LEADERSHIP SERIES FOURTH QUARTER 2017

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

Fidelity INVESTMENTS

Table of Contents

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

Fidelity INVESTMENTS

Market Summary

Goldilocks Setting Persisted, May Be Tested by Policy Shift

The synchronized expansion in global economic activity—along with low inflation and accommodative monetary policies—continued to provide a steady backdrop for asset markets. The solid growth environment is likely to give 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	ASSET MARKETS
Q3 2017	• Synchronized global expansion amid low inflation	• Low volatility and broad rise in asset prices
OUTLOOK	• Low recession risk globally • U.S. economy healthy though cycle becoming more mature • Shift toward global monetary policy normalization likely to reduce liquidity growth	• Monetary shift to boost market volatility • Smaller allocation tilts at this point in the cycle • Favor global equities and inflation-resistant assets

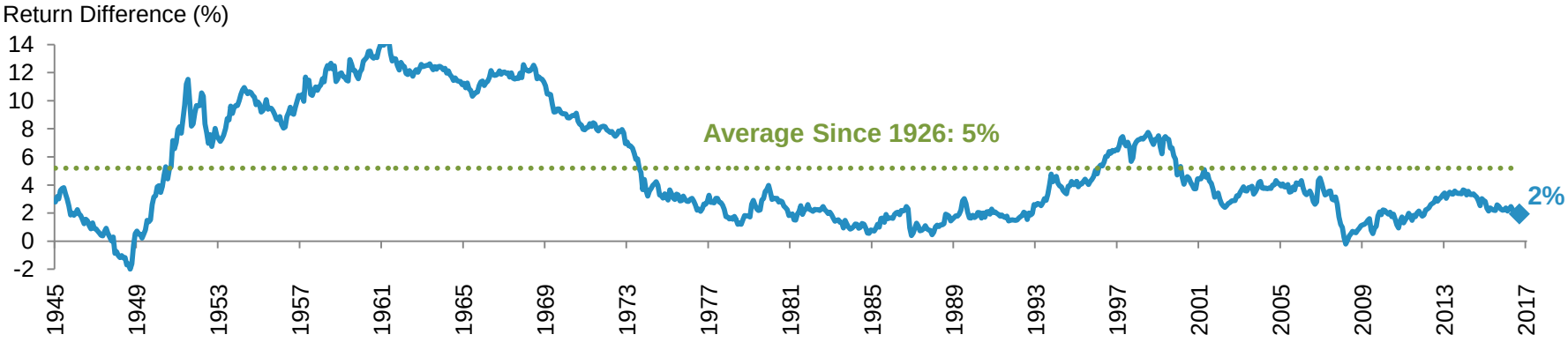
Fidelity INVESTMENTS

Non-U.S. Equities Again Led Broad-Based Rally

Non-U.S. equities spearheaded a global stock market rally for the third quarter in a row, bolstered by a weaker dollar and a strengthened economic backdrop. Credit spreads tightened further amid the "risk-on" tone, allowing emerging-market and high-yield corporate bonds to add to their solid year-to-date gains. Steady interest rates kept high-quality bonds in the black, and all asset categories posted positive returns.

	Q3 2017 (%)	Year-to-Date (%)		Q3 2017 (%)	Year-to-Date (%)
Emerging-Market Stocks	8.0	28.1	Emerging-Market Bonds	2.4	8.7
Non-U.S. Small-Cap Stocks	7.5	25.8	Commodities	2.2	-3.5
U.S. Small-Cap Stocks	5.7	10.9	High-Yield Bonds	2.0	7.0
Non-U.S. Developed-Country Stocks	5.5	20.5	Long Government & Credit Bonds	1.5	7.7
U.S. Large-Cap Stocks	4.5	14.2	U.S. Corporate Bonds	1.3	5.1
U.S. Mid-Cap Stocks	3.5	11.7	Real Estate Stocks	1.1	6.0
Gold	3.3	12.0	Investment-Grade Bonds	0.8	3.1

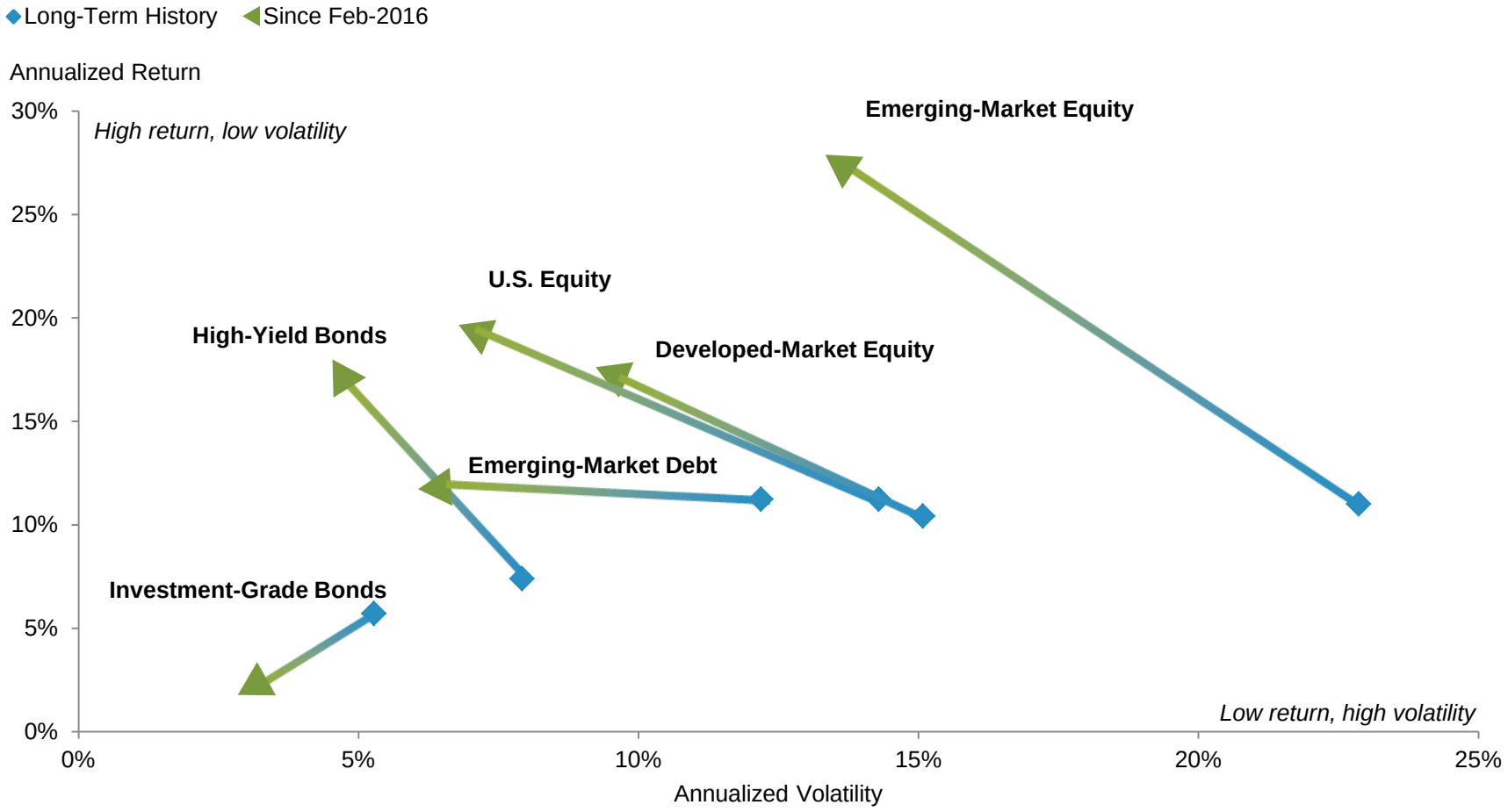
20-Year U.S. Stock Returns Minus Bond Returns Since 1926



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 9/30/17.

Extremely Low Volatility Amid Stellar Market Performance

Since equity markets hit a near-term bottom in early 2016, global assets have posted strong returns while experiencing remarkably low levels of volatility. Compared to historical averages, price fluctuations of riskier assets were extremely subdued, even as they registered big gains. More defensive assets such as investment-grade bonds posted smaller gains, but also experienced unusually low volatility.

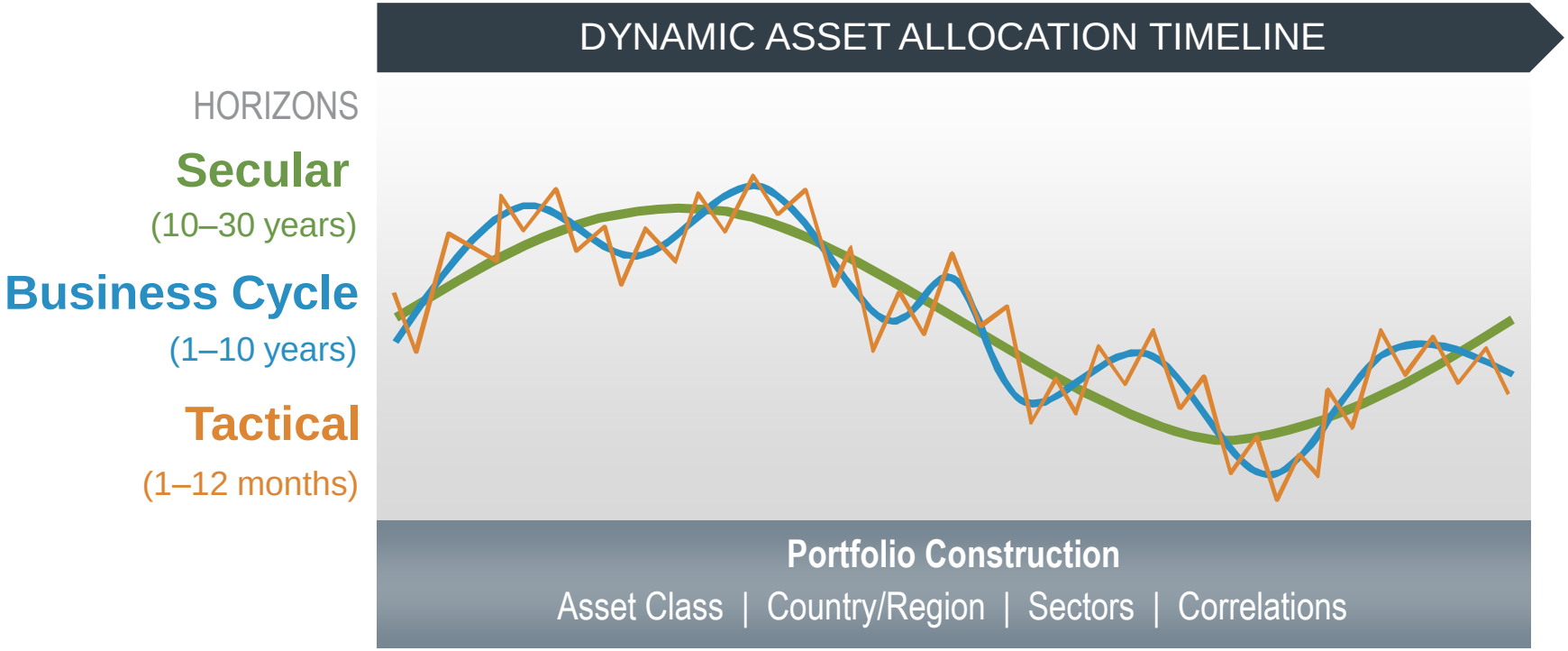


Past performance is no guarantee of future results. Asset class indices as defined on prior slide. Long-term history is since 1950 for all asset classes except EM equity, which is since 1988. Source: Haver Analytics, Fidelity Investments (AART), as of 8/31/17.

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).

