

LEADERSHIP SERIES FIRST QUARTER 2018

# Quarterly Market Update

## PRIMARY CONTRIBUTORS

**Lisa Emsbo-Mattingly**

*Director of Asset Allocation Research*

**Jake Weinstein, CFA**

*Senior Analyst, Asset Allocation Research*

**Dirk Hofschire, CFA**

*SVP, Asset Allocation Research*

**Cait Dourney, CFA**

*Analyst, Asset Allocation Research*



# Table of Contents

1.	Market Summary
2.	Economy/Macro Backdrop
3.	Asset Markets
4.	Long-Term Themes

---

# Market Summary

# Monetary Shift May Stoke Volatility after Near-Perfect 2017

The year 2017 was defined by a near-perfect backdrop of steady global growth, low inflation, and accommodative monetary policies. In 2018, we expect the synchronized global expansion to continue, but it should also give global policymakers confidence to generally shift toward reducing monetary accommodation, which has the potential to stoke an increase in market volatility from extremely low levels.

## MACRO

### Q4 2017

- Synchronized global acceleration amid low inflation

### OUTLOOK

- Global expansion continues but activity peaks amid China's less supportive policies
- U.S. economy healthy though cycle becoming more mature
- Shift toward global monetary policy normalization likely to reduce liquidity growth

## ASSET MARKETS

- Low volatility and broad rise in asset prices

- Monetary shift to boost market volatility
- Smaller allocation tilts at this point in the cycle
- Prioritize diversification, including inflation-resistant assets and international equities

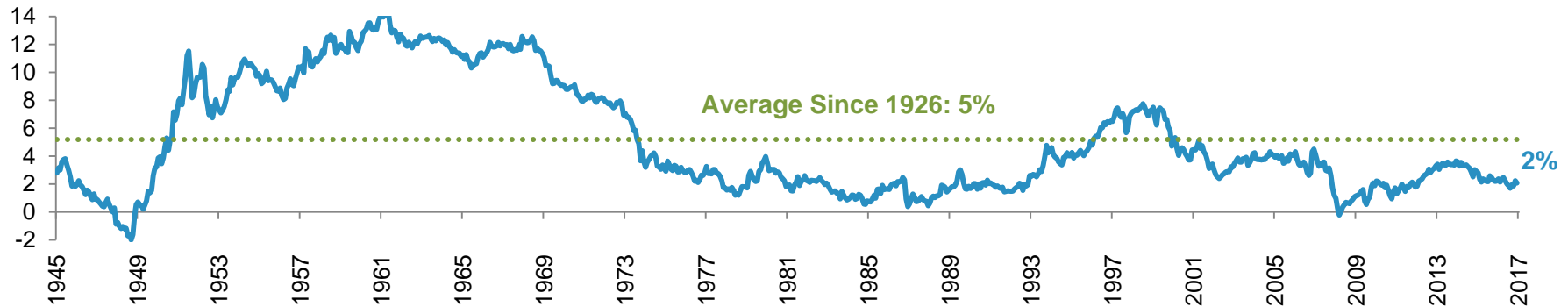
# Broad-Based Rally in Asset Prices Led by Non-U.S. Stocks

Non-U.S. equities outperformed the U.S. stock market for the first calendar year in the past five, bolstered by a weaker dollar and a strengthened economic backdrop. Credit spreads tightened amid the “risk-on” tone, boosting emerging-market and high-yield bonds. Steady longer-term interest rates kept high-quality bonds in the black, and all major asset categories posted positive returns.

	Q4 2017 (%)	2017 (%)		Q4 2017 (%)	2017 (%)
Emerging-Market Stocks	7.5	37.8	Long Government & Credit Bonds	2.8	10.7
Non-U.S. Small-Cap Stocks	6.1	33.5	Emerging-Market Bonds	0.5	9.3
Non-U.S. Developed-Country Stocks	4.3	25.6	Real Estate Stocks	2.5	8.7
U.S. Large-Cap Stocks	6.6	21.8	High-Yield Bonds	0.4	7.5
U.S. Mid-Cap Stocks	6.1	18.5	U.S. Corporate Bonds	1.0	6.2
U.S. Small-Cap Stocks	3.3	14.6	Investment-Grade Bonds	0.4	3.5
Gold	0.6	12.7	Commodities	4.4	0.7

## 20-Year U.S. Stock Returns Minus Bond Returns Since 1926

Return Difference (%)



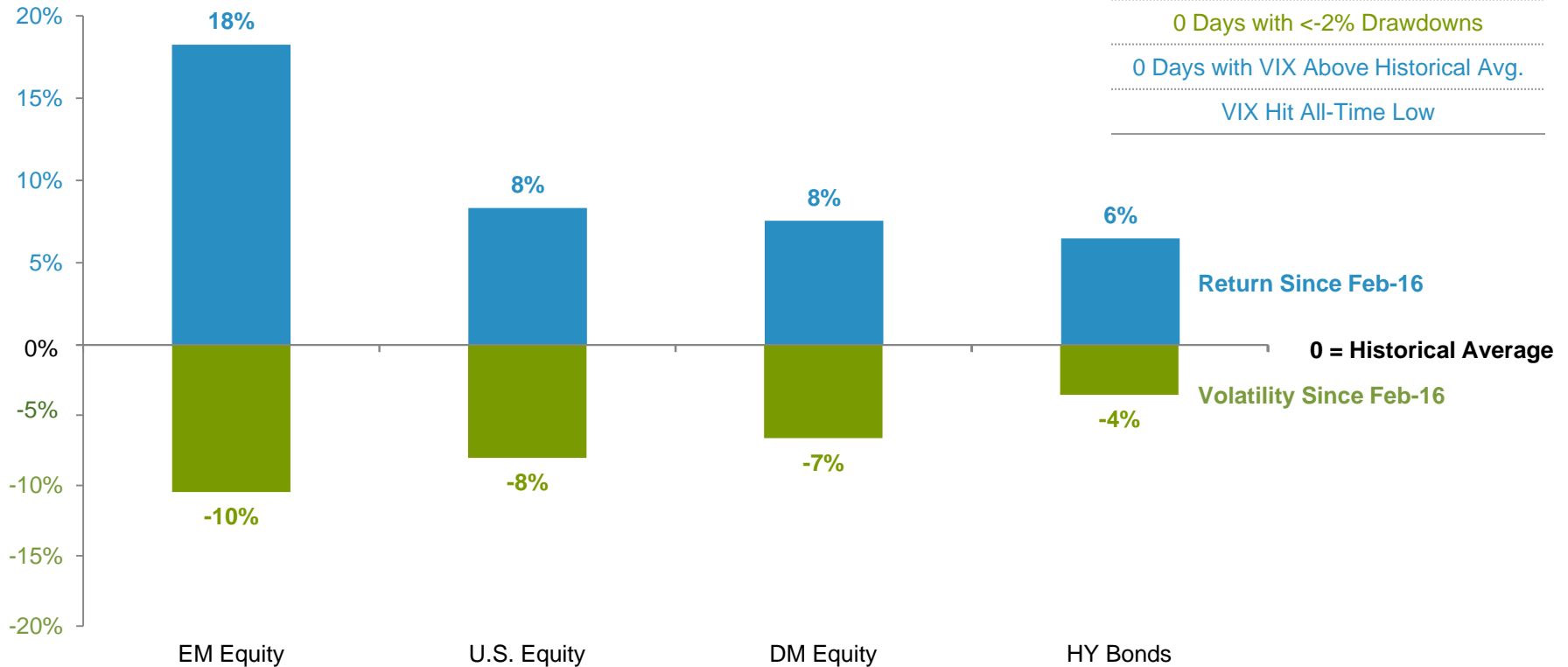
Past performance is no guarantee of future results. It is not possible to invest directly in an index. See appendix for important index information. Assets represented by: Commodities – Bloomberg Commodity Index; Emerging-Market Bonds – JP Morgan EMBI Global Index; Emerging-Market Stocks – MSCI EM Index; Gold – Gold Bullion, LBMA PM Fix; High Yield Bonds – Bank of America Merrill Lynch (BofA ML) 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; U.S. Treasury Bonds – Bloomberg Barclays U.S. Treasury Index. Source: Bloomberg Finance L.P., Haver Analytics, Fidelity Investments (AART), as of 11/30/17.

# Extremely Low Volatility Amid Remarkably Good Returns

Global assets experienced remarkably low levels of volatility. Since equity markets hit a bottom in early 2016, riskier assets have registered gains far above their long-term historical averages, even as their price fluctuations were far below average. U.S. stock-price moves were particularly tranquil during 2017.

## Returns and Volatility (Since Feb-16 Relative to Long Term)

Relative to Historical Average (Annualized)

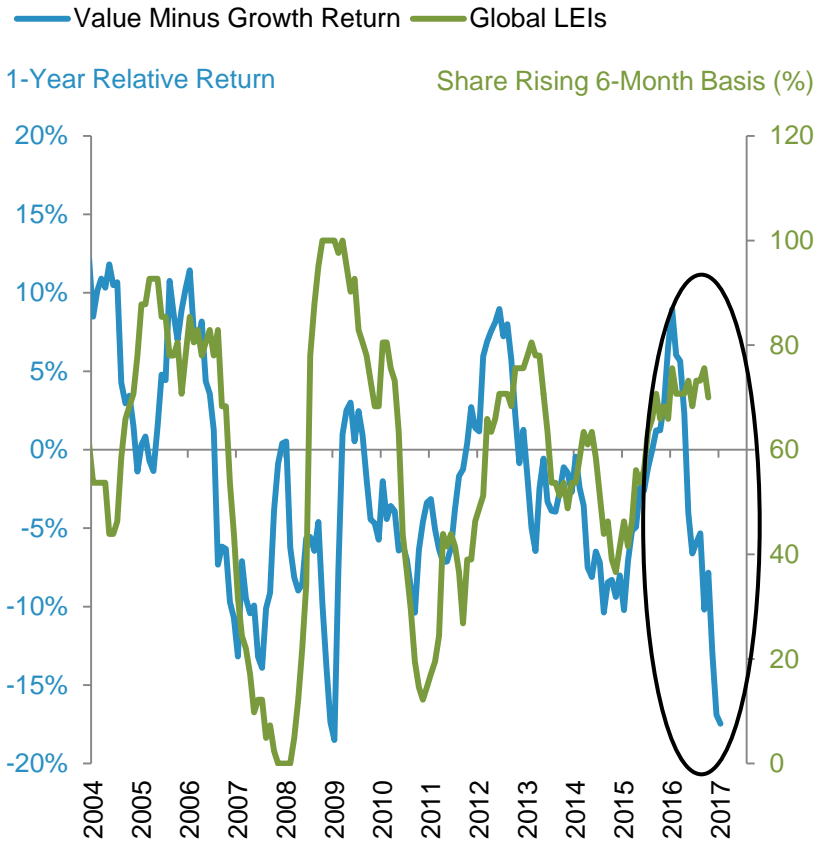


VIX = U.S. equity volatility index. Past performance is no guarantee of future results. Asset class indices as defined on prior slide. Long-term history is since 1950 for all asset classes except EM equity, which is since 1988. Source: Haver Analytics, Fidelity Investments (AART), as of 12/31/17.

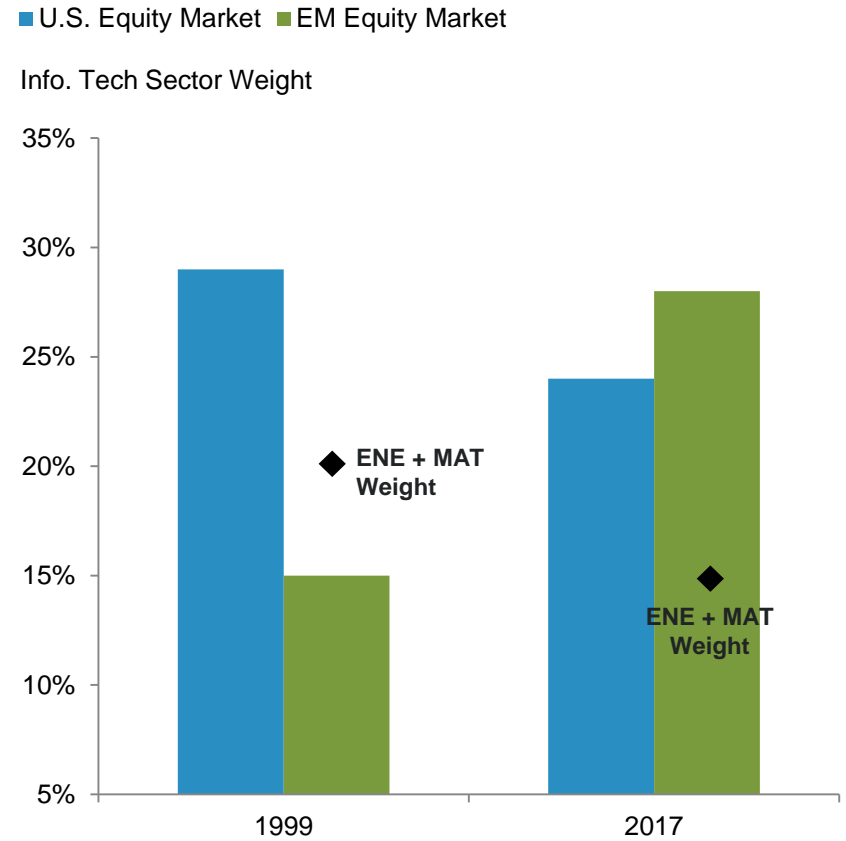
# Growth and Tech Led During Non-Inflationary Global Boom

2017 was a rare year when an accelerating global economy accompanied a large outperformance by growth stocks relative to their value counterparts, somewhat reminiscent of the large-cap technology stock leadership of the late 1990s. Emerging-market gains in 2017 were also spearheaded by tech stocks, which became the largest sector in the EM equity index and roughly twice the weight of the energy and materials sectors.

## Equity Style Performance and Global Growth



## Info Tech. Sector Weight: 1999 vs. 2017



ENE = energy sector; MAT = materials sector. LEIs = leading economic indicators. LEFT: Past performance is no guarantee of future results. Source: Haver Analytics, Fidelity Investments (AART), as of 12/31/17. RIGHT: U.S. equity market = S&P 500 index, EM equity market = MSCI EM index. Source: FactSet, Fidelity Investments (AART), as of 12/31/17.

