

Third Quarter 2015 | QUARTERLY MARKET UPDATE



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## PRIMARY CONTRIBUTORS

**Lisa Emsbo-Mattingly**

*Director of Asset Allocation Research*

**Dirk Hofschire, CFA**

*SVP, Asset Allocation Research*

**Jake Weinstein, CFA**

*Senior Analyst, Asset Allocation Research*

**Austin Litvak**

*Senior Analyst, Asset Allocation Research*

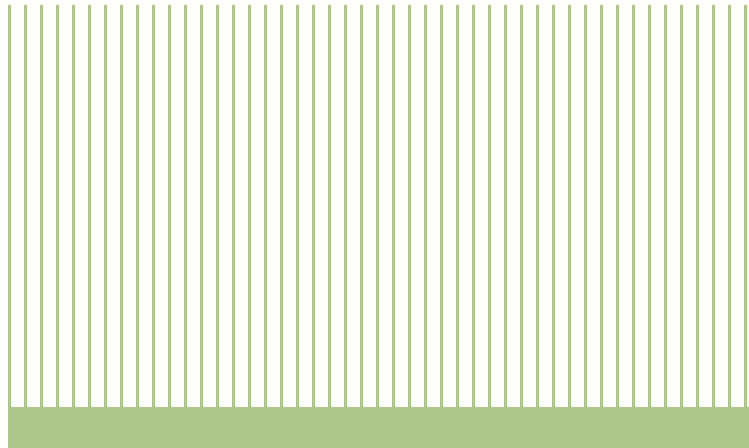
**Caitlin Dourney**

*Analyst, Asset Allocation Research*

This report is a product of Fidelity's Asset Allocation Research Team (AART), with contributions from throughout Fidelity's asset management organization. AART conducts economic, fundamental, and quantitative research to develop asset allocation recommendations for Fidelity's portfolio managers and investment teams. AART is responsible for analyzing and synthesizing investment perspectives across Fidelity's asset management unit to generate insights on macroeconomic and financial market trends and their implications for asset allocation.



## Market Summary



# Overview: Crosswinds Amid Rise in Global Bond Yields

Uneven global economic progress mollified deflationary fears, pushed up bond yields, and resulted in flattish results across most major asset classes. We continue to expect a moderately benign environment of modest cyclical improvement led by developed economies, though higher market volatility is likely and inflationary and deflationary risks remain.

## Q2 2015 TRENDS

### MACRO

- Slow global growth, better traction in developed economies than in emerging
  - Steady U.S. and Europe
  - Commodity prices stabilized
  - Deflation pressures ebbed; still-low inflation
- Accommodative global monetary policies
- U.S. dollar mixed

### MARKETS

- Upswing in bond yields and volatility
- Lackluster performance across most asset markets

## OUTLOOK Q3 2015

- Continued modest improvement in global economy, led by developed markets
  - U.S. mid-cycle economy sturdy amid bright consumer outlook
  - Europe cyclical trajectory solid, though Greece a near-term risk
- Fed on track for 2015 rate hike; gradual pace expected
- Deflation risk if China struggles to stabilize growth
- Inflation risk if U.S. wage growth takes off

- Favor European equities
- Market volatility likely to increase
- A spike in interest rates remains unlikely
- Oil/commodities slow to recover
- Dollar to remain solid but not uniformly strong

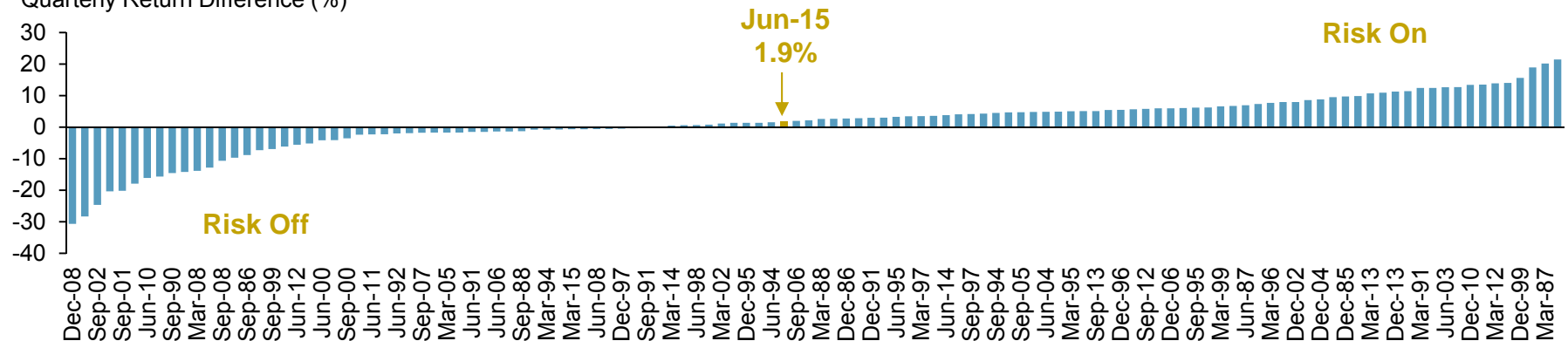
# Lackluster Quarter for Most Assets, Mixed for the Year

Most fixed-income categories suffered losses during Q2 as global bond yields rose, while many equity categories posted meager gains. Non-U.S. equities continued to hold a modest advantage over U.S. categories on a year-to-date basis. The risk meter is placed in the center of historical observations, underscoring a somewhat directionless quarter of performance.

	Q2 2015 (%)	Year-to-Date (%)		Q2 2015 (%)	Year-to-Date (%)
Commodities	4.7	-1.6	Emerging-Market Bonds	-0.3	1.8
Non-U.S. Small-Cap Stocks	4.5	10.4	Gold	-1.3	-2.9
Non-U.S. Developed-Country Stocks	0.8	5.9	U.S. Mid-Cap Stocks	-1.5	2.4
Emerging-Market Stocks	0.8	3.1	Investment-Grade Bonds	-1.7	-0.1
U.S. Small-Cap Stocks	0.4	4.8	U.S. Corporate Bonds	-2.9	-0.8
U.S. Large-Cap Stocks	0.3	1.2	Long Government & Credit Bonds	-7.6	-4.5
High-Yield Bonds	0.0	2.5	Real Estate Stocks	-9.1	-5.4

## Risk Meter: U.S. Large-Cap Stock minus Treasury Bond Returns, 1985–2015

Quarterly 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 – 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 – 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 – Barclays U.S. Treasury Index. Source: Bloomberg Finance L.P., Haver Analytics, Fidelity Investments (AART), as of 6/30/15.



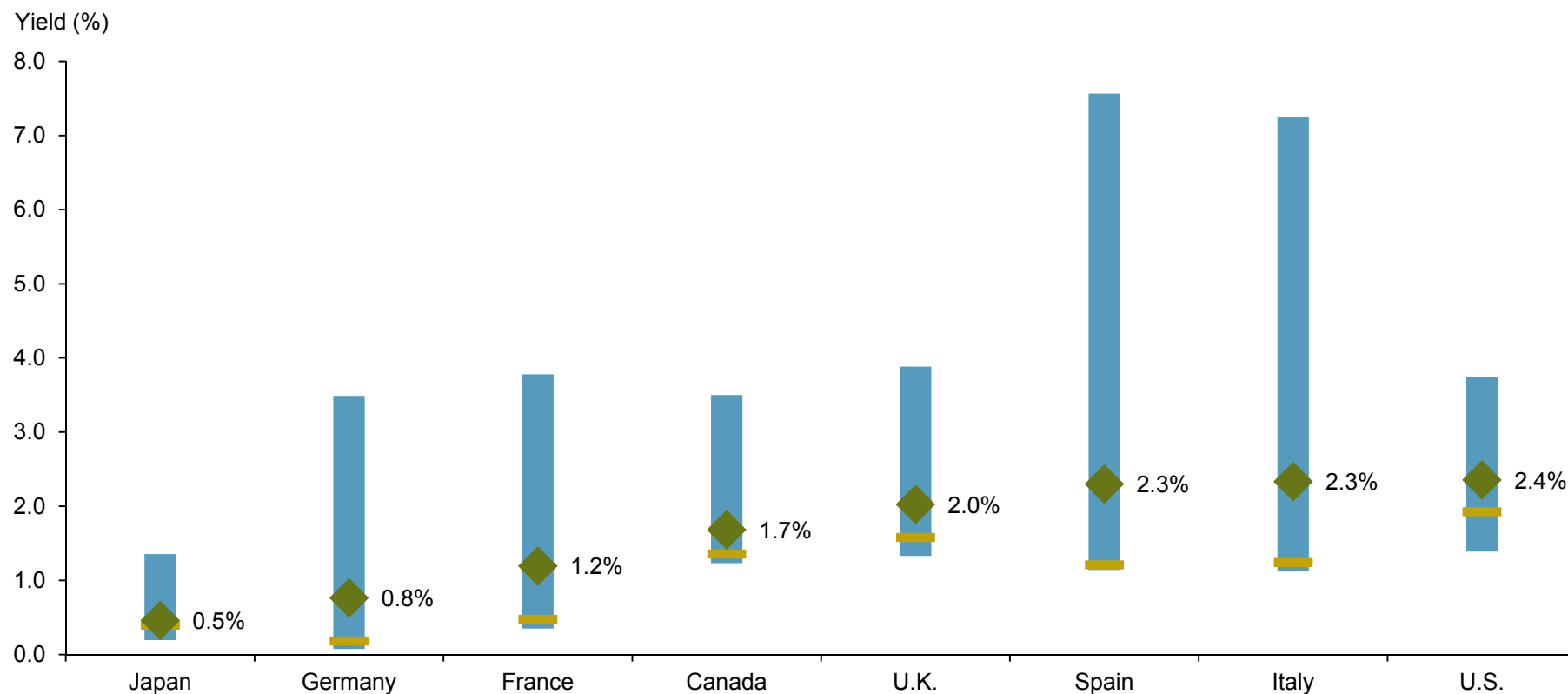
# Global Yields Reverse Course Upwards, Though Still Low

Most developed-country government bond yields rose substantially during Q2 amid the ebbing of deflationary fears. For many European countries the abrupt rise came after yields hit multi-year lows during Q1, though yields remain at the low end of historical ranges for most countries and U.S. yields are still among the highest.

SUMMARY

## 10-Year Government Bond Yields for Major Economies

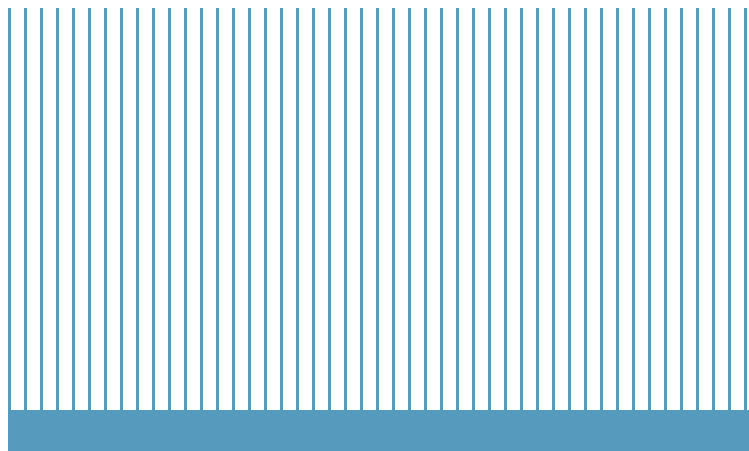
■ 5-year Range ■ Last Quarter ◆ Current



Source: Bloomberg Finance L.P., Fidelity Investments (AART), as of 6/30/15.



## Theme: Secular Trends



# 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).

HORIZONS

**Secular**  
(10–30 years)

**Business Cycle**  
(1–10 years)

**Tactical**  
(1–12 months)

## DYNAMIC ASSET ALLOCATION TIMELINE





# Weaker Demographics to Provide Less Tailwind for Growth

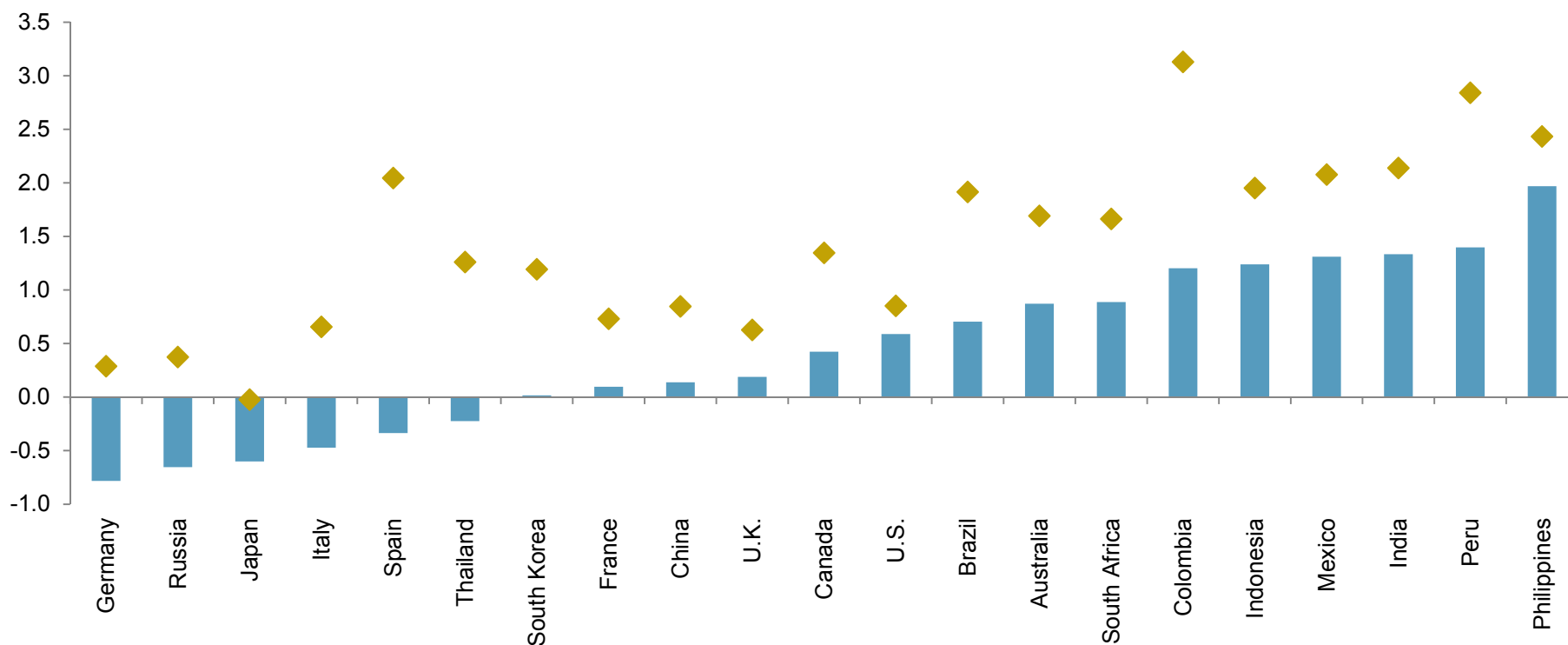
During the next 20 years, we anticipate global growth will be slower than over the past two decades, due largely to deteriorating demographics. Labor-force growth will be slower in almost all countries, although developing economies generally have better demographic profiles while aging populations will weigh heavily on many advanced economies.

