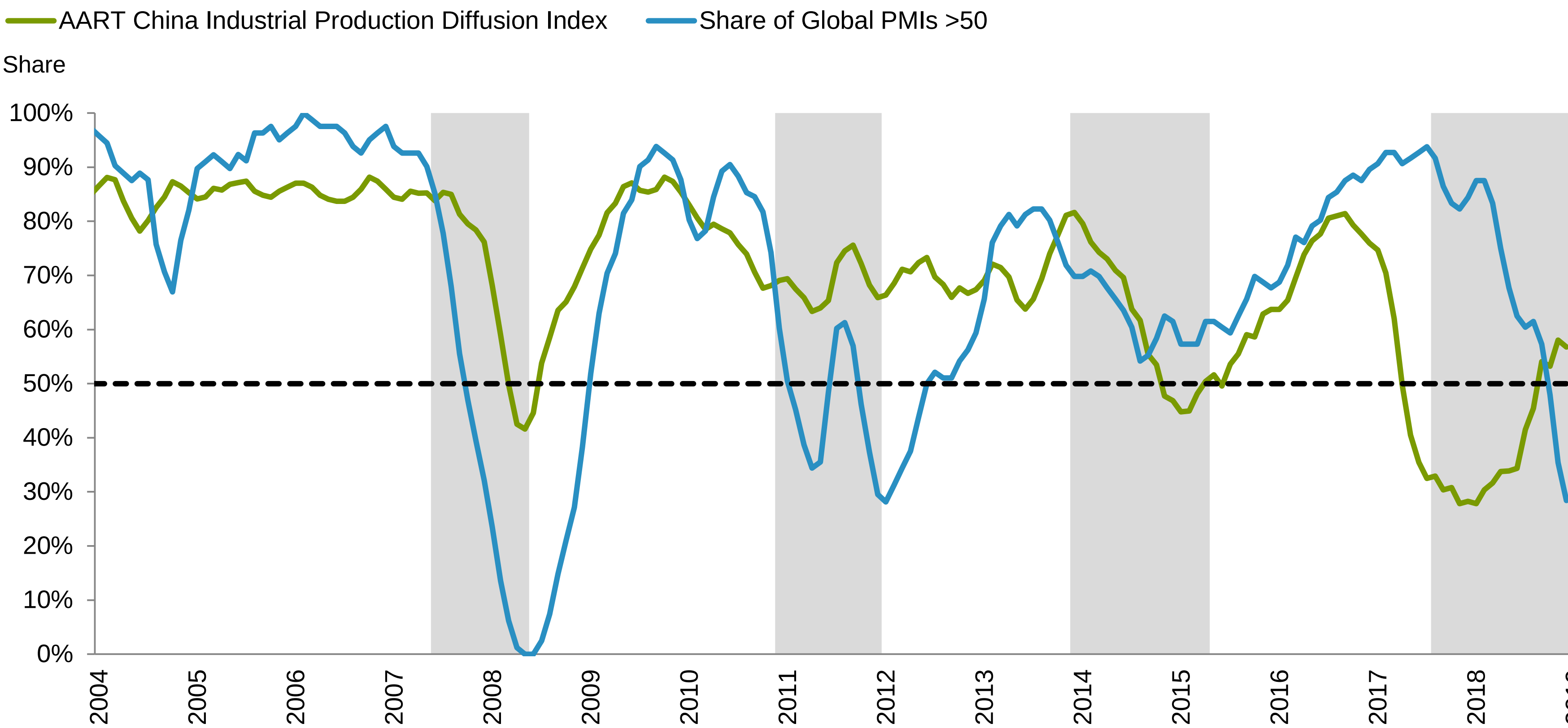


Note: The diagram above is a hypothetical illustration of the business cycle. There is not always a chronological, linear progression among the phases of the business cycle, and there have been cycles when the economy has skipped a phase or retraced an earlier one. * A growth recession is a significant decline in activity relative to a country's long-term economic potential. We use the "growth cycle" definition for most developing economies, such as China, because they tend to exhibit strong trend performance driven by rapid factor accumulation and increases in productivity, and the deviation from the trend tends to matter most for asset returns. We use the classic definition of recession, involving an outright contraction in economic activity, for developed economies. Source: Fidelity Investments (AART), as of 9/30/19.

Global Backdrop Weak Despite China's Industrial Stabilization

Sagging trade and industrial activity continued to weigh on global growth, with the share of major countries with expanding manufacturing sectors dropping to its lowest level since 2012. This weakness occurred despite an upturn in our diffusion index of China's industrial production. For the first time in the past decade, China's stimulus measures and manufacturing upswing have failed to lift global trade and industrial activity.

Global Manufacturing Activity and China Industrial Production

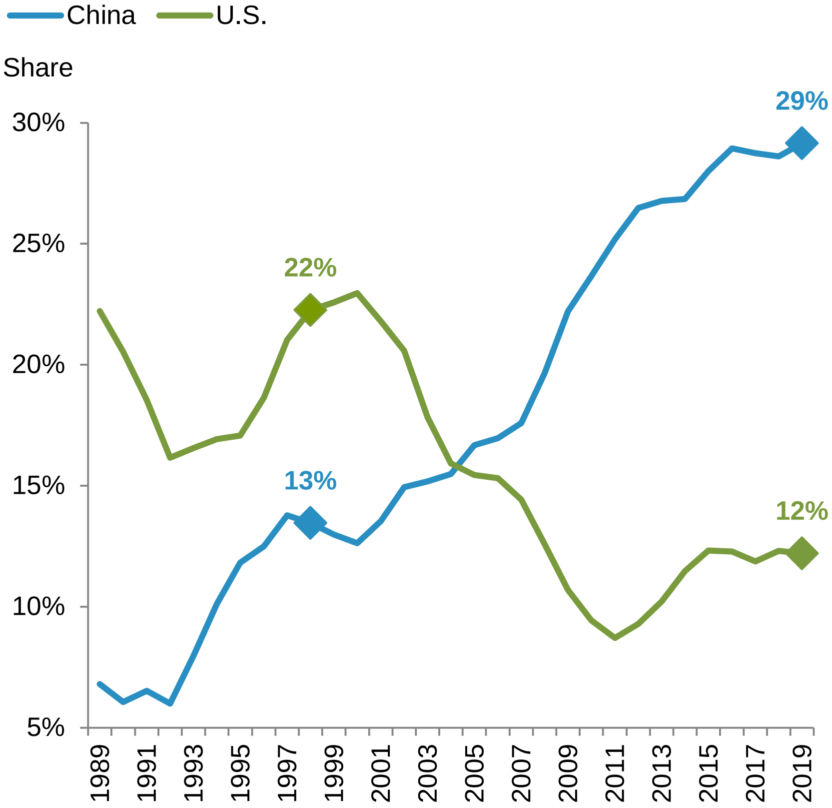


AART China Diffusion Index represents share of components rising over last 12 months. Gray bars represent China growth recessions as defined by AART. Source: ISM, Markit, China National Bureau of Statistics (official data), Haver Analytics, Fidelity Investments (AART), as of 8/31/19.

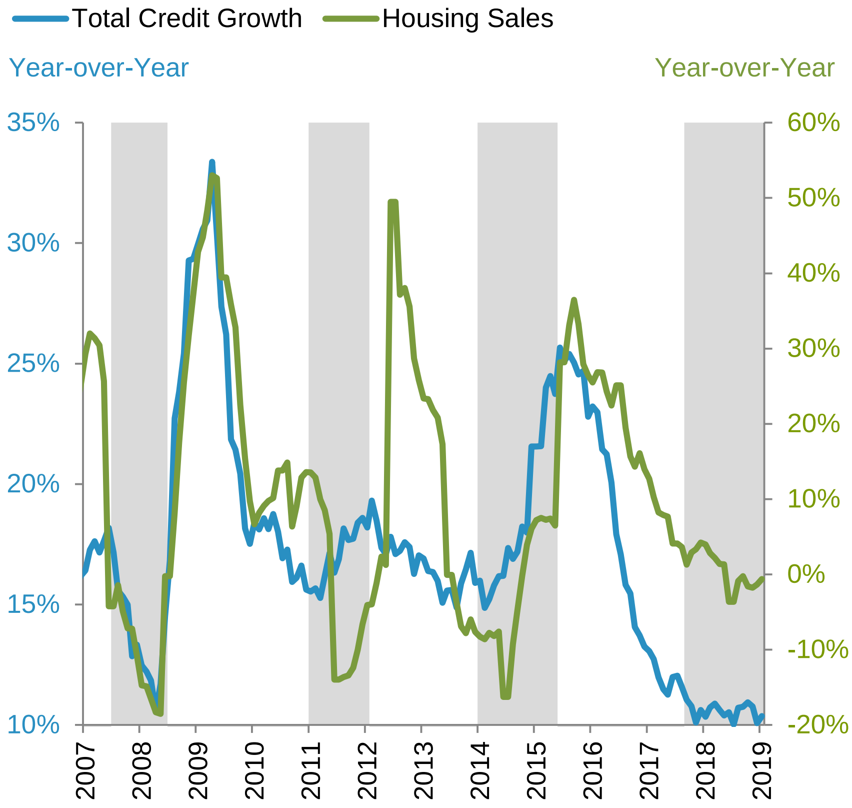
China Key to Global Growth; Policy Proving Insufficient

Unlike the late 1990s, in recent years China's contribution to global growth has been greater than that of the United States. China's monetary and fiscal policy easing has helped stabilize industrial activity, but credit growth stayed subdued, implying that high debt levels are inhibiting the policy response. U.S. trade uncertainty remains another headwind, supporting our stance that material economic reacceleration is unlikely.

Contribution to Global GDP Growth



China Credit and Property Market

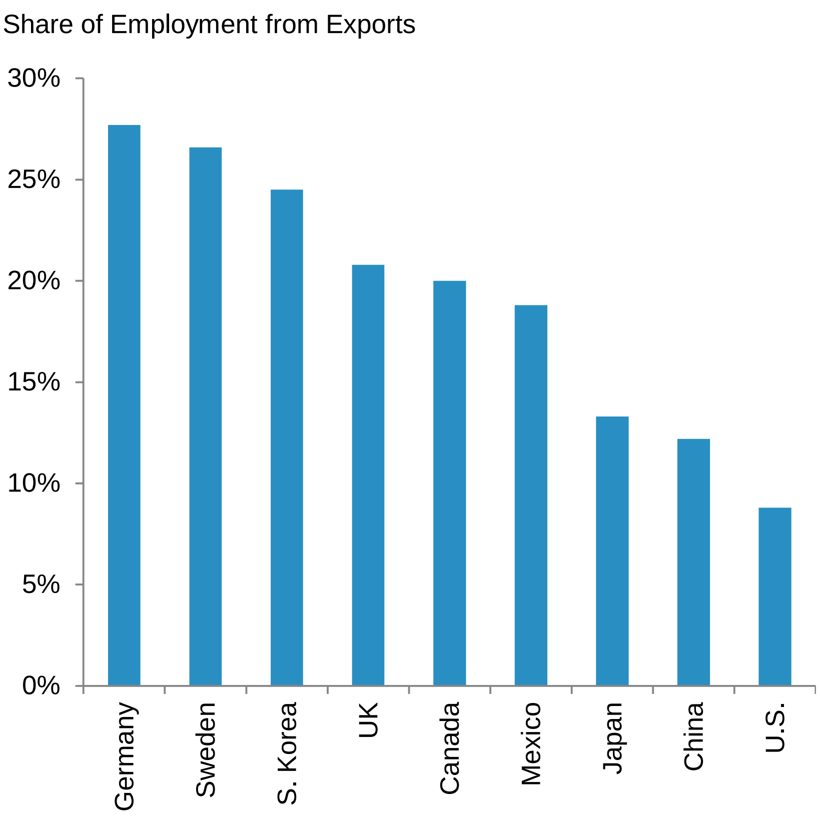


LEFT: Five-year averages. Source: International Monetary Fund, Fidelity Investments (AART), as of 9/30/19. **RIGHT:** Gray bars represent China growth recessions as defined by AART. Source: China National Bureau of Statistics (official data), Haver Analytics, Fidelity Investments (AART), as of 8/31/19.