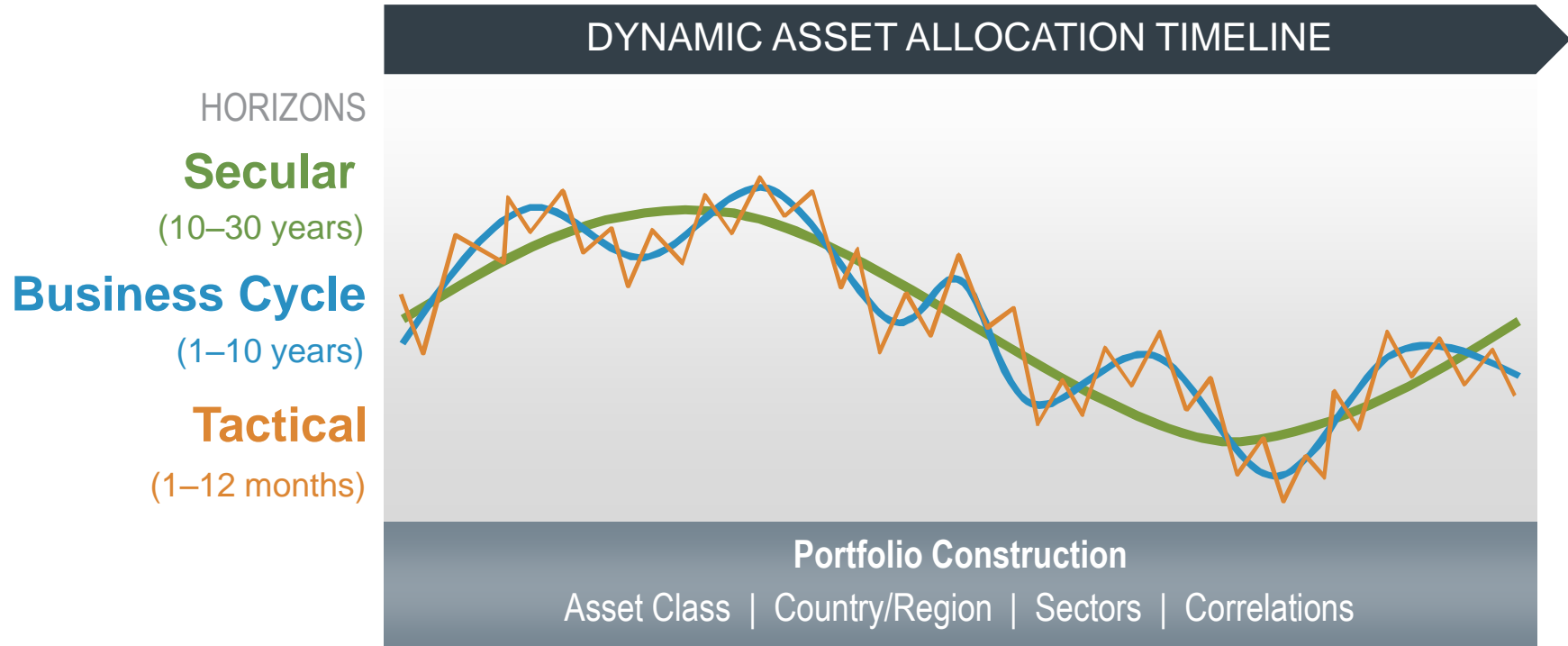
---

## 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).



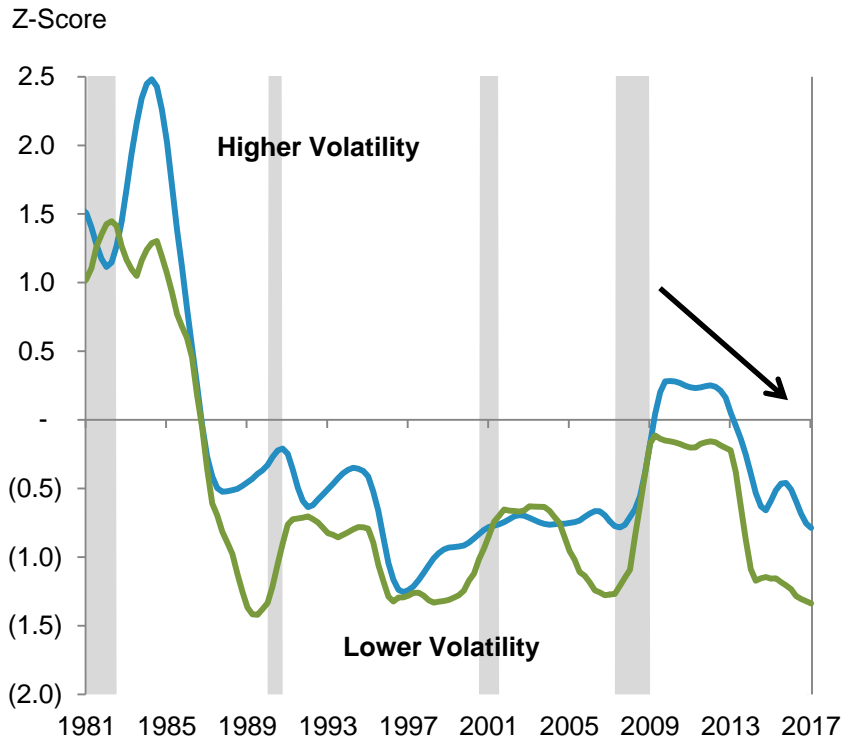
For illustrative purposes only. Source: Fidelity Investments (AART).

# Low-Volatility Fundamentals Created Ideal Market Backdrop

In 2017, low asset-market volatility was underpinned by economic fundamentals, such as growth and inflation, that also registered steady trends amid falling volatility. For the first time in years, global corporate earnings expectations rose throughout the year and finished on an upswing. In 2018, we expect fundamentals to begin on a high note, with some fraying in this picture as the year progresses.

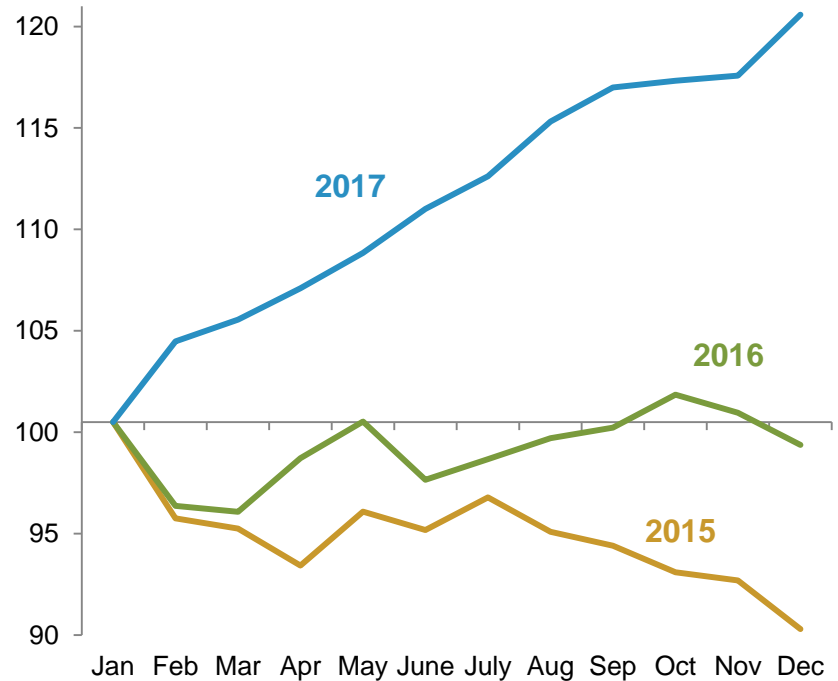
## U.S. Growth and Inflation Volatility

— Inflation — Growth



## Global Earnings Expectations ex-U.S.

Index January = 100

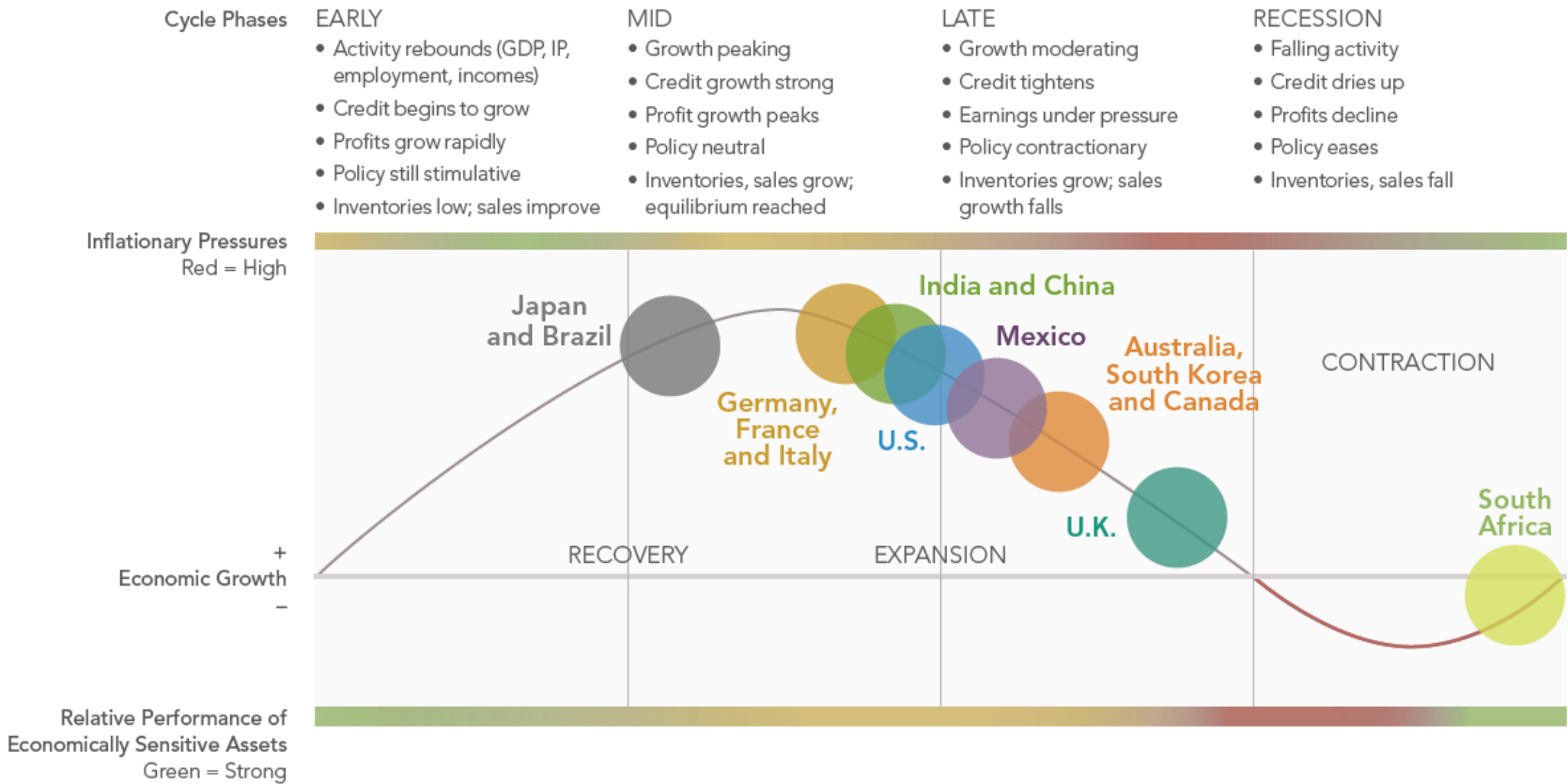


**LEFT:** Source: Z-score is calculated from quarterly inflation and Real GDP data since 1947. Shaded areas represent U.S. recessions. Source: Bureau of Labor Statistics, National Bureau of Economic Research, Haver Analytics, Fidelity Investments (AART), as of 11/30/17. **RIGHT:** Street EPS expectations for MSCI ACWI ex-U.S. over next 12-months. Source: MSCI, Fidelity Investments (AART), as of 11/30/17.

# Most Synchronized Global Expansion in Years

The global economy is experiencing a steady, synchronized expansion, with low global recession risk. Broadly speaking, most developed economies are in more mature (mid-to-late) stages of the business cycle, with the eurozone not as far along as the United States. Moving forward, less accommodative policy in several developed and emerging countries may constrain the upside to growth.

## Business Cycle Framework



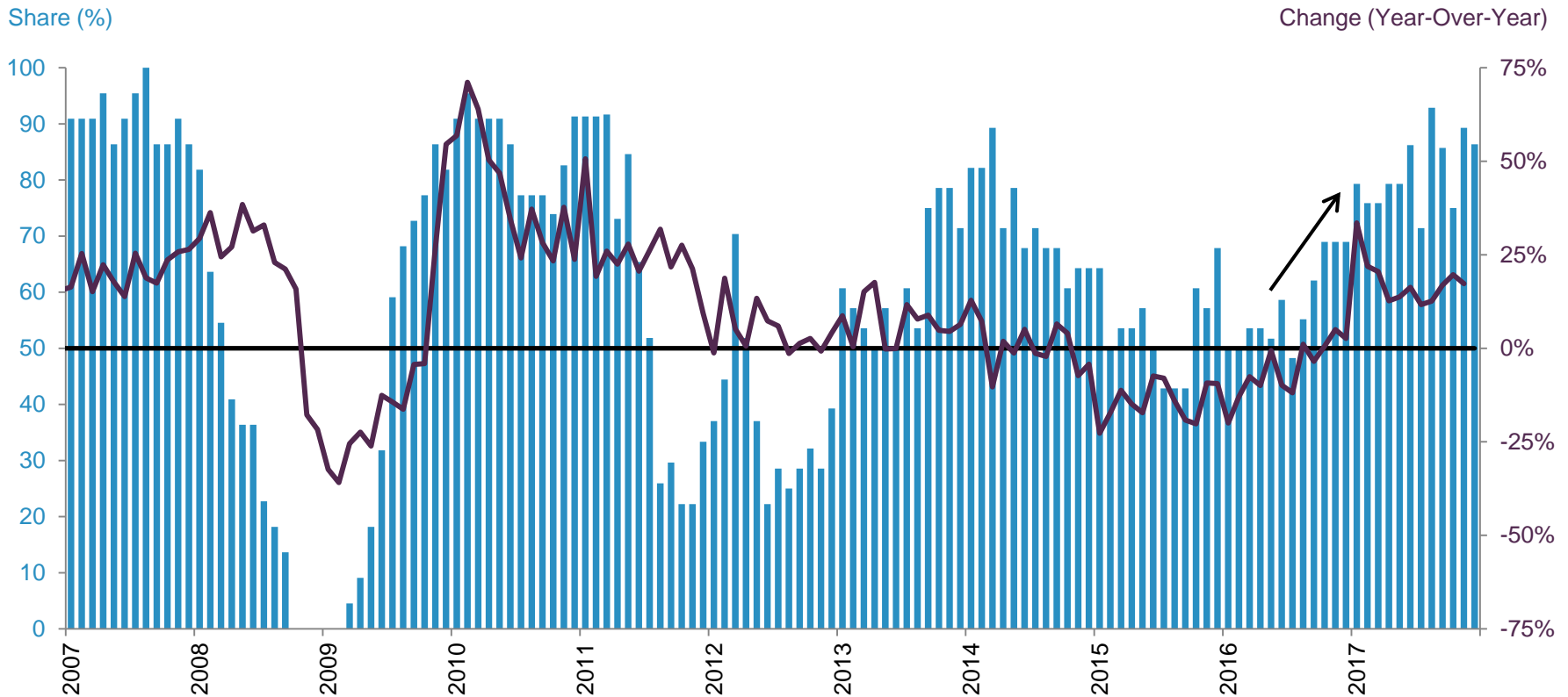
Note: The diagram above is a hypothetical illustration of the business cycle. There is not always a chronological, linear progression among the phases of the business cycle, and there have been cycles when the economy has skipped a phase or retraced an earlier one. Source: Fidelity Investments (AART), as of 12/31/17.

# Strong Trade Continues to Reinforce Global Growth

The global expansion continues to be underpinned by solid global export and manufacturing sectors. China's rising import demand over the past year has helped push the percentage of major countries with increasing new export orders to nearly 90%. The outlook for global trade, industrial activity, multinational profits, and commodity prices will be determined largely by China's cyclical trajectory.

## Global New Export Orders and China Import Growth

■ Share of New Export Order PMIs >50 — Chinese Import Growth



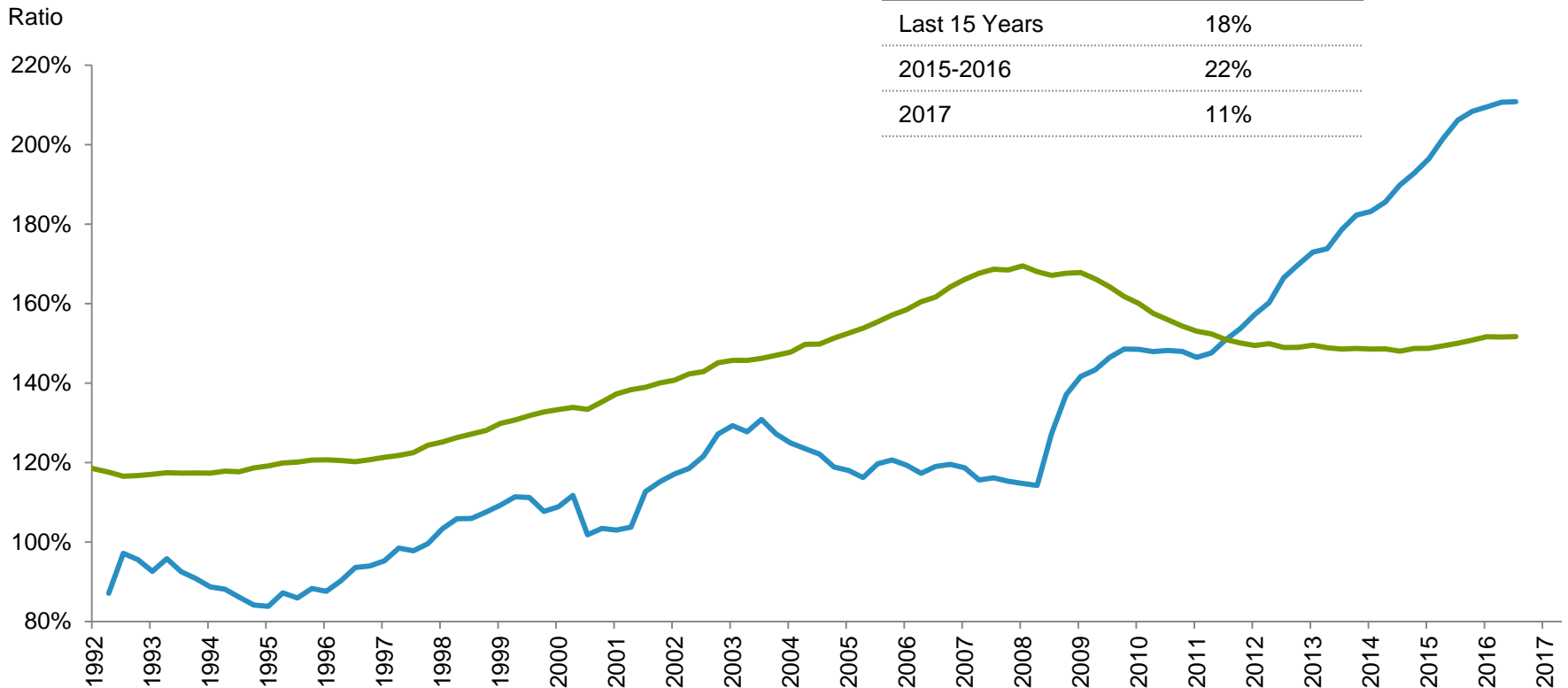
Note: Blue series includes 32 countries. Source: Markit, China Customs, Haver Analytics, Fidelity Investments (AART), as of 12/31/17.