THEME

## Labor Force Growth

■ 2015-2034 ◆ 1995-2014

Annualized Change (%)

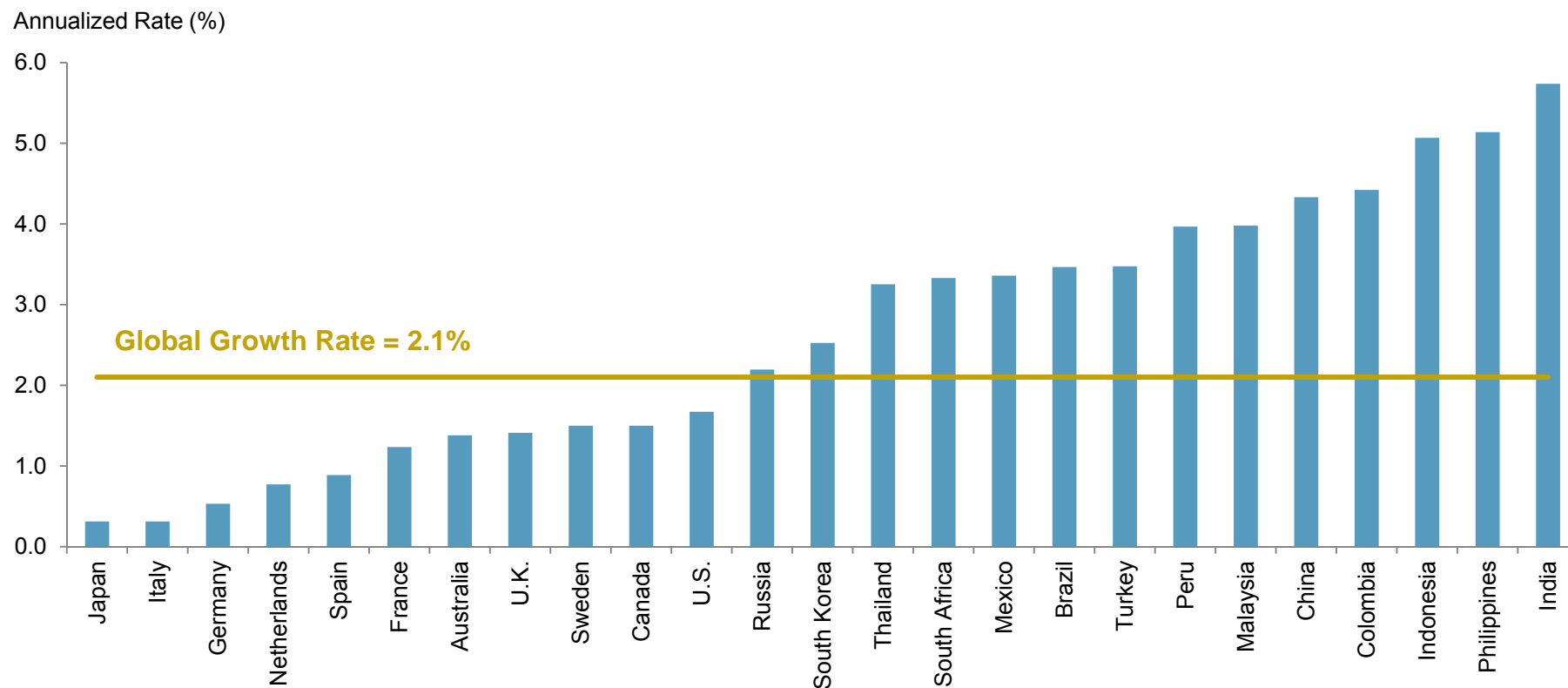


# Slower Global GDP Growth, with EMs in the Lead

Using projections for 40 countries within the MSCI All Country World equity index, we forecast global GDP growth of 2.1% annually over the next 20 years, compared with 2.7% averaged during the past two decades. Emerging markets will generally experience a faster pace of growth relative to developed countries.

THEME

## Real GDP Growth Forecast, 2015–2034



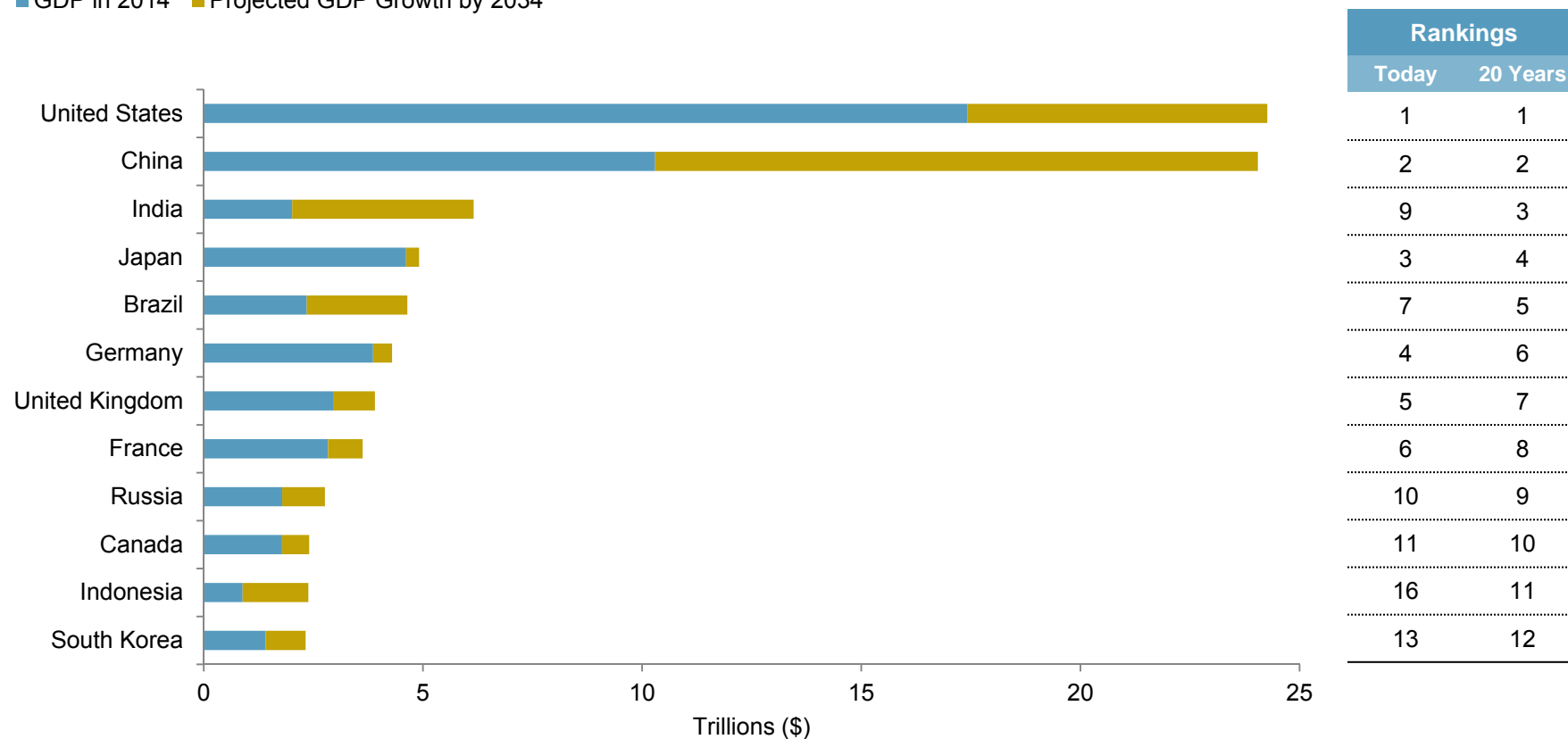
# Emerging Markets To Increase Share of World Economy

We project that faster growth in developing economies will lead to their accounting for about half of global GDP by 2034, compared with about one-third in 2014, and under one-quarter in 1994. Three of the world's largest economies will be emerging markets compared to one today. The U.S. will remain the largest economy with annualized growth of roughly 1.7%.

THEME

## World's Largest Economies

■ GDP in 2014 ■ Projected GDP Growth by 2034



GDP: Gross domestic product. GDP is in 2010 U.S. dollars. Source: Haver Analytics, Fidelity Investments (AART), as of 12/31/14.

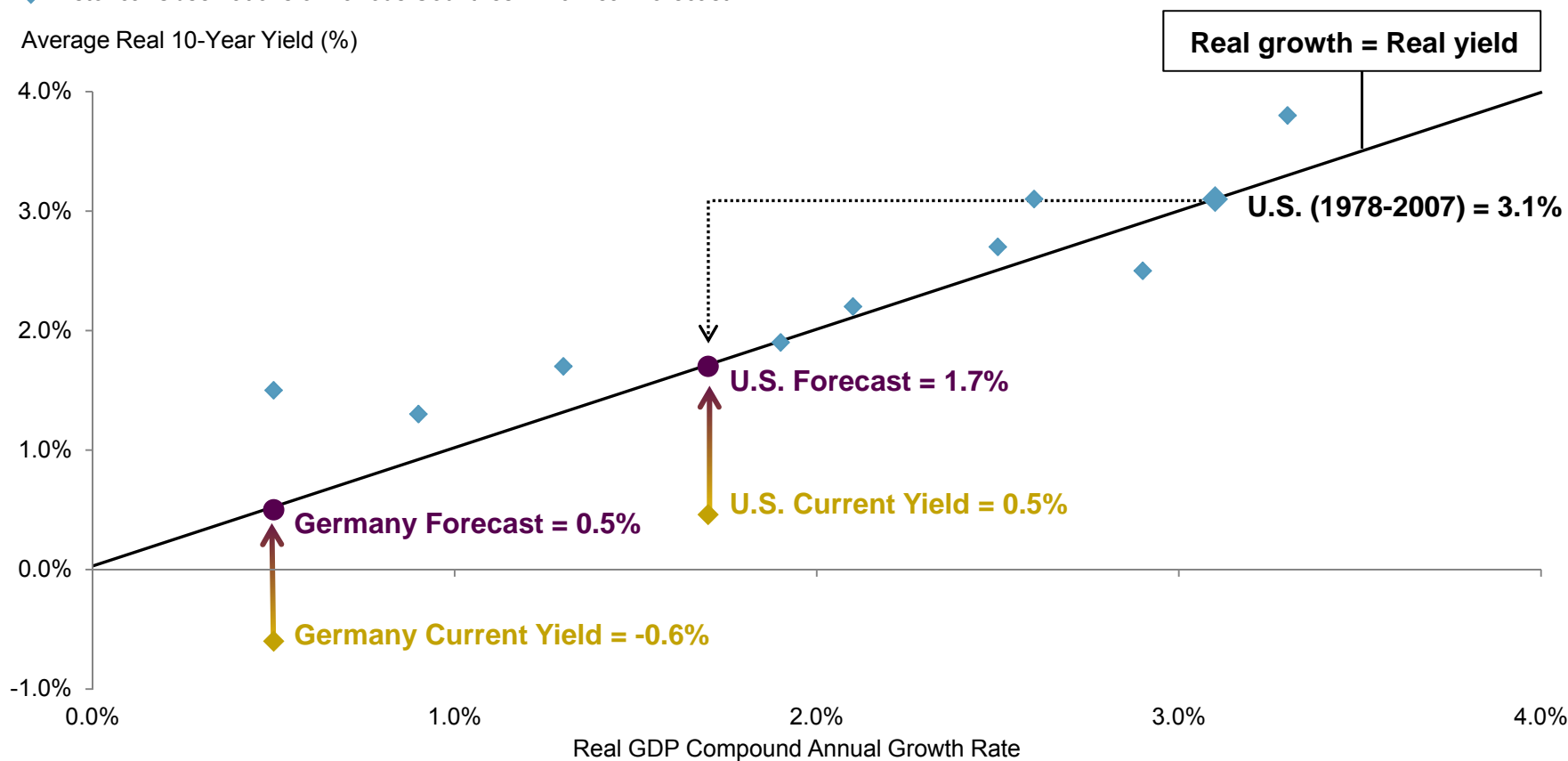
# Bond Yield Forecast: Higher Than Now, Lower Than History

Over long periods of time, GDP growth has a tight positive relationship with long-term government bond yields, with real (inflation-adjusted) yields generally averaging the same as real rates of growth. As a result, we expect U.S. yields will rise over time to average closer to our 1.7% GDP forecast, but this level will be significantly lower than the average in prior decades.

THEME

## Government Real Yields and Real GDP Growth

◆ Historical Observations of Various Countries ● 20-Year Forecast



Real: inflation-adjusted. The average real 10-year yield and real GDP compound annual growth rates are calculated since the inception dates of the inflation-adjusted government securities for the following countries: United Kingdom (Jan. 1985), Australia (Jun. 1985), Canada (Nov. 1991), United States (Apr. 1998), and Japan (Apr. 2004). Source: Country statistical organizations, Haver Analytics, Fidelity Investments (AART), as of 6/30/15.

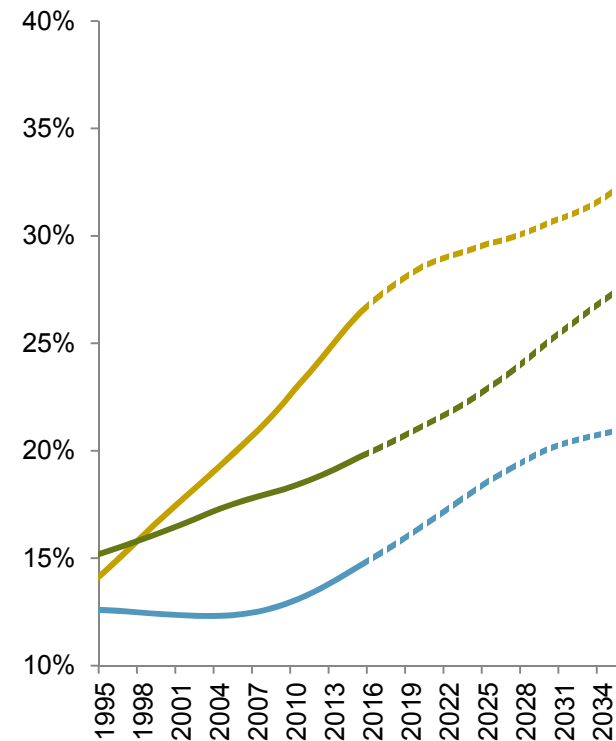
# Labor Markets: Fewer Jobs Needed, Margins Remain High

Labor-force participation rates are much lower for senior citizens, who are making up an increasingly large share of the population in many economies. Less job creation will be needed to maintain unemployment levels and potentially stoke wage inflation. Nevertheless, companies may tap the global labor supply and technology to maintain historically high profit margins.