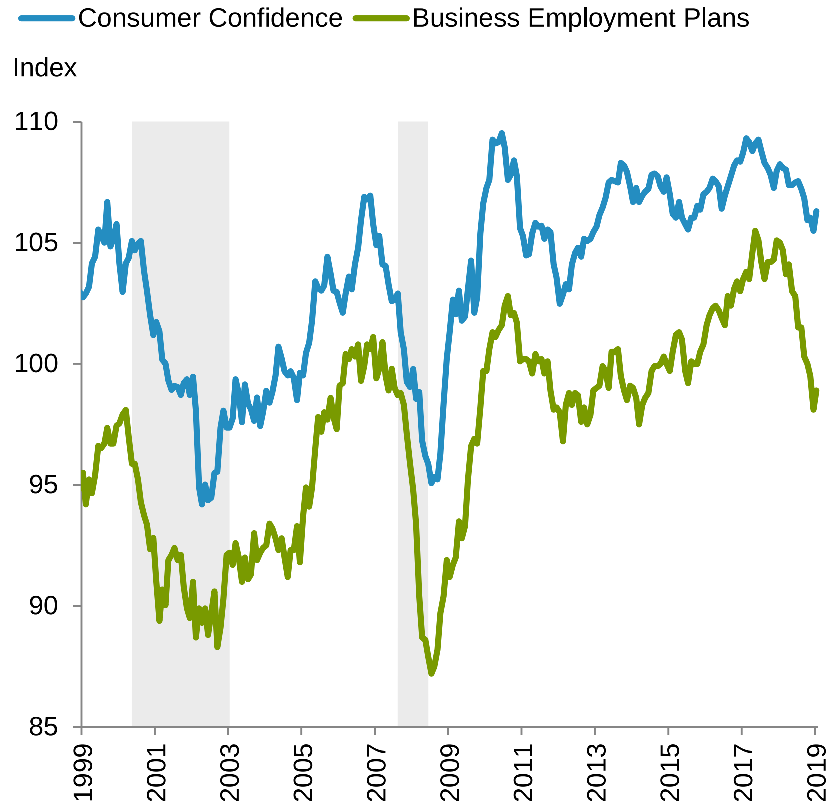
European Growth Slumping as Trade Headwinds Persist

Smaller and more open economies are most susceptible to global trade risk, but employment in many large economies, including Germany, is highly influenced by trade. The impact of deteriorating global trade conditions has begun to affect some European domestic economies, with consumer confidence and the employment outlook in Germany deteriorating markedly over the course of 2019.

Employment Reliance on Foreign Trade



German Labor Market and Consumer



LEFT: Share of domestic business sector employment sustained by exporting activities. Source: OECD, Fidelity Investments (AART), as of 9/30/19.
RIGHT: Shading represents Germany economic recession as defined by the Economic Cycle Research Institute (ECRI). Source: European Commission, Ifo, ECRI, Haver Analytics, Fidelity Investments (AART), as of 9/30/19.

U.S. Firmly in Late Cycle

Late cycle often is characterized as the phase during which capacity constraints emerge and economic activity peaks. Inflation rates are not always high, but tight labor markets tend to spur higher wage growth and more restrictive monetary policy. Late-cycle trends are now well entrenched, with peaking profit margins, slower employment growth, and an inverted yield curve. Credit, though, remains favorable versus previous late cycles.

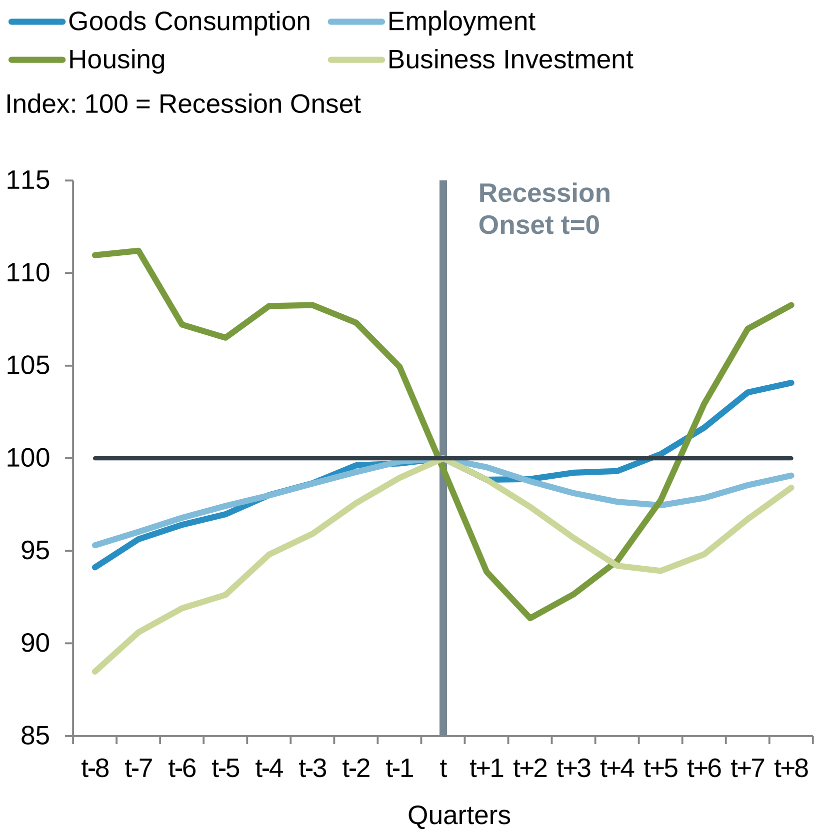
INDICATOR	CURRENT TREND	LATEST READINGS
Employment/Wages	Labor markets tighter, wages higher than 2–3 years ago	Pace of improvement has stalled
Monetary Policy	Fed policy tighter than 2–3 years ago	Fed cut rates
Yield Curve	Flattening	Inverted
Credit	Some tightening of lending standards	Credit accessible, spreads tight
Corporate Profits	Margins declining	Earnings growth slightly positive

Source: Fidelity Investments (AART), as of 9/30/19.

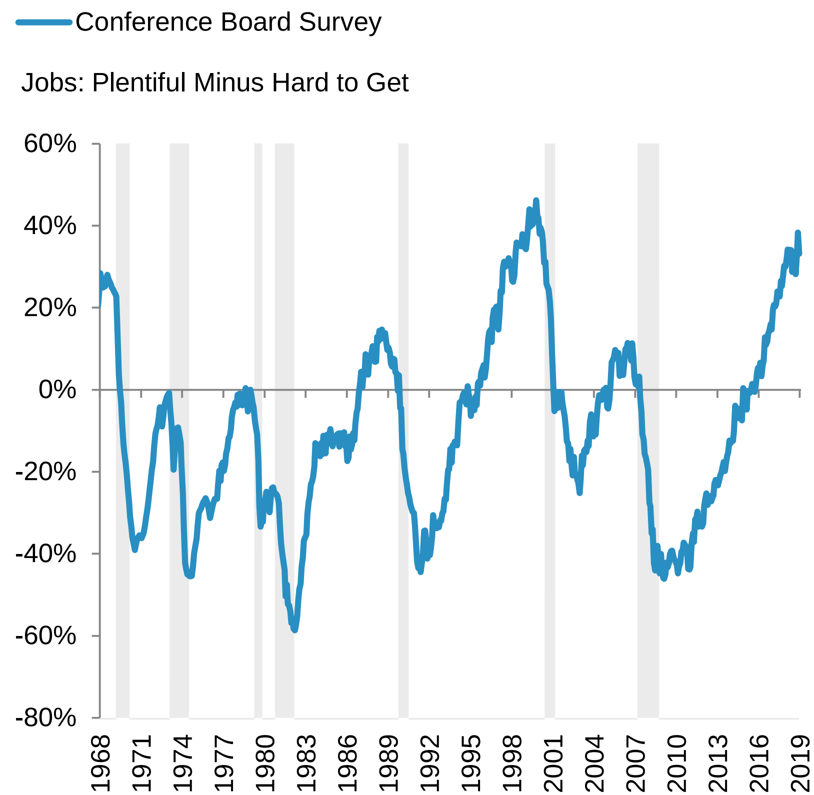
Healthy Labor Market and Consumer Typical of Late Cycle

The U.S. economy remains supported by consumption, which represents around 70% of GDP. Historically, consumer spending and employment growth stay positive during late cycle, typically not falling until the onset of recession. Several leading indicators suggest the labor market is nearing peak levels, including consumers' extremely favorable assessment of the job market, which tends to be most elevated just prior to recession.

Activity around Recessions (1948–2011)



Consumer Assessment of Labor Market

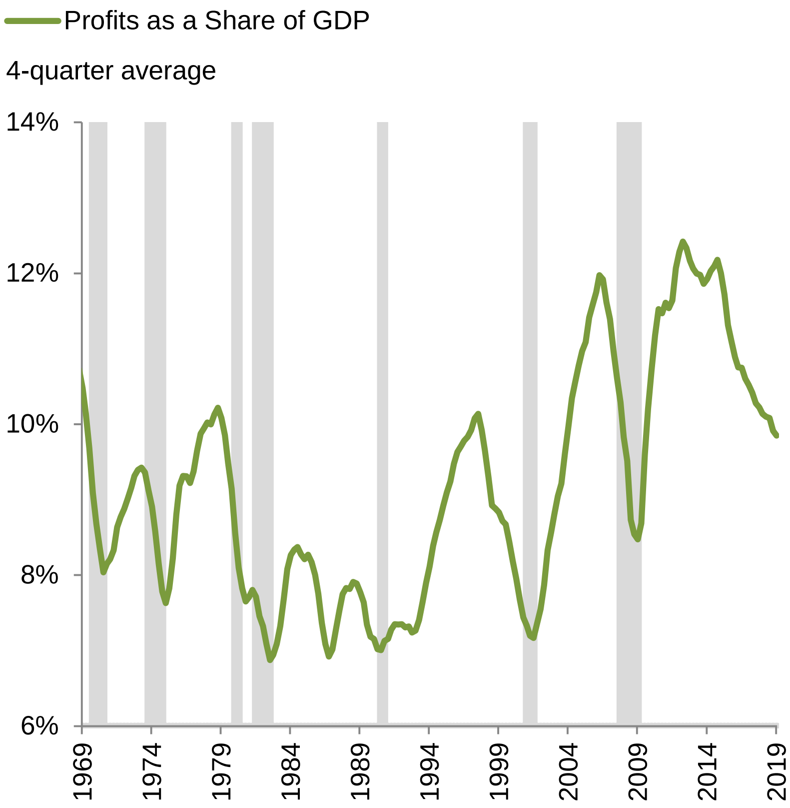


LEFT: Source: Bureau of Economic Analysis, Bureau of Labor Statistics, Haver Analytics, Fidelity Investments (AART), as of 9/30/19.
RIGHT: Shading represents U.S. economic recession as defined by the National Bureau of Economic Research (NBER). Source: Conference Board, NBER, Haver Analytics, Fidelity Investments (AART), as of 9/30/19.