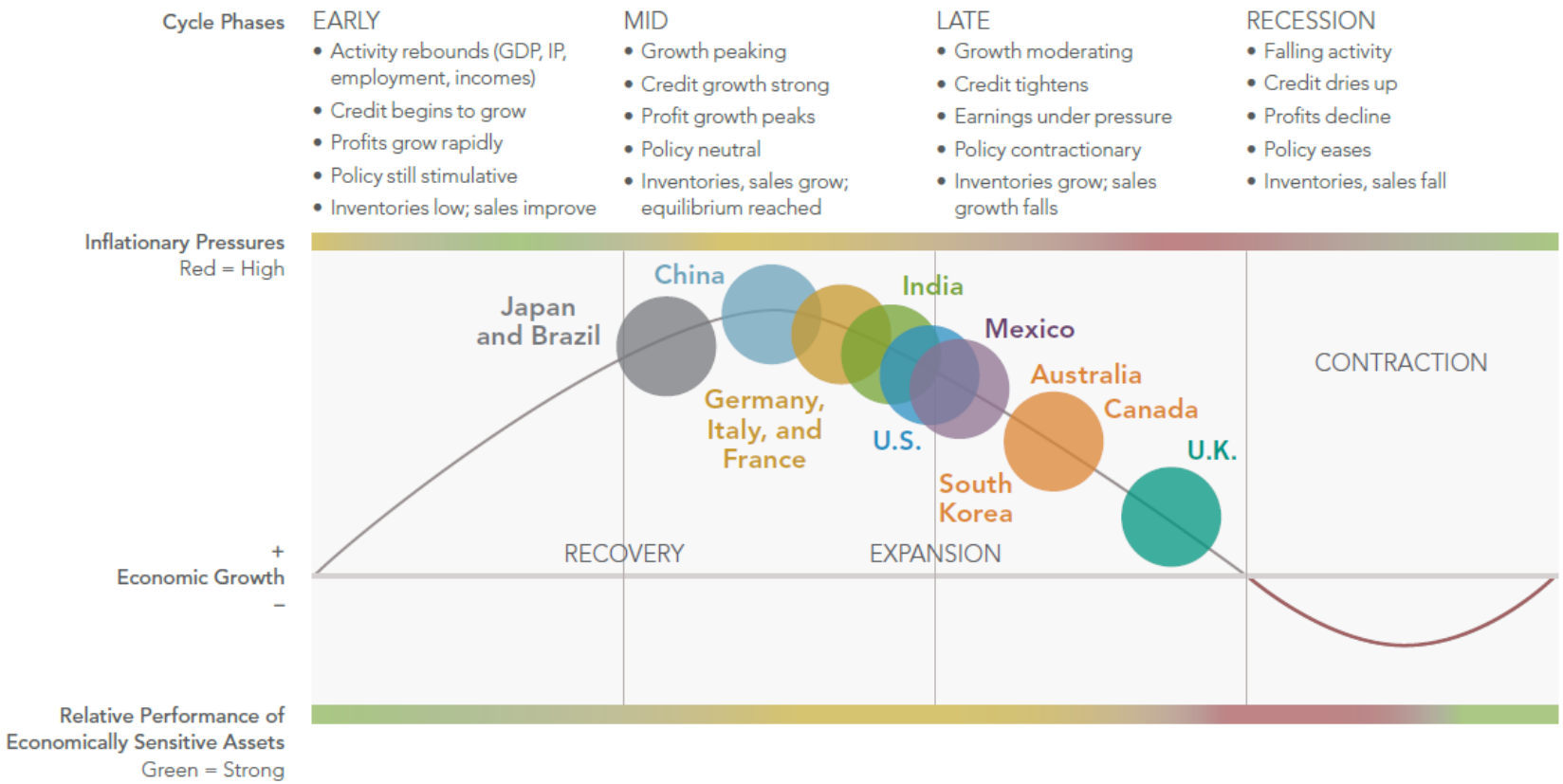


For illustrative purposes only. Source: Fidelity Investments (AART).

Most Synchronized Global Expansion in Years

The global economy is experiencing a relatively steady, synchronized expansion. 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. Recession risks remain low globally, although less accommodative policy in several countries, including China, may constrain the upside to growth going forward.

Business Cycle Framework

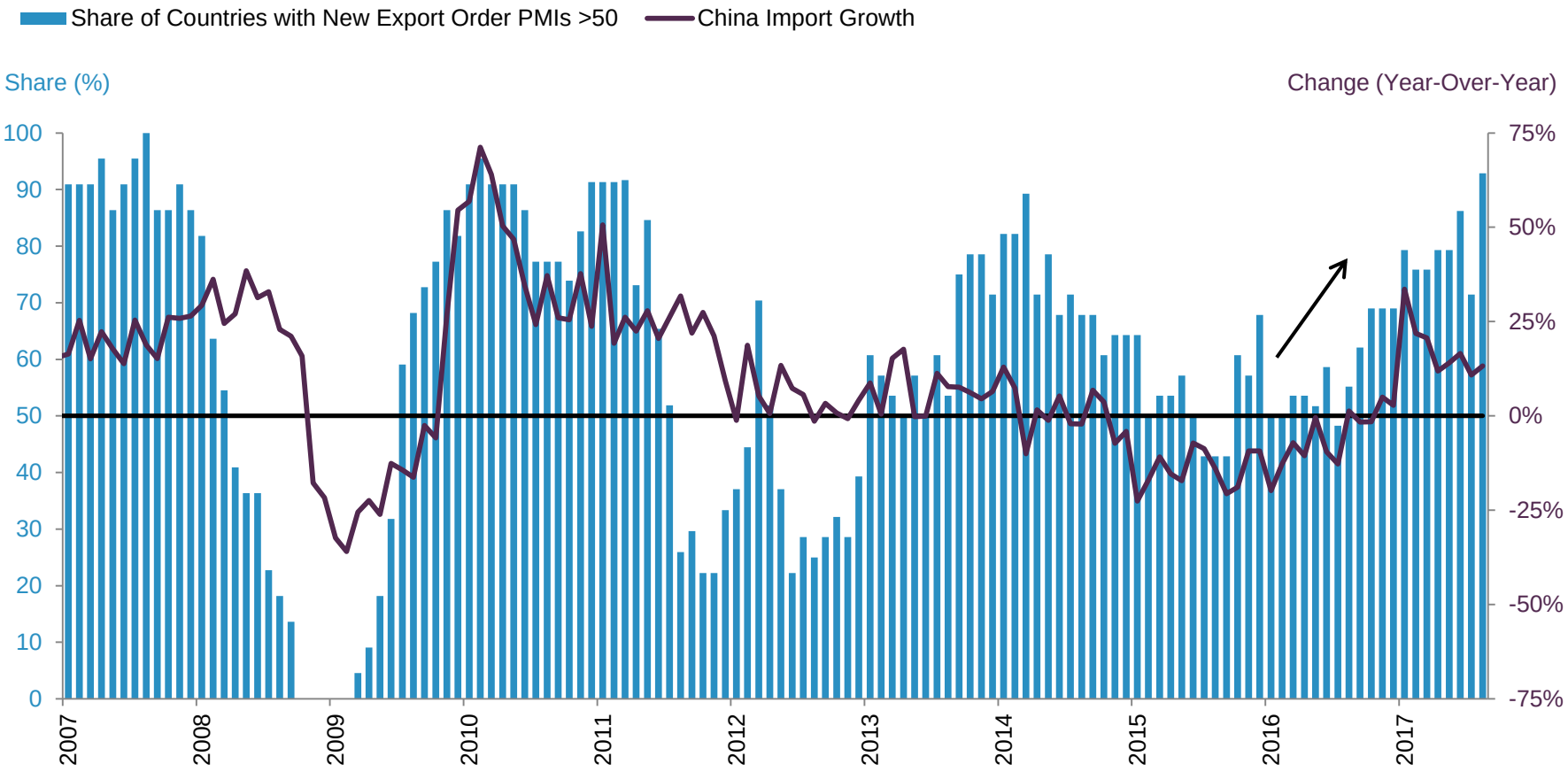


Note: The diagram above is a hypothetical illustration of the business cycle. There is not always a chronological, linear progression among the phases of the business cycle, and there have been cycles when the economy has skipped a phase or retraced an earlier one. Source: Fidelity Investments (AART), as of 9/30/17.

Trade Rebound Continued to Bolster Global Economy

The global expansion has been underpinned by a turnaround in export-oriented sectors and manufacturing activity. China's rising import demand over the past year has helped push the percentage of major countries with expanding new export orders to more than 90%. China's cyclical path will continue to heavily influence the outlook for global trade, industrial activity, multinational profits, and commodity prices.

Global New Export Orders and China Import Growth

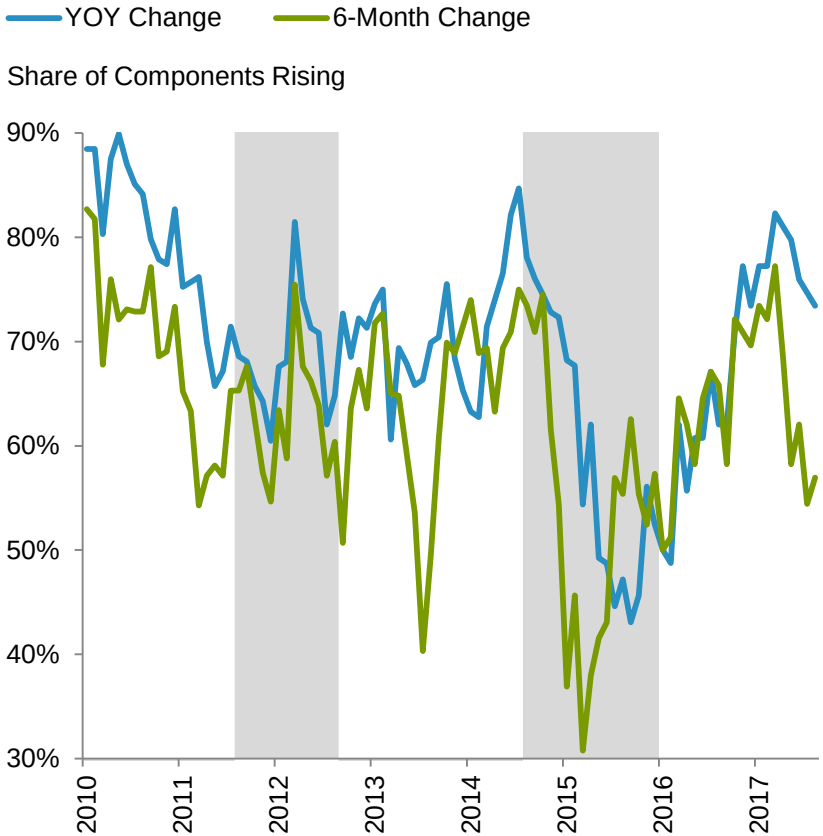


Blue series includes 32 countries. Source: Markit, China Customs, Haver Analytics, Fidelity Investments (AART), as of 8/31/17.

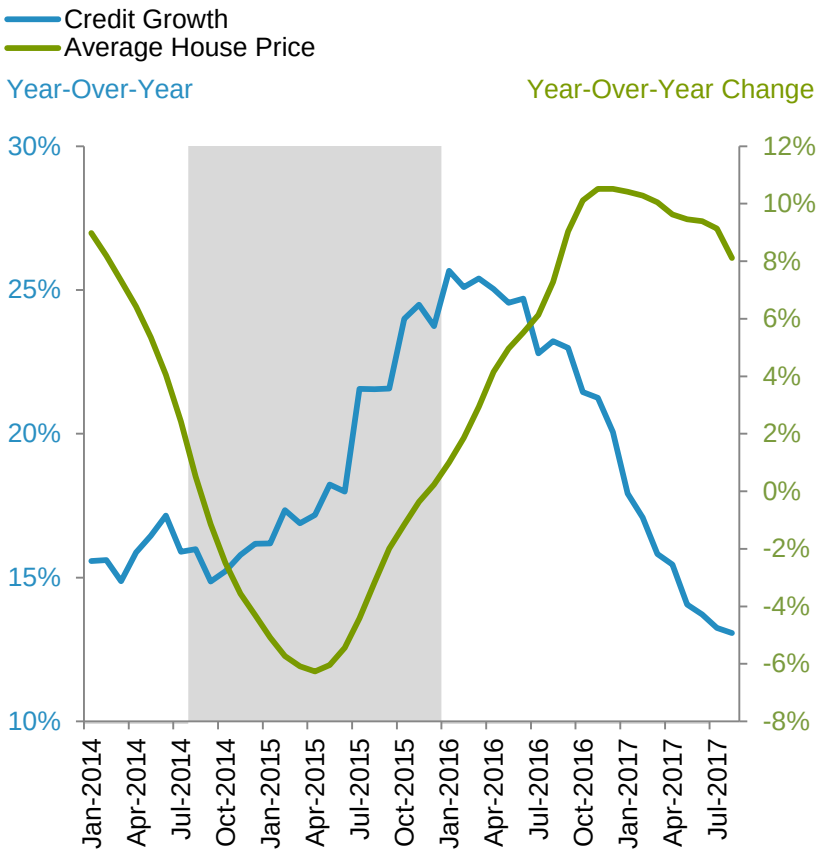
China Steady, but Activity Peaking alongside Tightening

The Chinese economy remains in expansion, with economic activity at healthy levels. However, policymakers' tighter stance is beginning to show an impact, as industrial and property sectors begin to show signs of losing momentum. China's economy remains broadly steady, but tighter financial conditions and signs of peaking activity suggest that upside to China's cyclical trajectory is limited.