# Massive Debt Build-Up Triggers Policy Tightening in China

China's private sector borrowed at a rampant rate over the past decade, far surpassing peak U.S. leverage levels prior to the 2008 financial crisis. Chinese policymakers have begun to tighten financial conditions, resulting in the sharpest deceleration in credit growth in nearly a decade. China's economy remains broadly steady, but less-supportive policies make the outlook more uncertain and a growth deceleration probable.

## Private Sector Debt-to-GDP Ratios

— China — U.S.



Source: Bank for International Settlements, Organization for Economic Cooperation & Development, China National Bureau of Statistics, Haver Analytics, Fidelity Investments (AART), as of 6/30/17. Table as of 11/30/17.

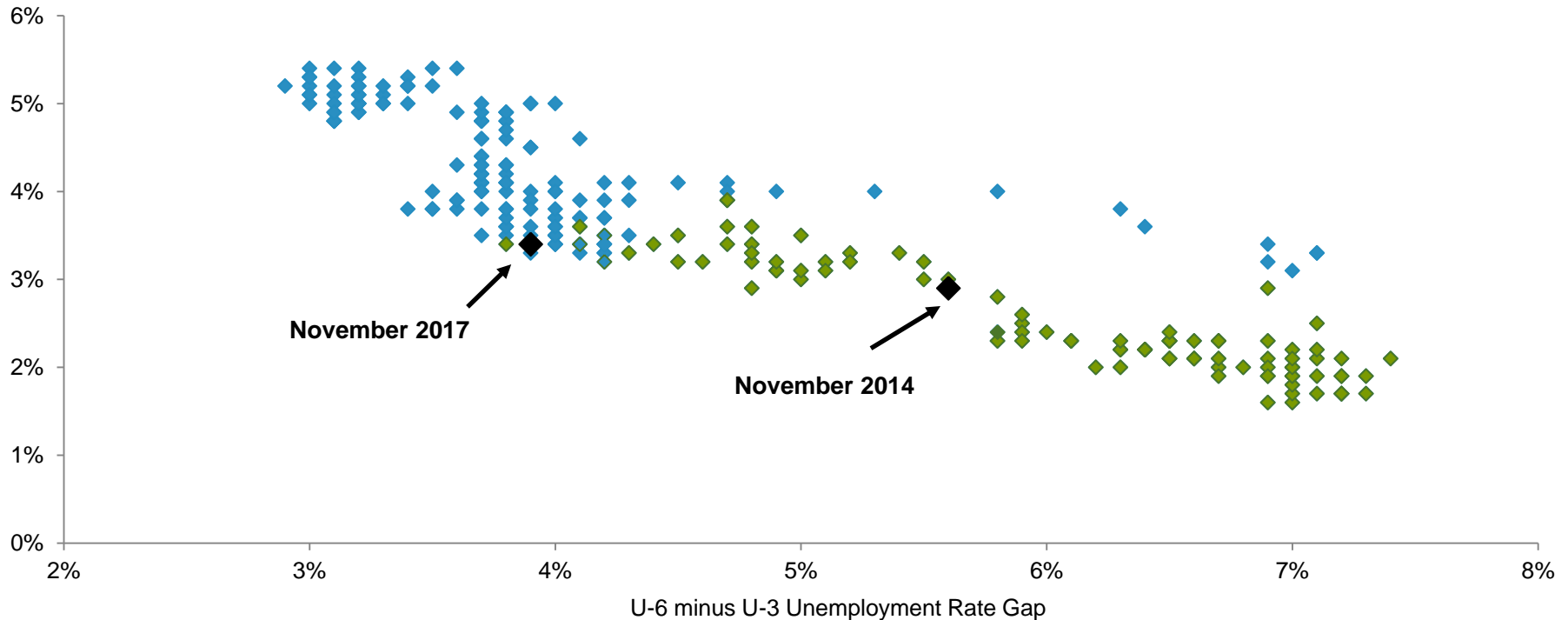
# Tighter Labor Markets Support Wage Growth, Consumers

With the unemployment rate at a cyclical low of 4.1%, tightening labor markets continue to boost consumers and keep U.S. recession risk low. Extra labor market slack, measured by workers who leave the market or are forced into part-time work, has dropped dramatically during the past several years and gradually pushed up wage growth. Inflation is still low, but moving toward full employment should continue to support wage gains.

## U.S. Phillips Curve: Extra Labor Market Slack vs. Wage Inflation

◆ Pre-Recession ◆ Post-Recession

Wage Inflation (Year-Over-Year)



Wage inflation: Atlanta Fed Wage Tracker. Unemployment rate gap is the difference between U-6 and U-3 unemployment and captures the number of workers who are either working part time due to economic reasons or are discouraged and have left the labor force. Pre-recession refers to 1997-2008, and post-recession refers to 2009-2017. Source: Federal Reserve, Bureau of Labor Statistics, Haver Analytics, Fidelity Investments (AART), as of 11/30/17.

# U.S. Economy a Mix of Mid- and Late-Cycle Dynamics

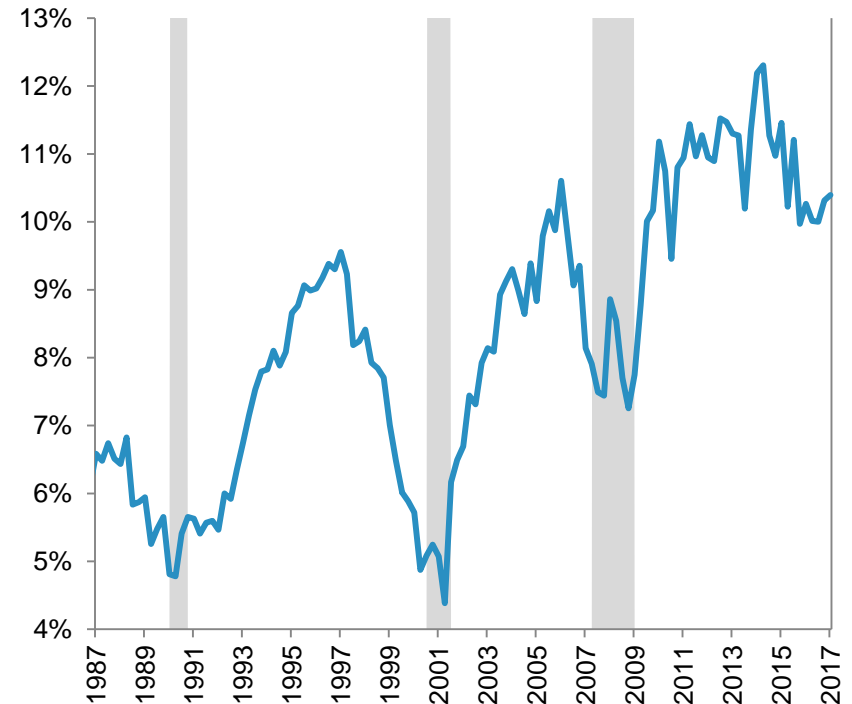
The U.S. has remained on a very gradual progression through its business cycle, with mid-cycle dynamics remaining solid and just a few hints of late-cycle trends. As is customary during a late-cycle phase, corporate profit margins have declined from peak levels, but restrained wage growth and robust global conditions have allowed margins to stay high and corporate profit growth to remain firm.

## Mid- to Late-Cycle Phase Transition

Indicator	Typical Late Cycle	Current Cycle	
		Mid Cycle	Late Cycle
Corporate Profits*	Margins decline	●	●
Inventories	Rise relative to orders	●	
Employment	Pace of hiring slows	●	
Wage Growth*	Accelerates	●	●
Monetary Policy	Fed tightens, yield curve flattens		●
Credit	Lending standards tighten	●	

## U.S. Profit Margins

Non-Financial Corporate After-Tax Profits Over Revenues

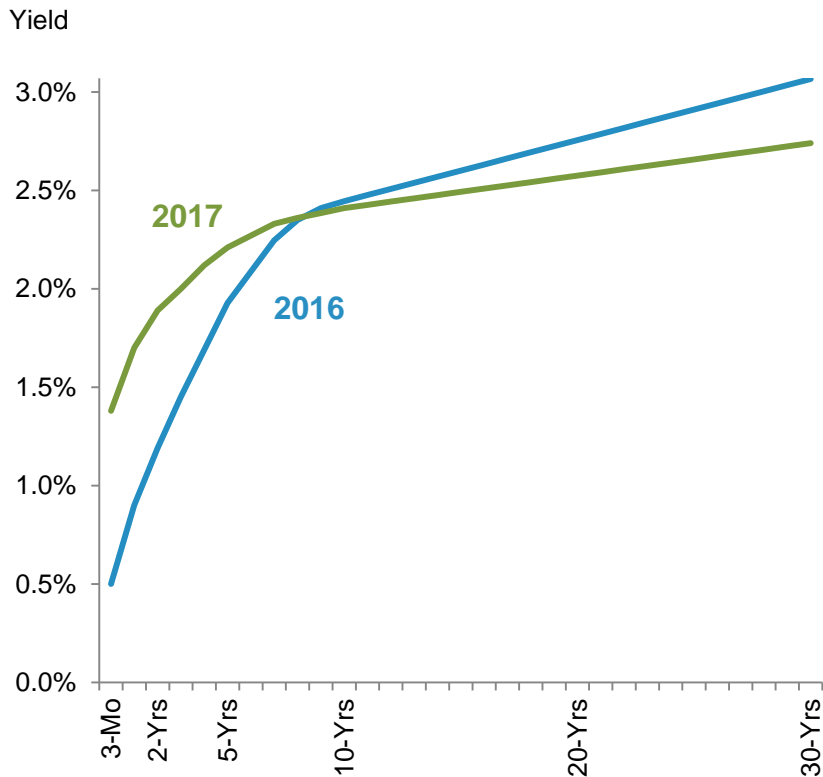


**LEFT:** \*Listing of both blue and orange circles indicates evidence of both mid- and late-cycle traits. Source: Fidelity Investments (AART), as of Dec. 31, 2017. **RIGHT:** Grey bars represent U.S. recessions. Source: Bureau of Economic Analysis, Haver Analytics, NBER, Fidelity Investments (AART), as of 11/30/17.

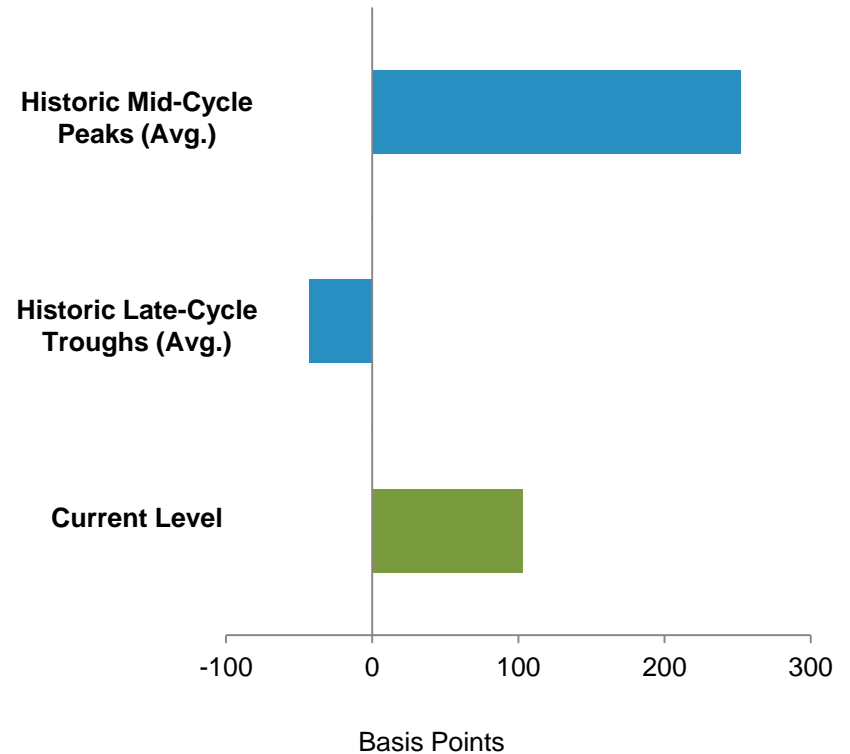
# Yield Curve Has Flattened but Remains Relatively Steep

The yield curve is an important indicator, having inverted before the previous seven U.S. recessions. In December, the Federal Reserve hiked policy rates for the third time during 2017, pushing up short-term rates and causing the yield curve to flatten by about 100 basis points. The curve, however, remains positively sloped and steep relative to prior late cycles, and credit and financial conditions have yet to tighten measurably.

## U.S. Treasury Yield Curve



## Yield Curve (10 Year–3 Months)



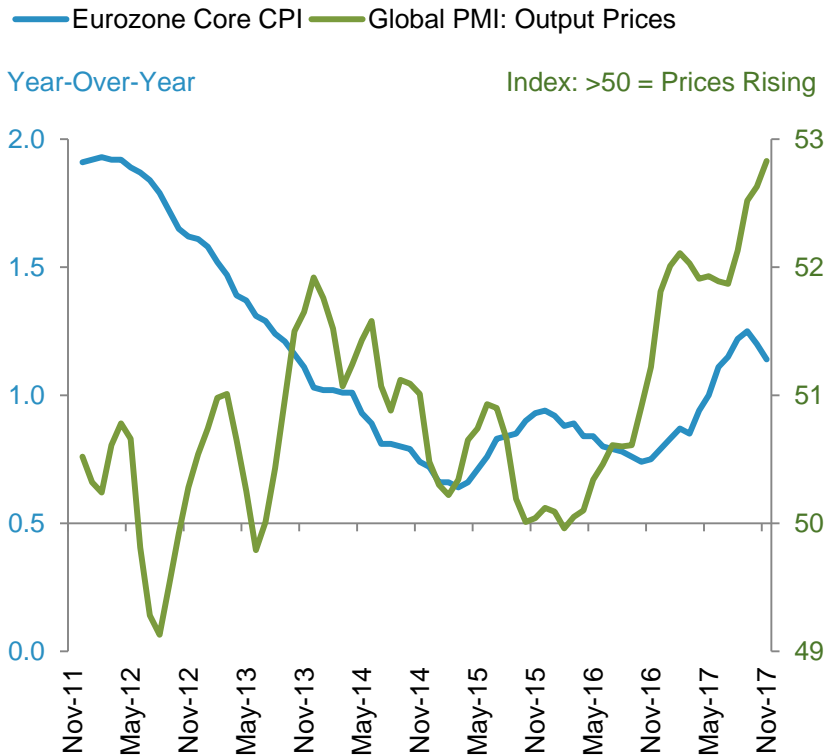
**LEFT:** Source: Bloomberg Financial L.P., Fidelity Investments (AART), as of 12/31/17. **RIGHT:** Data since 1950. bps: Basis Points. Source: Bloomberg Financial L.P., Fidelity Investments (AART), as of 12/31/17.