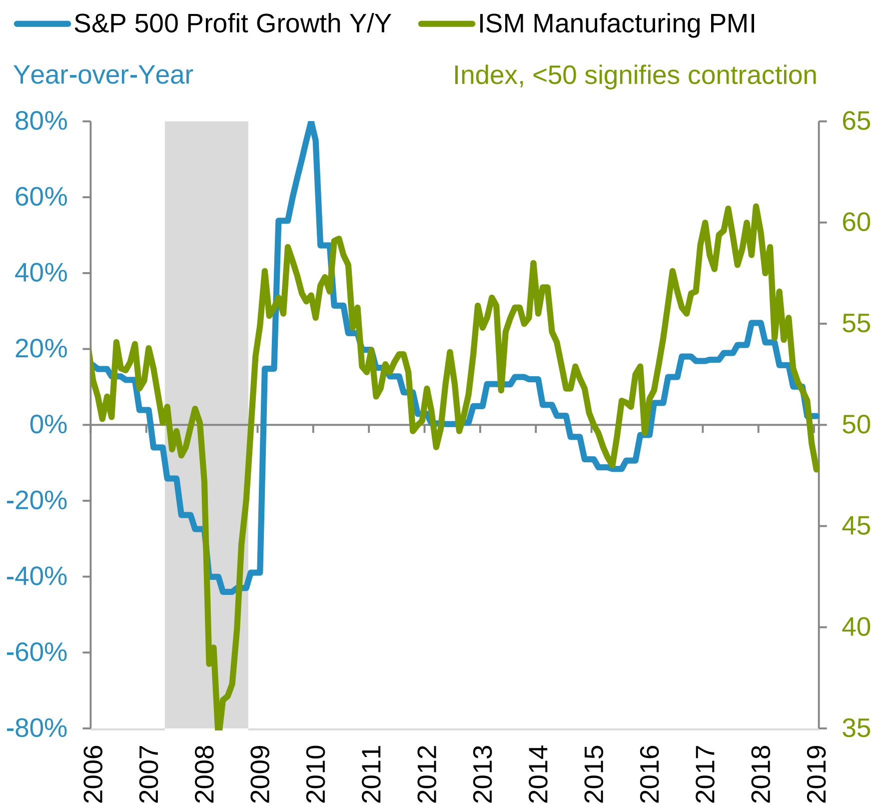
U.S. Profit Margins Declining, Exposed to Global Cycle

Over the past several years, corporate profit margins have declined from record levels due to higher wages and other costs, which is typical during the transition to late cycle. The level of economy-wide profit margins remains healthy. However, the earnings of large multi-national U.S. companies tend to follow the highly global manufacturing cycle, whose weakness has been exacerbated by the U.S.-China trade conflict.

U.S. Economy Profit Margins



U.S. Manufacturing and S&P 500 Earnings

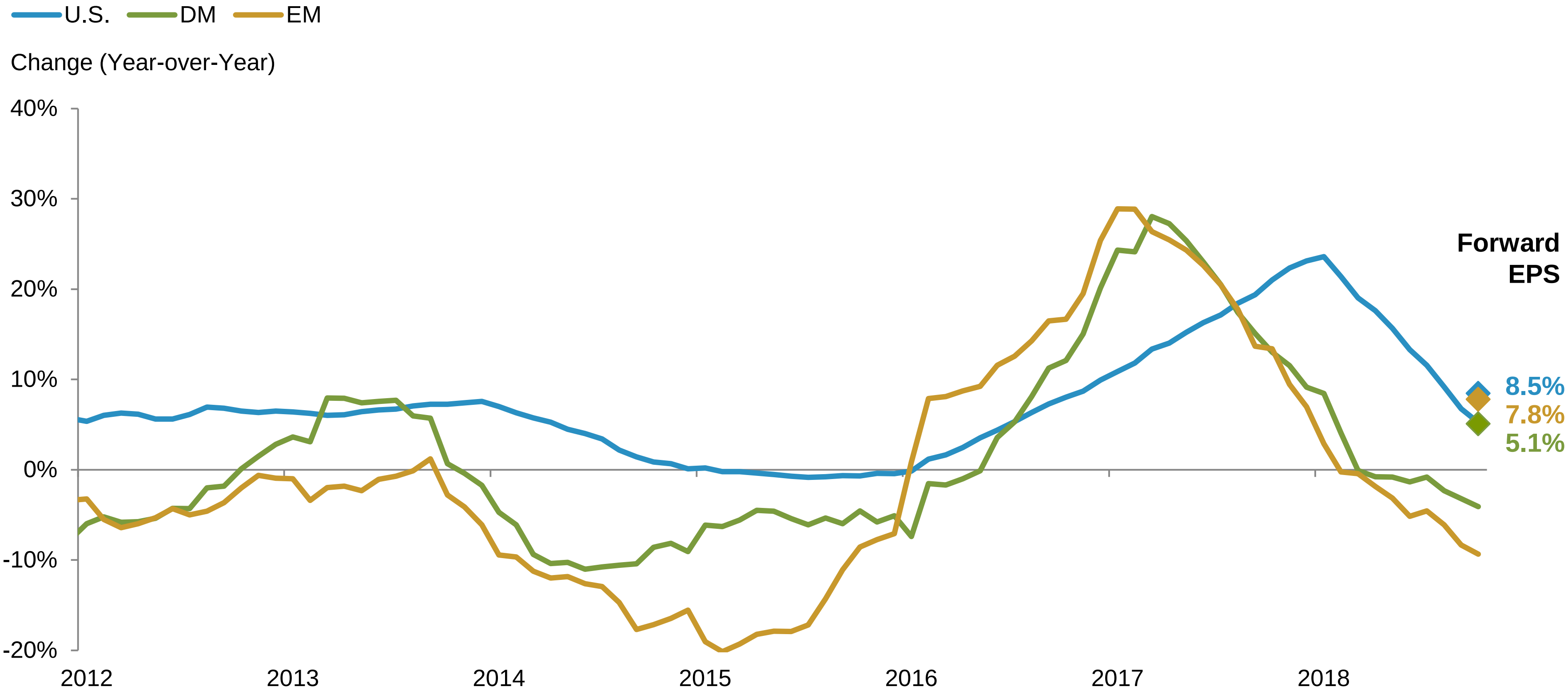


PMI: Purchasing Managers Index. Shading represents U.S. economic recession as defined by the National Bureau of Economic Research (NBER).
LEFT: Source: Bureau of Economic Analysis. NBER, Haver Analytics, Fidelity Investments (AART), as of 6/30/19. **RIGHT:** Source: Institute for Supply Management, Standard & Poor's, NBER, Haver Analytics, Fidelity Investments (AART), as of 9/30/19.

Expectations for Global Earnings Growth Convergence

U.S. earnings growth continued to decelerate during Q3, after receiving a boost from corporate tax cuts in 2018. Meanwhile, profit growth in non-U.S. developed and emerging markets stayed in negative territory during the quarter. Forward estimates point to market expectations of a convergence of global profit growth in the mid-single-digit range over the next 12 months.

Global EPS Growth (Trailing 12 Months)

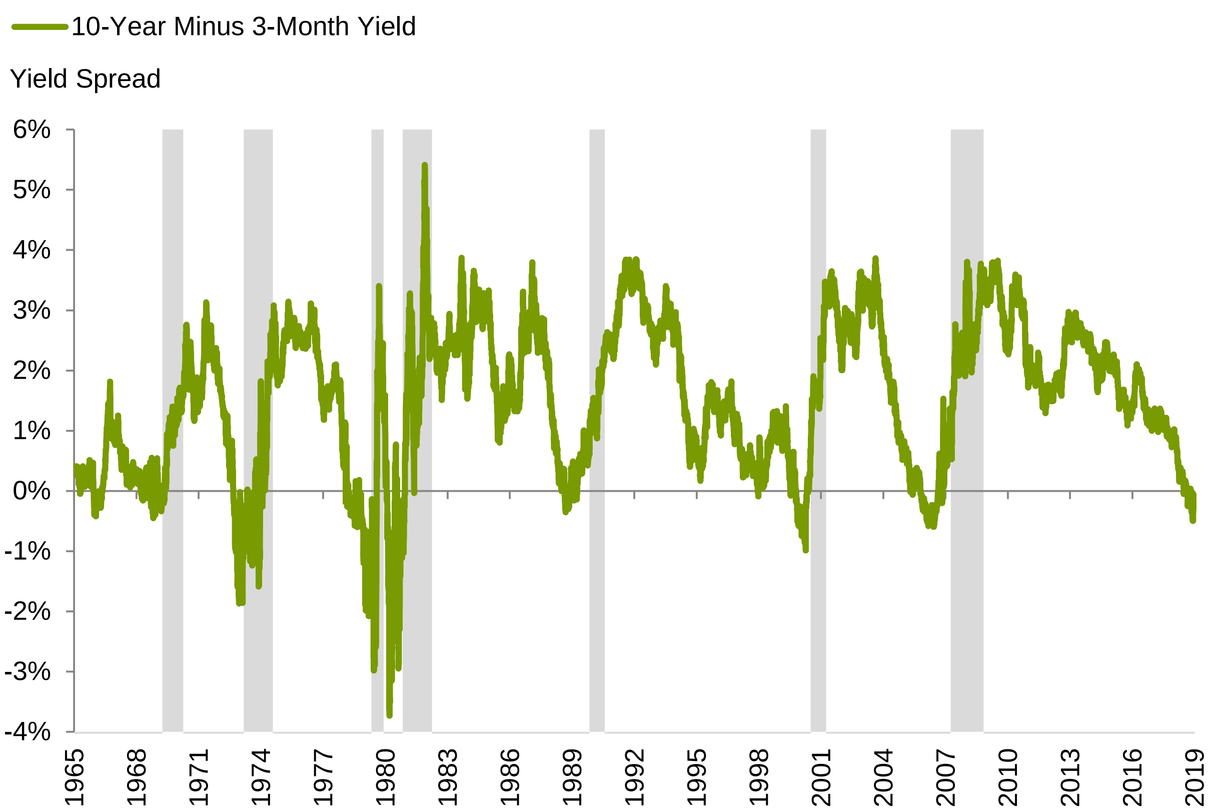


Past performance is no guarantee of future results. DM: Developed Markets. EM: Emerging Markets. EPS: Earnings per share. Forward EPS: Next 12 months expectations. Source: MSCI, Bloomberg Financial L.P., Fidelity Investments (AART), as of 9/30/19.