Chinese Industrial Activity



Chinese Credit Growth and Property Prices

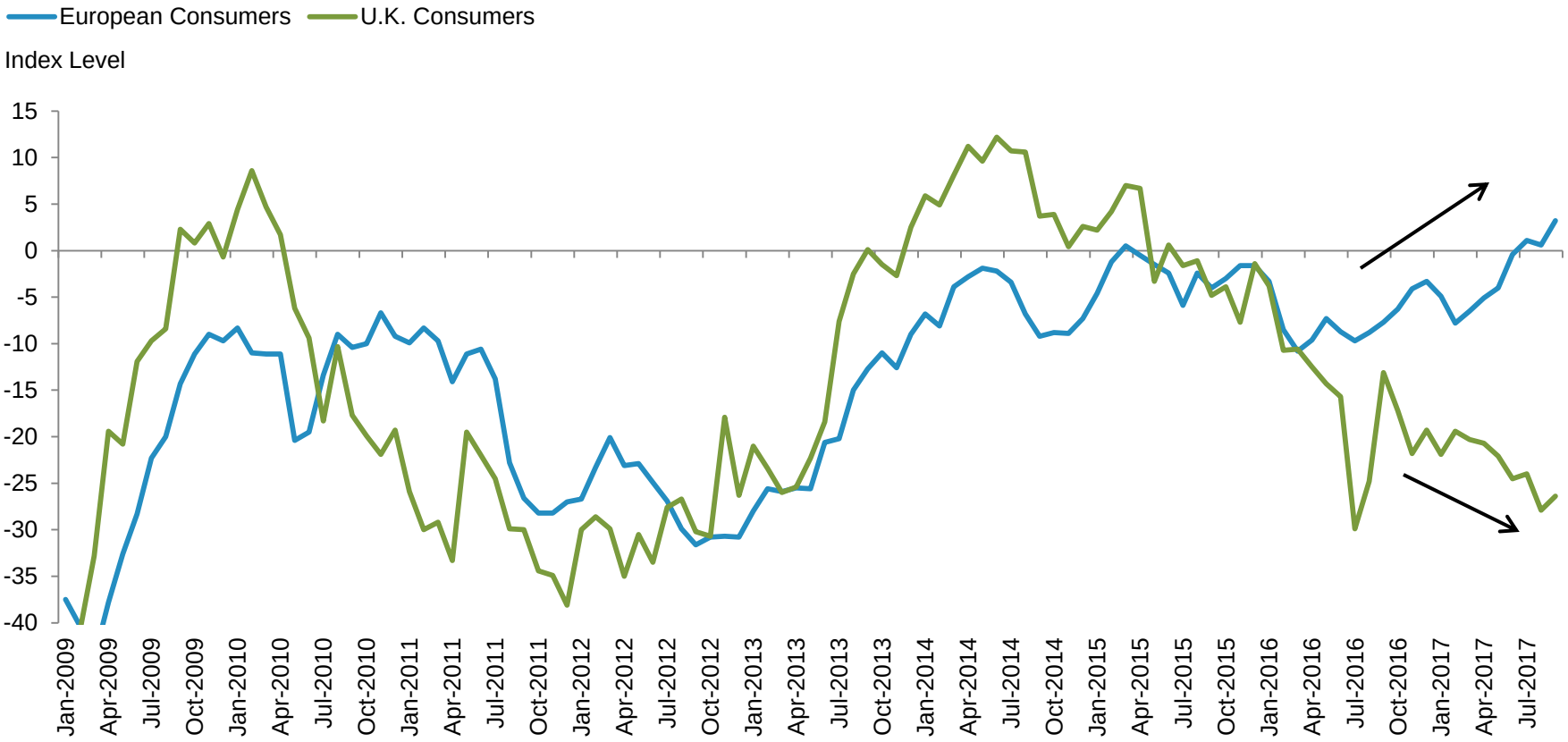


Grey bars refer to China's growth recessions. **LEFT**: Source: China National Bureau of Statistics, Haver Analytics, Fidelity Investments (AART), **RIGHT:** Source: China National Bureau of Statistics, Haver Analytics, Fidelity Investments (AART), as of 8/31/17.

Core Europe Remains Firm, While U.K. Outlook Softens

The eurozone is on a cyclical upswing, enjoying a reasonably synchronized mid-cycle expansion across both its core and its periphery. Consumer sentiment and expectations are at multiyear highs, reflecting a healthy domestic environment. The U.K., however, is confronting late-cycle pressures, as consumers' expectations deteriorate alongside rising inflation and faltering real income growth.

Eurozone and U.K. Economic Expectations

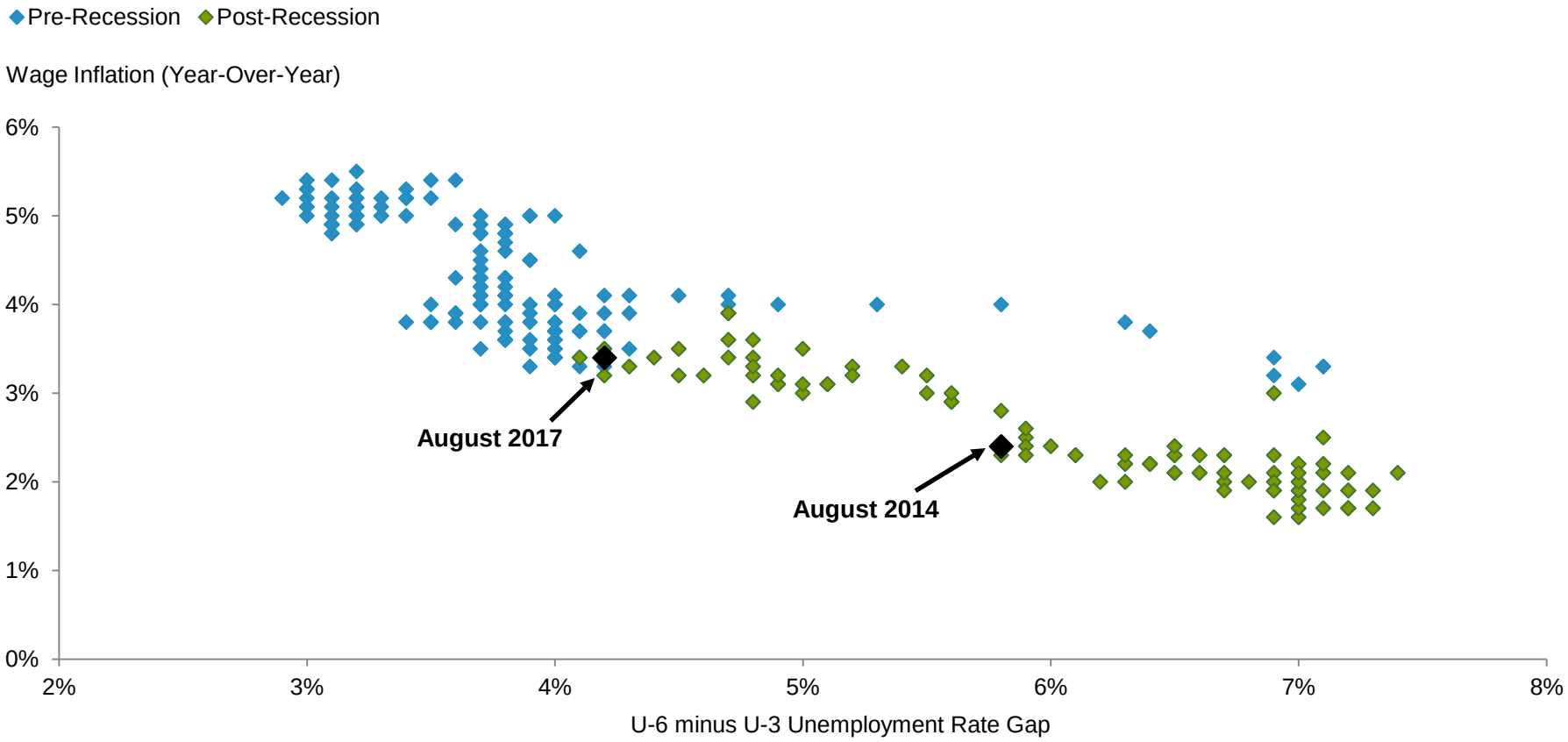


Source: European Commission, Haver Analytics, Fidelity Investments (AART), as of 8/31/17.

Tighter Labor Markets Support Wage Growth, Consumers

With the unemployment rate near cyclical lows at 4.4%, tightening labor markets continue to boost consumers and keep U.S. recession risk low. Extra labor market slack, measured by workers who leave the labor market or are forced into part-time work, persisted during this cycle. However, this slack has dropped dramatically during the past several years and has gradually pushed up wage growth, a trend we expect to continue.

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

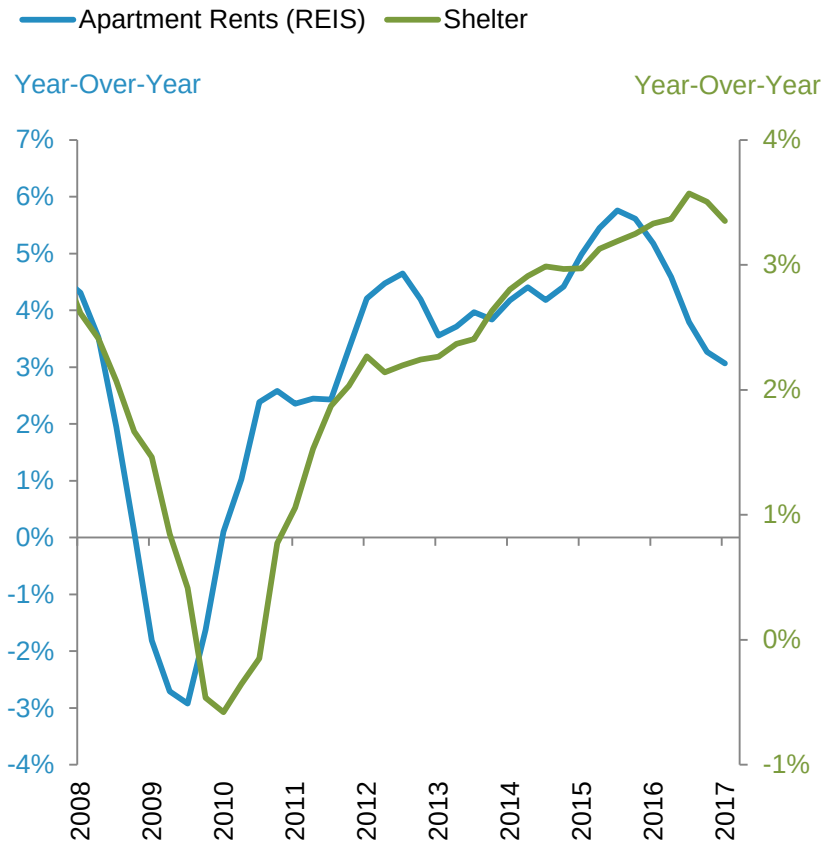


Wage inflation: Atlanta Fed Wage Tracker. Unemployment rate gap is the difference between U-6 and U-3 unemployment and captures the number of workers who are either working part-time due to economic reasons or are discouraged and have left the labor force. Pre-recession refers to 1997-2008, and post-recession refers to 2009-2017. Source: Federal Reserve, Bureau of Labor Statistics, Haver Analytics, Fidelity Investments (AART), as of 8/31/17.