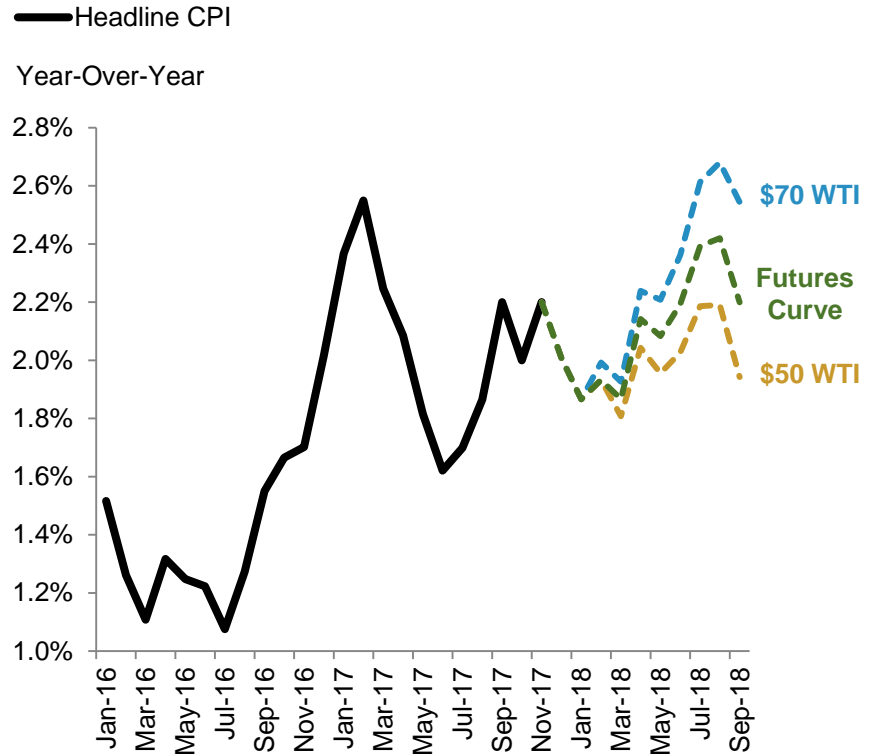
# Global Inflation Firming with Upside Risks

Global inflation remained tame in 2017, but evidence of price pressures has materialized. Eurozone core inflation has been on a steady rise, and PMIs in almost all of the world's largest economies have reported rising prices. In the U.S., inflation will likely remain firm even if oil prices don't continue to rise. We don't expect a dramatic acceleration in inflation in 2018, but there are upside risks given low investor expectations.

## Eurozone and Global Inflation



## U.S. Inflation Under Various Oil Scenarios



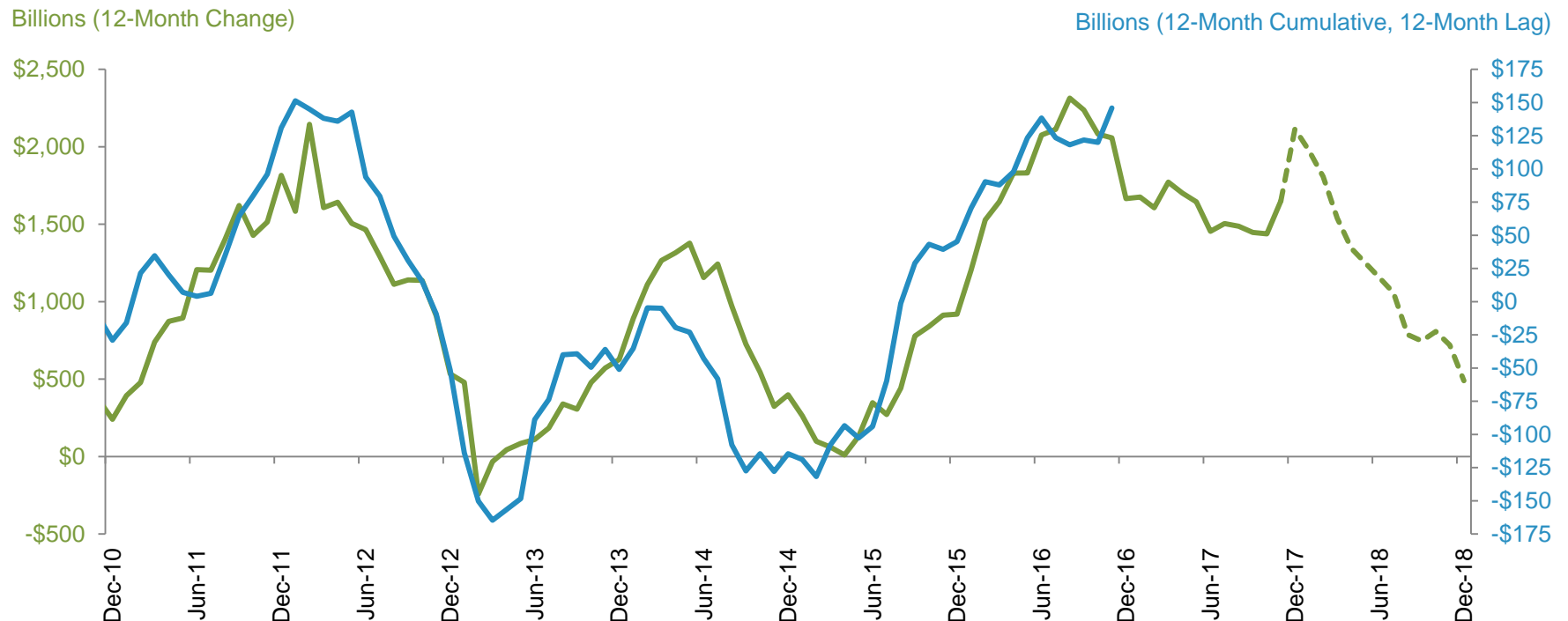
WTI: West Texas Intermediate crude oil. Headline CPI: Consumer Price Index. Core CPI excludes Food and Energy. **LEFT:** Source: European Central Bank, IHS Markit, Haver Analytics, Fidelity Investments (AART), as of 11/30/17. **RIGHT:** Scenarios assume AART core CPI and food cost growth rate forecasts under various average prices of oil for 2018. Bureau of Labor Statistics, Bloomberg Finance L.P., Fidelity Investments (AART), as of 11/30/17.

# QE Unwind to Challenge Global Liquidity Growth

We believe growth and inflation are firm enough to keep global policymakers moving toward a reduction in monetary accommodation. Growth in major central bank balance sheets is set to drop by \$1.4 trillion over the next 12 months as the Fed winds down its balance sheet and the ECB pares back on quantitative easing. The deceleration in liquidity growth may neutralize a key support for riskier asset prices and lower volatility.

## Fed, ECB, BOJ, BOE Balance Sheets and Asset Flows

— G4 Central Bank Assets — EME, EMD & HY Fund Flows



Fund Flows: Mutual funds and ETFs. EME: Emerging Market Equity. EMD: Emerging Market Debt, HY: High Yield. Dotted line estimates future central bank assets: Fed to roll-off balance sheet assets by lesser of stated caps or total bonds maturing each month. ECB to begin tapering in January 2018 to EUR30B of monthly purchases for 9 months. BOJ to purchase at annualized rate of JPY 60T going forward. BOE to keep balance sheet constant. Source: Federal Reserve, Bank of England (BOE), European Central Bank (ECB), Bank of Japan (BOJ), EPFR, Haver Analytics, Fidelity Investments (AART), as of 11/30/17.

# Will Pro-Business Policies Support Capex & Productivity?

New tax legislation may help boost business confidence and make more cash available to corporations, and some of the proceeds from tax cuts and foreign-earnings repatriation might go toward additional capital expenditures. After years of corporate under-investment, however, any cyclical uptick in capex may take a while to boost productivity growth, which typically follows capex growth on a lagged basis.

## Business Policy Changes

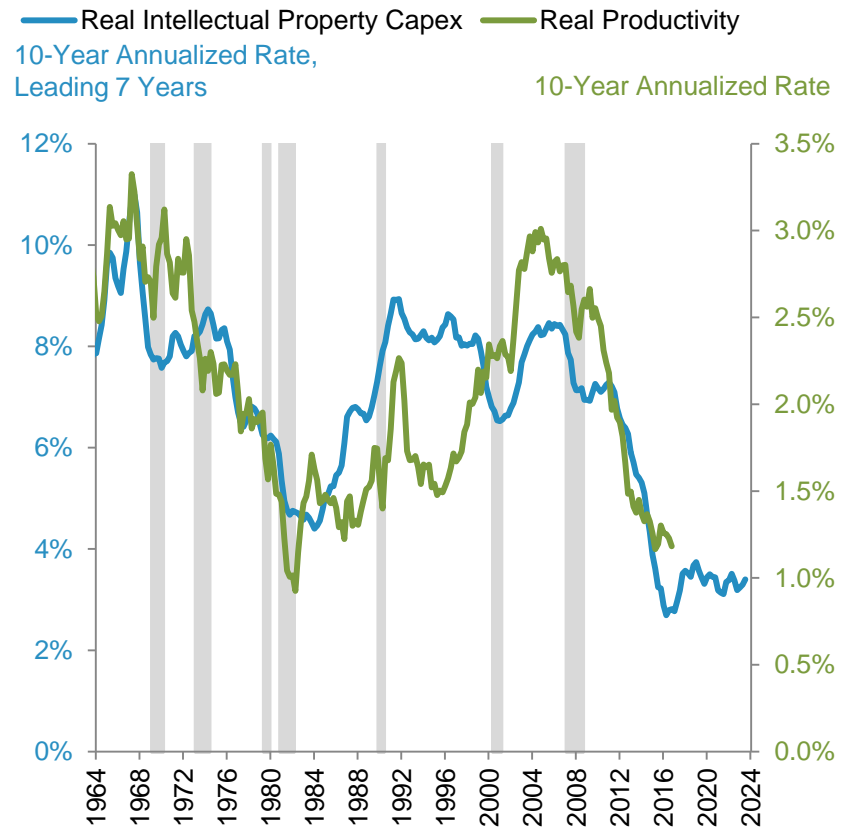
Corporate tax cuts

Deemed repatriation of foreign earnings

Improved competitiveness of U.S. corporate tax regime

Lighter regulation

## U.S. Capex and Productivity

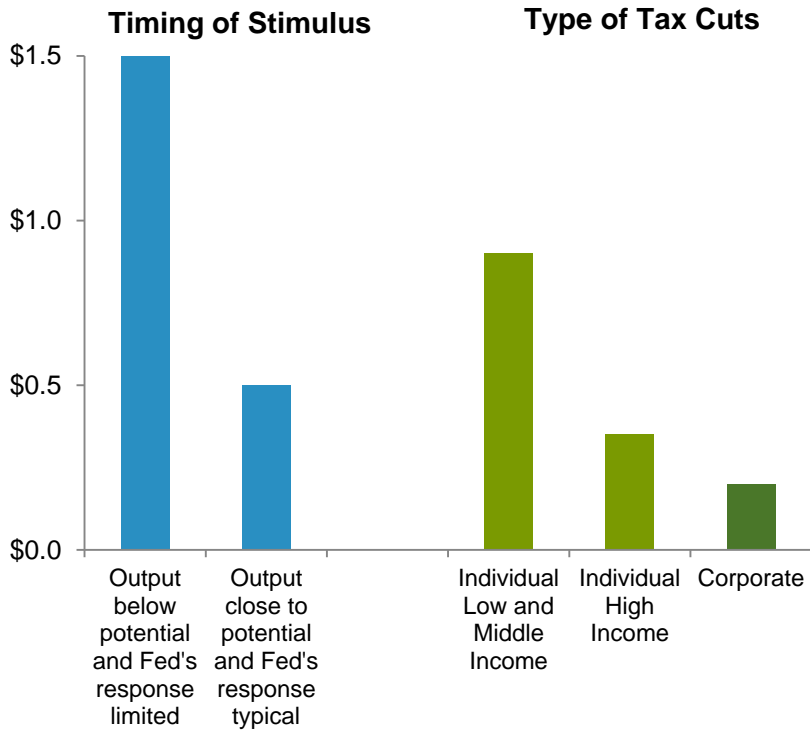


Shading represents U.S. economic recession as defined by the National Bureau of Economic Research (NBER). The seven-year lead in real intellectual capex compares what happened with capital investment (capex) seven years ago to what is going on with productivity today, to highlight the importance of capex in generating future productivity gains. Source: NBER, Bureau of Economic Analysis, Bureau of Labor Statistics, Haver Analytics, Fidelity Investments (AART), as of 9/30/17.

# Limited Tax-Cut Stimulus, but Fiscal Policy on Easing Path

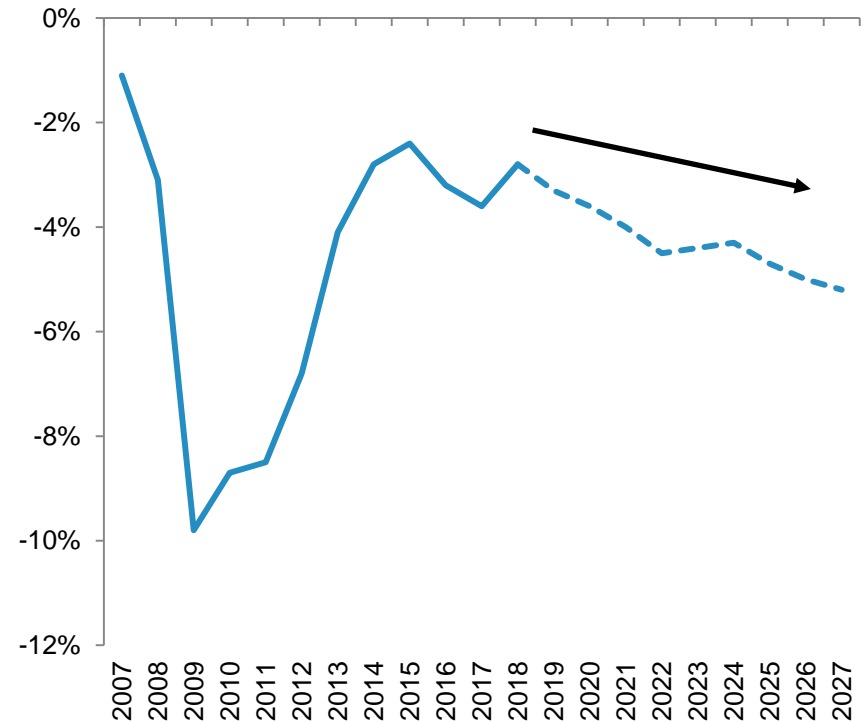
We estimate the tax legislation will provide a modest 0.3% boost to GDP over the next couple of years, with the cyclical impact limited by a muted multiplier effect. The stimulus multiplier is lower because there is little slack left in the economy and a high proportion of the tax cuts go to low-multiplier businesses and high-income individuals. Easier fiscal policy and rising deficits may put upward pressure on inflation and bond yields.

## Impact of \$1 Fiscal Stimulus Boost over Next Two Years



## U.S. Fiscal Deficit

Deficit as a Share of GDP

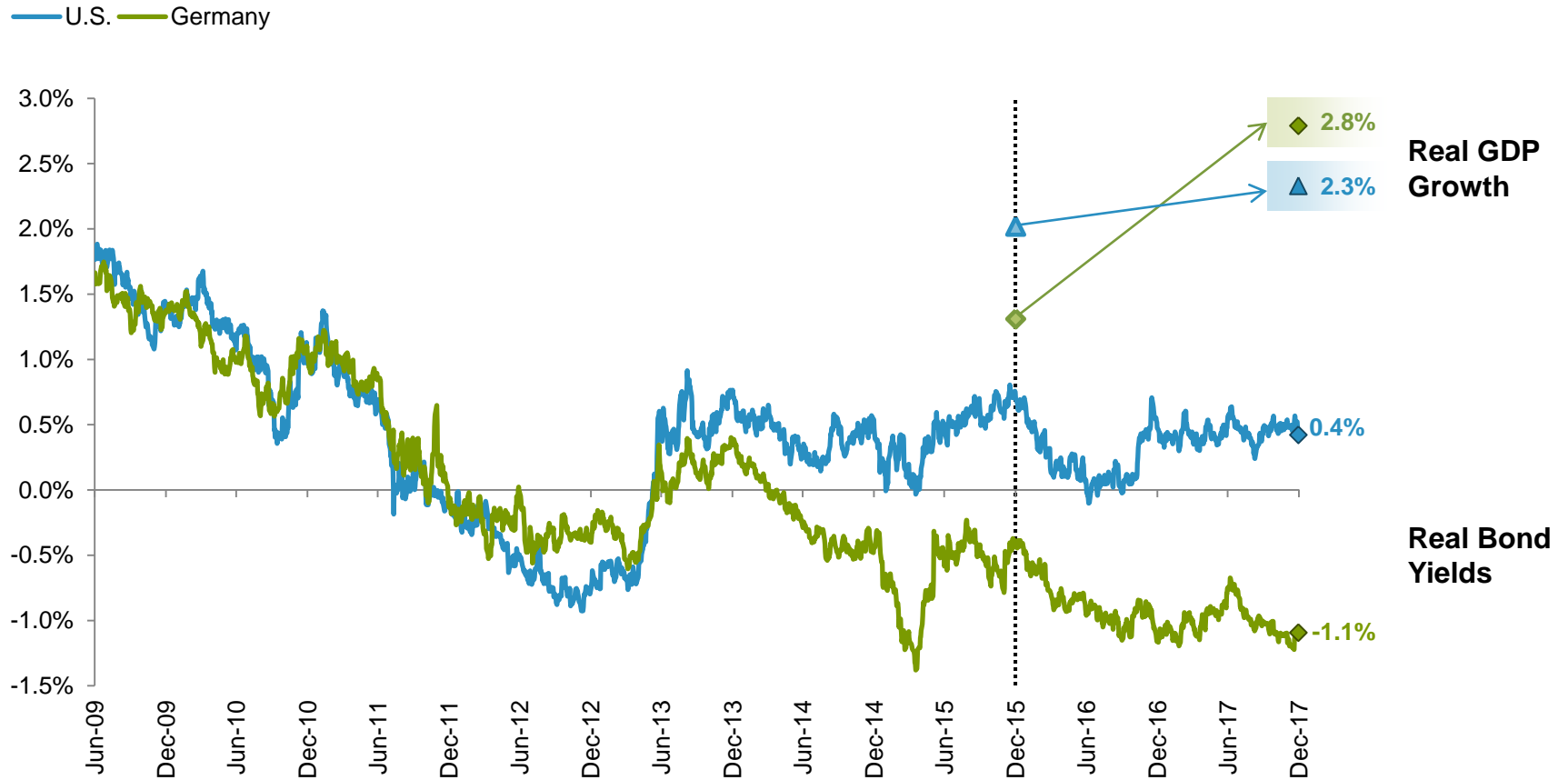


LEFT: Source: Congressional Budget Office, Fidelity Investments (AART), as of 2/28/15. RIGHT: Dashed line represents CBO projections. Source: Congressional Budget Office, Haver Analytics, Fidelity Investments (AART), as of 9/30/17.