Yield Curve Inversion Typical During Late Cycle

Ten-year Treasury bond yields remained below 3-month Treasuries, keeping the yield curve inverted. Curve inversions have preceded the past seven recessions and may be interpreted as the market signaling weaker expectations relative to current conditions. The time between inversion and recession has varied considerably, however, and the curve also has flashed two "head fakes" in which expansion lasted for at least two more years.

U.S. Treasury Yield Curve



Yield Curve Inversions

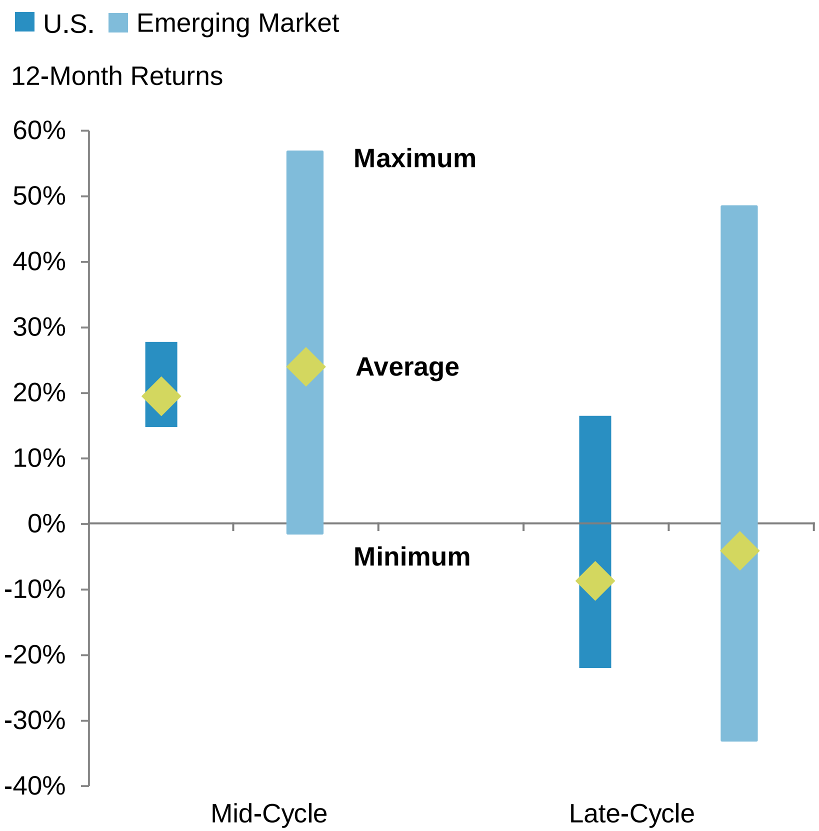
- Occurred before the last 7 recessions
- Occurred twice without a recession (1966,1998)
- Recessions started 4 to 21 months after inversion
- Un-inversions often occurred prior to recession

Shading represents U.S. economic recession as defined by the National Bureau of Economic Research (NBER). Source: Bloomberg Financial L.P., NBER, Fidelity Investments (AART), as of 9/30/19.

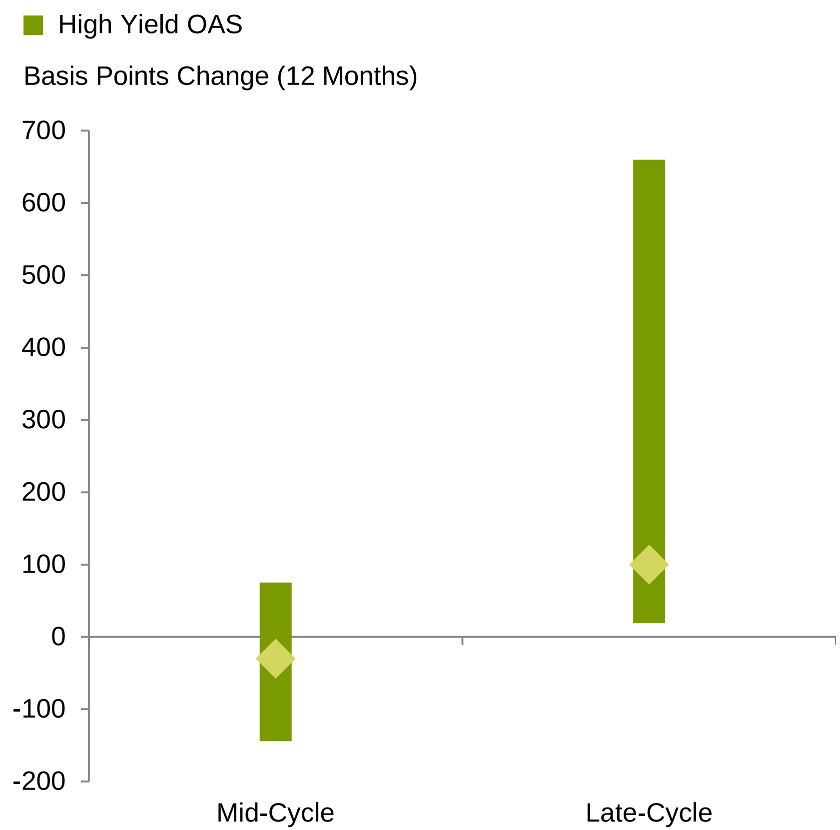
Rate Cuts Better for Risk Assets in Mid Cycle Versus Late

Since 1984, the Fed has initiated seven monetary easing cycles through cuts to its policy interest rate. When the rate cuts were started during the mid-cycle phase, they consistently boosted global equities and tightened credit spreads over the next 12 months. Rate cuts beginning in late cycle, however, resulted in a broader range of outcomes with negative average equity returns and wider credit spreads.

Equity Returns After Initial Fed Cut (1984–2007)



Credit Spreads After Initial Fed Cut (1984–2007)

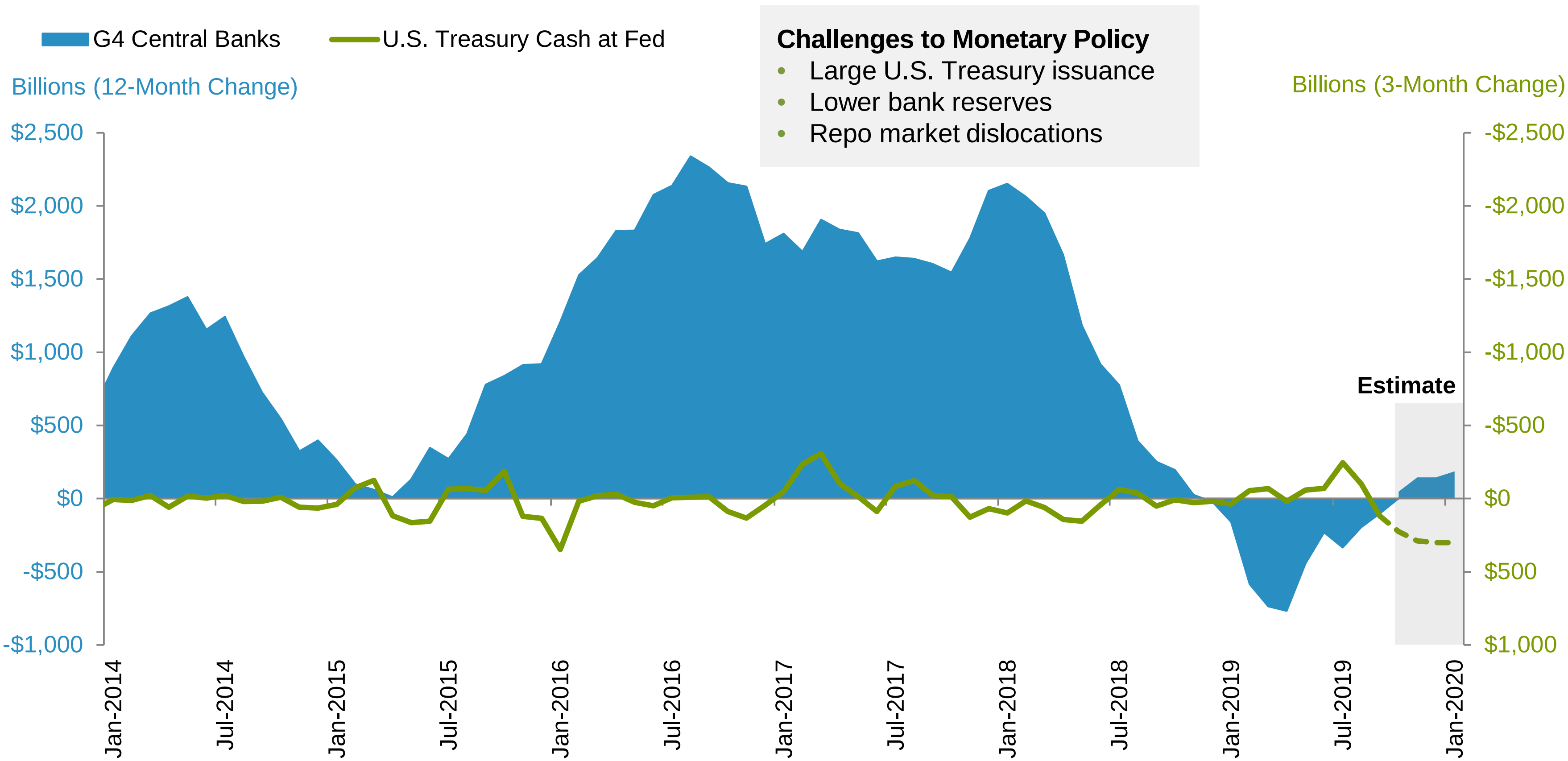


OAS: Option-Adjusted Spread, U.S: S&P 500 total returns. Emerging Market: MSCI Emerging Market total returns from 1988. High Yield: ICE BofAML U.S. High Yield Index. Source: Standard & Poor's, MSCI, Barclays Capital, Bloomberg Financial L.P., Fidelity Investments (AART), as of 9/30/19.

Dovish Global Central Bank Shifts Offset by U.S. Treasury

During Q3, global central banks eased policy by lowering interest rates, and the Fed ended its balance-sheet drawdown while the ECB re-initiated QE. However, the global liquidity backdrop is much less favorable than 2016–17, with U.S. Treasury increases of cash held at the Fed offsetting recent central-bank accommodation. Monetary policy may be showing its limitations, with a number of challenges blunting the effects of easing.

Central Bank Balance Sheets



Bars represent estimates: Federal Reserve and BOE keep constant balance sheet, European Central Bank (ECB) to purchase EUR20B per month, and Bank of Japan to purchase at annualized rate of average purchases over last 12 months. Dashed line represents estimate of Treasury increasing cash held at the Federal Reserve to $400 billion in the fourth quarter. Source: Haver Analytics, Fidelity Investments (AART), as of 9/30/19.