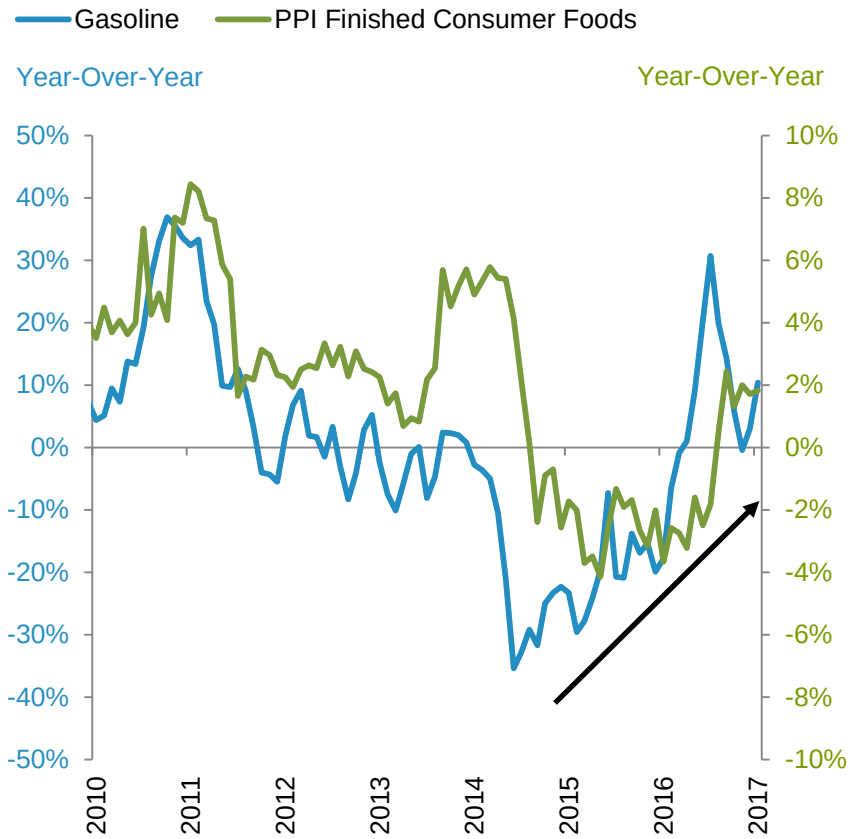
U.S. Inflation Likely Range-Bound amid Crosscurrents

Tight labor markets and rising wages provide support to core inflation. However, shelter costs (roughly 40% of core CPI) are slowing in tandem with a surge in new multifamily housing units, and transitory factors such as onetime wireless phone service discounts will continue to weigh on inflation in the coming months. On the other hand, food prices have turned upward amid higher producer prices, and oil and gas prices have firmed.

U.S. Multifamily House Prices & Shelter CPI



U.S. Food and Gasoline Prices

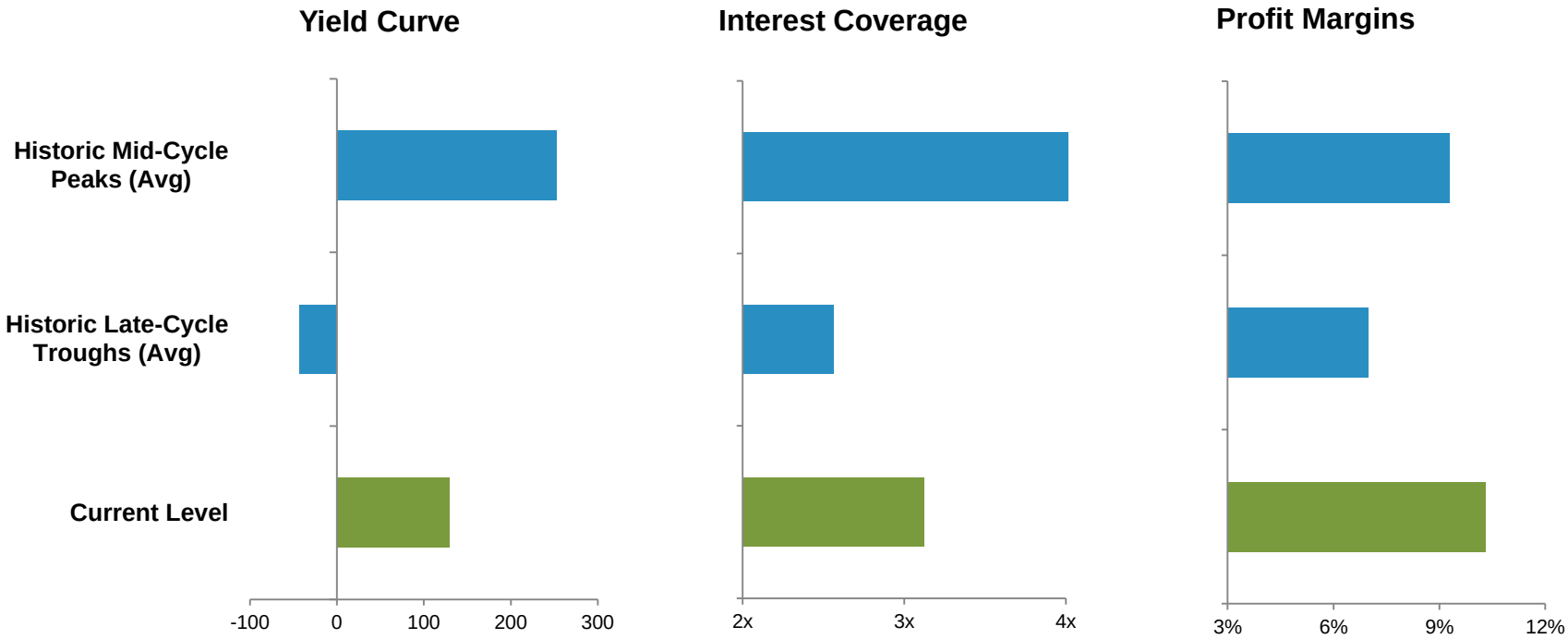


CPI: Consumer Price Index. PPI: Producer Price Index. Source: REIS Inc., Bureau of Labor Statistics, Bloomberg Finance L.P., Haver Analytics, Fidelity Investments (AART), as of 8/31/17.

Low Inflation Key to Prolonged Mid-to-Late-Cycle Transition

Rising inflation is typically a key driver of late-cycle pressures, as rising wages pressure profit margins and cause the Federal Reserve to tighten monetary policy. This, in turn, has historically caused a flattening of the yield curve and raised debt-servicing costs for businesses. While most of these indicators remain relatively healthy on a level basis, they have all deteriorated and are indicative of a maturing U.S. business cycle.

Business Cycle Indicators



	Yield Curve	Interest Coverage	Profit Margins
Since Cycle Peak	**231 bps flatter ↓**	**0.6x Lower ↓**	**2% Lower ↓**

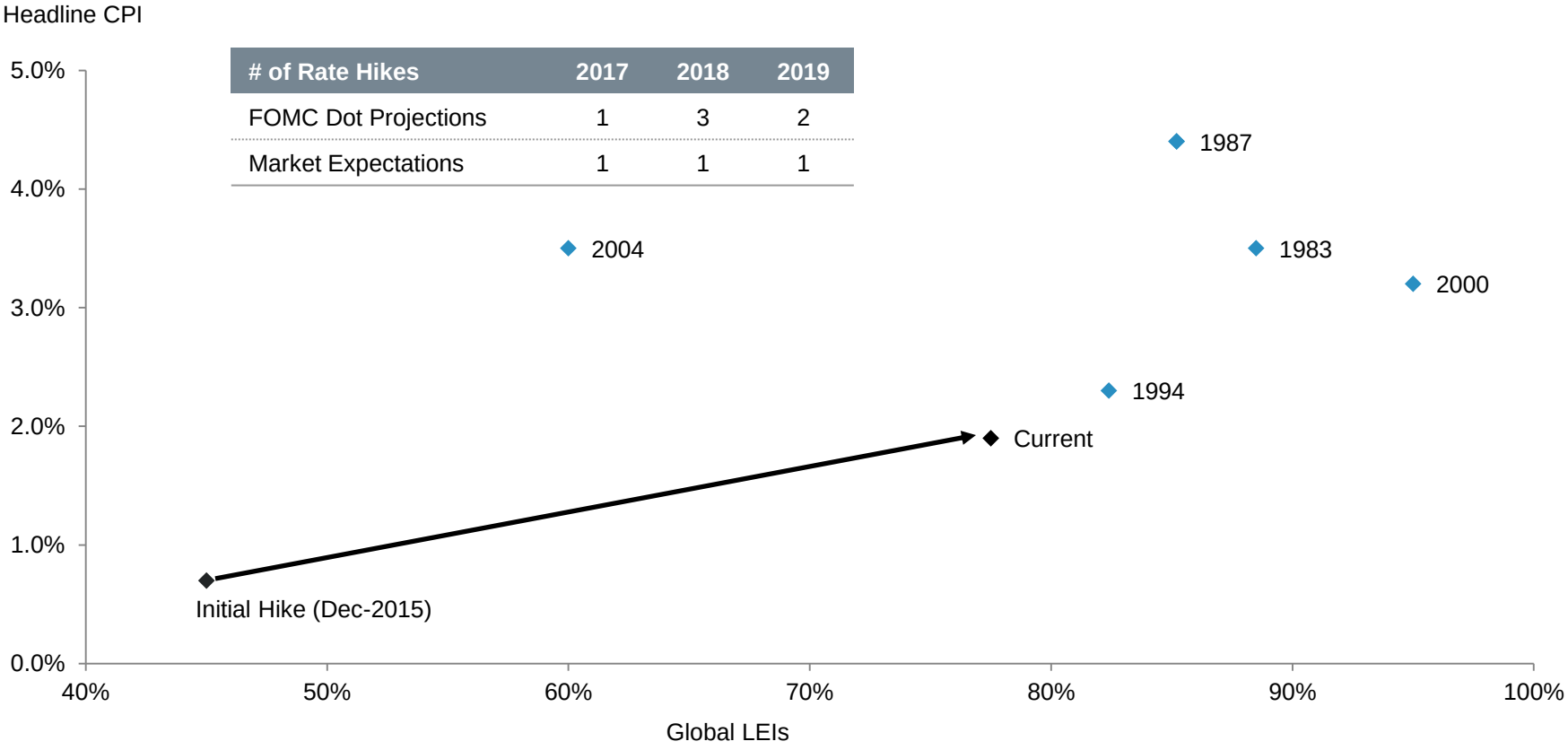
Data since 1950. bps: Basis Points. Yield Curve: 10 Year – 3 Month Treasuries. Interest Coverage: Non-Financial Corporate Profits / Interest Expense. Profit Margins: Non-Financial Corporate Profits / Revenues. Source: Bureau of Economic Analysis, Haver Analytics, Bloomberg Finance LP., Fidelity Investments (AART) as of 9/30/17.

Directional Movement toward Policy Normalization

Firming inflation and global growth have given the Federal Reserve (Fed) confidence to continue gradually hiking its short-term policy rate. Although growth and inflation remain weaker than during prior periods of tightening, other central banks may also recognize the need to begin a move away from extraordinary easing. The market's rate-hike expectations are lower than the Fed's projections, which has the potential to boost market volatility.

Global Growth and Inflation 100bps into Fed Tightening

# of Rate Hikes	2017	2018	2019
FOMC Dot Projections	1	3	2
Market Expectations	1	1	1

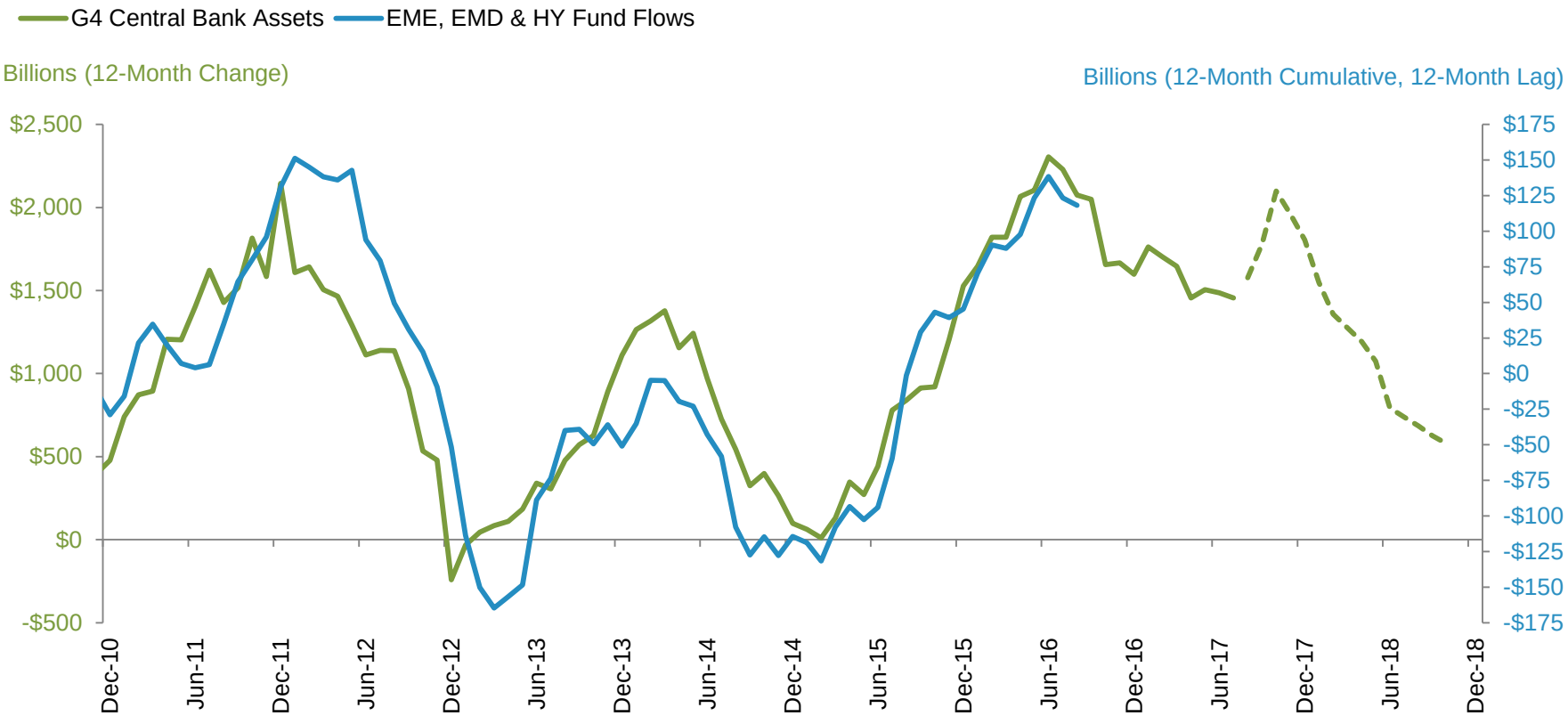


CPI: Consumer Price Index. FOMC: Federal Open Market Committee. Global LEIs: Share of world's 40 largest economies' Leading Economic Indicators rising on a six-month basis. Source: Bureau of Labor Statistics, OECD, Haver Analytics, Fidelity Investments (AART), as of 9/30/17.