# Could Ultra-Low Real Bond Yields Extend Goldilocks Market?

Major central banks have been slow to shift away from easy policies despite the global economic acceleration over the past two years. Long-term, inflation-adjusted bond yields have barely budged in the U.S., and have fallen further into negative territory in the eurozone and Japan. We believe policymakers have finally started to acknowledge improved growth, but the cycle may be prolonged if they move more slowly than expected.

## U.S. and Germany Real 10-Year Bond Yields vs. Growth Rates

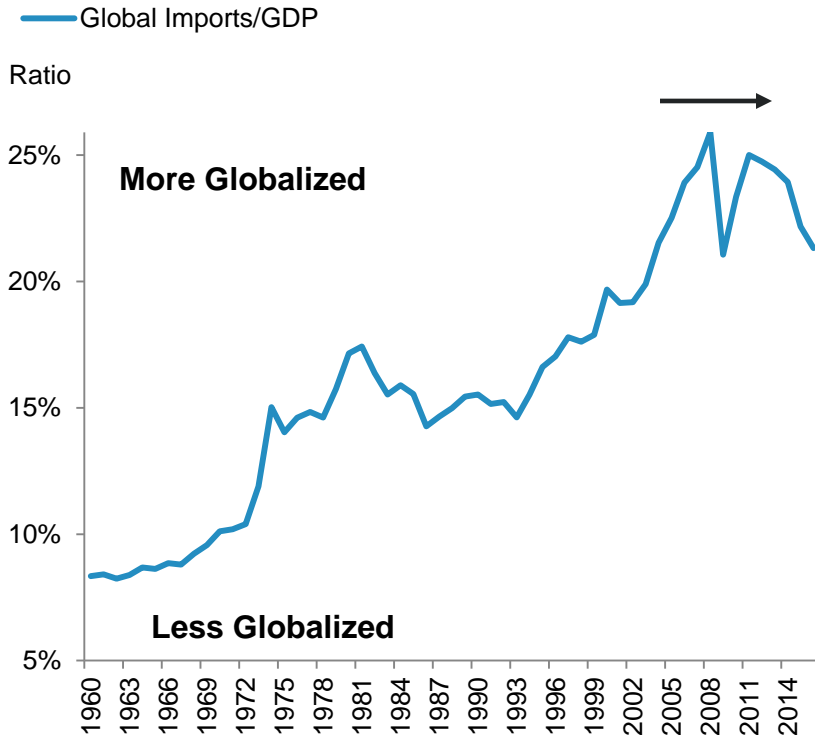


Source: Bureau of Economic Analysis, Bundesbank, Bloomberg Financial L.P., Fidelity Investments (AART), as of 12/31/17.

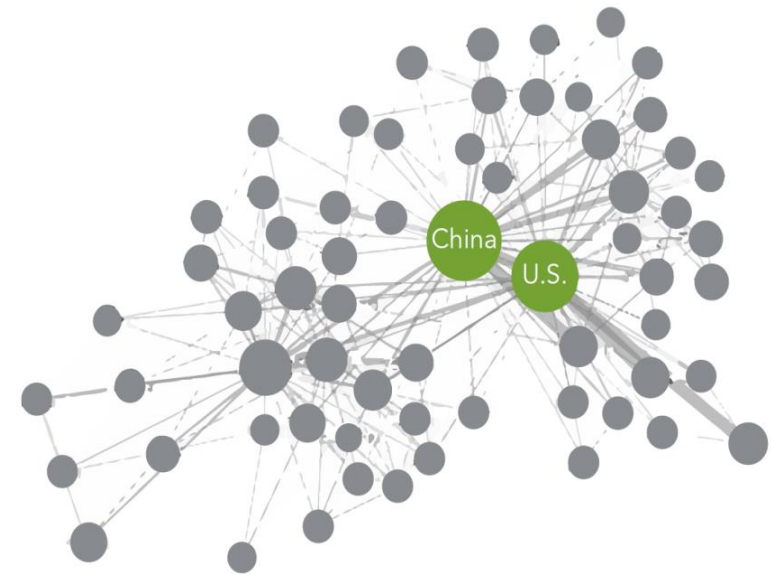
# Geopolitical Risks and Peak Globalization

After decades of rapid global integration, economic openness stalled in recent years amid political pressures in many advanced economies. Meanwhile, instability in North Korea represents a potential catalyst for higher tensions between the U.S. and China. In a highly integrated global economy, political risks in the commercial and security spheres may become intertwined and are likely to be elevated for the foreseeable future.

## Trade Globalization



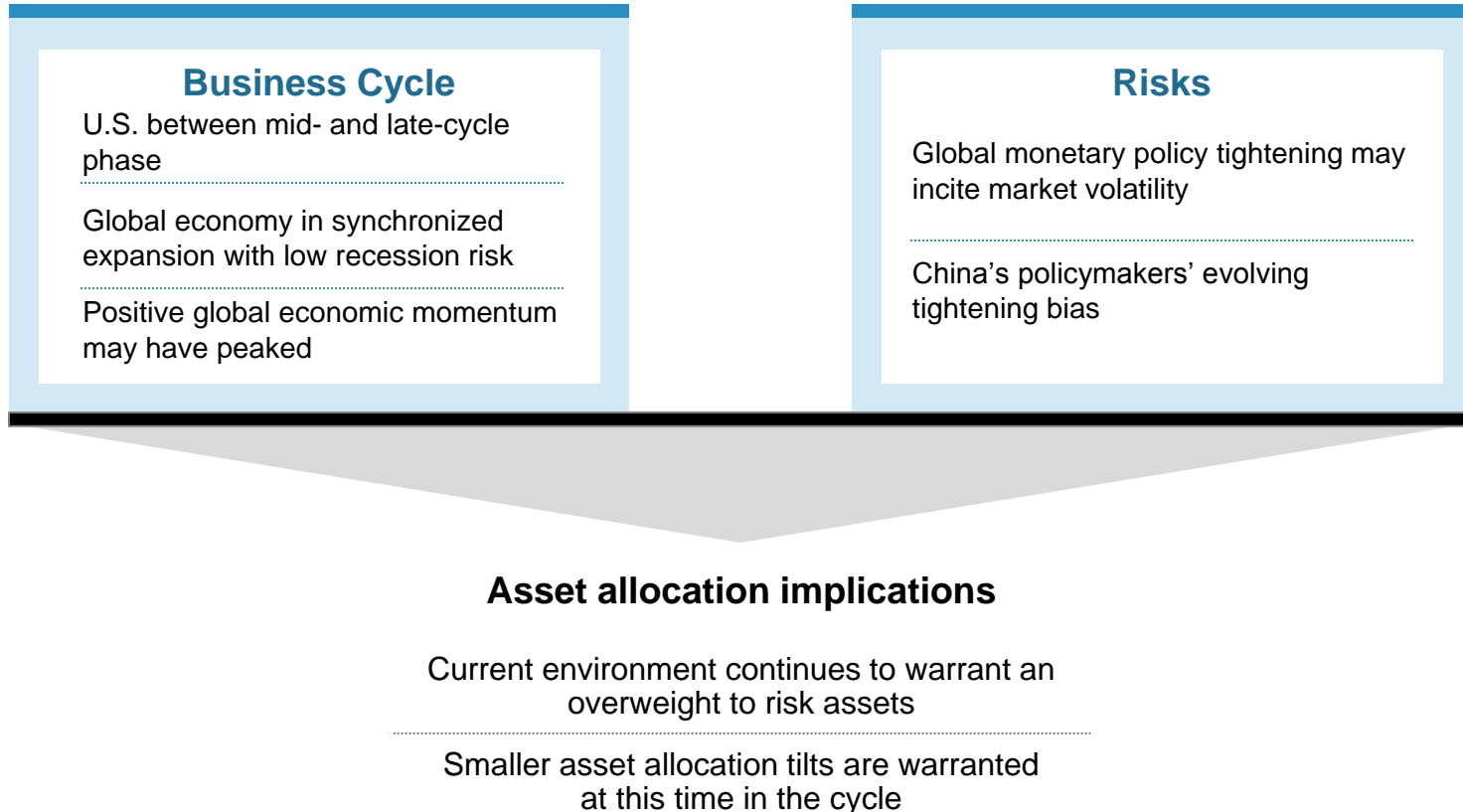
## Global Trade Interdependence



**LEFT:** Source: International Monetary Fund (IMF), World Bank, Haver Analytics, Fidelity Investments (AART), as of 12/31/16. **RIGHT:** The size of the circles represents total trade. The thickness of lines represents the volume of trade flows. The size of the circle and proximity to other countries represents importance and interconnectedness. Grey circles represent other countries. Source: International Monetary Fund, Haver Analytics, Fidelity Investments (AART), as of 12/31/15.

# Outlook: Market Assessment

Fidelity's Business Cycle Board, composed of portfolio managers responsible for a variety of global asset allocation strategies, believes the current backdrop warrants an overweight to risk assets. However, the Board believes global economic momentum may have peaked and expects higher volatility driven by risks to the monetary, political, and economic outlooks. Smaller asset allocation tilts are merited at this point in the cycle.



---

# Asset Markets



# Growth, Tech, EMs Cap Off a Stellar 2017

Q4 was another strong quarter for equity markets, with growth and emerging-market stocks continuing as the strongest performers, fueled by the information technology sector. All major equity categories and sectors ended the year with double-digit gains, except for energy and telecom stocks. Fixed income had modest returns in Q4, but all bond categories and sectors posted positive returns for the year.

## U.S. Equity Styles Total Return

	Q4	2017
Growth	7.6%	29.6%
Large Caps	6.6%	21.8%
Mid Caps	6.1%	18.5%
Small Caps	3.3%	14.6%
Value	5.1%	13.2%

## U.S. Equity Sectors Total Return

	Q4	2017
Info Tech	9.0%	38.8%
Materials	6.9%	23.8%
Consumer Discretionary	9.9%	23.0%
Financials	8.6%	22.2%
Health Care	1.5%	22.1%
Industrials	6.1%	21.0%
Consumer Staples	6.5%	13.5%
Utilities	0.2%	12.1%
Real Estate	3.2%	10.8%
Energy	6.0%	-1.0%
Telecom Services	3.6%	-1.3%

## International Equities Total Return

	Q4	2017
ACWI ex-US	5.1%	27.8%
EAFE Small Cap	6.1%	33.5%
Europe	2.3%	26.2%
EAFE	4.3%	25.6%
Japan	8.5%	24.4%
Canada	4.5%	16.9%
EM Asia	8.4%	43.3%
Emerging Markets	7.5%	37.8%
EMEA	11.8%	25.2%
Latin America	-2.2%	24.2%
Gold	0.6%	12.7%
Commodities	4.4%	0.7%

## Fixed Income Total Return

	Q4	2017
Long Govt & Credit	2.8%	10.7%
EM Debt	0.5%	9.3%
High Yield	0.4%	7.5%
Credit	1.0%	6.2%
Municipal	0.7%	5.4%
Leveraged Loan	1.1%	4.1%
CMBS	0.4%	3.5%
Aggregate	0.4%	3.5%
TIPS	1.3%	3.0%
MBS	0.2%	2.5%
Treasuries	0.1%	2.3%
Agency	0.0%	2.1%
ABS	0.0%	1.6%

EM: Emerging Markets. 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 indices 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 risk. Because of its narrow focus, sector investing may be more volatile than investing in more diversified baskets of securities. Source: FactSet, Fidelity Investments (AART), as of 12/31/17.

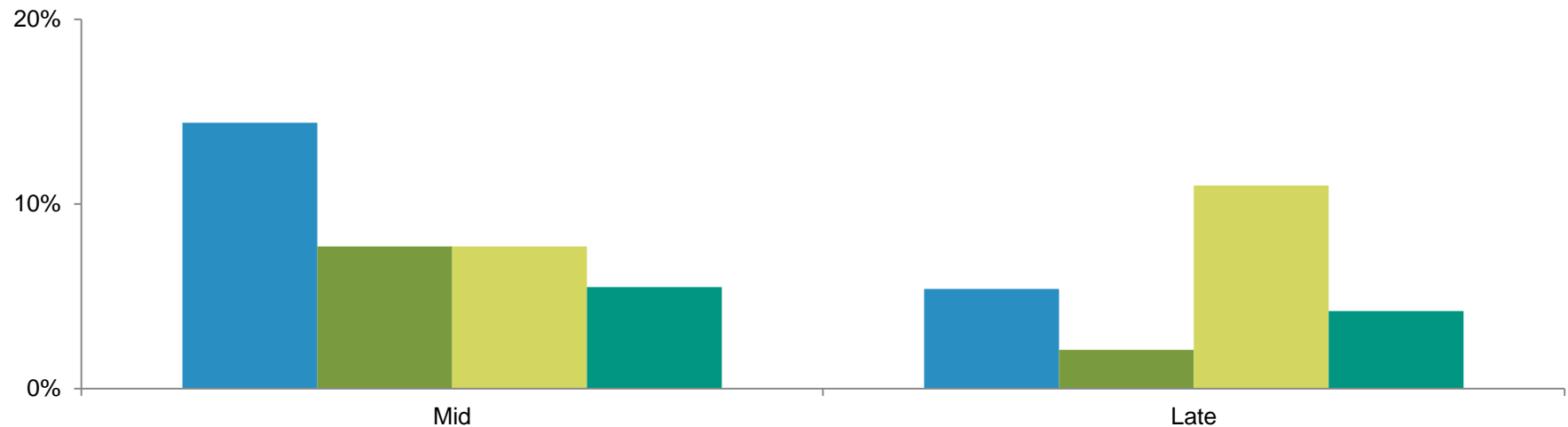
# Historical Playbook for Mid- and Late-Cycle Phases

Historically, the mid-cycle phase tends to favor riskier asset classes, while late cycles have the most mixed performance of any business-cycle phase. The late cycle has often featured more limited overall upside and less confidence in equity performance, though stocks have typically outperformed bonds. Inflation-resistant assets, such as commodities, energy stocks, short-duration bonds, and TIPS have performed relatively well.