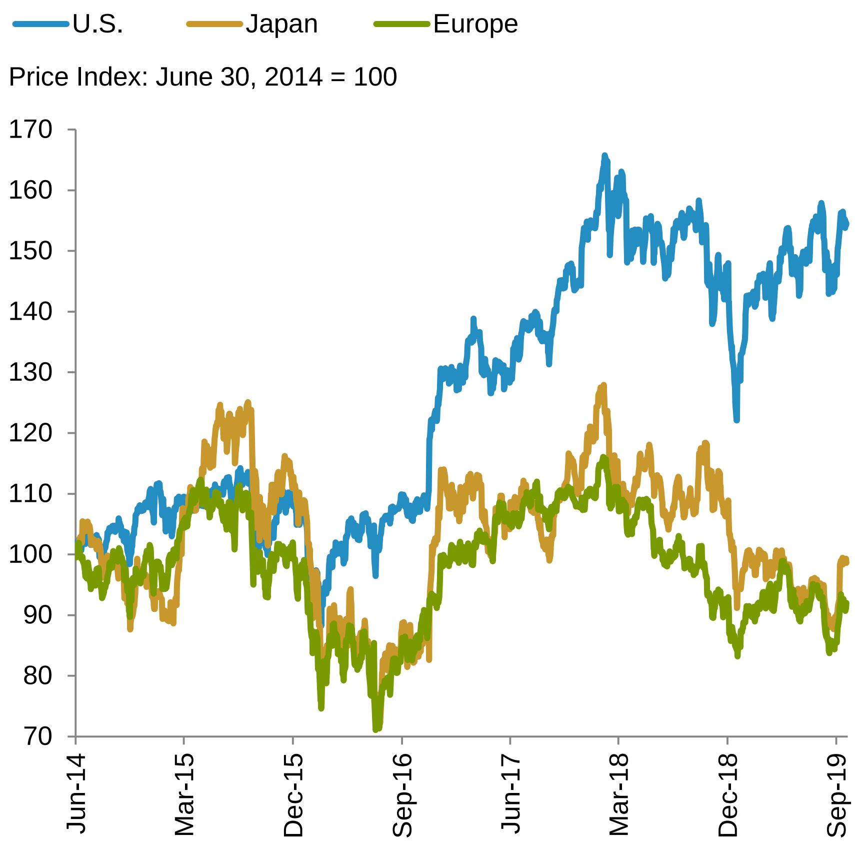
Unintended Consequences of Extraordinary Monetary Policy

Starting in 2014, five major central banks, including the BOJ and ECB, enacted negative policy rates in an effort to boost inflation, bank lending, and economic growth. In fact, the impact of negative rates in Europe and Japan has run counter to the intended goals. Aging consumers raised savings rates amid lower interest income, bank lending stayed weak as low loan rates pressured banks' profit margins, and inflation remained well below target.

Negative Policy Rate Considerations

Intended Central Bank Goals	Unintended Consequences
Stimulates consumption	Stimulates savings (German consumers increased savings rate)
Incentivizes bank lending	Hurts bank margins, reduces loan supply (European/Japan banks in doldrums)
Reduces debt service burden	Keeping weak firms alive, low productivity
Weakens currency	Limited impact in a world of low policy rates

Global Bank Stocks

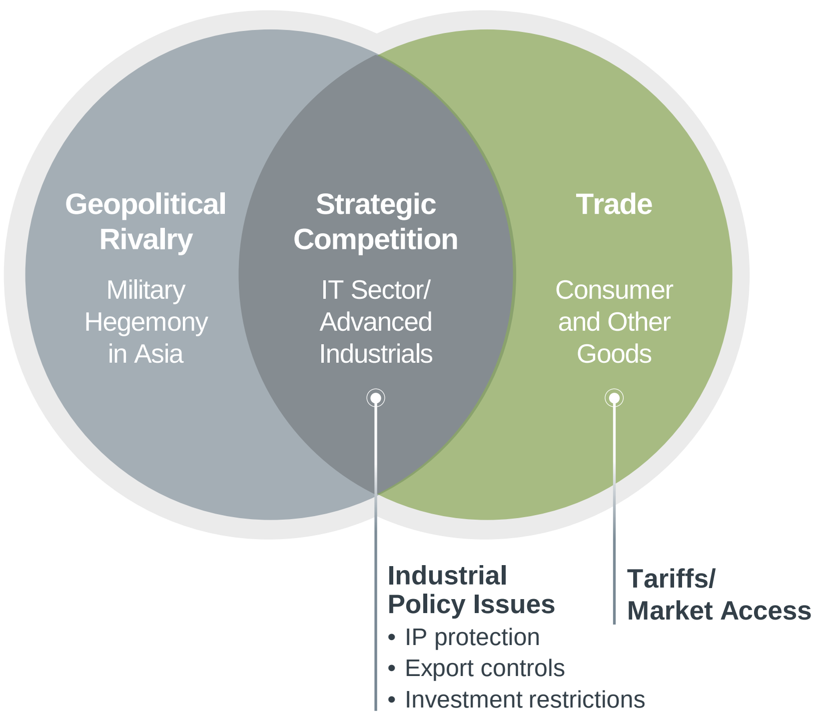


Bank stocks represented by MSCI Financials Index at regional level in local currency. Source: Bloomberg Finance L.P., Fidelity Investments (AART), as of 9/30/19.

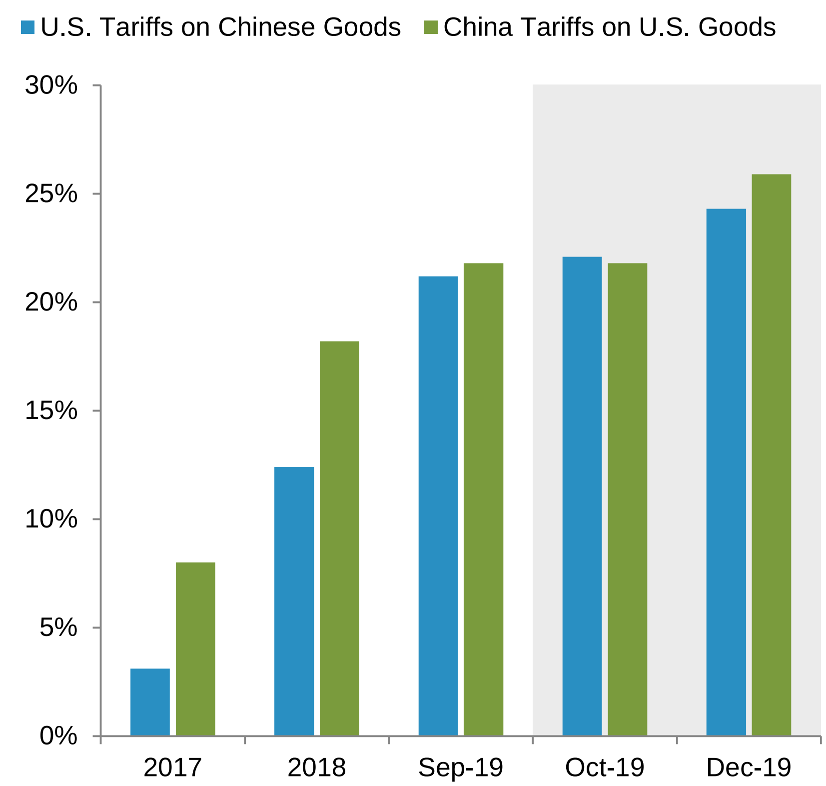
U.S. versus China: Strategic Competition and Trade Conflict

The U.S. and China raised the stakes again during Q3. Tariffs were pushed above 20%, on average, further disrupting the world's largest trading relationship and casting a shadow over corporate confidence in the highly integrated global economy. While hope remained that a truce could avert additional planned escalation, the deepening geopolitical rift makes a variety of other bilateral commercial issues less tractable.

U.S.-China Relationship



Average Tariff Rates



RIGHT: Shaded areas are announced changes as of 9/30/19. Source: Peterson Institute for International Economics, Fidelity Investments (AART) as of 9/30/19.

Outlook: Market Assessment

Fidelity's Business Cycle Board, composed of portfolio managers responsible for a variety of global asset allocation strategies, believes global economic momentum has peaked and that trade-policy friction is negatively influencing capital expenditures. While monetary policymakers around the world have shifted to a more accommodative stance, some level of uncertainty about the effectiveness of the policy response remains.

Business Cycle

U.S. firmly in late-cycle phase

China's economic slowdown is weighing on the global economy

Risks

Monetary and trade policy uncertainty

China's uncertain outlook and policy response

Asset allocation implications

Current environment warrants smaller asset allocation tilts and a diversified strategy

Policymakers' shift to a more accommodative stance may support global asset markets

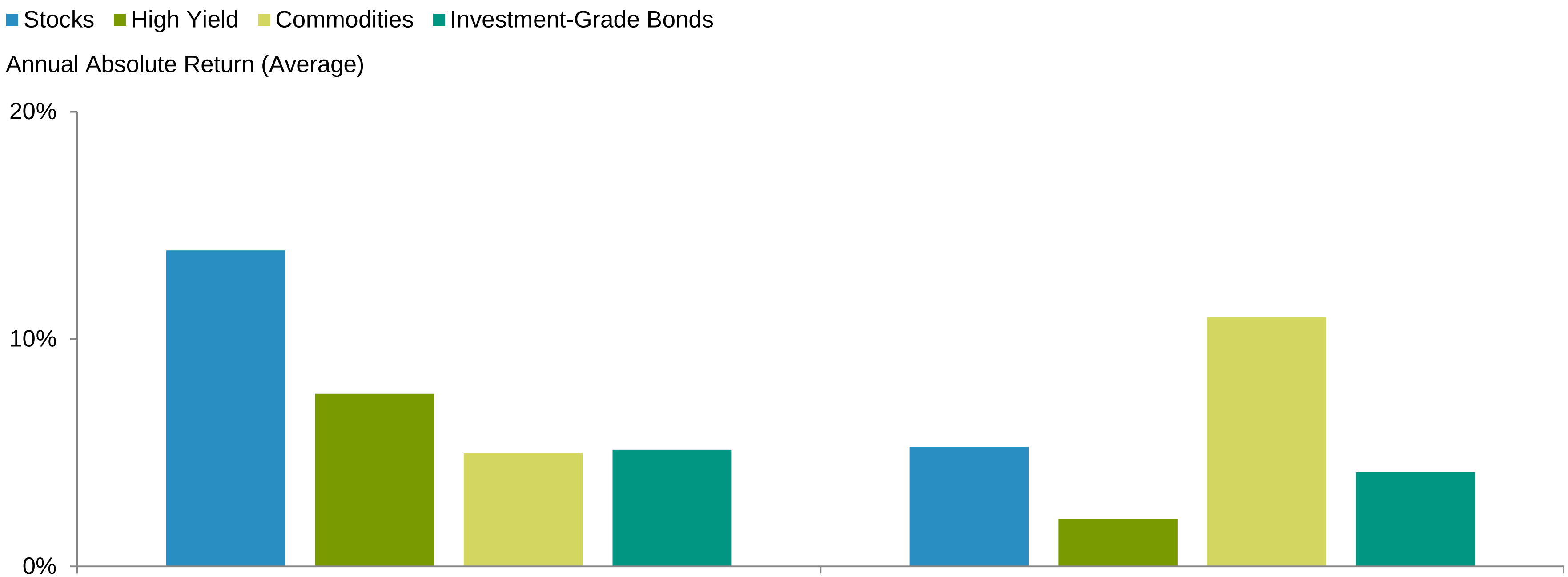
Inflation-sensitive asset valuations appear attractive though near-term inflation risks are muted

 For illustrative purposes only. Diversification does not ensure a profit or guarantee against a loss. Source: Fidelity Investments (AART) as of 9/30/19.