QE Unwind Could Challenge Global Liquidity Growth

For nearly a decade, large central banks injected more than $12 trillion of liquidity into global financial markets, supporting asset prices and dampening volatility. The central-bank purchases of high-quality assets helped push investors toward higher-yielding, less-liquid asset markets. The Fed's unwinding of its balance sheet, and the ECB's likely tapering of asset purchases next year, could pose a liquidity challenge to markets.

G4 Balance Sheets and Asset Flows

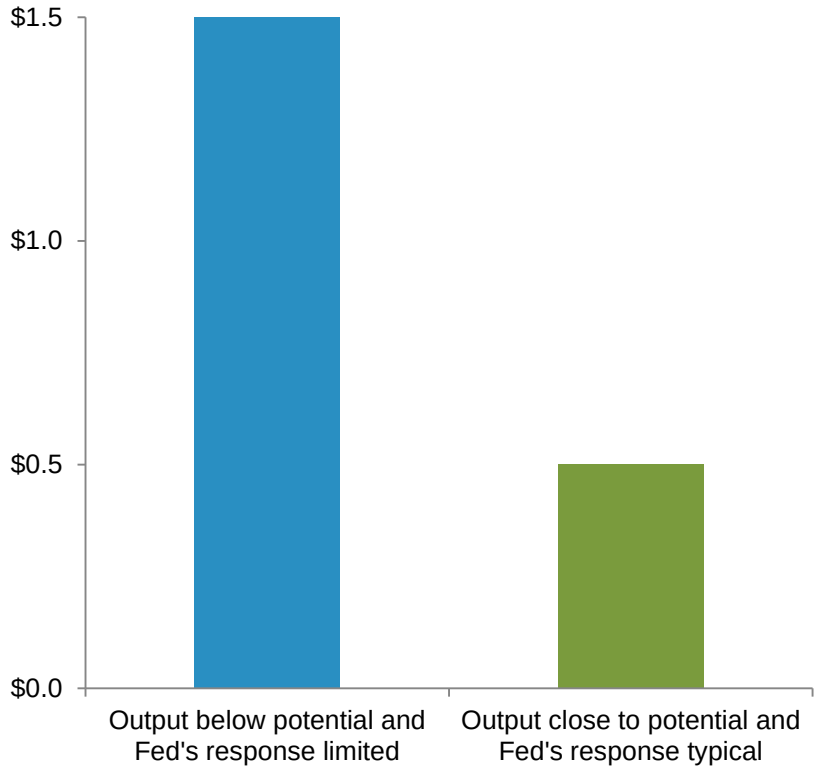


Fund Flows: Mutual funds and ETFs. EME: Emerging Market Equity. EMD: Emerging Market Debt, HY: High Yield. Dotted line estimates future central bank assets: Fed to roll-off balance sheet assets by lesser of stated caps or total bonds maturing each month. ECB to begin tapering in January 2018 to EUR40B of monthly purchases in 1H 2018 and EUR20B in 2H 2018. BOJ to purchase at annualized rate of JPY 60T. 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 8/31/17.

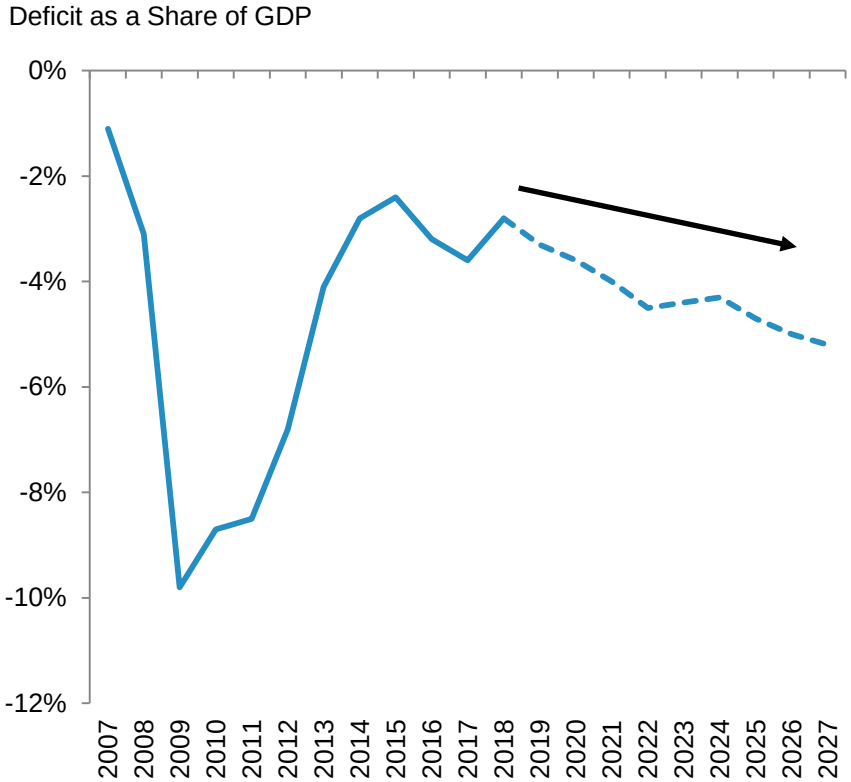
Fiscal Policy Is Supportive of Growth, but Upside Is Limited

Whether tax legislation is enacted or not, budget deficits are likely to widen in the coming years amid rising entitlement spending. Hopes for tax-cut legislation represent a potential upside surprise for corporate earnings, but cyclically may do more to boost inflation than growth. The stimulus growth multiplier tends to be higher when there is a large amount of economic slack and monetary policy is easing (unlike today).

Impact of $1 Fiscal Stimulus Boost over Next Two Years



U.S. Fiscal Deficit

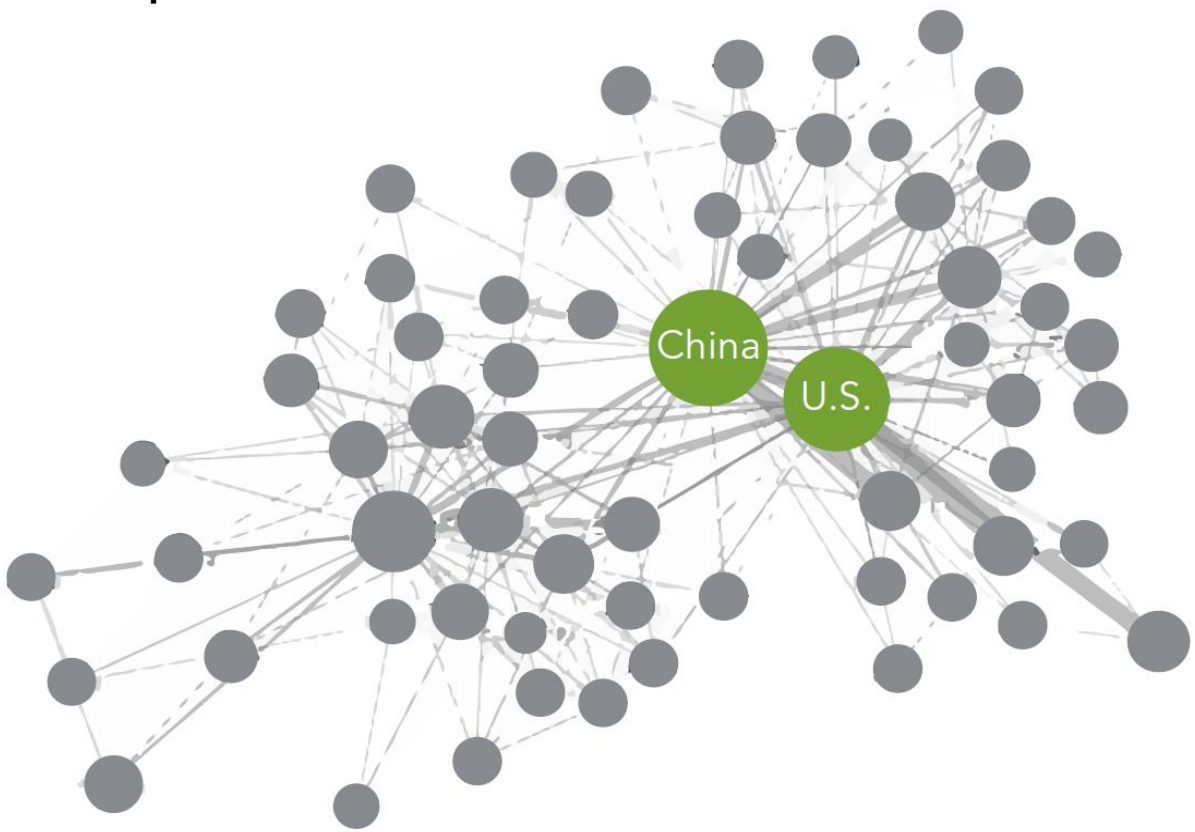


LEFT: Source: Congressional Budget Office, Fidelity Investments (AART), as of 2/28/15. **RIGHT:** Dashed line represents CBO projections.
Source: Congressional Budget Office, Haver Analytics, Fidelity Investments (AART), as of 9/30/17.

Geopolitical Risk: Highest if China and U.S. Tensions Rise

China and the U.S. are not only the world's two largest economies, but they are also the most central to the global trade network. Rising tensions between the U.S. and China would represent a major risk to the global economy, even if the source of the tensions originates in the security (and not trade) side of the relationship. For instance, escalation in the Korean peninsula represents a potential catalyst for meaningful market risk.

Global Trade Interdependence



The size of the circles represents total trade. The thickness of lines represents the volume of trade flows. 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 that the global economy is experiencing a synchronized expansion. However, the Board maintains an expectation for higher volatility driven by risks in the monetary policy outlook, and some members believe smaller asset allocation tilts may be warranted at this point in the cycle.

Business Cycle

U.S. between mid- and late-cycle phase

Global economy in synchronized expansion with low recession risk

Upside to global economic momentum may have peaked

Risks

Disconnect between the market's and the Federal Reserve's expectations of tightening

China's policymakers' evolving tightening bias

Asset allocation implications

Less reliable relative asset performance patterns merit smaller cyclical tilts

The possibility of higher volatility underscores the importance of diversification

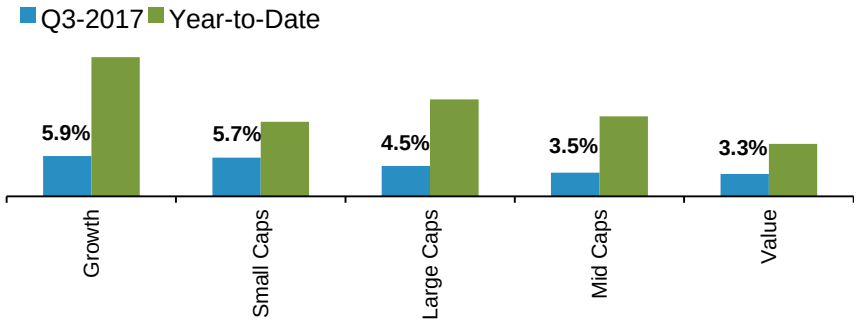
For illustrative purposes only. Source: Fidelity Investments (Asset Allocation Research Team).