## Asset Class Performance in Mid- and Late-Cycle Phases (1950–2010)

■ Stocks ■ High Yield ■ Commodities ■ Investment-Grade Bonds

Annual Absolute Return (Average)



### Mid-Cycle: Strong Asset Class Performance

- Favor economically sensitive assets
- Broad-based gains

### Late-Cycle: Mixed Asset Class Performance

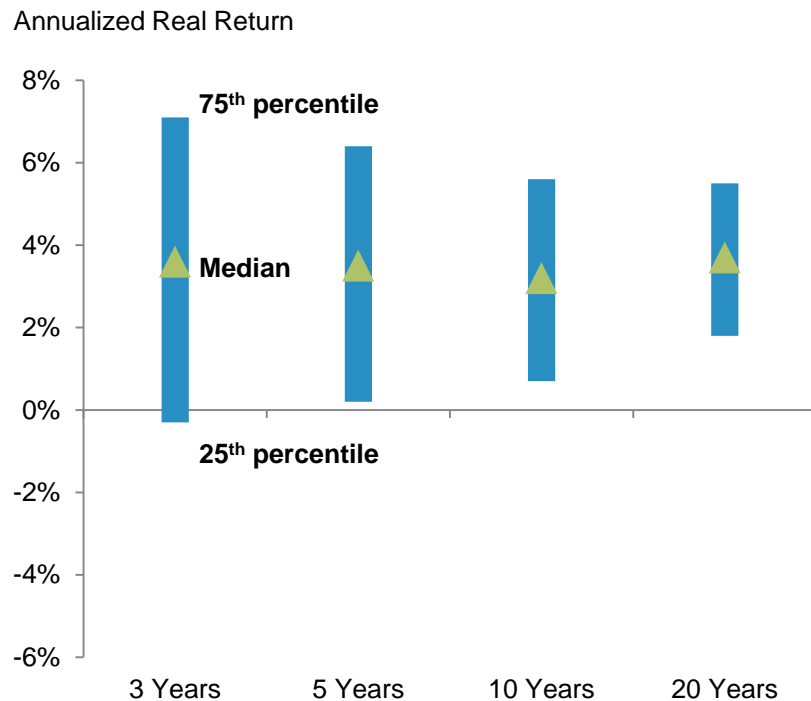
- Favor inflation-resistant assets
- Gains more muted

TIPS: Treasury Inflation-Protected Securities. Past performance is no guarantee of future results. Asset class total returns are represented by indices from the following sources: Fidelity Investments, Morningstar, and Bloomberg Barclays. Fidelity Investments: proprietary analysis of historical asset class performance, which is not indicative of future performance.

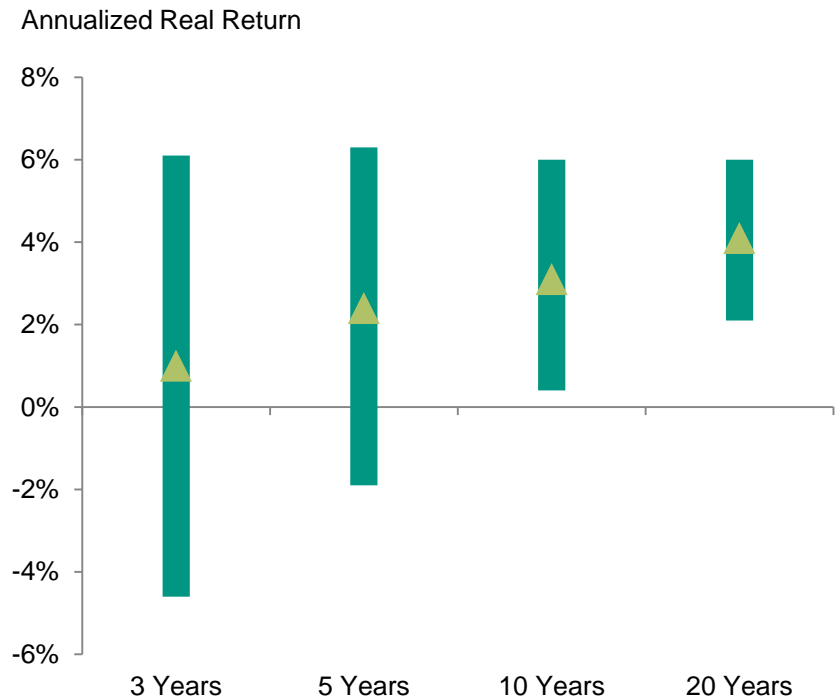
# Cyclical Risk Turns Asymmetrical in the Late-Cycle Phase

Over the intermediate term (3-5 years), the starting point in the business cycle has a meaningful impact on the expected distribution of asset returns. Mid-cycle starting points tend to provide a positive skew to the returns of a diversified portfolio. Although late-cycle starting points tend to experience positive returns on average, they also exhibit greater equity market drawdowns and volatility, which widens the expected range of returns.

## Portfolio Returns Starting in Mid Cycle



## Portfolio Returns Starting in Late Cycle



**Sample Portfolio: 40% Domestic Equity – 20% Foreign Equity – 30% IG Bonds – 10% HY Bonds**

For illustrative purposes only. Past performance is no guarantee of future results. It is not possible to invest directly in an index. All indices are unmanaged. Please see appendix for important index information. Portfolio based on Dow Jones U.S. Total Stock Market Index, MSCI ACWI ex-US Index, Bloomberg Barclays Aggregate Index, ICE BofAML U.S. High Yield Index as of 12/31/17.

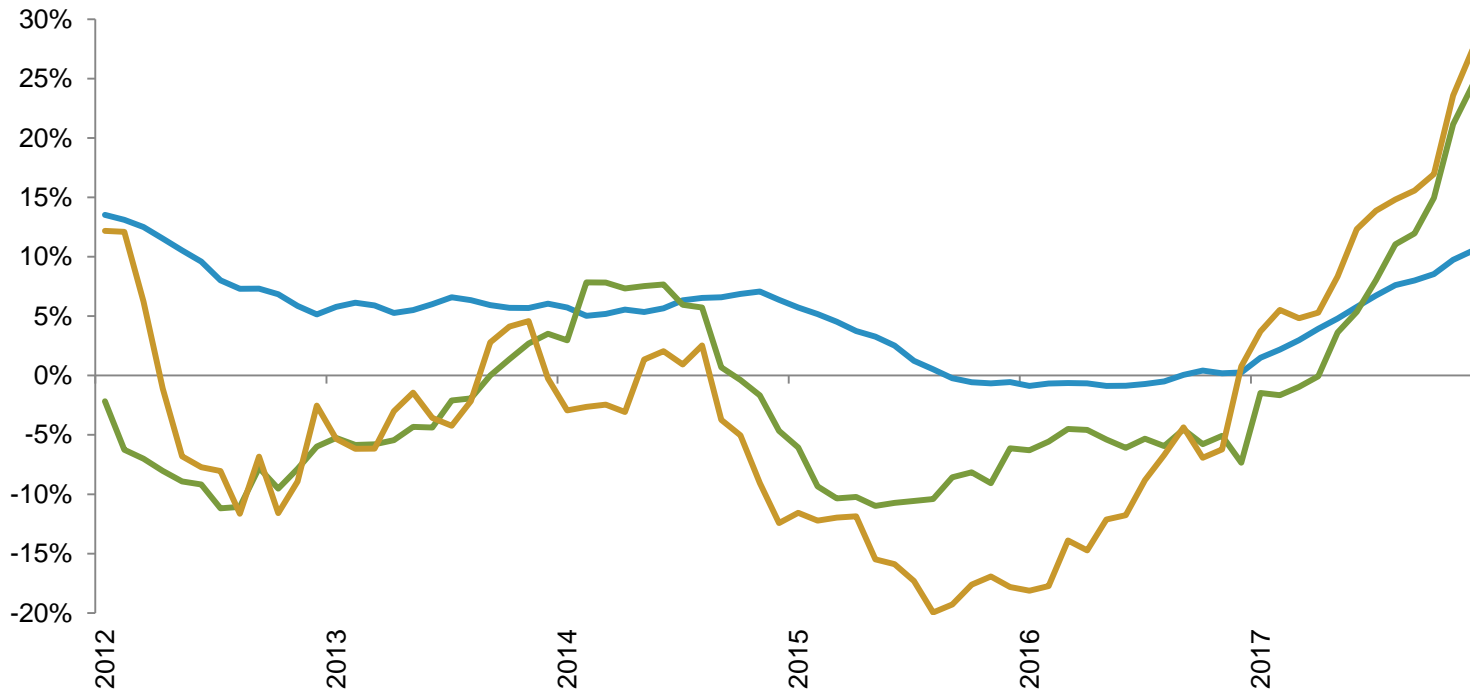
# International Earnings Growth Outpaced U.S. EPS Growth

Following several years of profit recession, international corporate earnings have accelerated for several quarters and surpassed U.S. corporate profit growth in 2017. Earnings revisions have also stabilized for the first time in years, although lofty forward-earnings-growth expectations may provide a tougher hurdle to clear in the year ahead, particularly in emerging markets.

## Global EPS Growth (Trailing 12 Months)

— U.S. — DM — EM

Change (Year-Over-Year)



### EPS NTM Growth Expectations

EM 21.0%

DM 9.0%

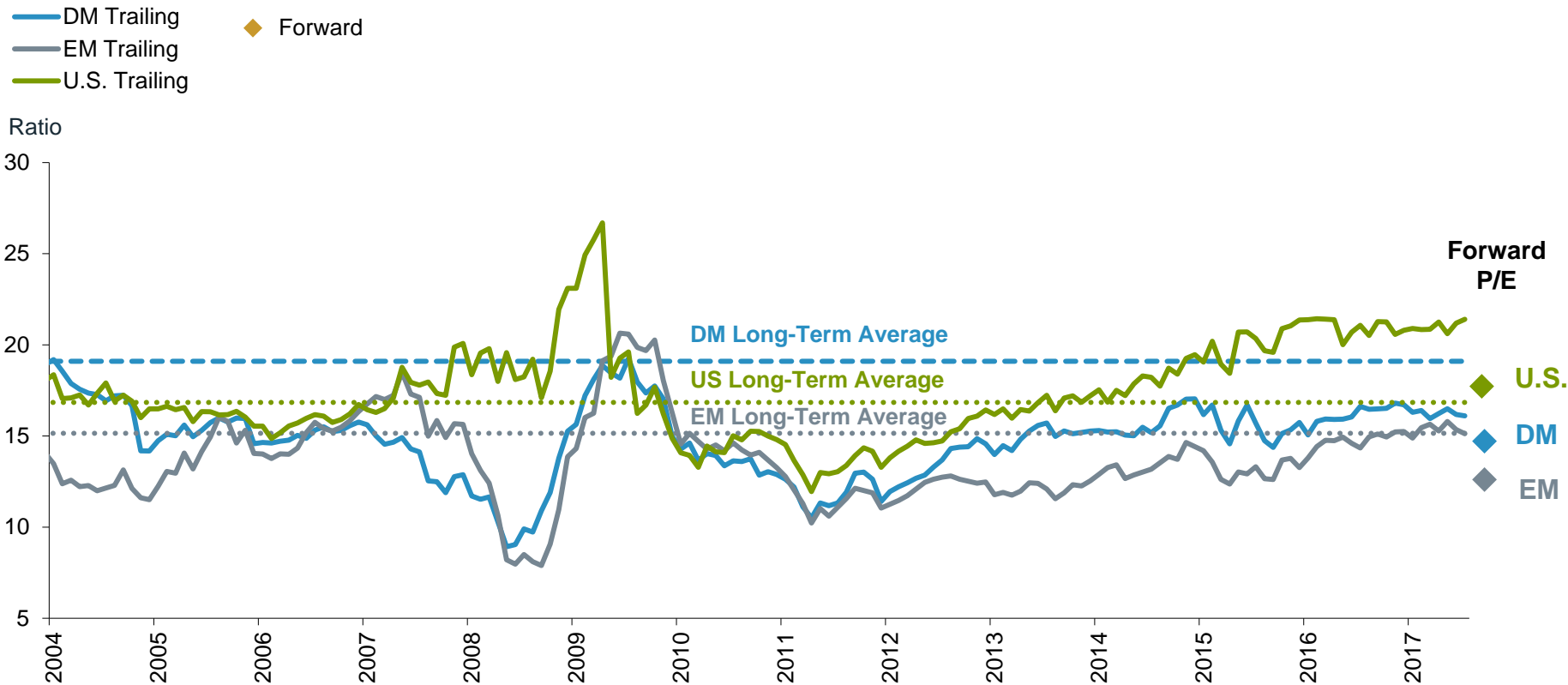
U.S. 12.0%

Past performance is no guarantee of future results. DM: Developed Markets. EM: Emerging Markets. NTM: Next 12 months. EPS: Earnings per share. Source: MSCI, FactSet, Fidelity Investments (AART), as of 12/31/17.

# Equity Valuations Mixed Relative to History

On a one-year-trailing-earnings basis relative to their own histories, U.S. price-to-earnings ratios are above average, developed markets are below average, and emerging markets are roughly average. All valuations have risen substantially over the past two years, although forward-looking estimates appear more reasonable.

## International Market P/E Ratios



DM: Developed Markets. EM: Emerging Markets. Past performance is no guarantee of future results. You cannot invest directly in an index. Please see appendix for important index information. Price-to-earnings ratio (P/E) = Stock price divided by earnings per share. Also known as the multiple, P/E gives investors an idea of how much they are paying for a company's earnings power. Long-term average P/E for Emerging Markets includes data for 1988–2017. Long-term average P/E for Developed Markets includes data for 1973–2016, U.S. 1926–2017. Foreign Developed – MSCI EAFE Index, Emerging Markets – MSCI EM Index. Source: FactSet, Fidelity Investments (AART) as of 12/31/17.

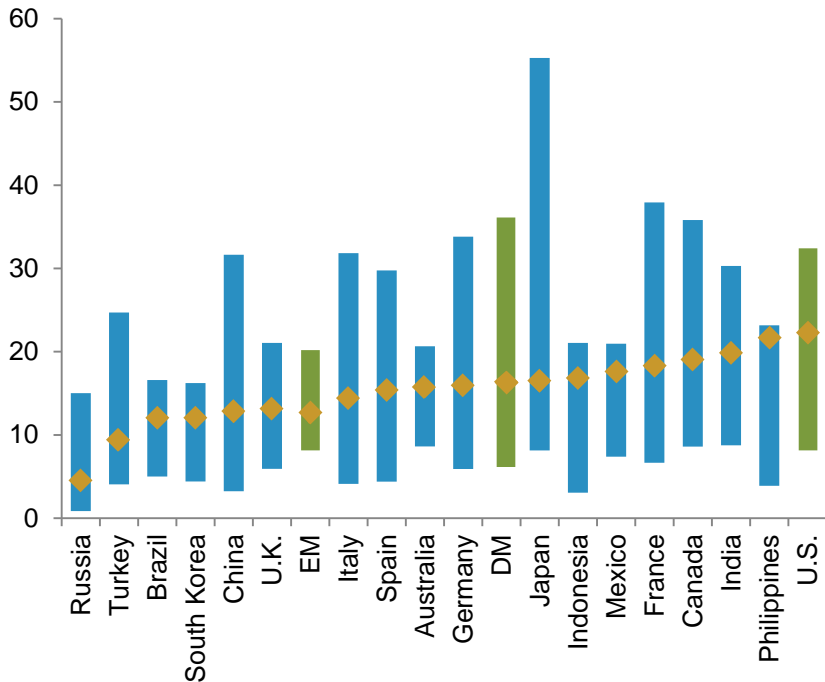
# Equity and Currency Valuations Attractive Relative to U.S.

Using five-year, peak-inflation-adjusted earnings, P/E ratios for foreign-developed and emerging-equity markets remain lower than those in the U.S., with many countries around the midpoint of their 20-year range. Despite dollar weakness in 2017, the value of most currencies also remains in the lower half of historical ranges versus the U.S. dollar. Both factors provide a relatively favorable long-term valuation backdrop for non-U.S. stocks.