Late Cycle: Less Favorable Risk-Return Profile

Typically, the mid-cycle phase has favored riskier asset classes, resulting historically in broad-based gains across most asset categories. Meanwhile, late cycle has produced the most mixed performance results of any business cycle phase. Another frequent feature of late cycle has been an overall more limited upside for a diversified portfolio, although returns for most asset categories have, on average, been positive.

Asset Class Performance in Mid- and Late-Cycle Phases (1950–2016)



Mid Cycle: Strong Asset Class Performance

- Favor economically sensitive assets
- Broad-based gains

Late Cycle: Mixed Asset Class Performance

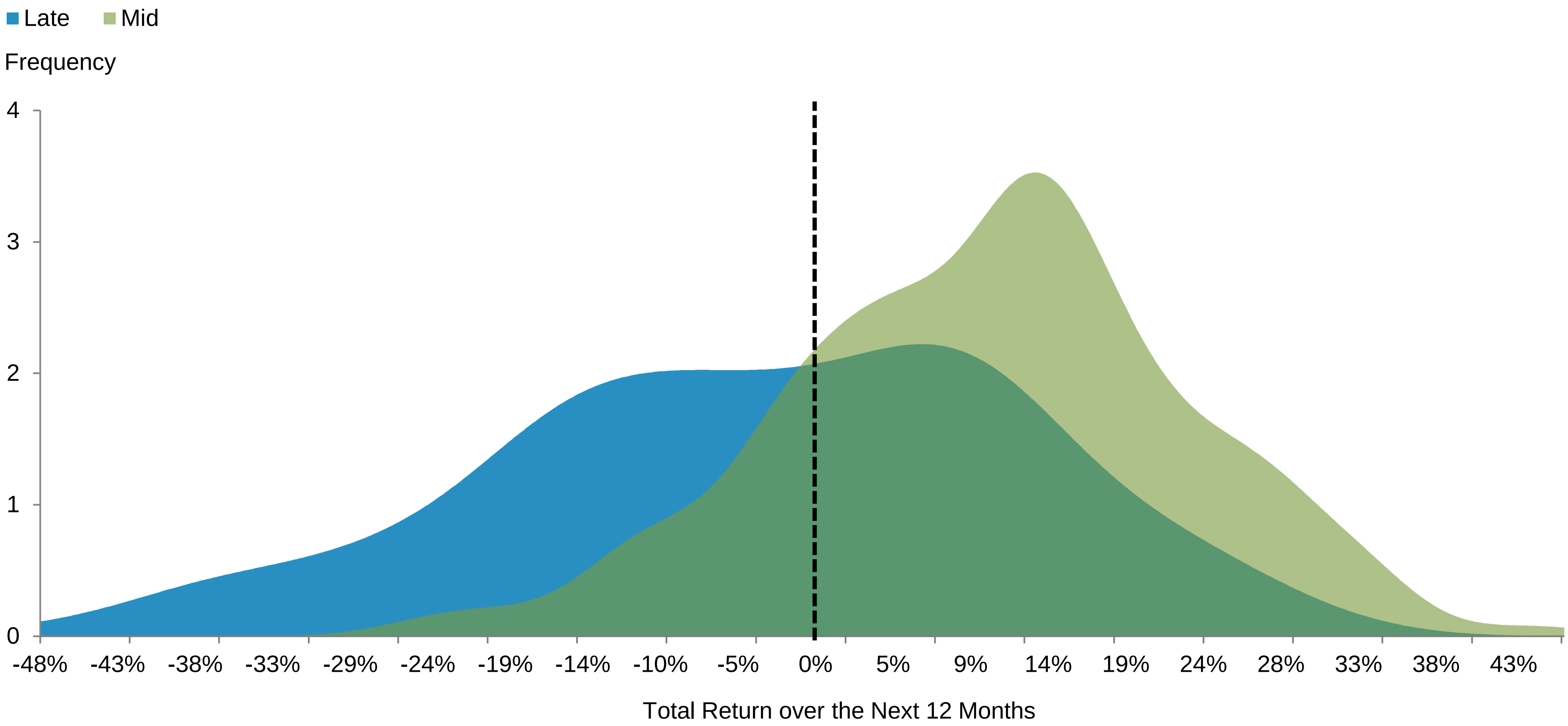
- Favor inflation-resistant assets
- Gains more muted

Diversification does not ensure a profit or guarantee against a loss. Past performance is no guarantee of future results. It is not possible to invest directly in an index. All indexes are unmanaged. Asset class total returns are represented by indexes from the following sources: Fidelity Investments, Morningstar, and Bloomberg Barclays. Fidelity Investments source: a proprietary analysis of historical asset class performance, which is not indicative of future performance.

Stocks' Return Profile Less Favorable During Late Cycle

Historically, this phase of the business cycle has had implications for asset market forward returns. When the U.S. economy has been in the mid-cycle phase, forward 12-month real returns have been generally positive, displaying a favorable distribution skewed to above-average returns. But as expansion matures into late cycle, the forward distribution of real equity returns has typically displayed a less favorable, more negative skew.

Subsequent Stock Market Returns Given Business Cycle Phase (1952–2018)

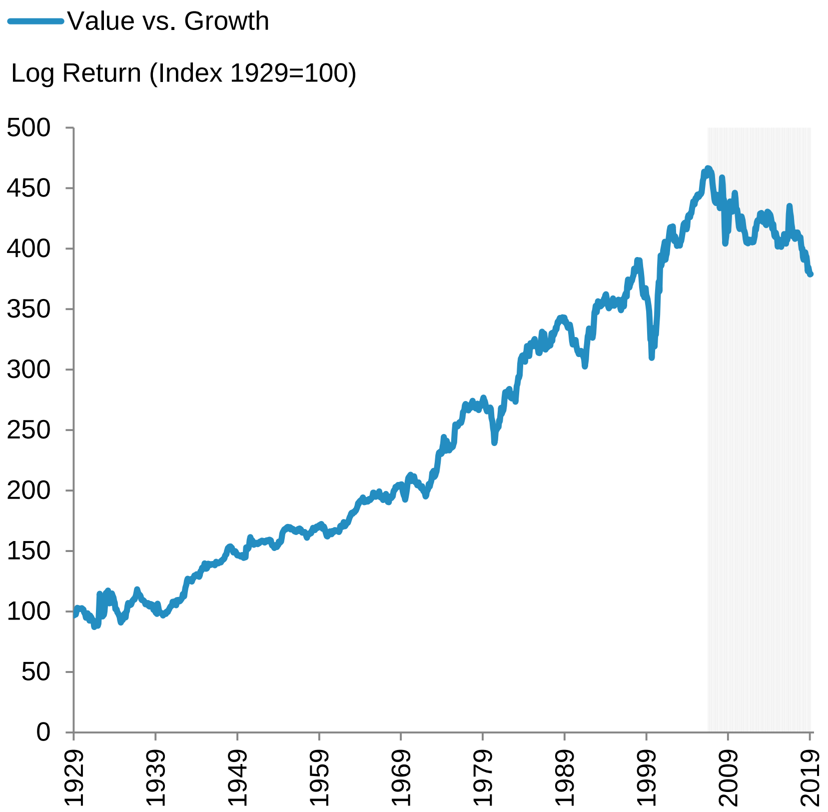


Past performance is no guarantee of future results. The above charts are density plots generated from the 12-month forward returns of a U.S. Equity Index sourced from Fidelity Investments. Source: Standard & Poor's, Fidelity Investments (AART), as of 9/30/19.

Long-Running Style and Regional Equity Trends Persist

Several extreme trends in relative equity performance continued to persist. The outperformance of U.S. growth stocks versus value stocks has extended more than a decade, and U.S. equities have outpaced their foreign counterparts for roughly the same time span. Meanwhile, the performance of U.S. minimum-volatility stocks has benefited from declining bond yields and surpassed the broader equity market during the bull-market upswing.

U.S. Equity Style Relative Performance



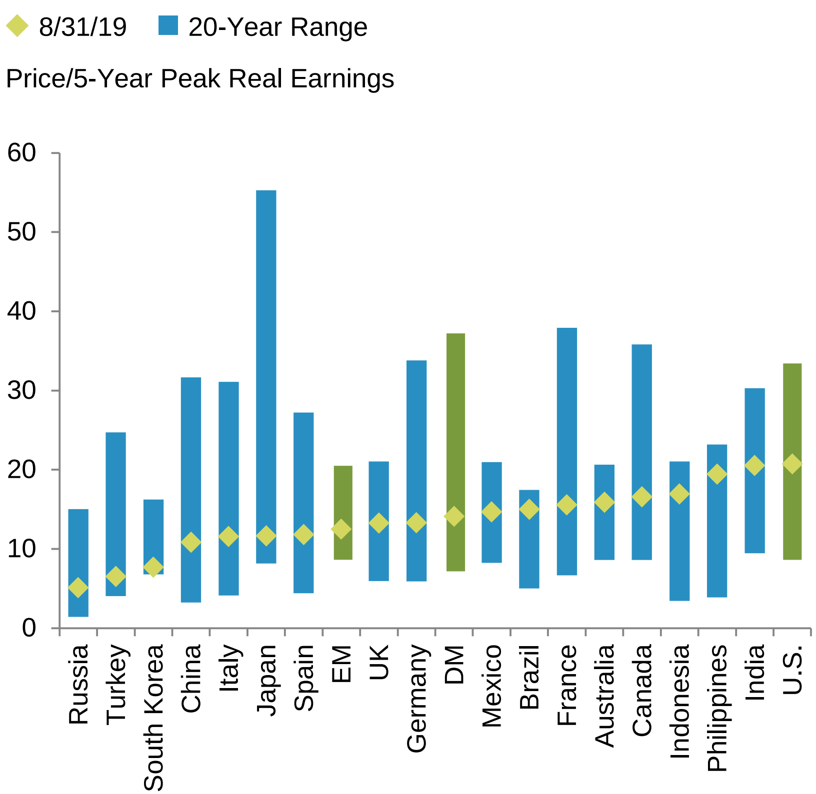
Equity Relative Performance

LEFT: Source Fama/French Research Factors—High Minus Low. Shading represents the peak of the value versus growth equity style.
RIGHT: U.S. Min Vol: MSCI USA Minimum Volatility Total Return Index. US Broad Market: MSCI USA Total Return Index. US: MSCI USA Total Return Index. Rest of World: MSCI ACWI ex USA Total Return Index, as of 9/30/19.