## Share of Population 65+

Japan Eurozone U.S.

Share of Total Population

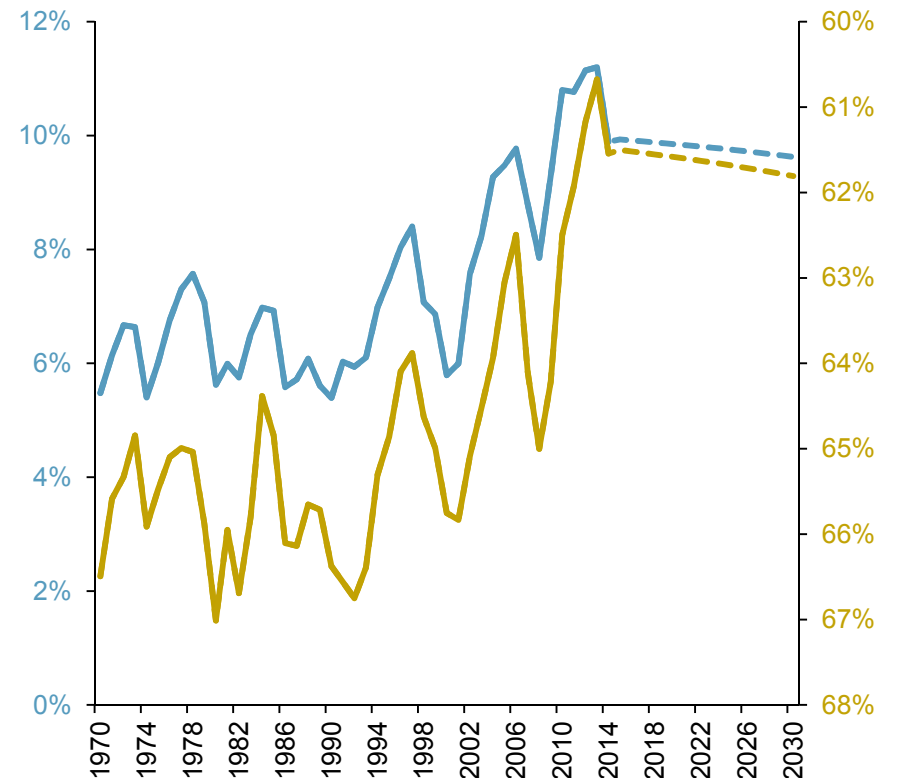


Current Labor Force Participation Rates	
65+	All Adults
21%	59%
4%	57%
19%	63%

## Profit Margins vs. Labor's Share of Income

Gross National Income  
Profit Margin (%)

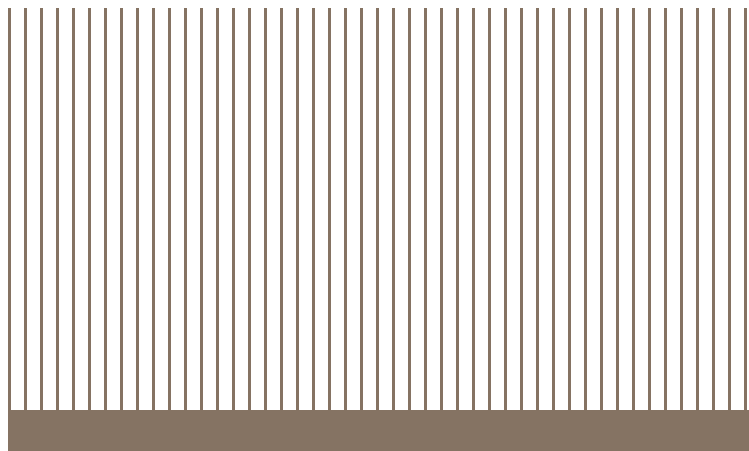
Compensation Share of Gross  
National Income, Inverted (%)



LEFT: Source: United Nations (data downloaded March 2015), Fidelity Investments (AART), as of 12/31/14. RIGHT: Dashed lines represent Fidelity Investments' (AART) outlook. Source: Bureau of Economic Analysis, Haver Analytics, Fidelity Investments (AART), as of 12/31/14.



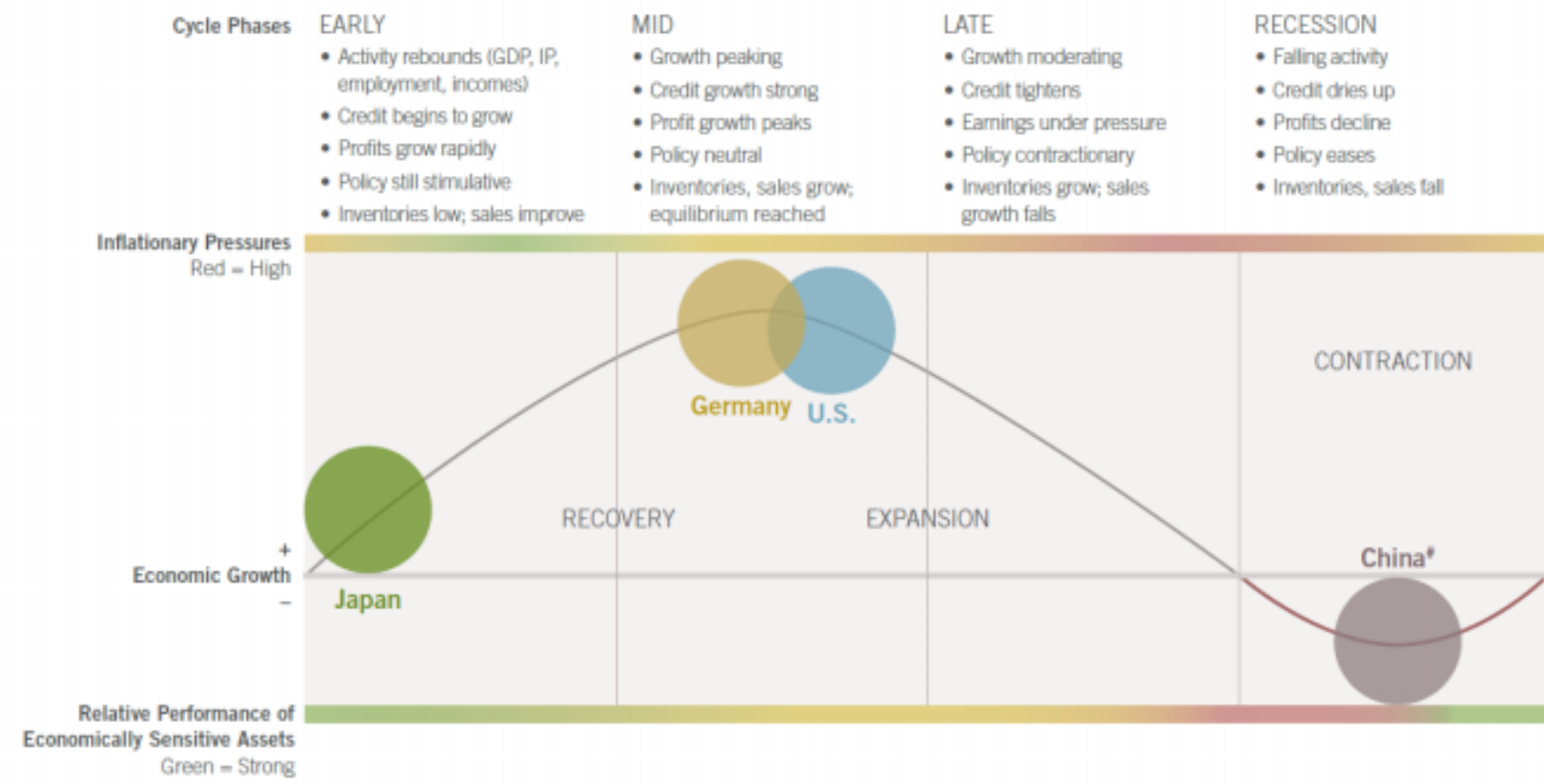
## Economy/Macro Backdrop



# Business Cycle: Modest, Uneven Improvement Led by DMs

The global expansion remains sluggish, but better conditions in several major developed economies underpin a modestly improving outlook. Europe continues to gain traction in its mid-cycle reacceleration, the U.S. is solidly mid-cycle, and Japan has entered a tepid early cycle alongside monetary stimulus and a weaker yen. China slipped into a growth recession.

## Business Cycle Framework



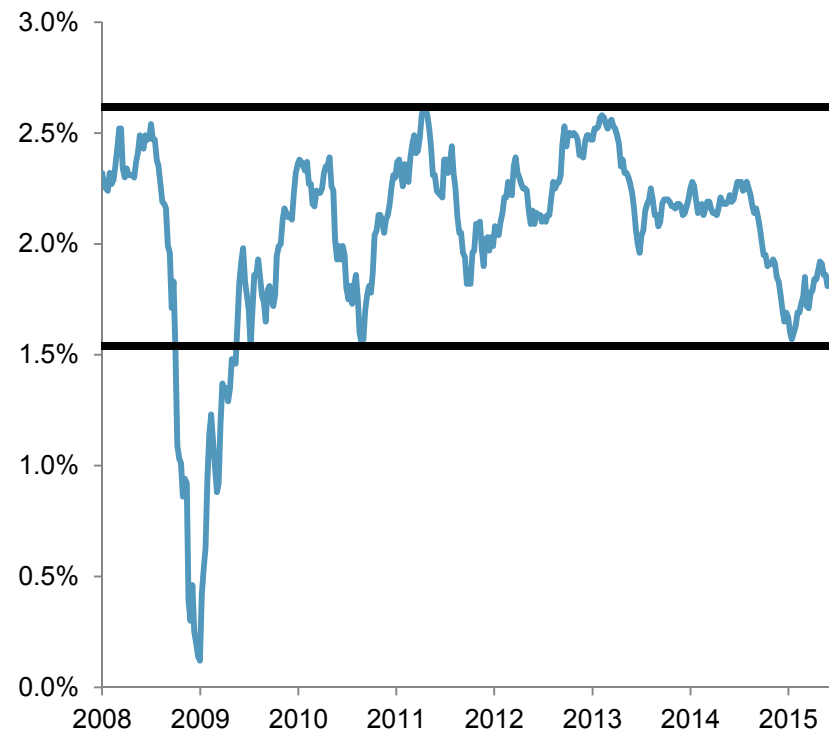
# For developed economies, we use the classic definition of recession, involving an outright contraction in economic activity. For developing economies, such as China, we have adopted a “growth cycle” definition because they tend to exhibit strong trend performance driven by rapid factor accumulation and increases in productivity, and deviation from trend tends to matter most for asset returns. DM: Developed Markets. Source: Fidelity Investments (AART), as of 6/30/15.

# Inflationary vs. Deflationary Forces: Neither Side Winning

The financial crisis stoked fears of extreme scenarios, including an inflation outbreak amid extraordinary monetary policies and a deflationary collapse due to a struggling global economy. Instead, the world has followed a moderate path of range-bound inflation expectations, with developed countries in a mildly reflationary trend while EMs struggle to gain traction.

## U.S. Implied 10-Year Inflation Expectations

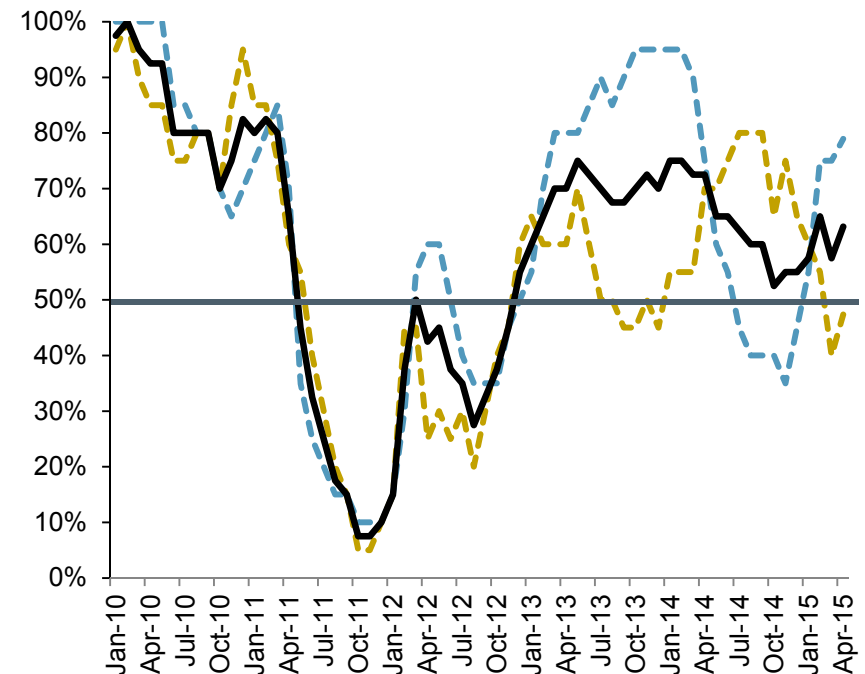
Nominal 10-Year Yields minus TIPS 10-Year Yields (%)



## Leading Economic Indicators Diffusion Indices

— Developed — Emerging — Global

Percent of Economies Rising over Past 6-Months (%)



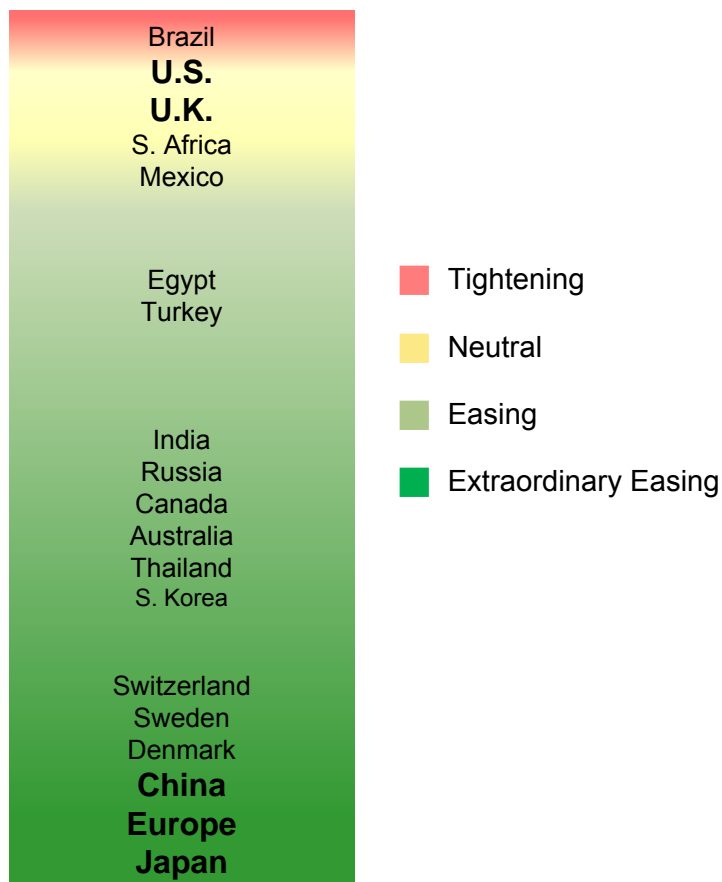
EM: Emerging markets. **LEFT:** TIPS: Treasury Inflation-Protected Securities. Source: Federal Reserve, Haver Analytics, Fidelity Investments (AART), as of 6/30/15. **RIGHT:** Leading economic indicators include the world's 40-largest economies. Source: Organisation for Economic Co-operation and Development (OECD), Foundation for International Business and Economic Research (FIBER), International Monetary Fund, Haver Analytics, Fidelity Investments (AART), as of 4/30/15.