## Cyclical P/E's

◆ 11/30/2017    ■ 20-Year Range

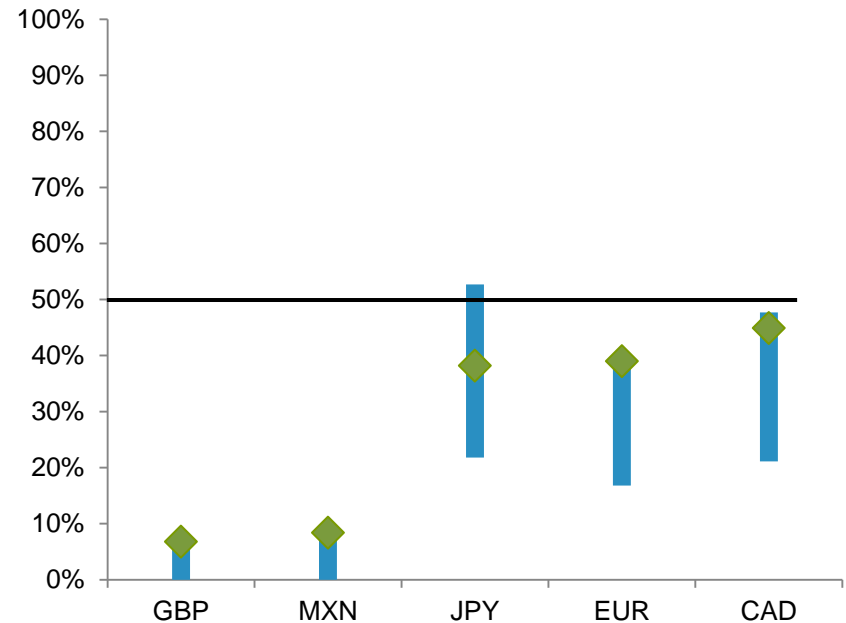
Price/5-Year Peak Real Earnings



## Valuation of Major Currencies vs. USD

■ Last 12-Month Range    ◆ Year-End 2017

Percentile Since 2000

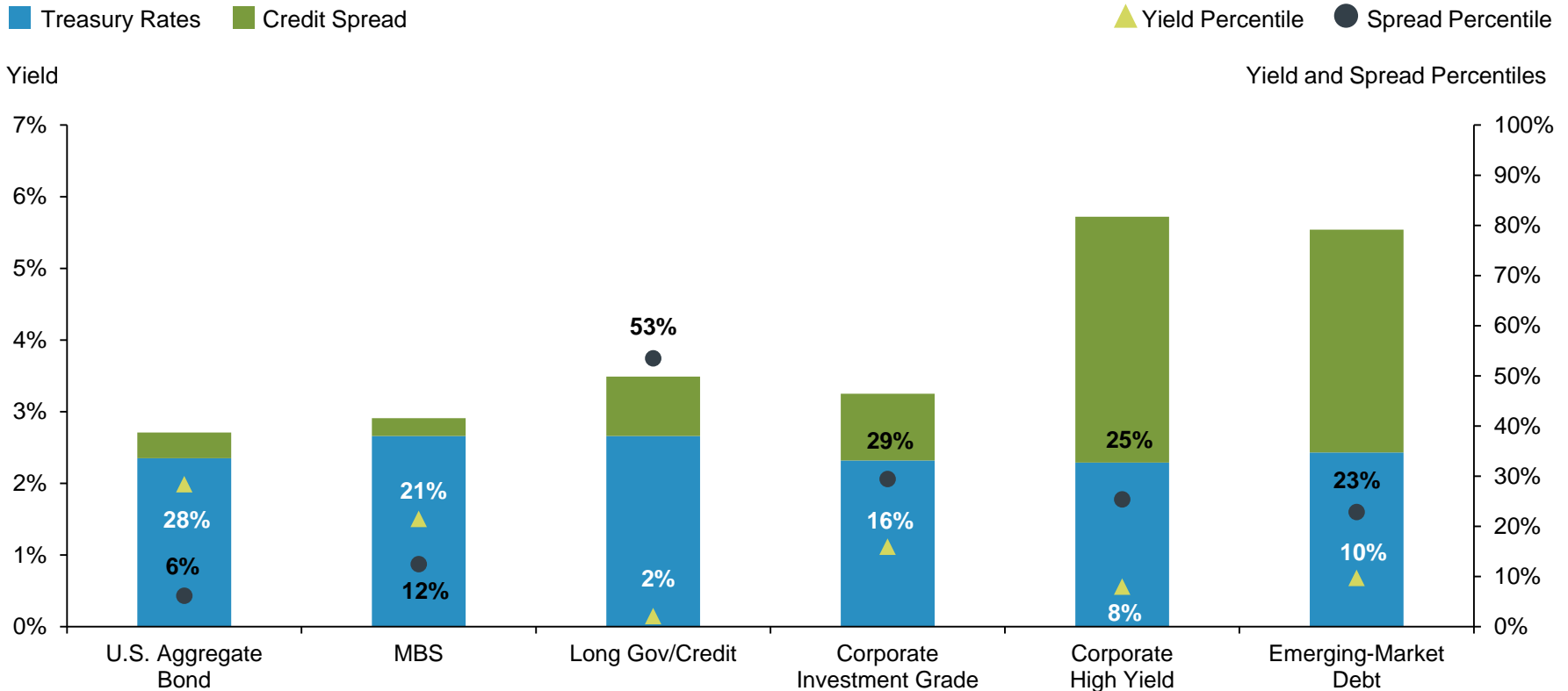


DM: Developed Markets. EM: Emerging Markets. Past performance is no guarantee of future results. It is not possible to invest directly in an index. All indices are unmanaged. Please see appendix for important index information. **LEFT:** Price-to-earnings (P/E) ratio (or multiple): stock price divided 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 11/30/17. **RIGHT:** Source: Federal Reserve Board, Haver Analytics, Fidelity Investments (AART), as of 12/31/17. MXN: Mexican peso, GBP: British pound, EUR: euro, CAD: Canadian dollar, JPY: Japanese yen.

# Yields and Spreads Remain Low Relative to History

Bond yields were mixed during the quarter, with some categories rising slightly and 30-year Treasury rates falling. However, all yields for all categories remain well below their historical averages. Credit spreads narrowed slightly during the quarter, making all credit sectors more expensive relative to their own histories.

## Fixed-Income Yields and Spreads (1993-2017)



Past performance is no guarantee of future results. It is not possible to invest directly in an index. All indices are unmanaged. Please see appendix for important index information. Percentile ranks of yields and spreads based on historical period from 1993 to 2017. MBS: mortgage-backed security. Source: Bloomberg Barclays, Bank of America Merrill Lynch, JP Morgan, Fidelity Investments (AART), as of 12/31/17.

# Sector Considerations: Intermediate-Term Cycle View

A disciplined business-cycle approach to sector allocation can produce active returns by favoring industries that may benefit from cyclical trends. By choosing a blended portfolio of sectors that have historically performed well in the current and potentially upcoming cycle phases—for example, info tech (mid cycle), energy (late cycle), and health care (recession)—it may be possible to generate excess returns.

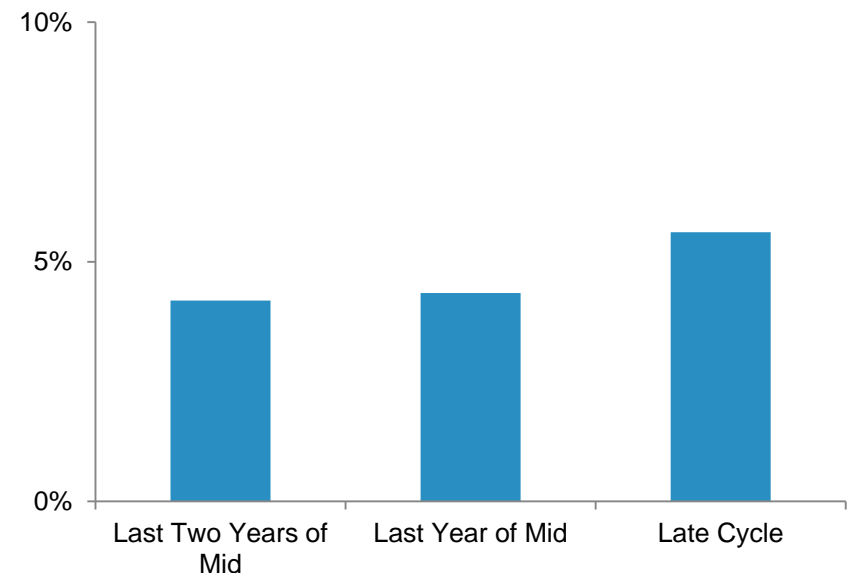
## Business-Cycle Approach to Sectors

Sector	Early	Mid	Late	Recession
Financials	+			
Real Estate	++			--
Consumer Discretionary	++		--	
Info. Tech	+	+	--	--
Industrials	++	+		--
Materials		--	++	-
Consumer Staples	-		+	++
Health Care	-		++	++
Energy	--		++	
Telecom	--			++
Utilities	--	-	+	++

## Illustrative Info. Tech/Energy/Health Care Portfolio Relative Performance: 1962–2010

■ Equal-Weighted Tech/Healthcare/Energy Portfolio

Annualized Excess Return



Past performance is no guarantee of future results. Sectors as defined by GICS. **LEFT:** Unshaded (white) portions above suggest no clear pattern of over- or underperformance vs. broader market. 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. Source: The Business-Cycle Approach to Sector Investing, Fidelity Investments (AART), October 2016.

**RIGHT:** This chart is an illustrative example of the potential impact of choosing sectors that historically perform well in the current and potentially upcoming two phases of the business cycle (mid/late/recession). Analysis selects one sector from each of the three phases (mid, late, recession) that demonstrated outperformance in one of those phases. Sectors shown are equal-weighted (33.3%). Analysis excludes early cycle because an early cycle is unlikely to occur in the next several years. Sector returns represented by S&P 500 sectors. Source: Haver Analytics, Fidelity Investments (AART), as of 12/31/17.



---

# Long-Term Themes

# 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

1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Legend
18%	75%	17%	38%	35%	35%	35%	66%	32%	14%	26%	56%	32%	35%	35%	40%	5%	79%	28%	8%	20%	39%	28%	5%	21%	38%	Emerging-Market Stocks
17%	33%	8%	37%	23%	33%	29%	34%	26%	8%	10%	47%	26%	21%	33%	16%	-20%	58%	27%	8%	19%	34%	14%	3%	18%	30%	Growth Stocks
15%	20%	3%	37%	23%	29%	21%	27%	12%	5%	4%	39%	21%	14%	27%	12%	-26%	37%	19%	4%	18%	33%	13%	1%	18%	26%	Foreign-Developed Country Stocks
15%	19%	2%	30%	22%	24%	20%	24%	8%	2%	-2%	37%	18%	12%	22%	11%	-34%	32%	18%	4%	18%	32%	12%	1%	12%	22%	Large Cap Stocks
11%	19%	1%	28%	22%	22%	14%	21%	-1%	-2%	-6%	31%	17%	7%	18%	7%	-36%	28%	17%	2%	16%	23%	11%	1%	12%	15%	Small Cap Stocks
8%	17%	0%	20%	16%	20%	9%	21%	-3%	-4%	-9%	31%	11%	5%	16%	6%	-36%	27%	16%	2%	16%	19%	6%	0%	11%	15%	60% Large Cap 40% IG Bonds
8%	10%	-1%	18%	15%	13%	3%	12%	-5%	-4%	-15%	29%	11%	5%	12%	5%	-37%	26%	15%	0%	16%	7%	5%	-4%	9%	13%	Value Stocks
7%	10%	-2%	15%	11%	10%	-3%	7%	-9%	-12%	-16%	28%	9%	5%	11%	2%	-38%	20%	15%	-4%	15%	3%	3%	-4%	8%	9%	REITs
5%	10%	-2%	15%	6%	2%	-18%	3%	-14%	-20%	-20%	24%	8%	4%	9%	-1%	-38%	19%	12%	-12%	11%	-2%	-2%	-5%	7%	8%	High-Yield Bonds
4%	4%	-3%	12%	6%	-3%	-25%	-1%	-22%	-20%	-22%	19%	7%	3%	4%	-2%	-43%	18%	8%	-13%	4%	-2%	-4%	-15%	3%	4%	Investment-Grade Bonds
-12%	-1%	-7%	-5%	4%	-12%	-27%	-5%	-31%	-21%	-28%	4%	4%	2%	2%	-16%	-53%	6%	7%	-18%	-1%	-10%	-17%	-25%	2%	1%	Commodities

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 indices are unmanaged. Please see appendix for important index information. Asset classes represented by: Commodities – Bloomberg Commodity Index; Emerging-Market Stocks – MSCI Emerging Markets Index; Foreign-Developed Country Stocks – MSCI EAFE Index; Growth Stocks – Russell 3000 Growth Index; High Yield Bonds – Bank of America Merrill Lynch U.S. High Yield Index; Investment-Grade Bonds – Bloomberg Barclays U.S. Aggregate Bond Index; Large-Cap Stocks – S&P 500 Index; Real Estate/REITs – FTSE NAREIT Equity 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 12/31/17.

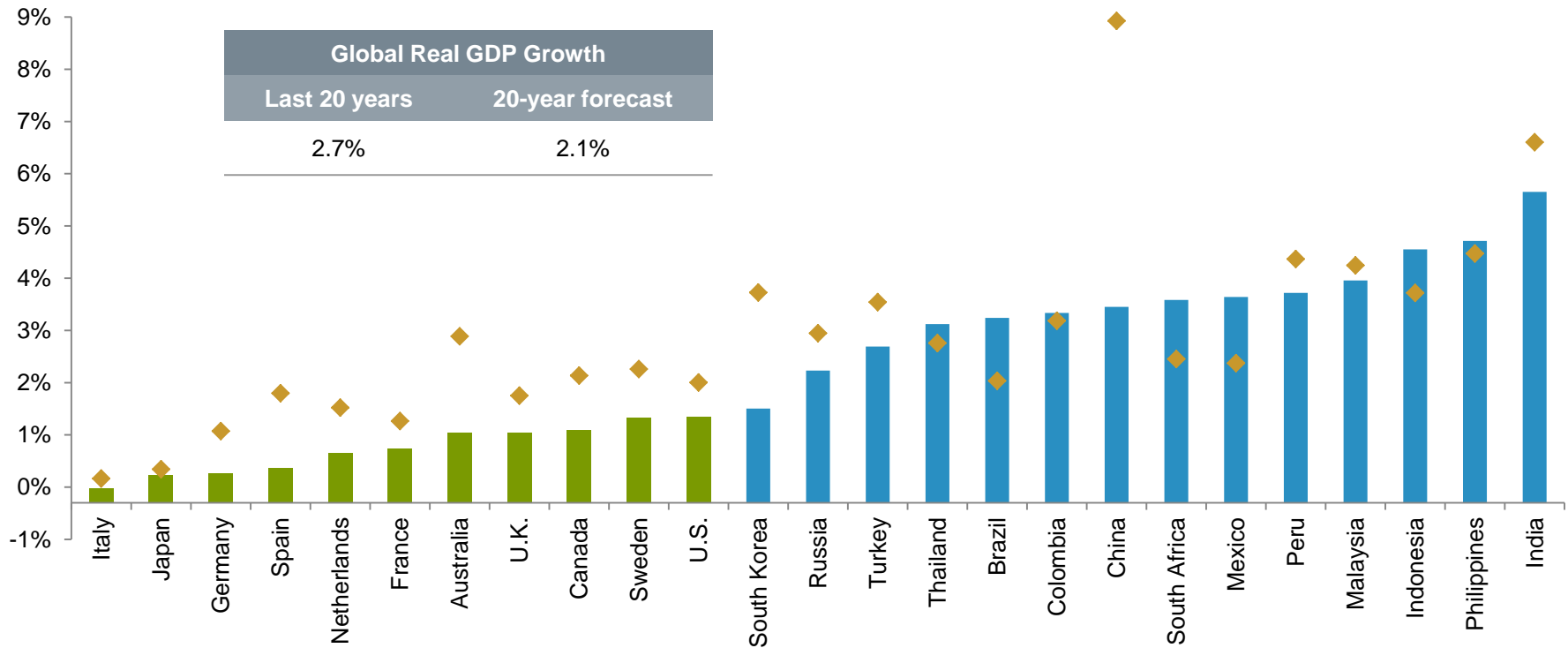
# Secular Forecast: Slower Global Growth, EMs to Lead

Slowing labor force growth and aging demographics are expected to tamp down global growth over the next two decades. We expect GDP growth of emerging countries 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

■ Developed Markets ■ Emerging Markets ◆ Last 20 Years

Annualized Rate



EM: Emerging Markets. GDP: Gross Domestic Product. Source: OECD, Fidelity Investments (AART), as of 5/31/17.