Asset Markets

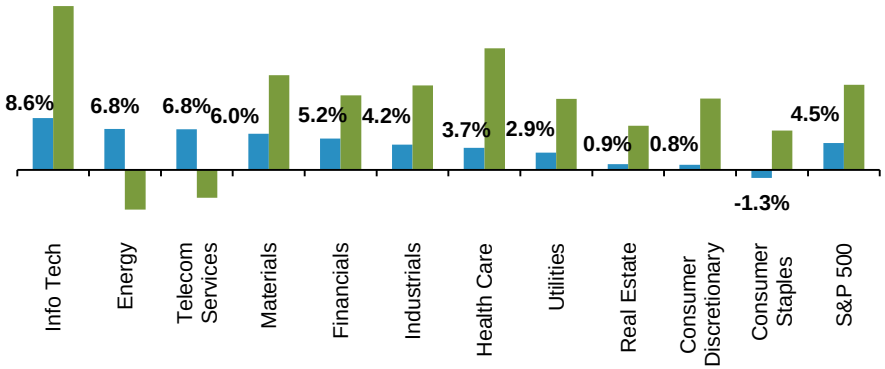
Widespread Gains Led by Growth, Tech, EMs

Q3 was another strong quarter for U.S. and global equity markets. Growth stocks and emerging-market categories were the strongest performers, boosted by their exposure to big gains in the information technology sector. Credit categories continued to lead gains in the bond market, and year-to-date returns were almost universally positive across major asset categories and sectors.

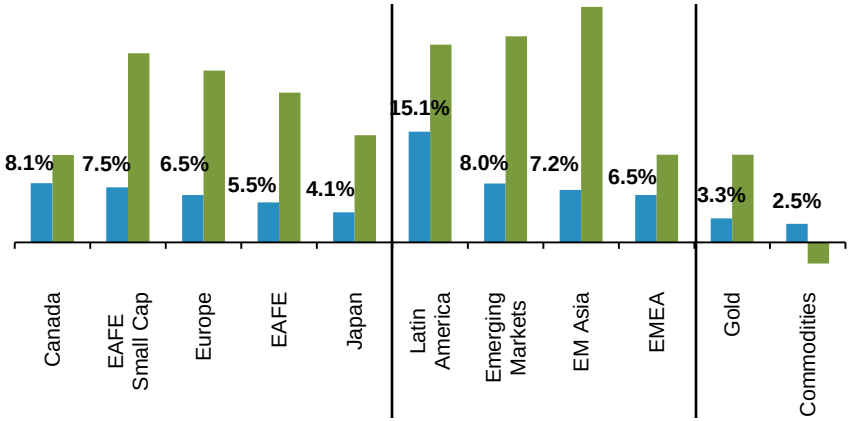
U.S. Equity Styles Total Return



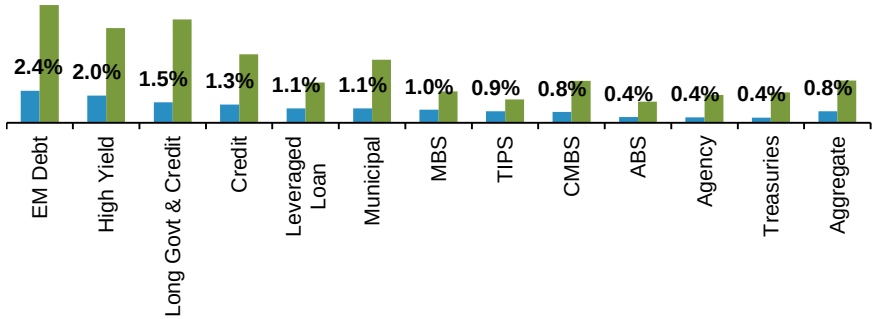
U.S. Equity Sectors Total Return



International Equities Total Return



Fixed Income Total Return

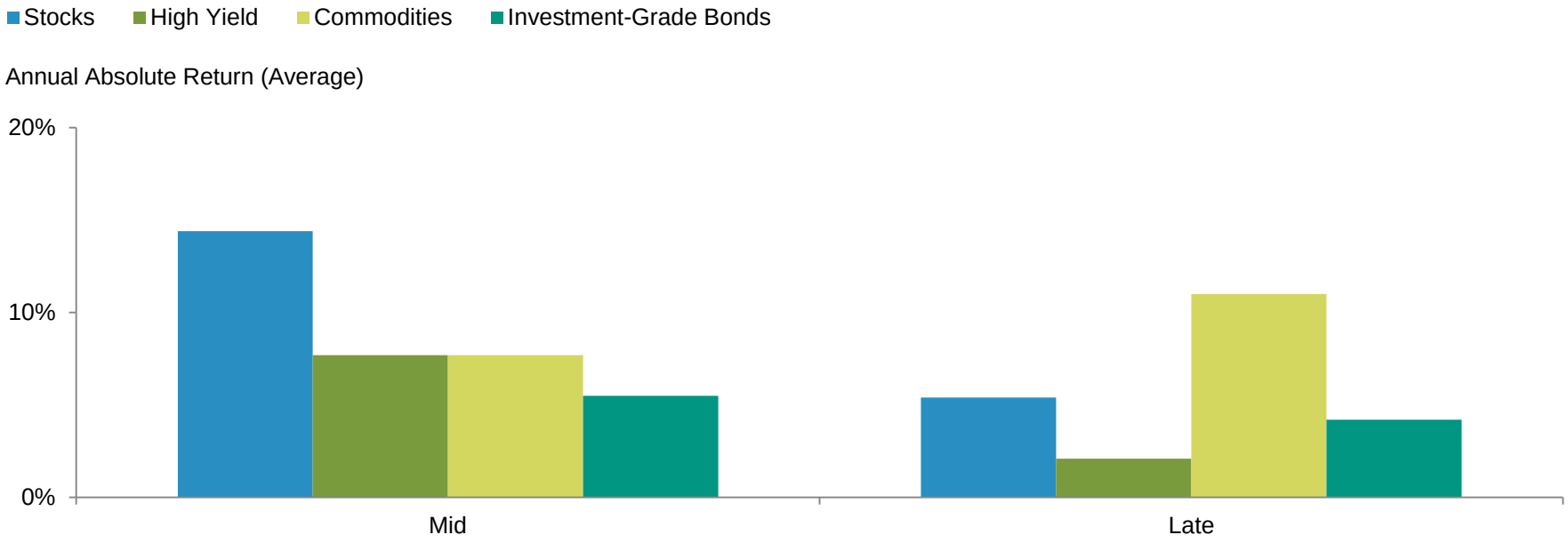


EM: Emerging Markets. For indexes and other important information used to represent above asset categories see Appendix. Past performance is no guarantee of future results. It is not possible to invest directly in an index. All indices are unmanaged. Sector returns represented by S&P 500 sectors. Sector 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 9/30/17.

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. 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)



Mid-Cycle: Strong Asset Class Performance

- Favor economically sensitive assets
- Broad-based gains

Late-Cycle: Mixed Asset Class Performance

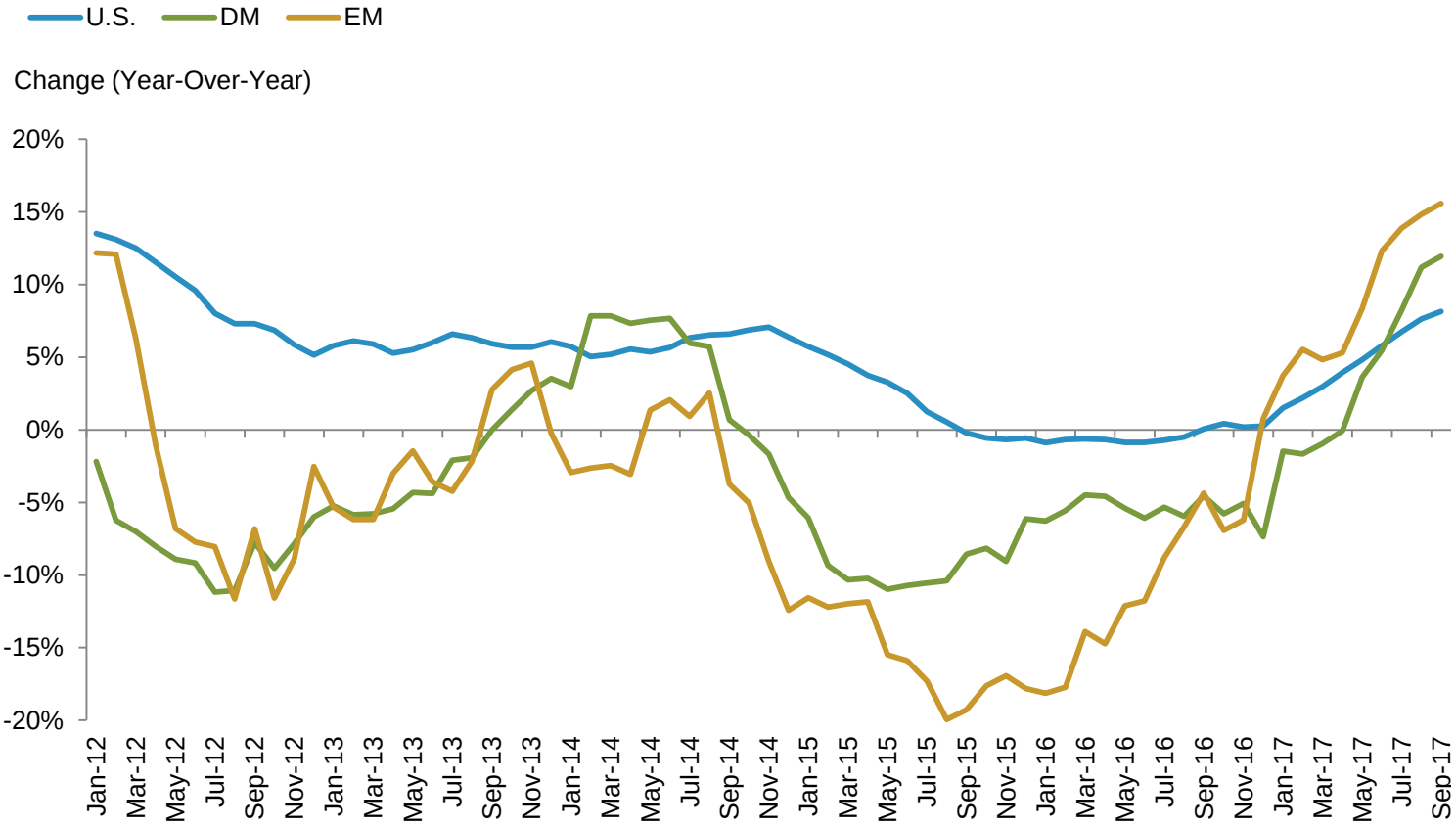
- Favor inflation-resistant assets
- Gains more muted

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.

International Earnings Growth Outpaced U.S.