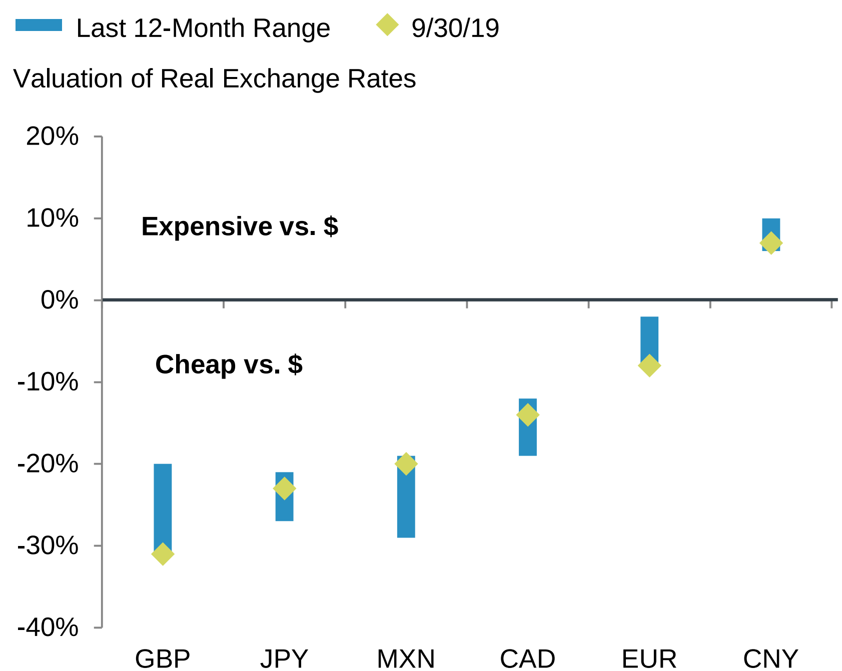
Non-U.S. Equity and Currency Valuations Still Attractive

Using 5-year peak inflation-adjusted earnings, P/E ratios for international developed- and emerging-market equities remained lower than those for the U.S., providing a relatively favorable long-term valuation backdrop for non-U.S. stocks. After moving sideways during the first half of 2019, the U.S. dollar appreciated during Q3, resulting in generally expensive valuations versus many of the world's major currencies.

Cyclical P/Es



Valuation of Major Currencies vs. USD



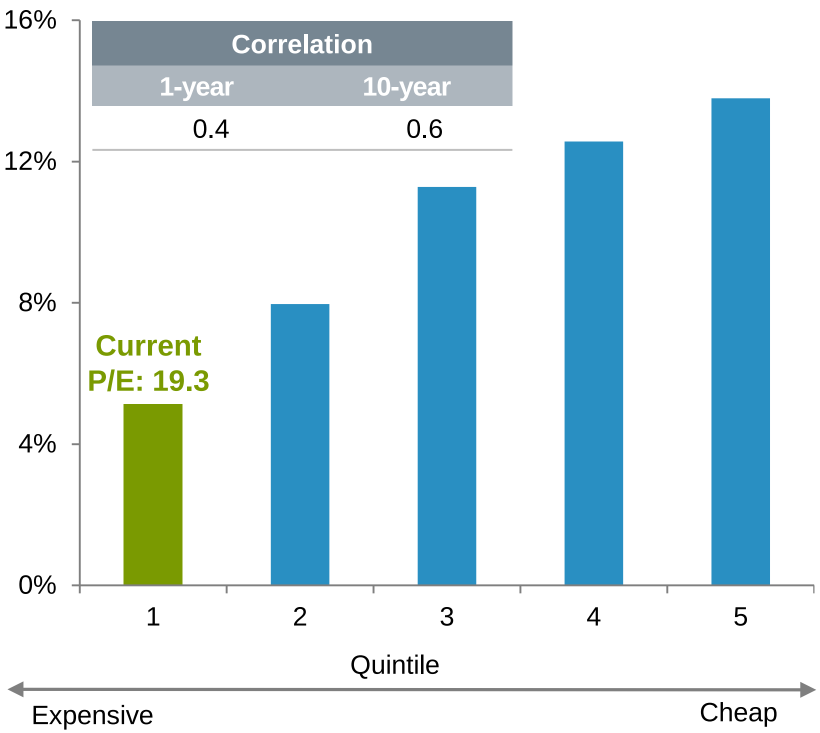
DM: Developed Markets. EM: Emerging Markets. Past performance is no guarantee of future results. It is not possible to invest directly in an index. All indexes are unmanaged. See Appendix for important index information. **LEFT:** Price-to-earnings (P/E) ratio (or multiple): stock price divided by earnings per share, which indicates how much investors are paying for a company's earnings power. Five-year peak earnings are adjusted for inflation. Source: FactSet, countries' statistical organizations, Haver Analytics, Fidelity Investments (AART), as of 8/31/19. **RIGHT:** GBP—British pound; MXN—Mexican peso; JPY—Japanese yen; EUR—euro; CAD—Canadian dollar. Source: Federal Reserve Board, Haver Analytics, Fidelity Investments (AART), as of 9/30/19.

A High Equity Risk Premium Does Not Make Stocks Cheap

Plunging bond yields widened the gap between the equity earnings yield (reciprocal of the P/E ratio) and the 10-year U.S. Treasury bond yield—a measure of the equity risk premium (ERP). However, standalone valuation metrics such as the P/E have a stronger relationship than the ERP to forward equity returns. The ERP, though, may be better at identifying equity attractiveness relative to expected bond returns.

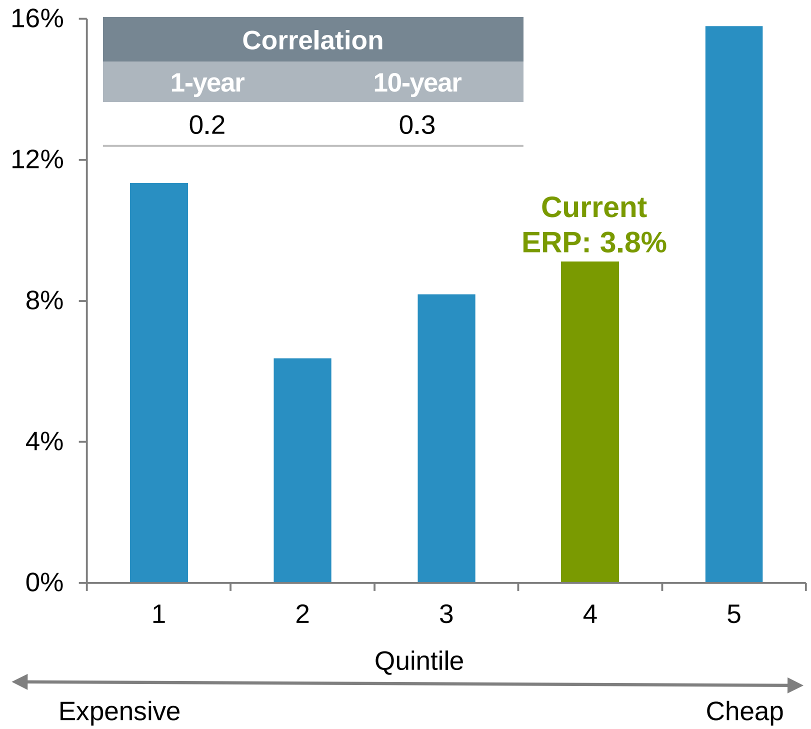
P/E Relation to Equities (1926–2019)

4-Quarter Forward S&P500 Average Return



Equity Risk Premium Relation to Equities (1926–2019)

4-Quarter Forward S&P500 Average Return



Price-to-earnings ratio (P/E): stock price divided by earnings per share. Source: Fidelity Investments, Robert Shiller, Standard & Poor's, Bloomberg Barclays, Haver Analytics, Fidelity Investments (AART), as of 9/3019.

Fidelity INVESTMENTS

Business-Cycle Approach to Equity Sectors

A disciplined business-cycle approach to sector allocation can 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 that have more stable earnings have tended to outperform late in the cycle and, in particular, during recessions.

Business-Cycle Approach to Sectors

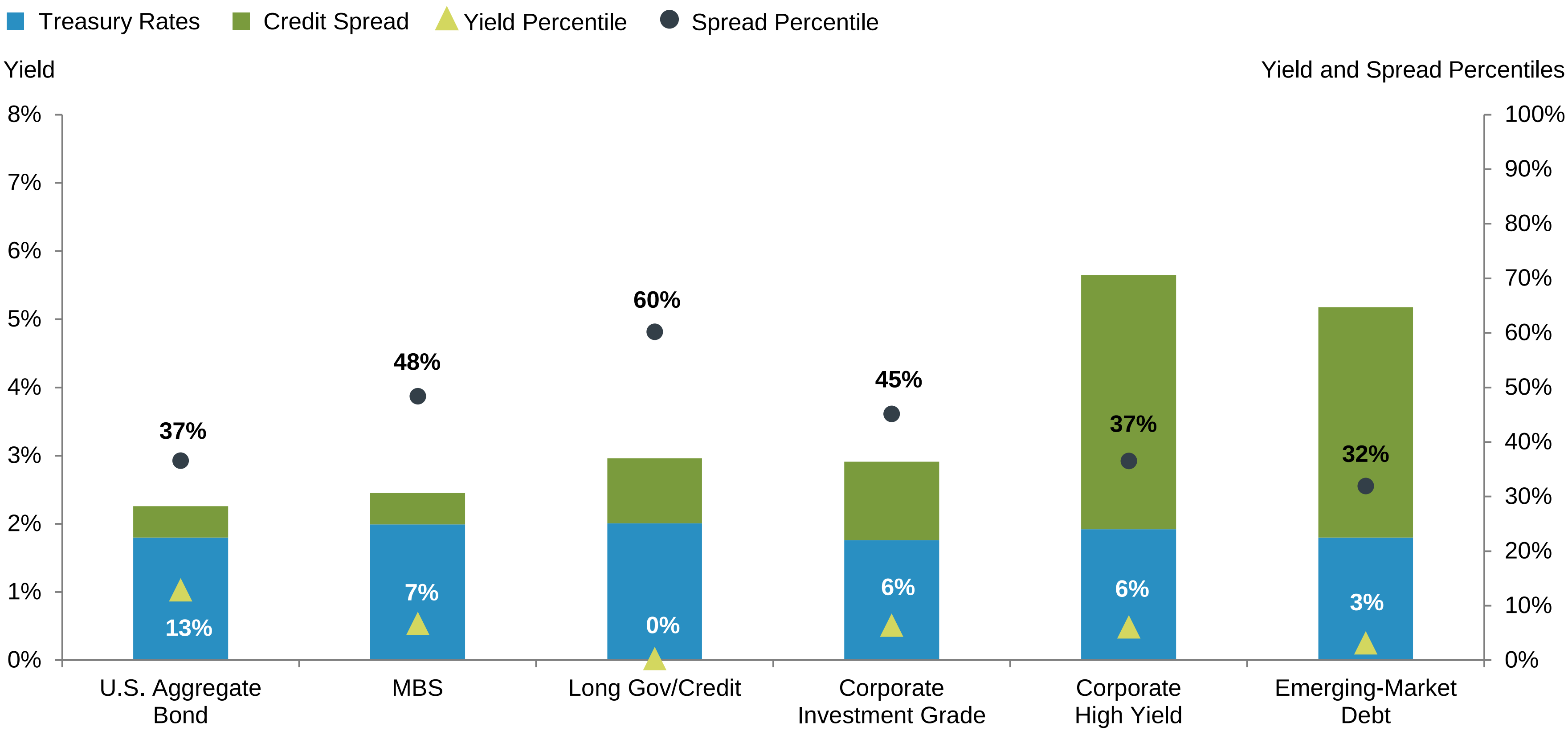
Sector	EARLY CYCLE Rebounds	MID CYCLE Peaks	LATE CYCLE Moderates	RECESSION Contracts
Financials	+			
Real Estate	++			--
Consumer Discretionary	++	-	--	
Information Technology	+	+	--	--
Industrials	++			--
Materials	+	--	++	
Consumer Staples			++	++
Health Care	--		++	++
Energy	--		++	
Communication Services		+		-
Utilities	--	-	+	++
	Economically sensitive sectors may tend 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 tend to perform better, while more cyclical sectors underperform.	Since performance is generally negative in 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 2016. Source: Fidelity Investments (AART), as of 9/30/19.