# Reflationary Monetary Policies But Fed Closer to Tightening

Monetary policy remains highly accommodative across much of the world amid weak global demand and deflationary pressures. The expectations of both the Federal Reserve (Fed) and the markets, however, are that the Fed will raise rates by the end of 2015. The market still expects a more gradual tightening path than the Fed has signaled.

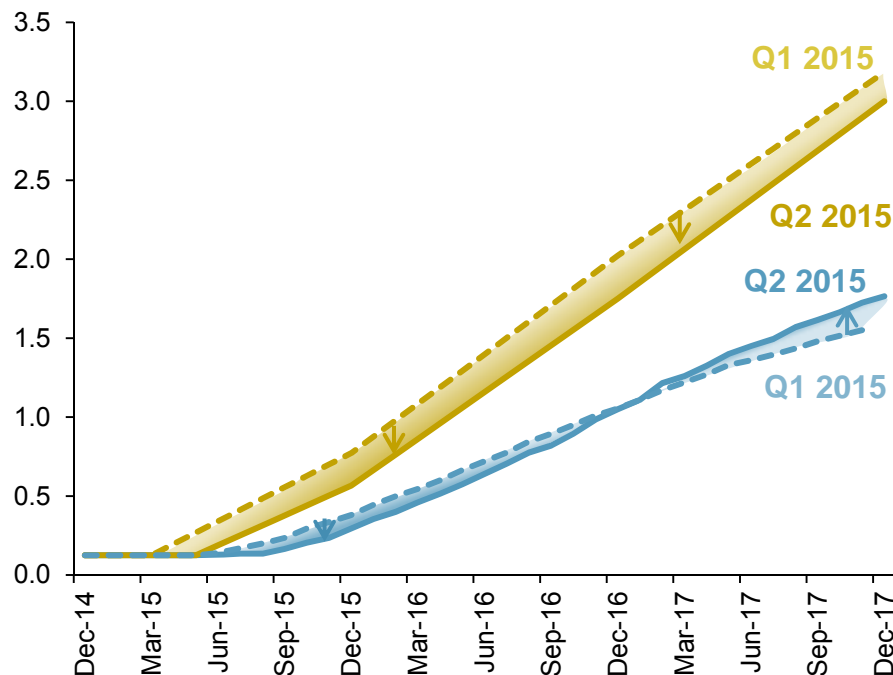
## Global Monetary Policy Easing



## FOMC vs. Market Expectations of Fed Tightening Cycle

Fed Fund Futures Market FOMC

Expected Fed Funds Rate (%)

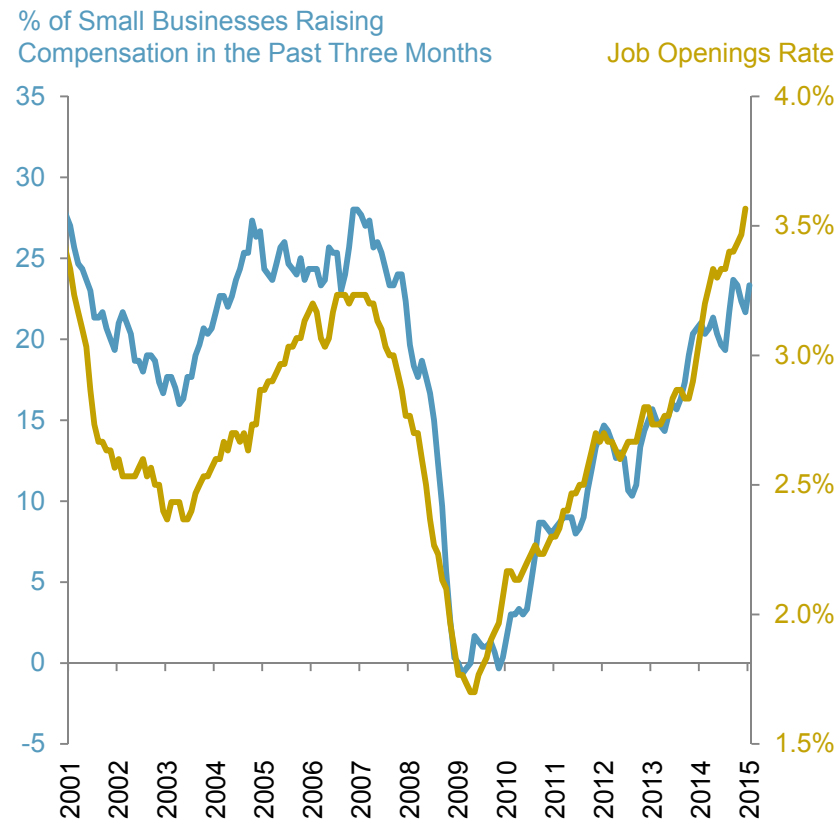


**LEFT:** Source: Haver Analytics, Fidelity Investments (AART), as of 6/30/15. **RIGHT:** Fed: Federal Reserve. FOMC: Federal Open Market Committee. Market fed funds rate hike expectations calculated using daily generic fed funds futures contracts out 36 months. FOMC rate hike expectations calculated using the weighted average of the participants of the Federal Reserve System's appropriate pace of policy firming survey results. Source: Federal Reserve, Bloomberg Finance L.P., Fidelity Investments (AART), as of 6/30/15.

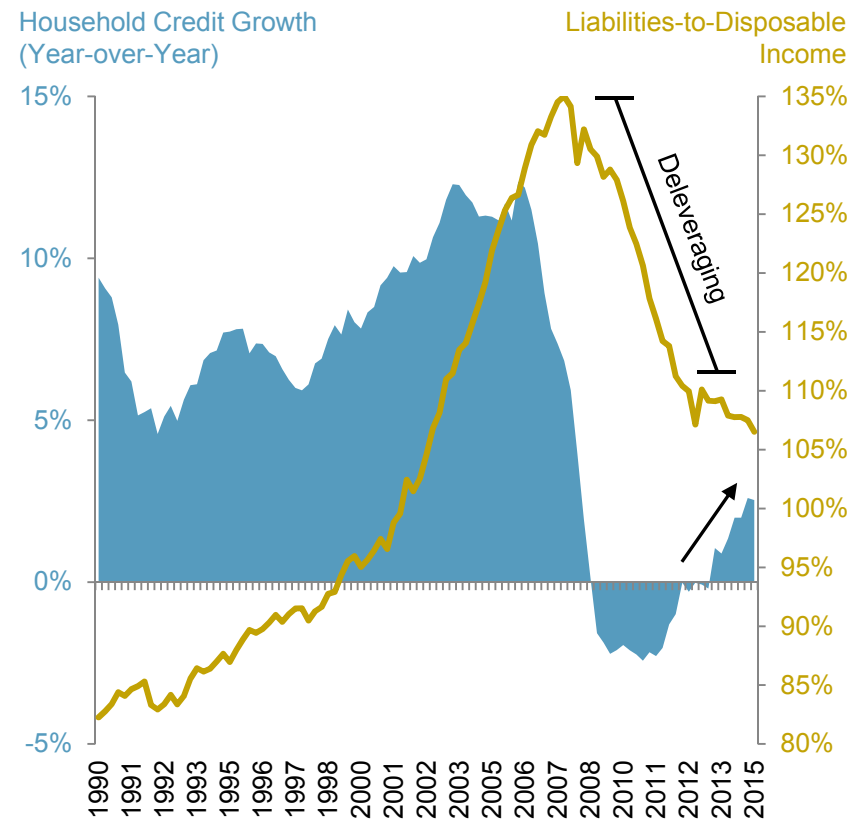
# U.S. Labor Markets and Households Continue to Improve

U.S. labor markets continue to tighten, with the highest rate of job openings in more than a decade and more small businesses raising worker compensation. Household debt-to-income ratios have stabilized and credit has begun to grow again, suggesting the worst of deleveraging has already occurred and that U.S. consumers are on a solid trajectory.

## Compensation vs. Job Openings



## Household Debt and Credit Growth

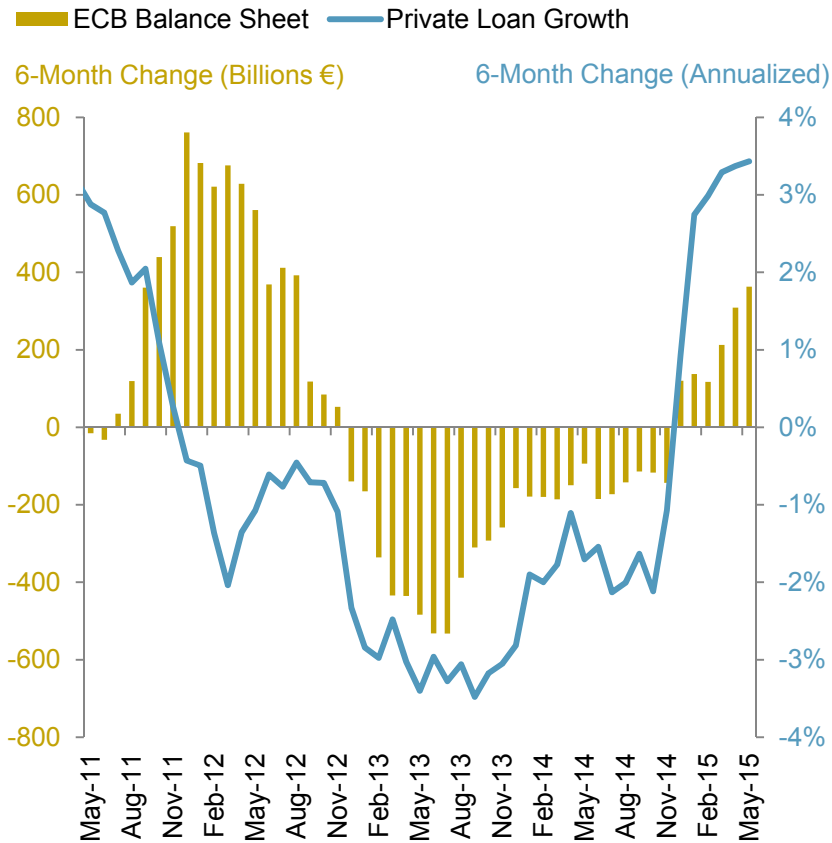


**LEFT:** Data shown as 3-month averages. Source: National Federation of Independent Business (NFIB), Bureau of Labor Statistics, Haver Analytics, Fidelity Investments (AART), as of 4/30/15. **RIGHT:** Source: Federal Reserve Board, Haver Analytics, Fidelity Investments (AART), as of 3/31/15.

# European Expansion Intact; Greece Not a Game Changer

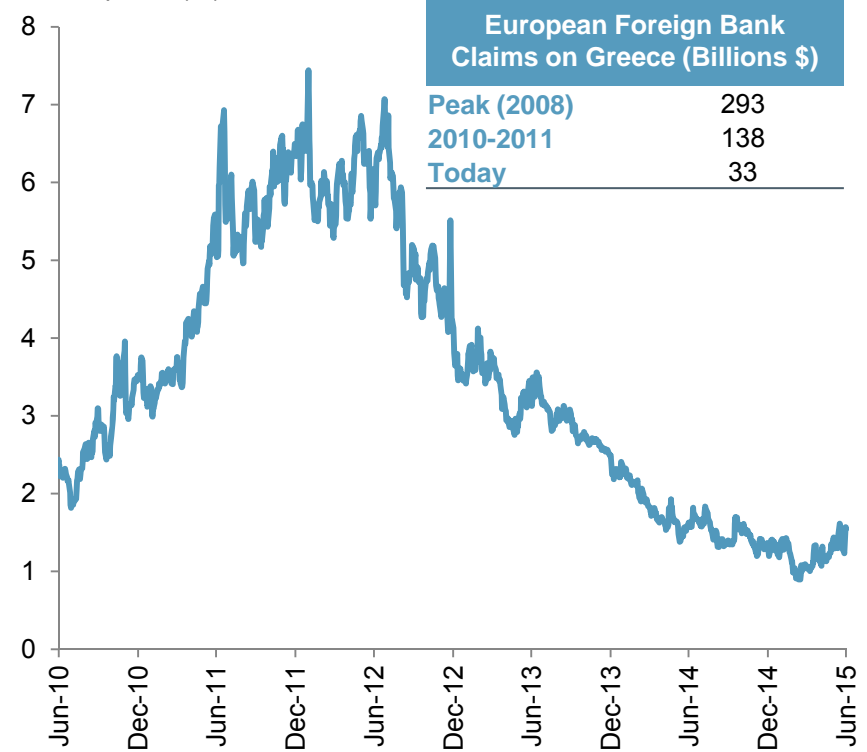
The eurozone is in a solid mid-cycle expansion, supported by favorable credit conditions, pent-up household demand, and easy monetary policy. Greece represents a near-term risk, but Europe's modest banking exposure to Greece, the ECB's liquidity programs, and stable peripheral bond spreads suggest contagion is unlikely to derail Europe's expansion.

## ECB Balance Sheet vs. Private Loan Growth



## Peripheral Europe Sovereign Yield Spreads (ex-Greece)

Yield Spread (%)



**LEFT:** Source: European Central Bank (ECB), Haver Analytics, Fidelity Investments (AART), as of 5/31/15. **RIGHT:** Nominal average of 10-year Government bond yields of Spain, Italy, Ireland and Portugal less 10-year German bunds. Source: Bloomberg Finance L.P., as of 6/30/15, **TABLE:** Source: Bank for International Settlements, Haver Analytics, Fidelity Investments (AART), as of 12/31/14.