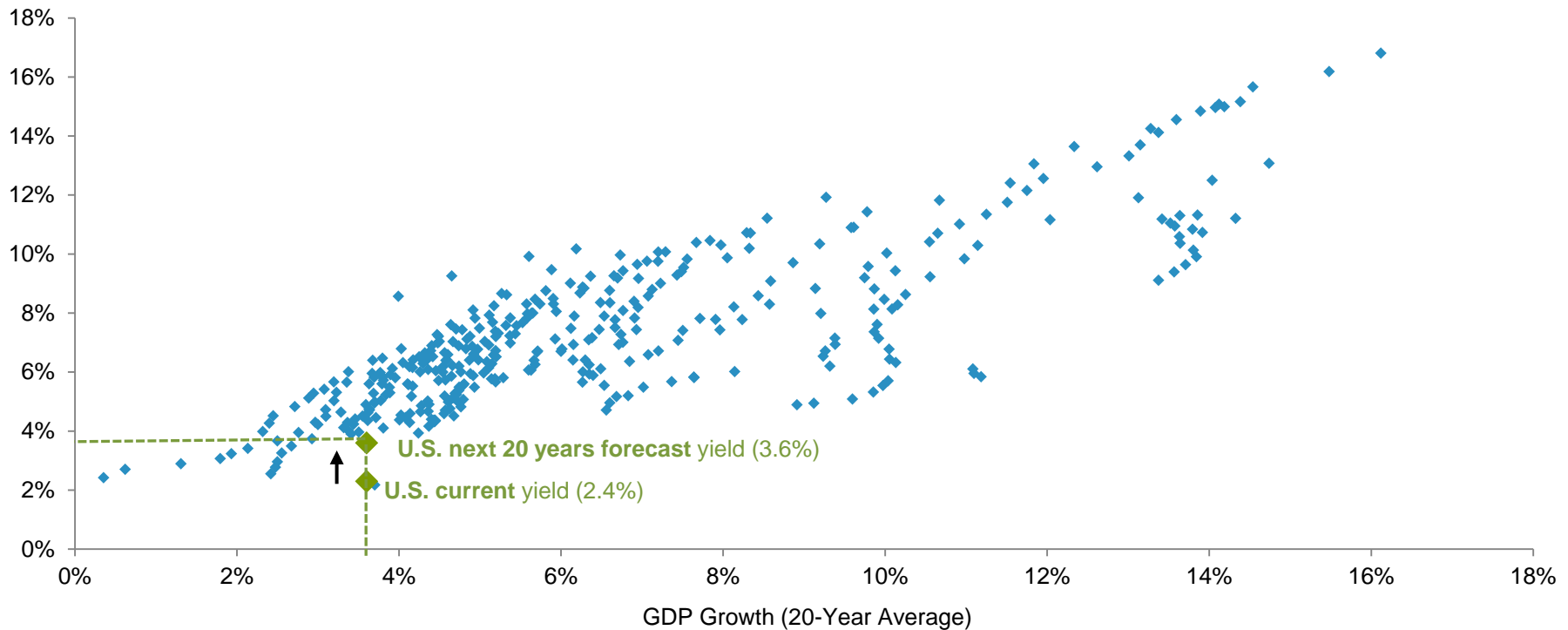
# Secular Rate Outlook: Higher than Now, Lower than History

Over long periods of time, GDP growth has a tight positive relationship with long-term government bond yields (yields generally have averaged the same rate as nominal growth). We expect interest rates will rise over the long term to an average that is closer to our 3.6% nominal GDP forecast, but this implies they would settle at a significantly lower level than their historical averages.

## Nominal Government Bond Yields and GDP Growth

◆ U.S. Secular Growth Forecast ◆ Historical Observations of Various Countries

10-Year Sovereign Yield (20-Year Average)

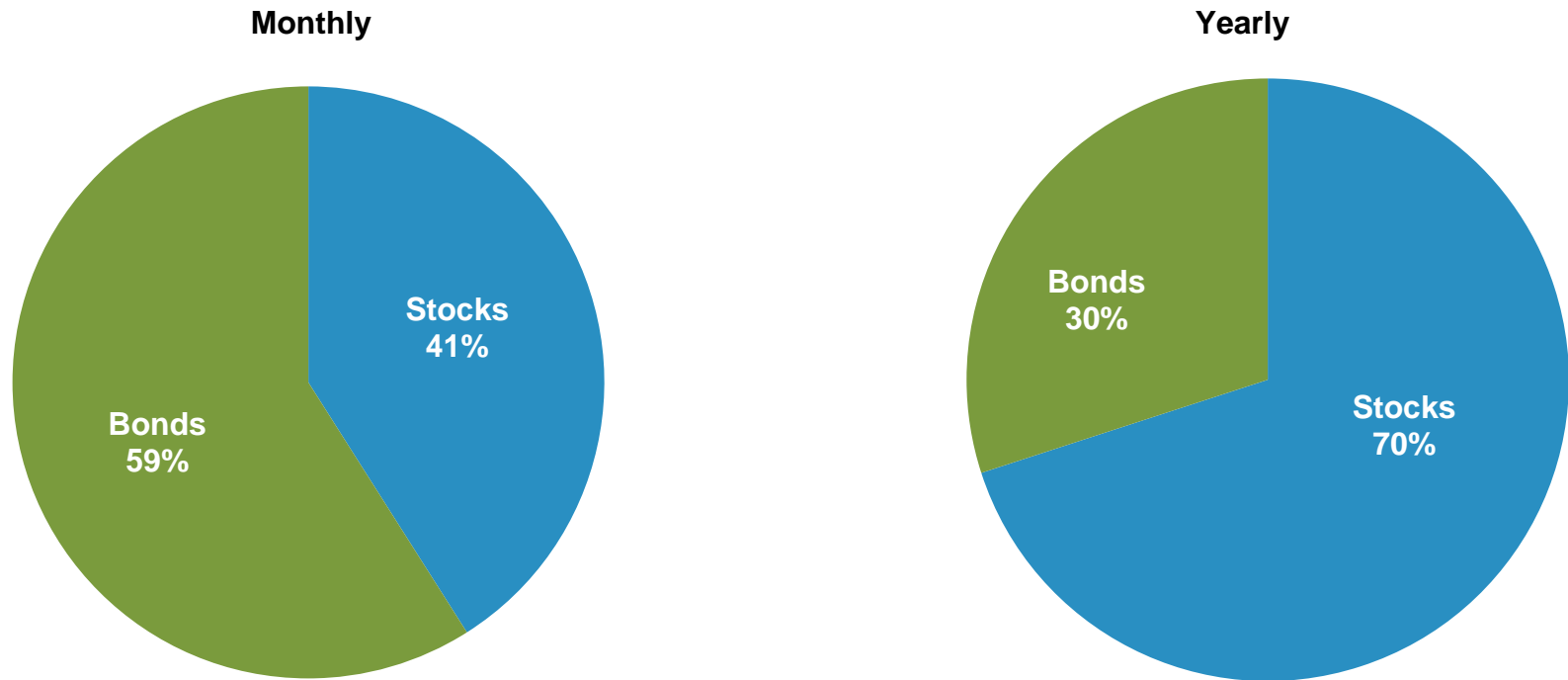


GDP: Gross Domestic Product. Source: Official Country Estimates, Haver Analytics, Fidelity Investments (AART), as of 12/31/17.

# Myopic Loss Aversion Prompts Risk-Averse Behavior

*Myopic loss aversion* describes a common bias in which greater sensitivity to losses than to gains is compounded by the frequent evaluation of outcomes. Investors who review their portfolios more frequently have tended to shift toward more conservative exposures, as increased monitoring raises the likelihood of seeing (and reacting to) a loss.

## Impact of Feedback Frequency on Investment Decisions



In a study, subjects were assigned simulated conditions that were similar to making portfolio decisions on a monthly or yearly basis. Source: Thaler, R.H., A. Tversky, D. Kahneman, and A. Schwartz. "The Effect of Myopia and Loss Aversion on Risk Taking: An Experimental Test." *The Quarterly Journal of Economics* 112.2 (1997), used by permission of Oxford University Press; Fidelity Investments (AART), as of 9/30/17.

# 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.

*Unless otherwise disclosed to you, any investment or management recommendation in this document is not meant to be impartial investment advice or advice in a fiduciary capacity, is intended to be educational and is not tailored to the investment needs of any specific individual. Fidelity and its representatives have a financial interest in any investment alternatives or transactions described in this document. Fidelity receives compensation from Fidelity funds and products, certain third-party funds and products, and certain investment services. The compensation that is received, either directly or indirectly, by Fidelity may vary based on such funds, products and services, which can create a conflict of interest for Fidelity and its representatives. Fiduciaries are solely responsible for exercising independent judgment in evaluating any transaction(s) and are assumed to be capable of evaluating investment risks independently, both in general and with regard to particular transactions and investment strategies.*

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

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

**Past performance and dividend rates are historical and do not guarantee future results.**

Investing involves risk, including risk of loss.

Diversification does not ensure a profit or guarantee against 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.

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 Indices

\* **Index returns on slide 22 represented by:** Growth - Russell 3000 Growth Index; Large Caps - S&P 500 Index; Mid Caps - Russell Midcap Index; REITs (Real Estate Investment Trusts) - FTSE NAREIT Equity Index; Small Caps - Russell 2000 Index; Value - Russell 3000 Value Index; Canada - MSCI Canada Index; Commodities - S&P GSCI Commodities Index; EAFE - MSCI 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 - BofA ML 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.

**BofA ML Corporate Real Estate Index**, a subset of BofA ML U.S. Corporate Index, is a market capitalization-weighted index of U.S. dollar-denominated investment-grade corporate debt publicly issued in the U.S. domestic market by real estate issuers. Qualifying securities must have an investment-grade rating (based on an average of Moody's, S&P, and Fitch). In addition, qualifying securities must have at least one year remaining to final maturity, a fixed coupon schedule, and a minimum amount outstanding of \$250 million. **BofA ML U.S. Real Estate Index** is a subset of the BofA ML Real Estate Corporate Index; qualifying securities must have an investment grade rating and an investment grade-rated country of risk. **BofA ML U.S. High Yield Bond Index** is a market capitalization-weighted index of U.S. dollar denominated below-investment-grade corporate debt publicly issued in the U.S. domestic market.

**The BofA/Merrill Lynch High-Yield Bond Master II Index** is an unmanaged index that tracks the performance of below-investment-grade, U.S.-dollar-denominated corporate bonds publicly issued in the U.S. domestic market. **Bloomberg Barclays U.S. 1-3 (1-5) Year Government Credit Index** includes all publicly issued U.S. government and corporate securities that have a remaining maturity between one and three (five) years and are rated investment grade. **Bloomberg Barclays U.S. 1-5 Year Credit Index** is designed to cover publicly issued U.S. corporate and specified non-U.S. debentures and secured notes with a maturity between one and five years and meet the specified liquidity and quality requirements; bonds must be SEC-registered to qualify. **Bloomberg Barclays U.S. 1-5 Year Municipal Index** covers the one- to five-year maturity, U.S. dollar-denominated, tax-exempt bond market with four main sectors: state and local general obligation bonds, revenue bonds, insured bonds, and pre-refunded bonds. **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 Emerging Market Bond Index** is an unmanaged index that tracks total returns for external-currency-denominated debt instruments of the emerging markets. **Bloomberg Barclays Euro Aggregate Bond Index** is a broad-based flagship benchmark that measures the investment grade, euro-denominated, fixed rate bond market, including treasuries, government-related, corporate and securitized issues. **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. Corporate High Yield Bond Index** is a market value-weighted index that covers the universe of dollar-denominated, fixed-rate, non-investment grade debt. **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. Government Index** is a market value-weighted index of U.S. Government fixed-rate debt issues with maturities of one year or more. **Bloomberg Barclays Global Aggregate ex-USD Index Unhedged** is a measure of global investment grade debt from 24 local currency markets. This multi-currency benchmark includes treasury, government-related, corporate and securitized fixed-rate bonds from both developed and emerging markets issuers.

**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. Select Real Estate Securities Index** is a float-adjusted, market capitalization-weighted index of publicly traded real estate securities, such as real estate investment trusts (REITs) and real estate operating companies (REOCs).

# Appendix: Important Information

## Market Indices (continued)

**FTSE 100 Index** is a market capitalization-weighted index of the 100 most highly capitalized blue chip companies listed on the London Stock Exchange. **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).

**The IA SBBI U.S. Small Cap Stock Index** is a custom index designed to measure the performance of small capitalization U.S. stocks. **IA SBBI U.S. Intermediate-Term Government Bond Index** is an unweighted index that measures the performance of five-year maturity U.S. Treasury bonds. Each year, a one-bond portfolio containing the shortest non-callable bond having a maturity of not less than five years is constructed. **IA SBBI U.S. Long-Term Corporate Bond Index** is a custom index designed to measure the performance of long-term U.S. corporate bonds. **IA SBBI U.S. 30-Day Treasury Bill Index** is an unweighted index that measures the performance of 30-day maturity U.S. Treasury bills. **JPM® EMBI Global Index**, and its country sub-indices, tracks total returns for the U.S. dollar-denominated debt instruments issued by Emerging Market sovereign and quasi-sovereign entities, such as Brady bonds, loans, and Eurobonds. **JPM® EMBI Global Investment Grade Index**, and its country sub-indices, tracks total returns for traded external debt instruments issued by emerging-market sovereign and quasi-sovereign entities rated investment grade.

**MSCI® All Country (AC) Europe Index** is a market capitalization-weighted index that is designed to measure the equity market performance of Europe; it consists of the following developed and emerging-market country indices: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Netherlands, Norway, Poland, Portugal, Russia, Spain, Sweden, Switzerland, Turkey, and United Kingdom. **MSCI All Country World Index (ACWI)** is a market capitalization-weighted index that is designed to measure the investable equity market performance for global investors of developed and emerging markets. **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 Europe Financials Index** (Total Return) captures large- and mid-cap representations of financial securities across 15 developed-market countries in Europe, represented by the MSCI Europe Index, **MSCI Japan Financials Index** (Total Return) captures large- and mid-cap representations of financial securities across Japan, represented by the MSCI Japan Index, an index designed to measure the performance of the large- and mid-cap segments of the Japanese equity market. With 318 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in Japan. **MSCI North America Index** is a market capitalization-weighted index designed to measure the performance of large- and mid-cap segments of the U.S. and Canada markets. **MSCI Pacific ex Japan Index** is a market capitalization-weighted index that is designed to measure the equity market performance of four of the five developed market countries in the Pacific region including Australia, Hong Kong, New

Zealand and Singapore. **MSCI World Index** is a market capitalization-weighted index that is designed to measure the investable equity market performance for global investors of developed markets. **MSCI World ex USA Index** is a market capitalization-weighted index designed to measure the equity market performance of developed markets excluding the U.S.

**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 EM Large Cap Index** is composed of those securities in the MSCI EM Index that are defined as large-capitalization stocks.

**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.

**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 USA Index** is a market capitalization-weighted index designed to measure the equity market performance of the U.S.

**MSCI REIT Preferred Index** is a preferred stock market capitalization-weighted total return index of certain exchange-traded perpetual preferred securities issued by U.S. Equity and U.S. Hybrid REITs.

**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.



# Appendix: Important Information

## Market Indices (continued)

The **S&P 500® Index** 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 **S&P 500 Total Return Index** represents the price changes and reinvested dividends of the S&P 500® Index. The **S&P SmallCap 600** is a market capitalization-weighted index of 600 small-capitalization stocks. The **S&P GSCI® Commodities Index** provides investors with a reliable and publicly available benchmark for investment performance in the commodity markets.

**LIBOR** is the London Interbank Offered Rate. It is the benchmark rate that some of the world's leading banks charge each other for short-term loans.

**Global Policy Uncertainty Index** a GDP-weighted average of national economic policy uncertainty indexes for 18 countries. It reflects the relative frequency of own-country newspaper articles that contain a trio of terms pertaining to the economy, policy, and uncertainty.

The **Sectors and Industries** 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 real estate, including 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 whose businesses 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 are engaged in a wide range of commodity-related manufacturing. Telecommunication Services – companies that provide communications services primarily through fixed-line, cellular, wireless, high bandwidth, and/or fiber-optic cable networks. Utilities – companies considered electric, gas, or water utilities, or companies 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.

**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.

**KOF Index of Globalization** measures the economic, social, and political dimensions of globalization and is calculated referring to actual economic flows, economic restrictions, data on information flows, data on personal contact, and data on cultural proximity.

**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.

**The Philadelphia Gold and Silver Index** is a market-capitalization index of precious metal mining company stocks.

**A Purchasing Managers' Index (PMI)** is a survey of purchasing managers in a certain economic sector. A PMI over 50 represents expansion of the sector compared to the previous month, while a reading under 50 represents a contraction, and a reading of 50 indicates no change. The Institute for Supply Management® reports the U.S. manufacturing PMI®. Markit compiles non-U.S. PMIs.

**S&P Global BMI Gold Capped Index** is a modified market capitalization-weighted index of stocks designed to measure the performance of companies that produce gold and related products, including companies that mine or process gold and the South African finance houses that primarily invest in, but do not operate, gold mines.

# Appendix: Important Information

## 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.

**The 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:** 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.

The Chartered Financial Analyst (CFA) designation is offered by the 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.

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

If receiving this piece through your relationship with Fidelity Institutional Asset Management® (FIAM), this publication may be provided by Fidelity Investments Institutional Services Company, Inc., Fidelity Institutional Asset Management Trust Company, or FIAM LLC, depending on your relationship.

If receiving this piece through your relationship with Fidelity Personal & Workplace Investing (PWI) or Fidelity Family Office Services (FFOS), this publication is provided through Fidelity Brokerage Services LLC, Member NYSE, SIPC.

If receiving this piece through your relationship with Fidelity Clearing and Custody Solutions or Fidelity Capital Markets, this publication is for institutional investor or investment professional use only. Clearing, custody or other brokerage services are provided through National Financial Services LLC or Fidelity Brokerage Services LLC, Member NYSE, SIPC.

829724.1.0

© 2018 FMR LLC. All rights reserved.