Yields Fell Due to Lower Rates; Spreads Remained Tight

Modest inflation, flagging growth expectations, and the Federal Reserve's dovish shift pushed bond yields lower for the third quarter in a row. Credit spreads experienced some volatility but ended the quarter roughly unchanged. Many fixed income categories have dropped to the bottom yield deciles relative to their own long-term histories. Credit spreads also are generally below their long-term averages.

Fixed Income Yields and Spreads (1993–2019)

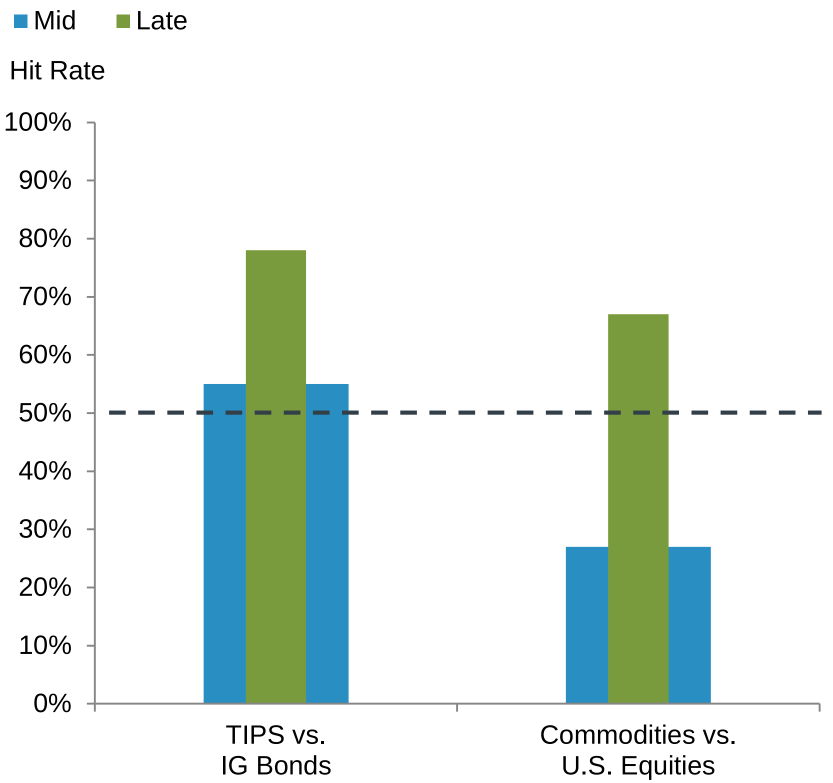


Past performance is no guarantee of future results. It is not possible to invest directly in an index. All indexes are unmanaged. See Appendix for important index information. Percentile ranks of yields and spreads based on historical period from 1993 to 2019. MBS: mortgage-backed security. Source: Bloomberg Barclays, Bank of America Merrill Lynch, JP Morgan, Fidelity Investments (AART), as of 9/30/19.

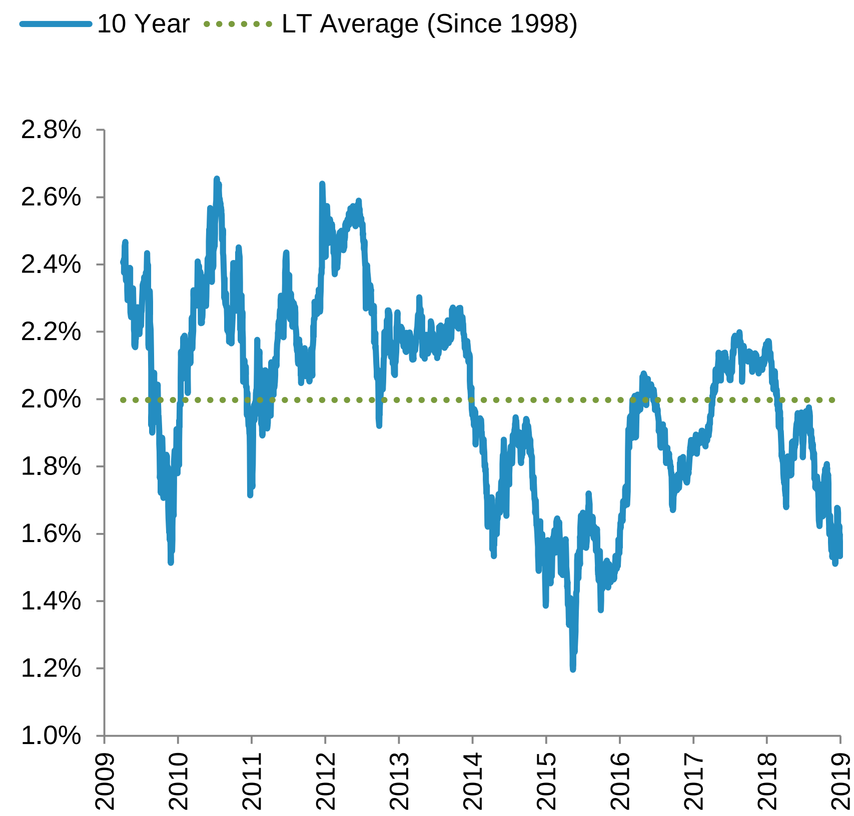
Muted Inflation Expectations Relative to Recent History

Historically, the late cycle has often experienced rising inflation pressures, which has tended to enhance the attractiveness of inflation-sensitive assets such as TIPS and commodities. Our near-term outlook for inflation is relatively range-bound, but market expectations for inflation (represented by TIPS breakeven rates) are at the lower end of their decade-long range, suggesting inflation protection is relatively inexpensive.

Relative Asset Performance by Cycle Phase (1950–2016)



U.S. Treasury Breakeven Inflation Rates



Past performance is no guarantee of future results. It is not possible to invest directly in an index. All indexes are unmanaged.
TIPS: Treasury Inflation-Protected Securities. Hit Rate: frequency of one asset class outperforming another. Results are the difference between total returns of the respective periods represented by indexes from the following sources: Fidelity Investments, Morningstar, and Bloomberg Barclays.
Fidelity Investments source: proprietary analysis of historical asset class performance, which is not indicative of future performance, as of 6/30/19.

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 of the date indicated, based on the information available at that time, and may change based on market and other conditions. Unless otherwise noted, the opinions provided are those of the authors and not necessarily those of Fidelity Investments or its affiliates. Fidelity does not assume any duty to update any of the information.

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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 24 represented by: Growth—Russell 3000® Growth Index; Large Caps—S&P 500® index; Mid Caps—Russell MidCap® Index; Small Caps—Russell 2000® Index; Value - Russell 3000® Value Index; ACWI ex USA—MSCI All Country World Index (ACWI); Canada—MSCI Canada Index; Commodities—Bloomberg Commodity Index; EAFE—MSCI EAFE (Europe, Australasia, Far East) Index; EAFE Small Cap—MSCI EAFE Small Cap Index; EM Asia—MSCI Emerging Markets Asia Index; EMEA (Europe, Middle East, and Africa)—MSCI EM EMEA Index; Emerging Markets (EM)—MSCI EM Index; Europe—MSCI Europe Index; Gold—Gold Bullion Price, LBMA PM Fix; Japan—MSCI Japan Index; Latin America—MSCI EM Latin America Index; ABS (Asset-Backed Securities)—Bloomberg Barclays ABS Index; Agency—Bloomberg Barclays U.S. Agency Index; Aggregate—Bloomberg Barclays U.S. Aggregate Bond Index; CMBS (Commercial Mortgage-Backed Securities)—Bloomberg Barclays Investment-Grade CMBS Index; Credit—Bloomberg Barclays U.S. Credit Bond Index; EM Debt (Emerging-Market Debt)—JP Morgan EMBI Global Index; High Yield—ICE BofAML U.S. High Yield Index; Leveraged Loan—S&P/LSTA Leveraged Loan Index; Long Government & Credit (Investment-Grade)—Bloomberg Barclays Long Government & Credit Index; MBS (Mortgage-Backed Securities)—Bloomberg Barclays MBS Index; Municipal—Bloomberg Barclays Municipal Bond Index; TIPS (Treasury Inflation-Protected Securities)—Bloomberg Barclays U.S. TIPS Index; Treasuries—Bloomberg Barclays U.S. Treasury Index.

Bloomberg Barclays 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.

Bloomberg Barclays 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 Barclays 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 Barclays Municipal Bond Index is a market value-weighted index of investment-grade municipal bonds with maturities of one year or more. **Bloomberg Barclays 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 Barclays 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 Barclays 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 Barclays 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 Barclays 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 Barclays 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 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.

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.

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).

ICE BofAML 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.

MSCI All Country World Index (ACWI) is a market capitalization-weighted index designed to measure the 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 the investable equity market performance for global investors of large and mid cap stocks in developed and emerging markets, excluding the United States.

MSCI Emerging Markets (EM) Index is a market capitalization-weighted index that is 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 in Asia. **MSCI EM Europe, Middle East, and Africa (EMEA) Index** is a market capitalization-weighted index that is designed to measure the investable equity market performance for global investors in the emerging-market countries of Europe, the Middle East, and Africa. **MSCI EM Latin America Index** is a market capitalization-weighted index that is designed to measure the investable equity market performance for global investors in the emerging-market countries of Latin America.

MSCI Europe, Australasia, Far East Index (EAFE) is a market capitalization-weighted index that is 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 that is designed to measure the investable equity market performance of small cap stocks for global investors in developed markets, excluding the U.S. and Canada.

Appendix: Important Information

Market Indexes (continued)

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.

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. **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.

The **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.

The **Sectors and Industries** are defined by Global Industry Classification Standards (GICS®), except where noted otherwise. **S&P 500 sectors** are defined as follows: 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, including seismic data collection; 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; it includes media companies moved from Consumer Discretionary and internet services companies moved from Information Technology. Utilities—companies considered electric, gas, or water utilities, or that operate as independent producers and/or distributors of power.

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.

Other Indexes

The Consumer Price Index (CPI) is a monthly inflation indicator that measures the change in the cost of a fixed basket of products and services, including housing, electricity, food, and transportation.

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 and 15:00 with the price set in U.S. dollars per fine troy ounce.

Definitions

Correlation coefficient measures the interdependencies of two random variables that range in value from −1 to +1, indicating perfect negative correlation at −1, absence of correlation at 0, and perfect positive correlation at +1.

Price-to-Earnings (P/E) ratio is the ratio of a company's current share price to its current earnings, typically trailing 12-months earnings per share. A Forward P/E calculation will typically use an average of analysts' published estimates of earnings for the next 12 months in the denominator.

Excess return is the amount by which a portfolio's performance exceeds its benchmark, net (in the case of the analysis in this article) or gross of operating expenses, in percentage points.

Option-Adjusted Spread (OAS) is the measurement of the spread between a fixed-income security's rate and the risk-free rate of return, which is adjusted to take into account any embedded options.

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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Fidelity Clearing & Custody Solutions® provides clearing, custody, or other brokerage services through National Financial Services LLC or Fidelity Brokerage Services LLC, (Members NYSE, SIPC).

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