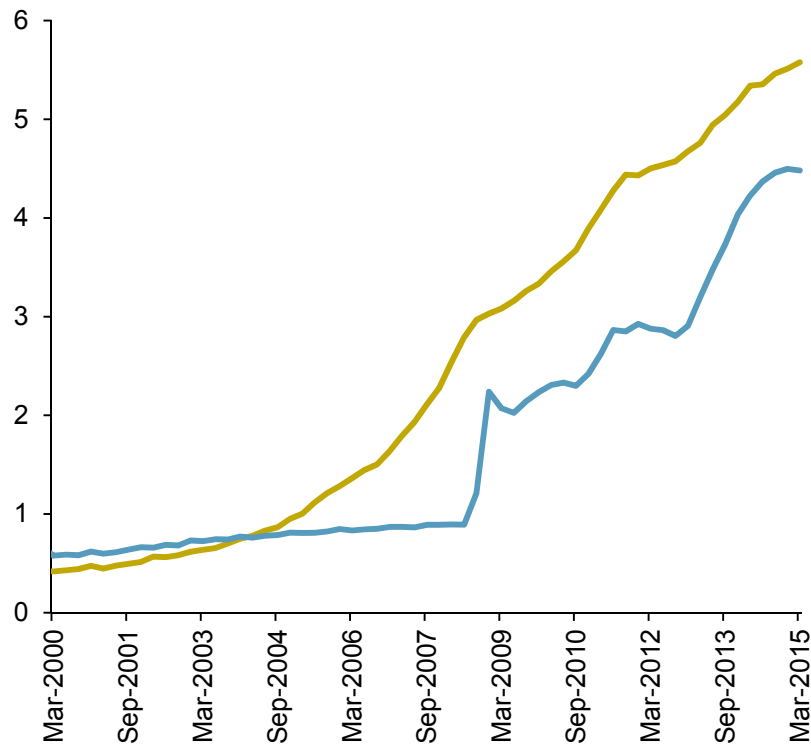
# China: Increasing Stimulus to Battle Deflationary Pressures

A downshift in growth at the end of a cyclical boom has left China with a severe credit overhang and a need for economic restructuring. Monetary policy easing became even more aggressive during Q2 and may help stabilize the near-term outlook, but a more sustainable upturn remains elusive amid industrial overcapacity and declining corporate profitability.

## Central Bank Balance Sheets

— People's Bank of China — Federal Reserve

Total Assets (Trillions, \$)

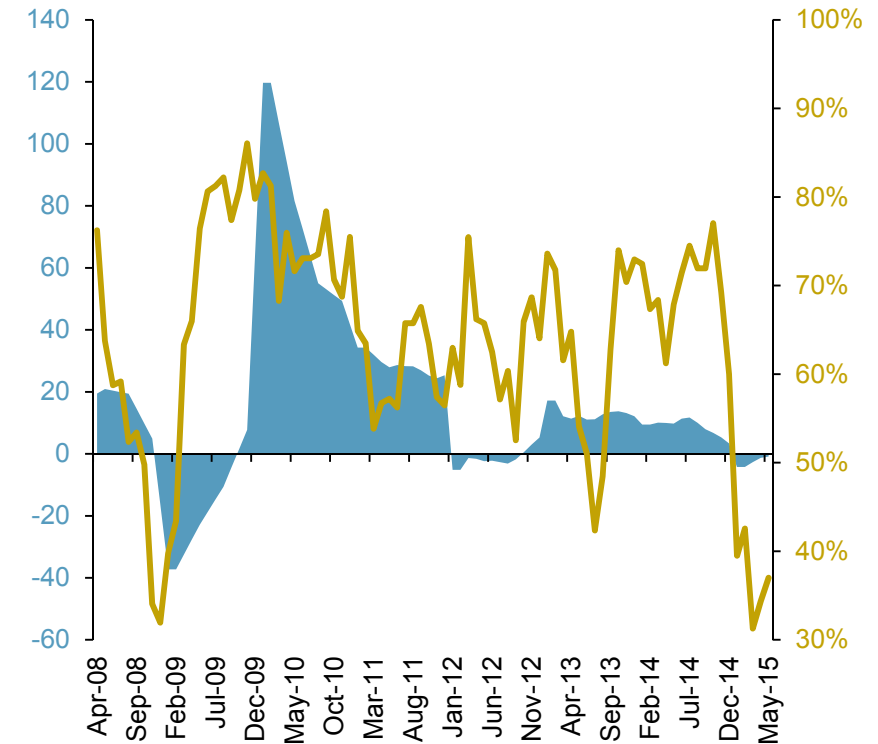


## Industrial Production and Profits

— Industrial Sector Profit Growth — Industrial Production

Year-over-Year (%)

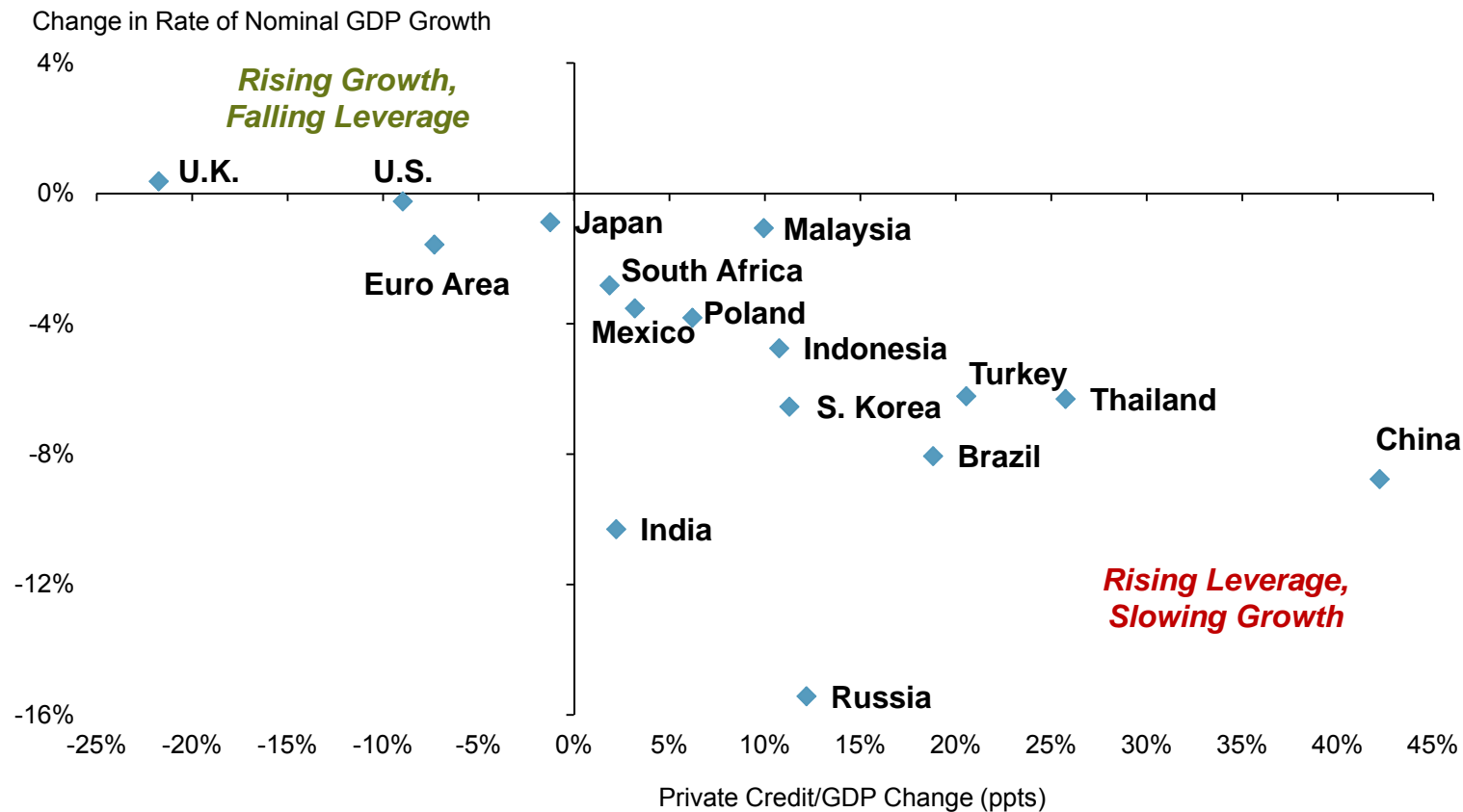
% of Components Rising (6-Month Basis)



# Rise in Private Debt and Slower Growth Challenge EMs

Many emerging-market countries have experienced booms in private-sector credit growth in recent years but now face higher debt burdens at the same time that nominal GDP growth (the ability to service debt) has decelerated materially. While many EMs do not have high debt levels, the ability to cyclically boost growth through credit expansion is much more constrained.

## Change in Nominal GDP and Private Credit Growth (2010 vs. 2014)



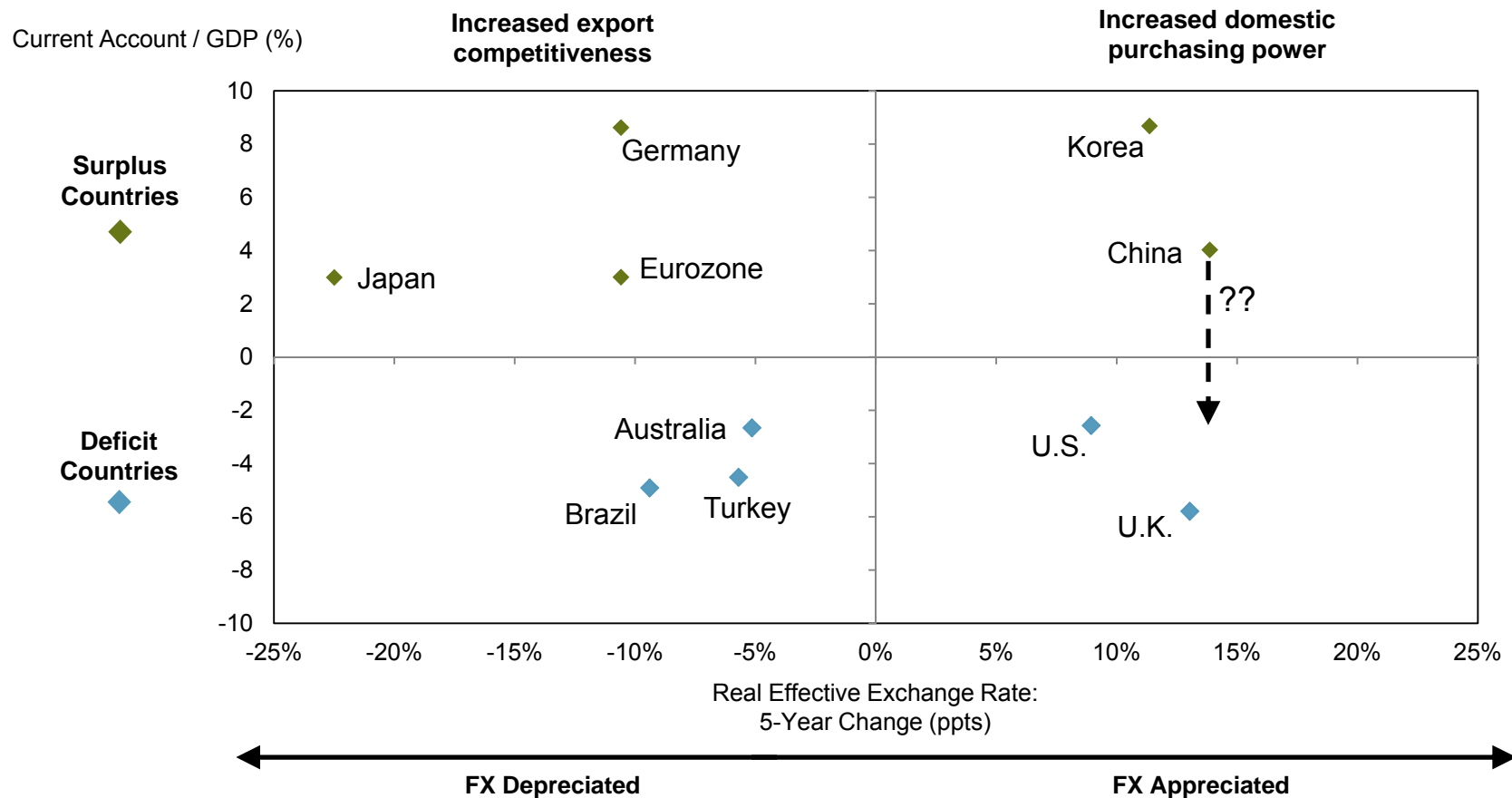
### Non-Financial Private Credit/GDP

China	196%
S. Korea	186%
Japan	168%
U.K.	162%
Euro Area	161%
U.S.	146%
Malaysia	134%
Thailand	128%
Poland	79%
Brazil	76%
South Africa	74%
Turkey	71%
Russia	69%
India	60%
Indonesia	39%
Mexico	27%

# Surplus vs. Deficit Nations: Who Will Drive Global Demand?

Historically, current-account-deficit countries such as the U.S. have boosted global growth by importing goods from other countries, but the purchasing power of many deficit countries has been cut by recent currency depreciation. China is well poised to grow imports due to its solid currency and consumer sector, but its surplus has actually grown in recent years.

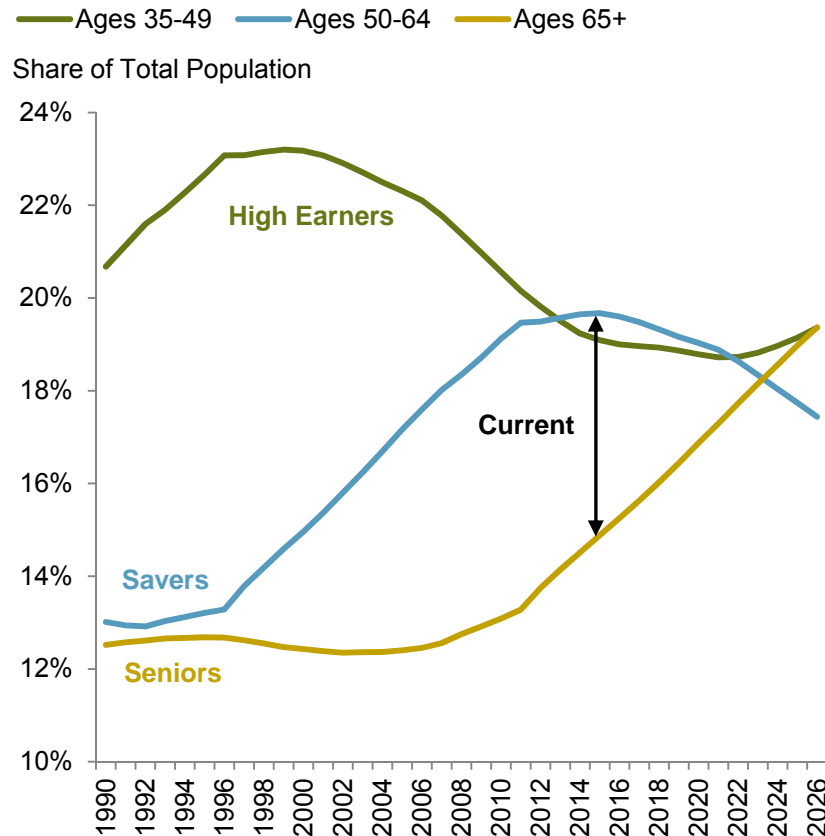
## Current Account Balance vs. Change in Real Effective Exchange Rates



# U.S. Consumer: Outlook Bright But Not Off to the Races

Increased saving from the aging baby boomer generation is indicative of the secular restraints on the U.S. consumer that are likely to keep the pace of consumer spending well below the peak pace of prior expansions. However, cyclical headwinds should continue to dissipate, which in turn should allow the U.S. consumer to remain on a positive trajectory.