Following several years of profit recession, international corporate earnings have accelerated for several quarters and have surpassed U.S. corporate profit growth. 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)



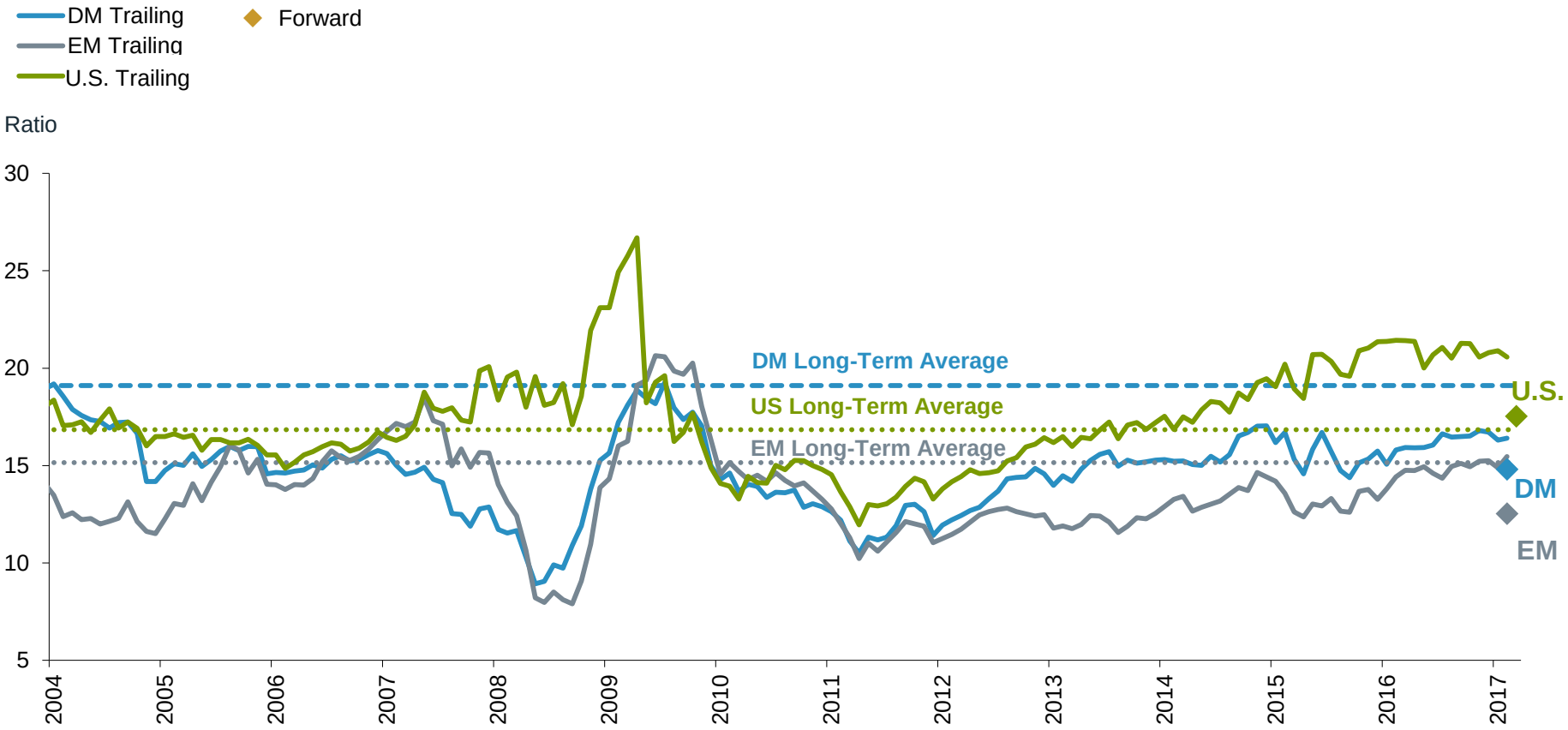
EPS NTM Growth Expectations (%)	
EM	22.4
DM	10.8
US	11.1

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 9/30/17.

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 Markets' P/E Ratios

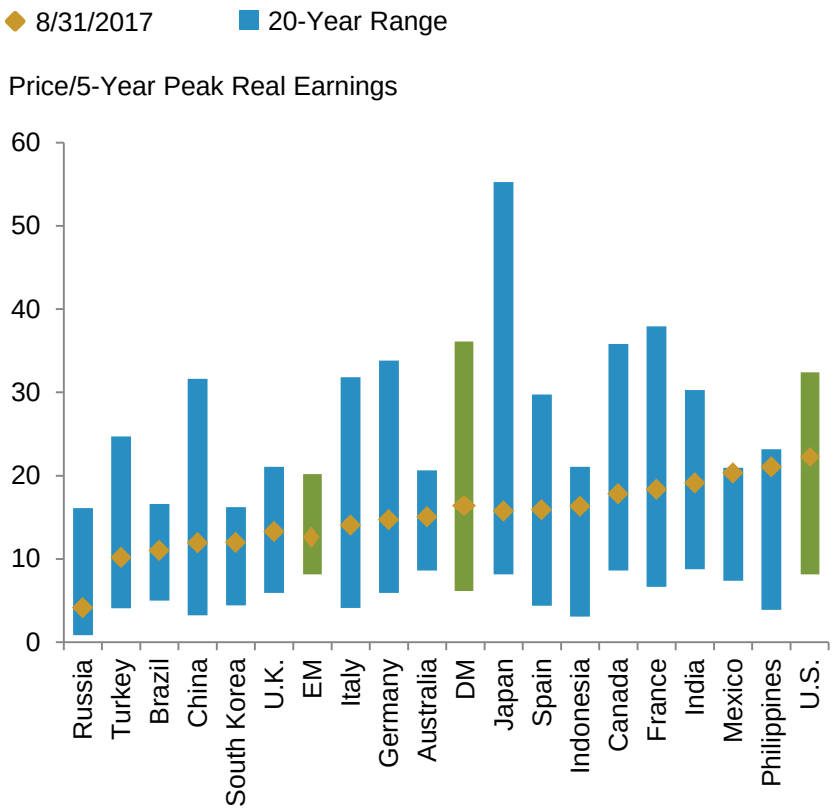


DM: Developed Markets. EM: Emerging Markets. Past performance is no guarantee of future results. You cannot invest directly in an index. Please see appendix for important index information. Price-to-earnings ratio (P/E) = Stock price divided by earnings per share. Also known as the multiple, P/E gives 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 8/31/17.

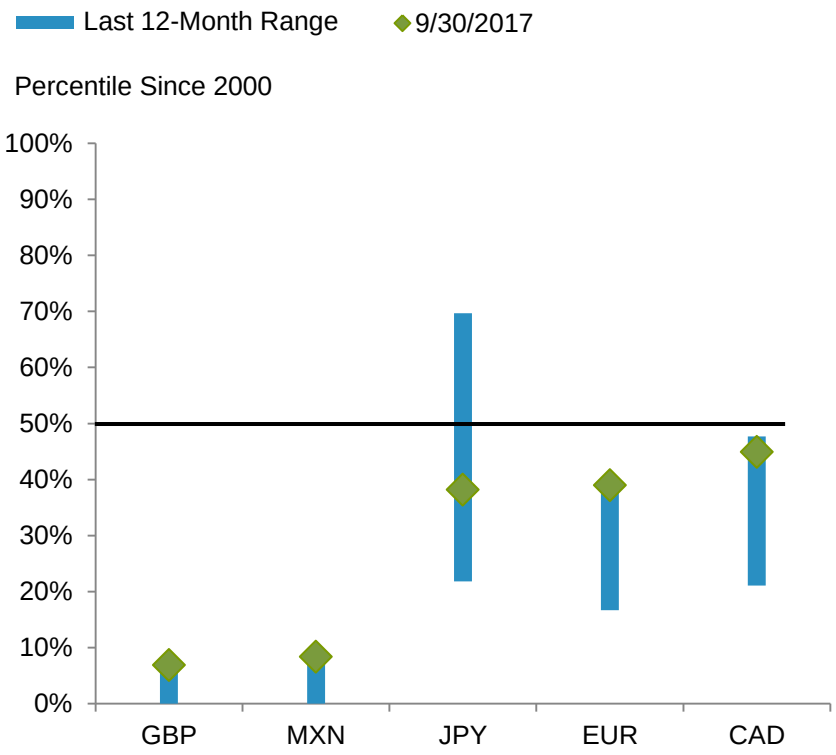
Equity and Currency Valuations Attractive Relative to U.S.

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 in the bottom half 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/Es



Valuation of Major Currencies vs. USD

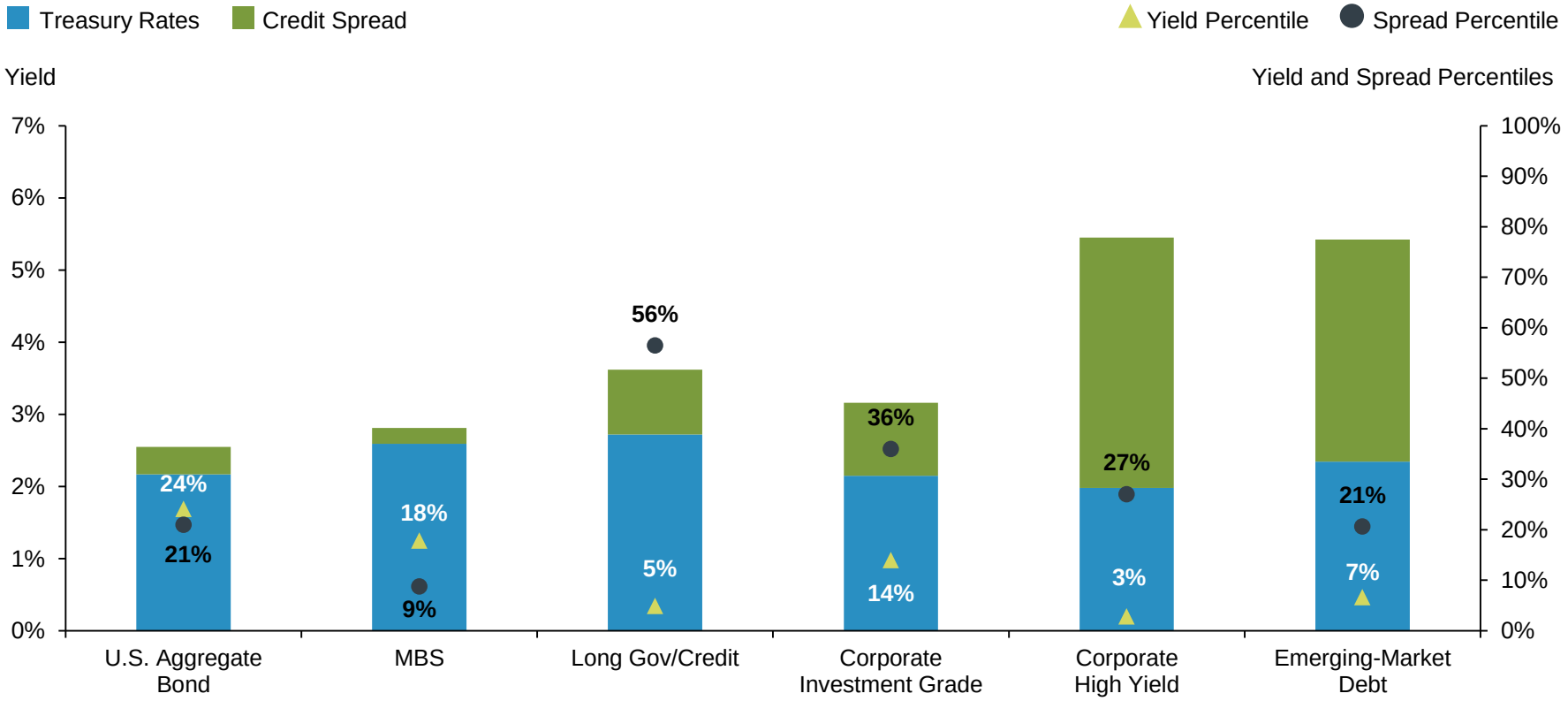


DM: Developed Markets. EM: Emerging Markets. Past performance is no guarantee of future results. It is not possible to invest directly in an index. All indices are unmanaged. Please see appendix for important index information. **LEFT:** Price-to-earnings (P/E) ratio (or multiple): stock price divided 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 8/31/17. **RIGHT:** Source: Federal Reserve Board, Haver Analytics, Fidelity Investments (AART), as of 9/30/17. 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 largely unchanged across most categories during the quarter. Yields remain extremely low relative to history, with high-yield corporate bonds approaching all-time lows. 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 9/30/17.

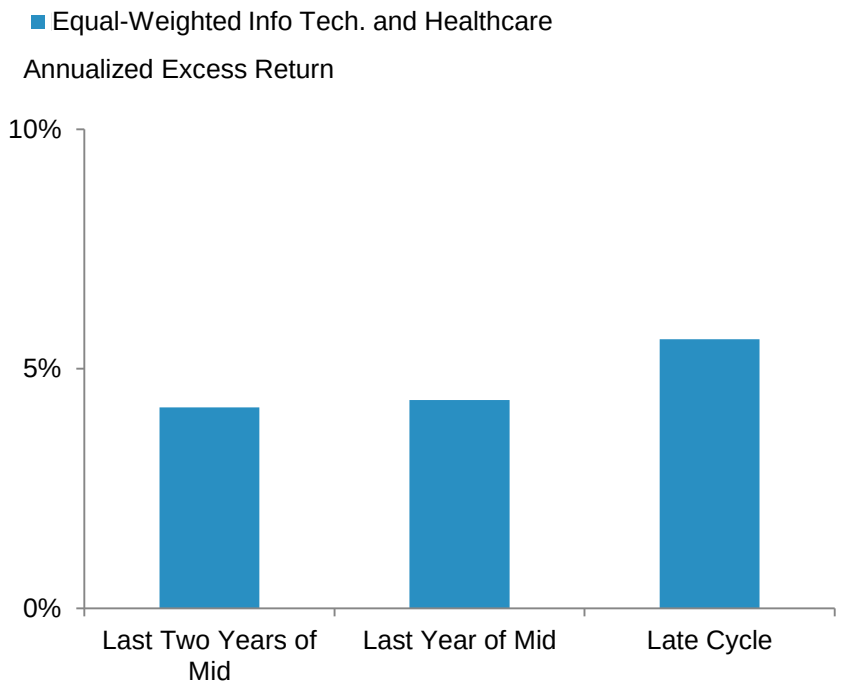
Sector Considerations: Intermediate-Term Cycle View

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



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 9/30/17.