## Age Cohorts' Share of U.S. Population



## Headwinds for U.S. Consumption

### Secular inhibitors

### Recent trend

Worsening demographics



Changes to retirement system



Higher inequality



Post-crisis behavior



### Cyclical delays

Balance sheet hangover



Lower income tiers lag



Uncertain gas prices



Slow housing recovery



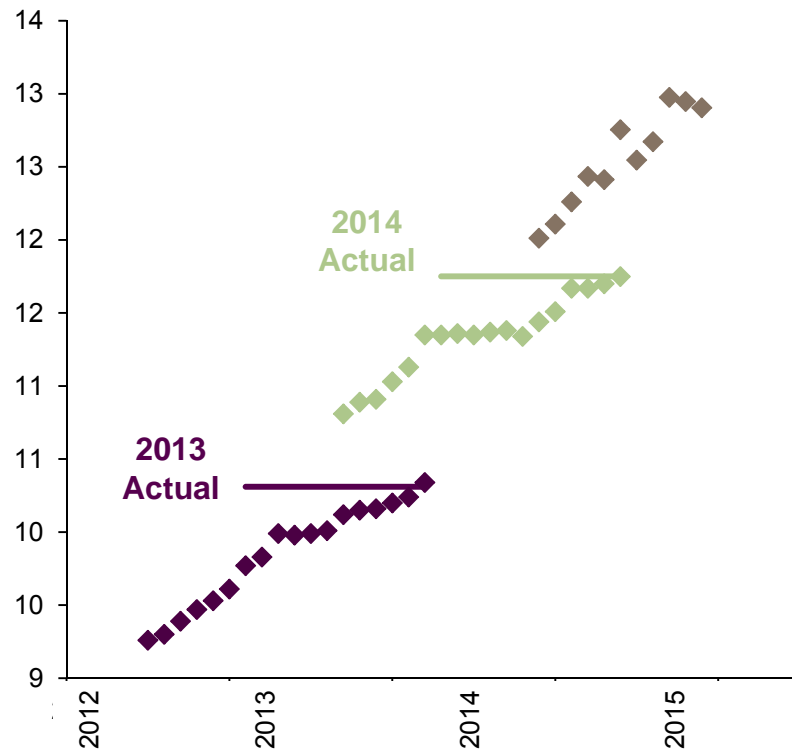
# Deflationary Impulses Abating from Oil and the Dollar

The sharp drop in oil prices and strengthening of the U.S. dollar that began in 2014 have been significant deflationary influences on the U.S. economy. However, both show signs of stabilization—oil production growth in the U.S. is slowing after years of exceeding expectations and the dollar was flat in Q2—implying their deflationary impact may fade going forward.

## Projected vs. Actual U.S. Petroleum Production

◆ 2013 ◆ 2014 ◆ 2015

Millions of Barrels per Day (bpd)

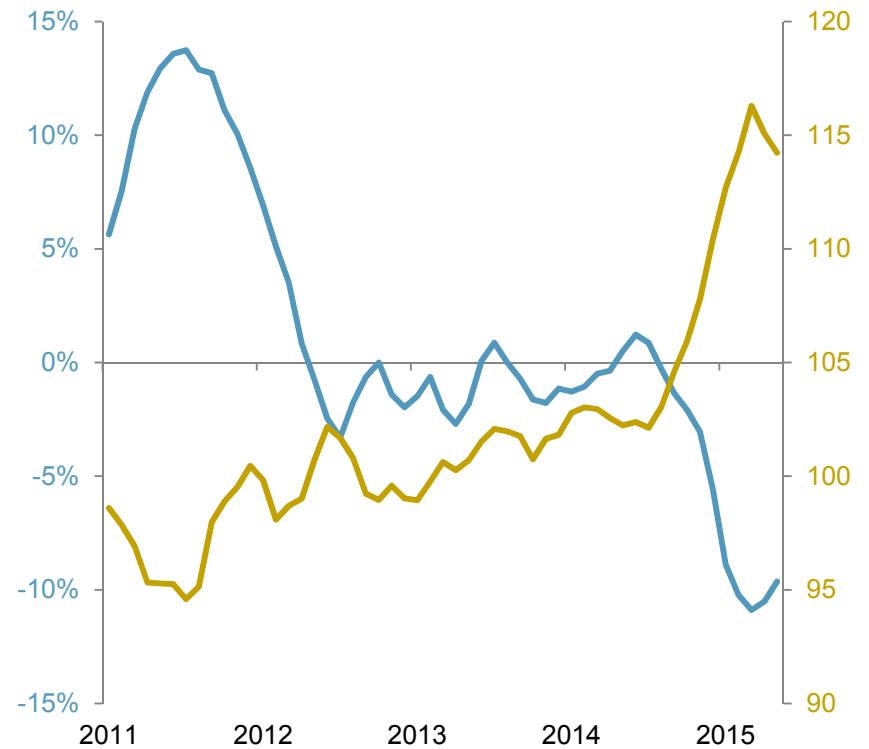


## U.S. Import Prices vs. the Dollar

— Import Prices — Nominal Trade-Weighted Dollar

Year-over-Year Change (%)

Index Level (Jan 1997 = 100)

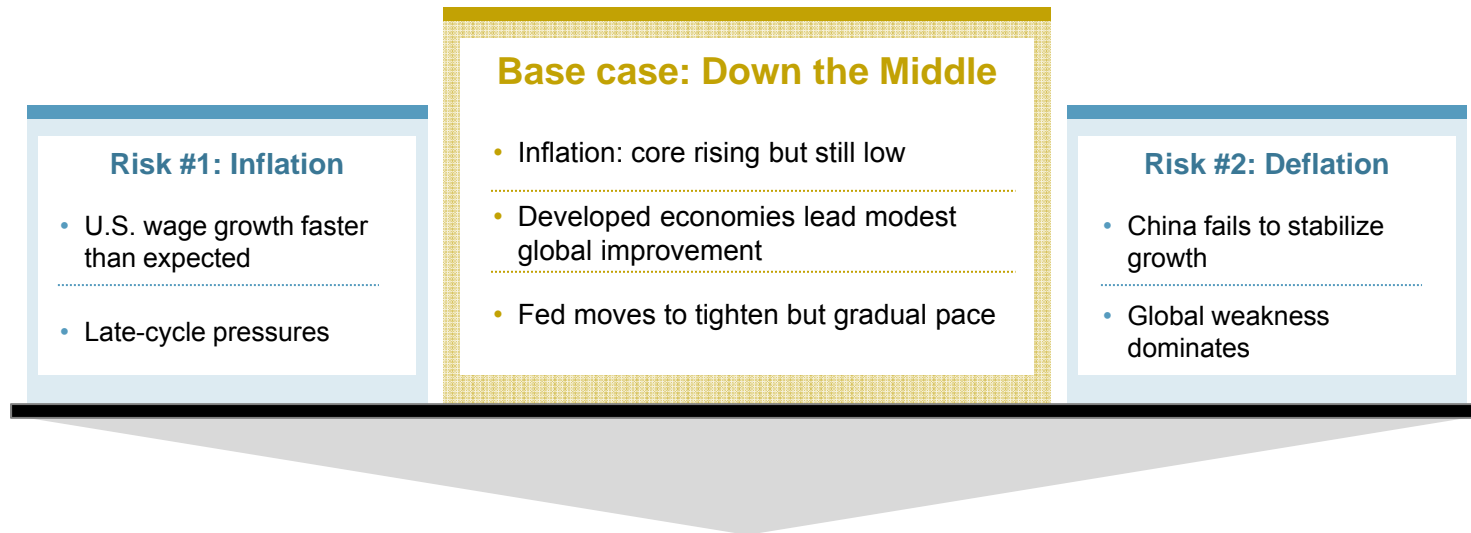


Petroleum is crude plus natural gas liquids. **LEFT:** Source: Based on IEA data from the IEA Oil Data Service © OECD/IEA 5/15, IEA Publishing, World Bank Commodity Markets Outlook, Fidelity Investments (AART), as of 5/31/15. **RIGHT:** Source: Bureau of Labor Statistics, Federal Reserve, Haver Analytics, Fidelity Investments (AART), as of 5/31/15.



# Outlook: Benign Mid-Cycle Backdrop but Volatility to Rise

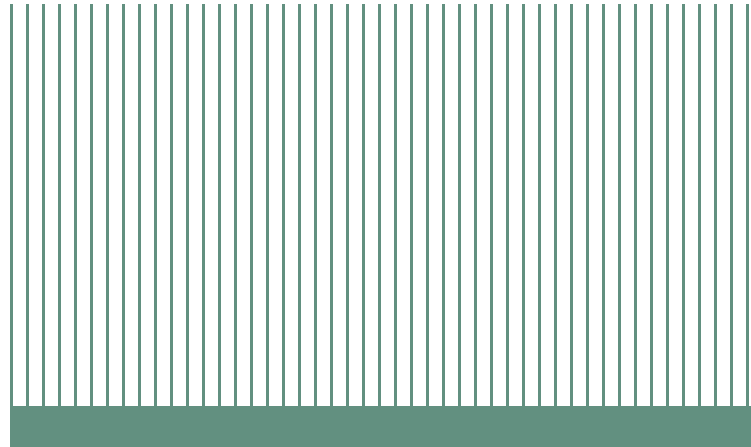
We expect the beneficial cyclical environment to persist, with modest wage pressures in the U.S. and easy monetary policies and gradual economic improvement around the globe. Key risks to this outlook include faster wage inflation that could push the U.S. toward the late cycle, and deflationary pressures in China. Market volatility may rise as the Fed moves to hike rates.



## Asset allocation implications

- Higher market volatility
- Smaller bets warranted
- Favor equities, especially DM
- Not afraid of duration to diversify

## U.S. Equity Markets

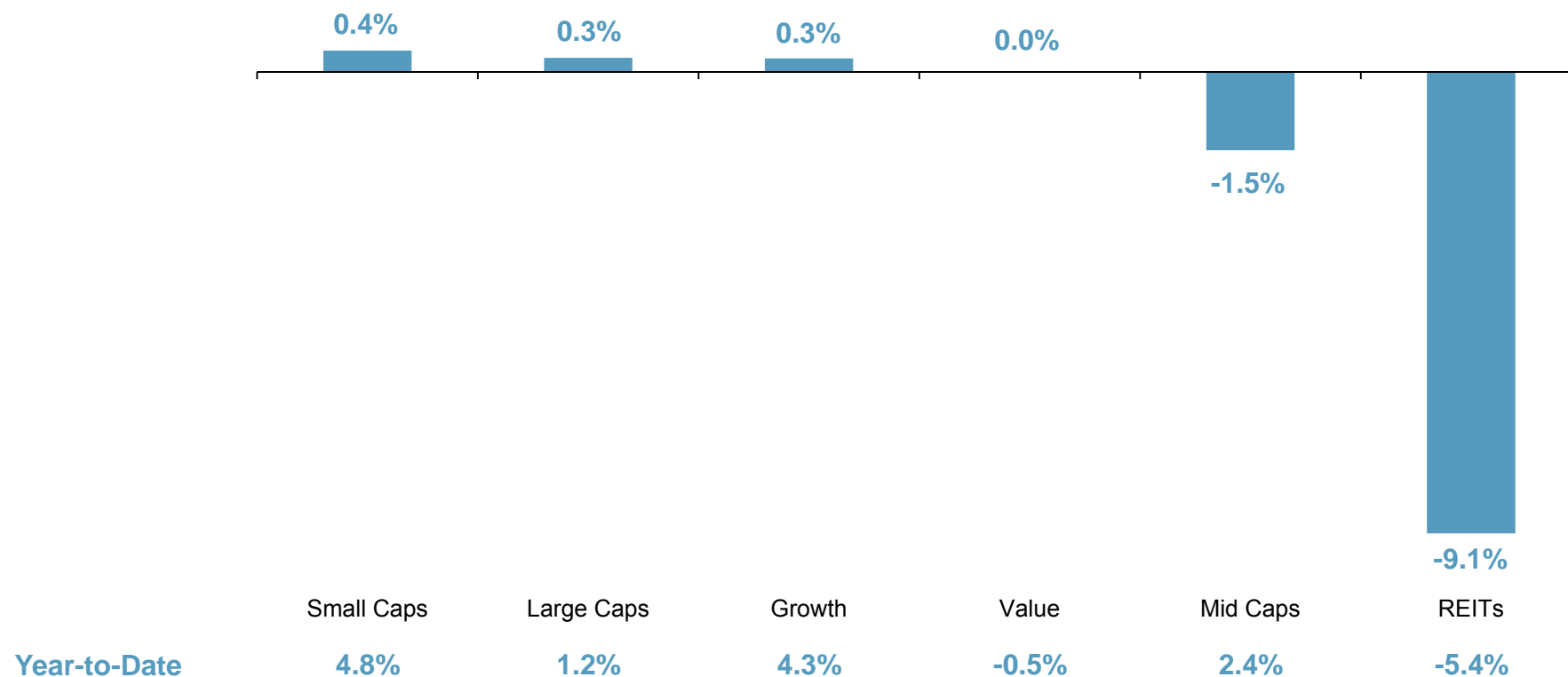


# Style and Cap Performance Flattish, REITs Plunge

There was little distinguishable performance between cap and style during the second quarter of the year, although small-cap and growth stocks remain the biggest outperformers year to date. REITs experienced a sizable sell-off however, as the rise in long-term interest rates made their dividend streams relatively less attractive.

U.S. EQUITY

## Q2 2015 Total Return



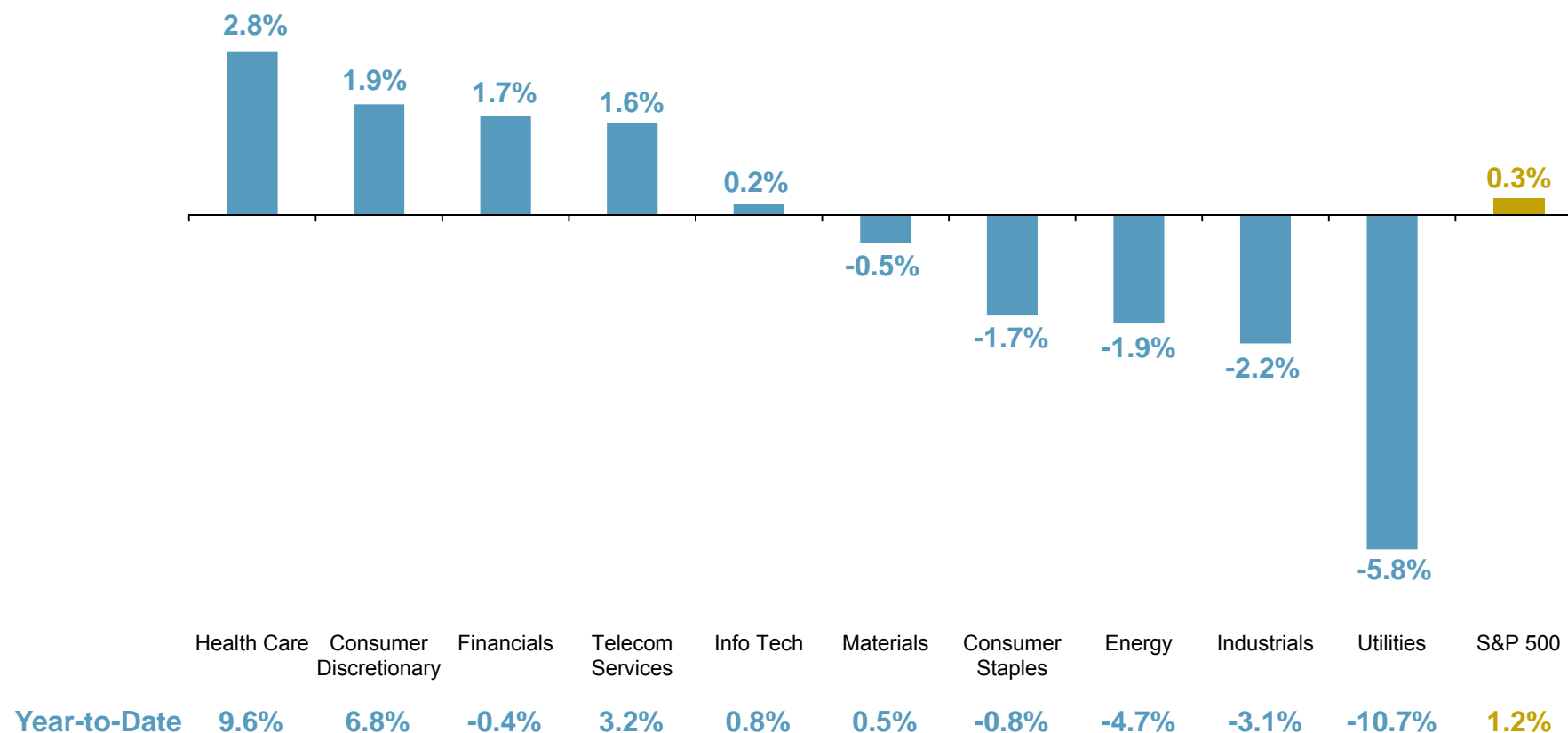
Past performance is no guarantee of future results. It is not possible to invest directly in an index. All indices are unmanaged. Please see appendix for important index information. Equity market returns represented by: Growth – Russell 3000 Growth Index; Large Caps – S&P 500 Index; Mid Caps – Russell Midcap Index; REITs (Real Estate Investment Trusts) – FTSE NAREIT Equity Index; Small Caps – Russell 2000 Index; Value – Russell 3000 Value Index. Source: FactSet, Fidelity Investments (AART), as of 6/30/15.

# Domestic-Centric Sectors Outperformed More Global Sectors

Domestic-oriented sectors, such as health care, consumer discretionary, financials, and telecom, generally outperformed as the U.S. economy remained on a more steady path than many other economies. The exception was utilities, which sold off as the rise in long-term interest rates made their dividend yields relatively less attractive.

U.S. EQUITY

## Q2 2015 Total Return

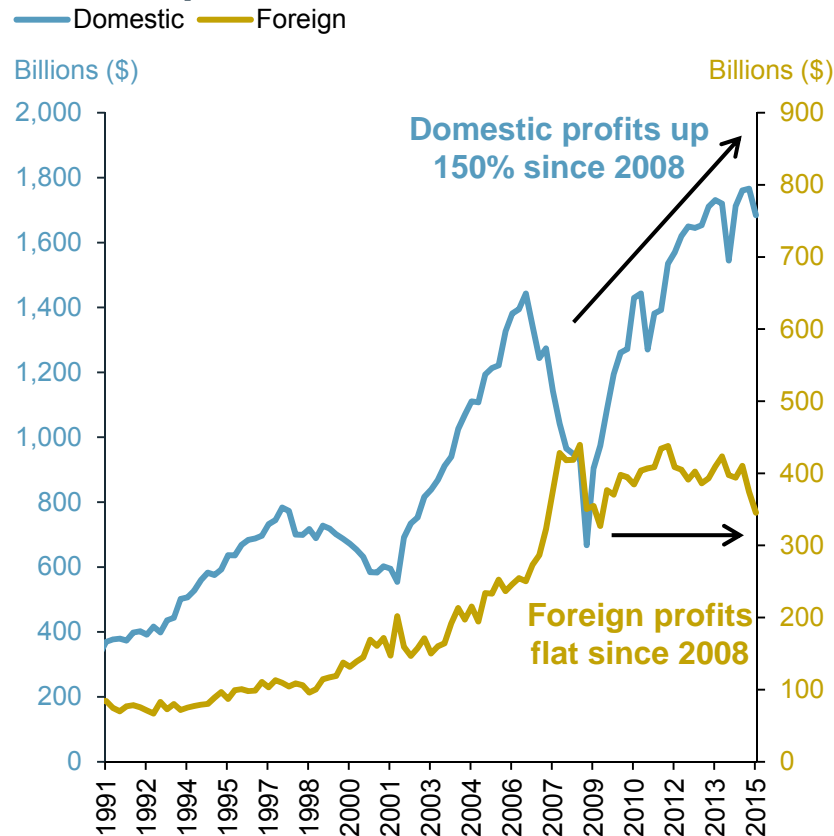


Past performance is no guarantee of future results. It is not possible to invest directly in an index. All indices are unmanaged. Please see appendix for important index information. Sector investing involves risk. Because of its narrow focus, sector investing may be more volatile than investing in more diversified baskets of securities. Sector returns represented by S&P 500 sectors. Source: FactSet, Fidelity Investments (AART), as of 6/30/15.

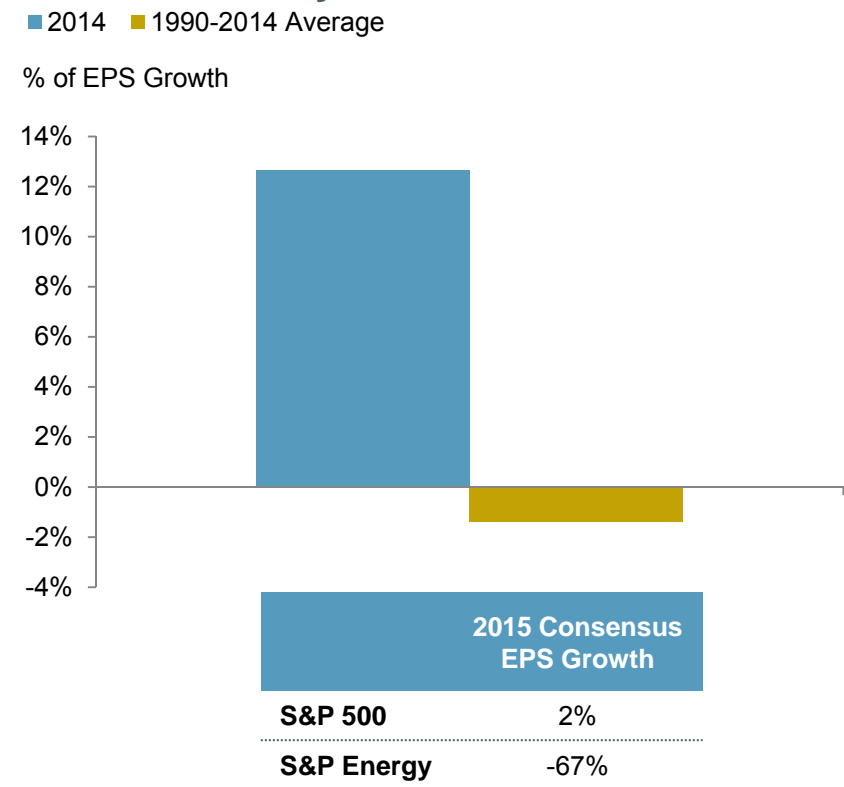
# Corporate Profit Outlook: Uneven, but Still Positive

The slow global backdrop continues to weigh on multinational and commodity-producer profits. Share buybacks are now a larger contributor to EPS growth, but they remain a minor driver in absolute terms. Profit margins may be pressured somewhat amid higher wage growth but they should stay elevated, and mid-single-digit profit growth appears achievable.

## U.S. Corporate Profits



## S&P 500: Contribution to EPS Growth from Share Buybacks



EPS: Earnings per share. **LEFT:** Source: Bureau of Economic Analysis, Fidelity Investments (AART), as of 3/31/15. **RIGHT:** Chart: Past performance is no guarantee of future results. Data show the contribution from the median S&P 500 company. Source: I/B/E/S, Compustat, FactSet, Fidelity Investments, as of 12/31/14. Table: Consensus data from Standard & Poor's. Source: Standard & Poor's, Fidelity Investments (AART), as of 6/30/15.

# Business Cycle Outlook for U.S. Consumer Sectors

The current mid-cycle phase has historically resulted in the relative outperformance of cyclical sectors such as tech and industrials. The bright consumer outlook may provide a fundamental boost to discretionary spending that is typically stronger during the early cycle, while any transition to the late-cycle tends to favor sectors such as staples with more stable demand.

U.S. EQUITY

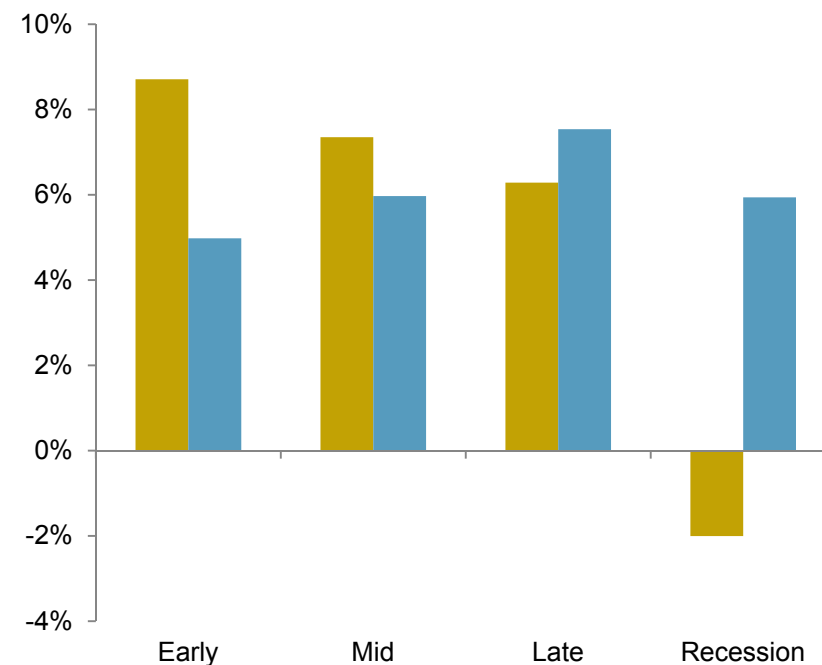
## Business Cycle Returns Heat Map

Sector	Early	Mid	Late	Recession
Financials	+			-
Consumer Discretionary	++		--	
Technology	+	+	--	--
Industrials	++	+		--
Materials		--	++	-
Consumer Staples	-		+	++
Health Care	-		++	++
Energy	--		++	
Telecom	--			++
Utilities	--	-	+	++

## Consumer Spending by Category, 1962-2010

■ Discretionary-Oriented ■ Staples-Oriented

Annualized Growth (%)



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), September 2014. **RIGHT:** Discretionary personal consumption expenditure includes: durable goods, clothing and energy. Staples personal consumption expenditure includes: nondurable goods excluding clothing and energy. Source: Bureau of Economic Analysis, Haver Analytics, Fidelity Investments (AART), as of 4/30/15.



# Lower Inflation Implies Valuations Could Remain Elevated

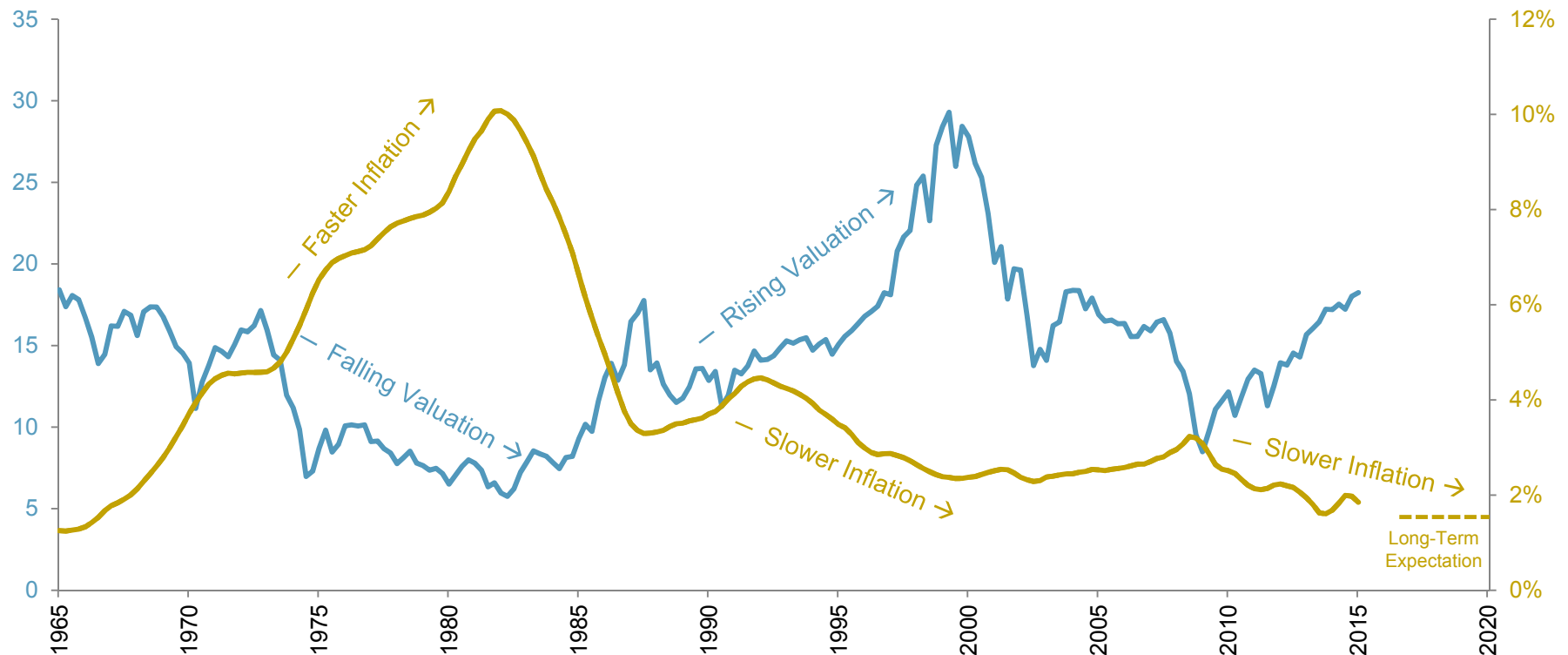
Lower inflation rates have historically been conducive to higher equity-market multiples. Our long-term outlook for U.S. inflation is 2% compared to the 3% historical average. So while equity valuations remain somewhat elevated relative to history, they may only be a modest detractor from total return potential over the long term.