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%	28%	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%	21%	Foreign-Developed Country 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%	20%	Growth 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%	14%	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%	11%	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%	10%	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%	8%	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%	7%	High-Yield Bonds
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%	6%	REITs
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%	3%	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%	-4%	Commodities

*2017 as of 9/30/17. 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 9/30/17.

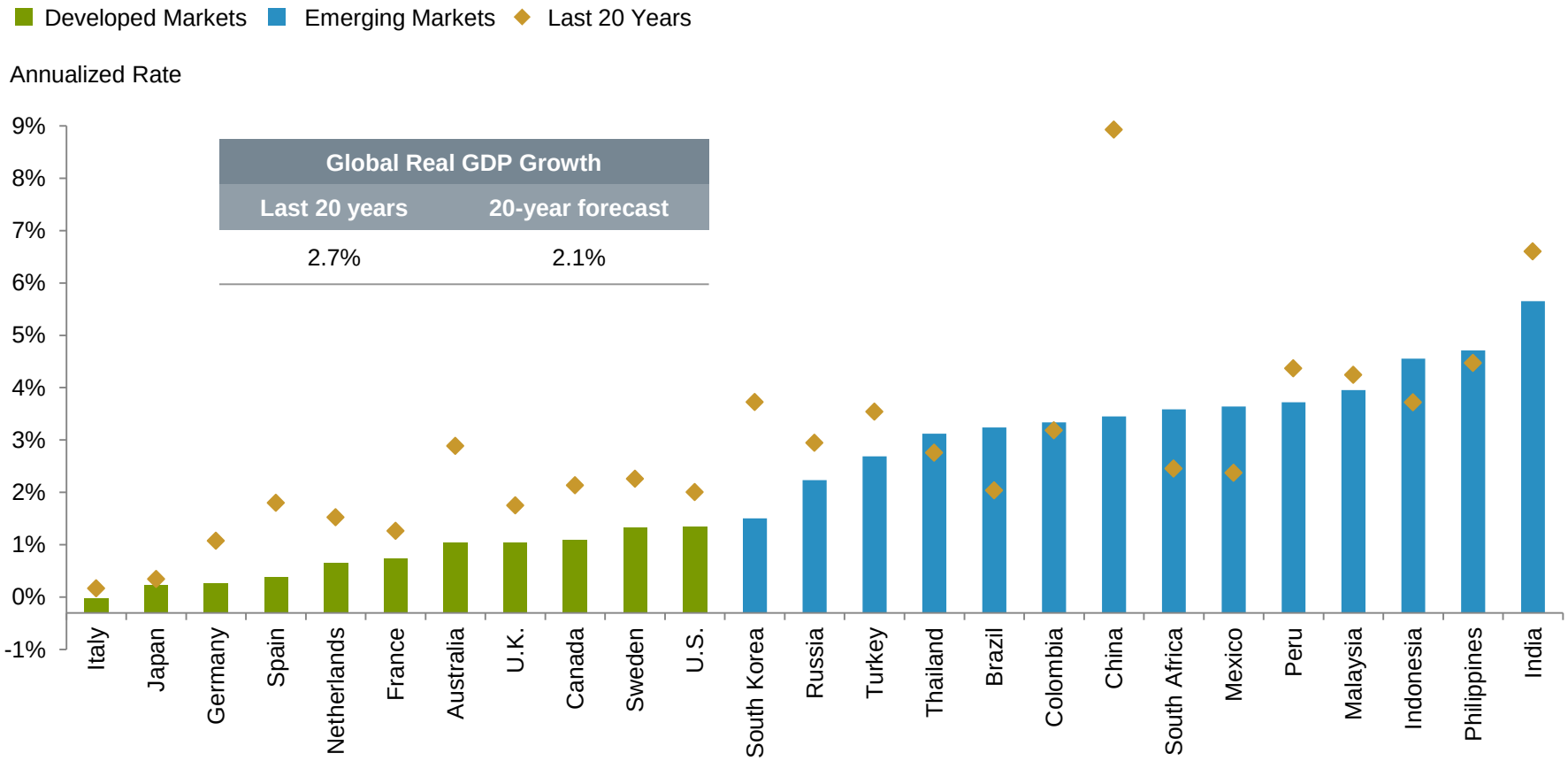
Fidelity INVESTMENTS

Long-Term Themes

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



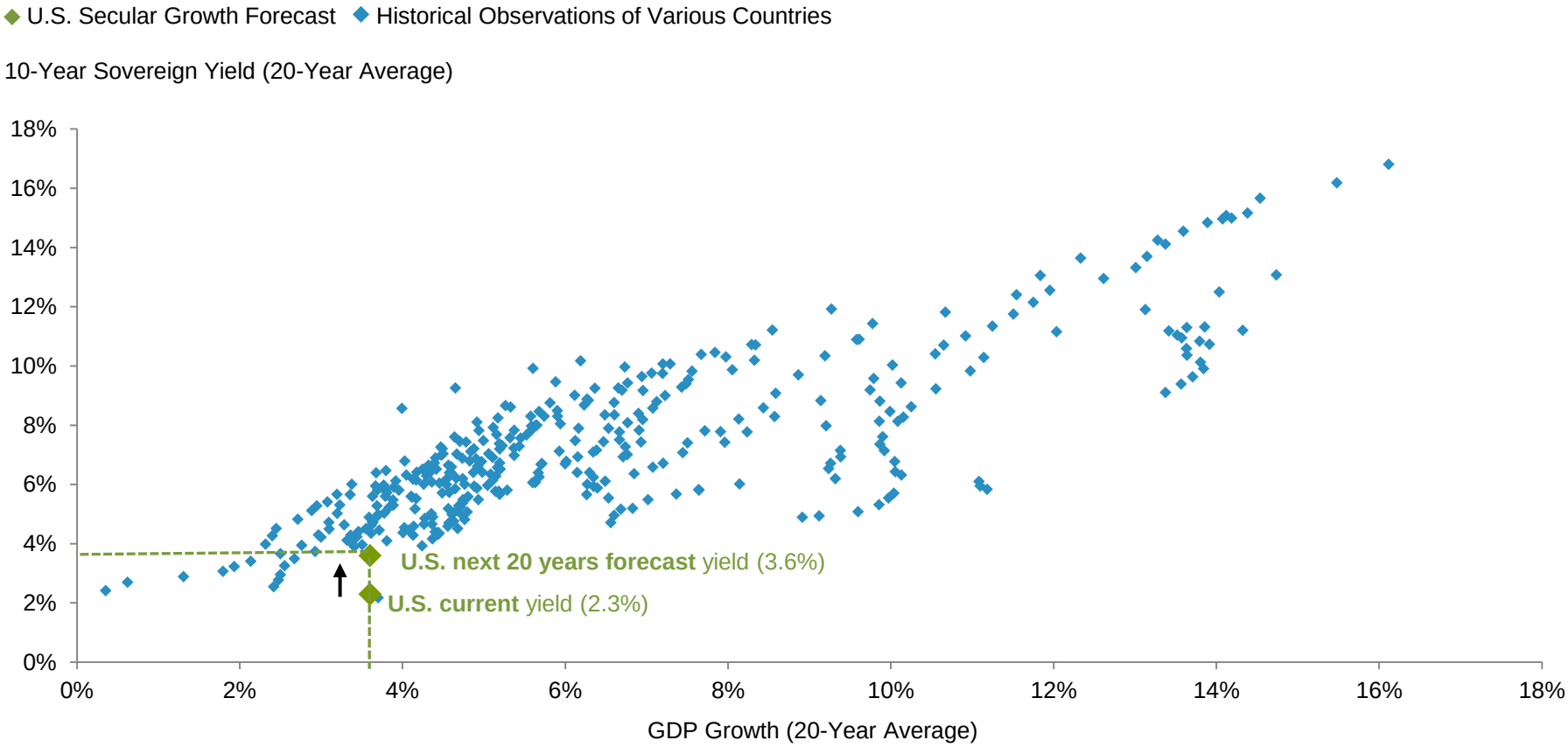
Global Real GDP Growth	
Last 20 years	20-year forecast
2.7%	2.1%

EM: Emerging Markets. GDP: Gross Domestic Product. Source: OECD, Fidelity Investments (AART), as of 5/31/2017.

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

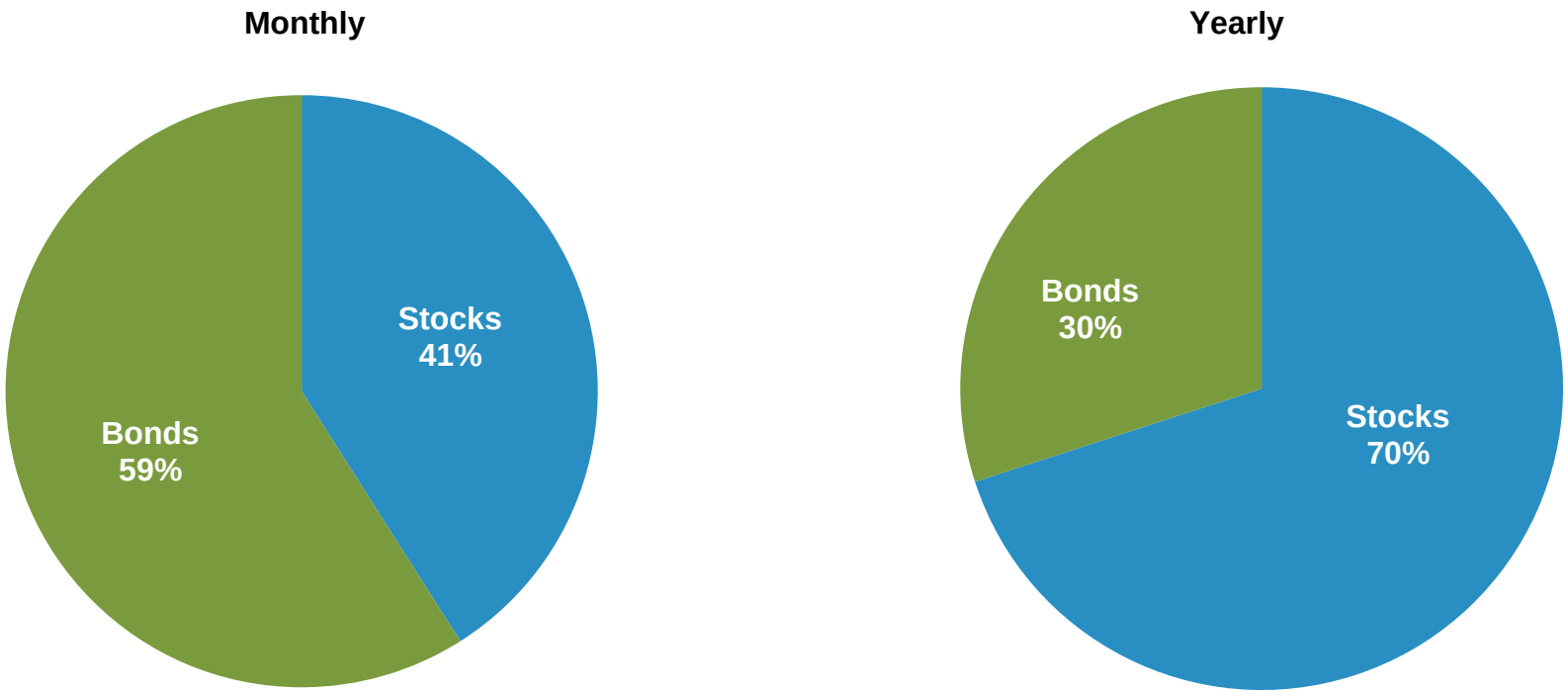


GDP: Gross Domestic Product. Source: Official Country Estimates, Haver Analytics, Fidelity Investments (AART), as of 9/30/17.

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 the 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.

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 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, 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.

Other Indices

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.

816737.1.0

© 2017 FMR LLC. All rights reserved.