## S&P 500 Valuations vs. Inflation

— Price-to-Earnings Ratio — CPI

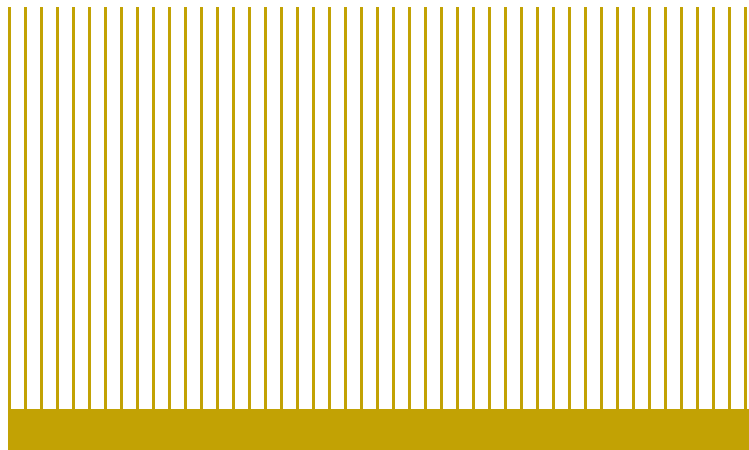
Price/5-Year Peak Real Earnings

5-Year Average, Year-Over-Year (%)



Past performance is no guarantee of future results. Real: Inflation adjusted. CPI: Consumer Price Index. Source: Standard & Poor's, Bureau of Labor Statistics, Haver Analytics, Fidelity Investments (AART), as of 3/31/15.

## International Equity Markets & Global Assets

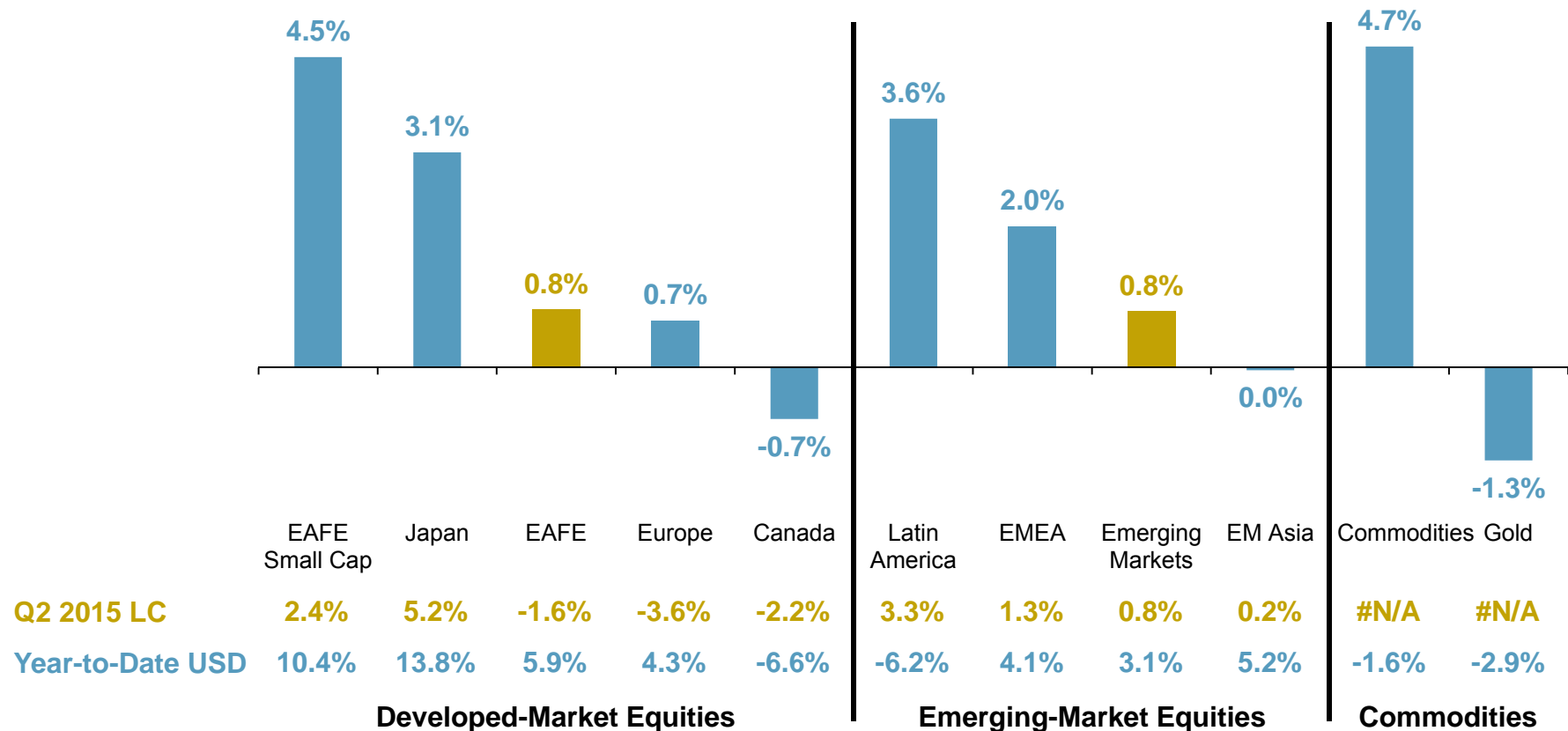




# Commodities and Small-Caps Led in Q2

Reversing from recent trends, commodity prices rebounded during the quarter, and developed-country currencies rose against the dollar and were the impetus for slightly positive equity returns in dollar terms. Most categories have posted moderate year-to-date gains, with Japanese equities, in particular, benefiting from quantitative easing and other measures.

## Q2 2015 Total Return



EM: emerging markets. LC: local currency. All returns are gross in U.S. dollars unless otherwise noted. 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. Index returns represented by: 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. Source: FactSet, Fidelity Investments (AART), as of 6/30/15.

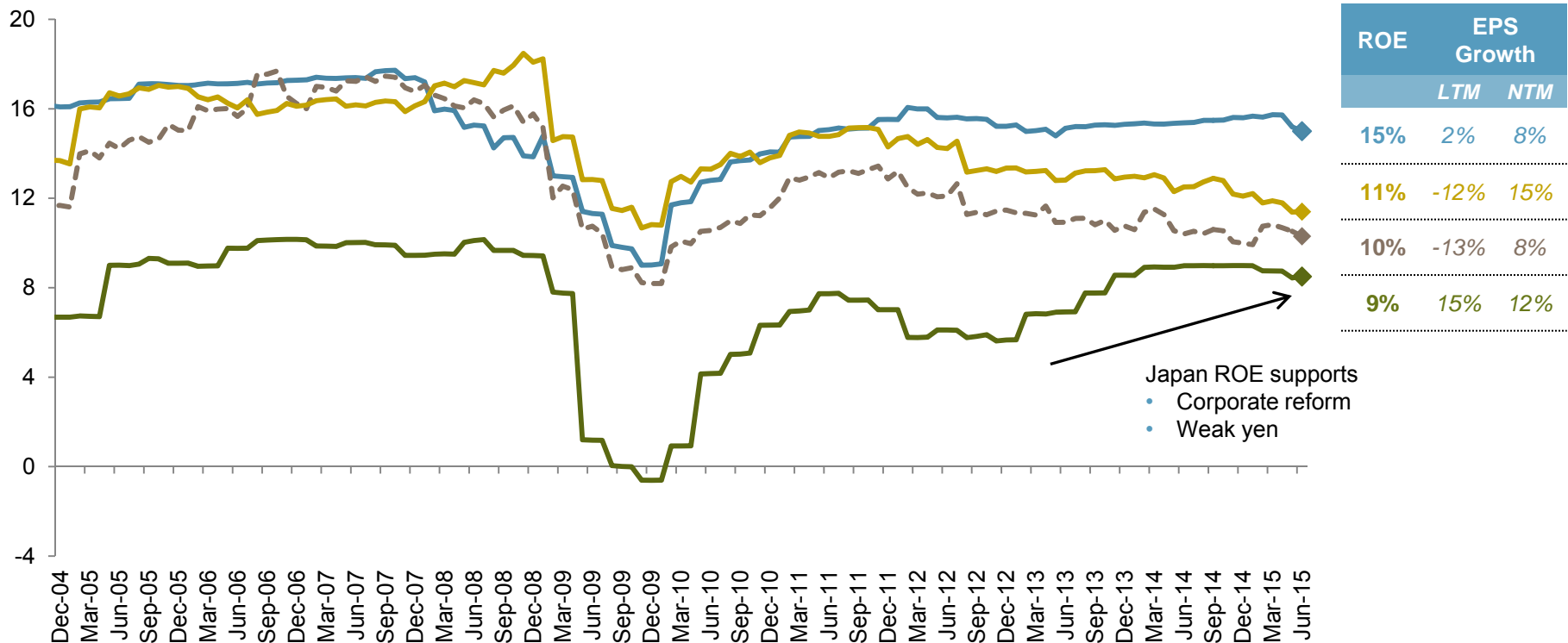
# Rising Profitability in Japan, EM Continues Downtrend

Aided by the weak yen and new corporate governance standards that include return on equity (ROE) targets, Japanese companies have displayed an improving profitability trend. After eclipsing developed-market ROE levels prior to the global financial crisis, emerging-market corporations have since seen deteriorating profitability amid cyclical headwinds.

## Developed and Emerging Market Return on Equity (ROE)

— U.S. — Europe — Japan — EM

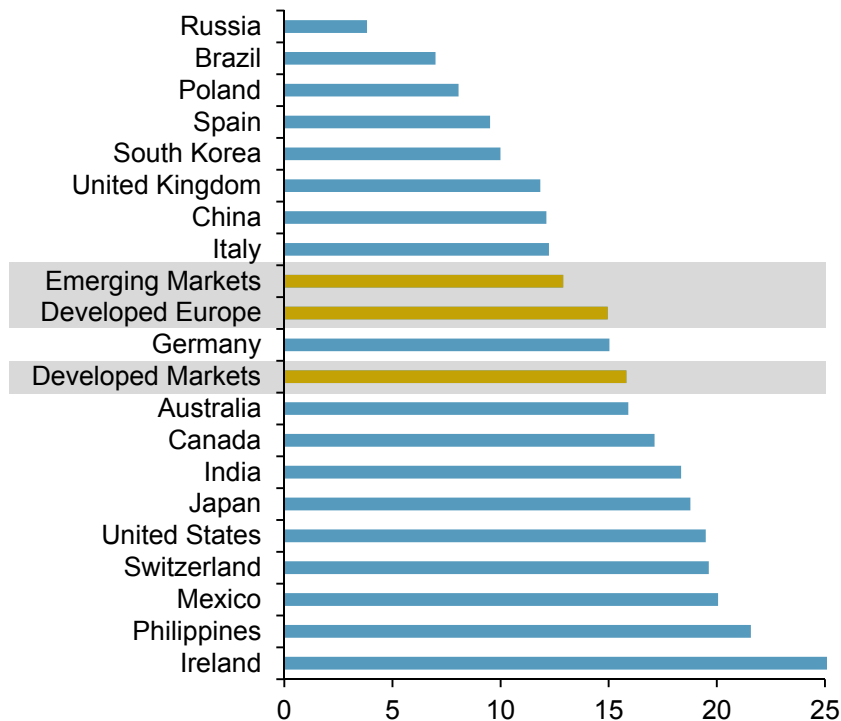
Return on Equity (%)



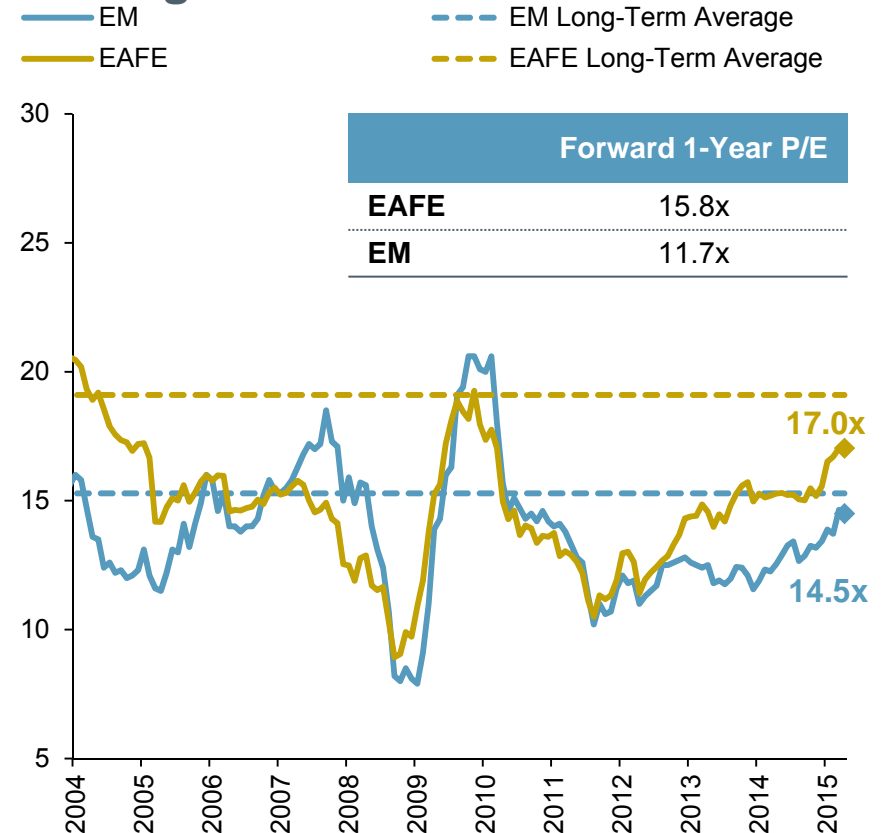
# Non-U.S. Valuations Rise, Still Relatively Attractive

Developed and emerging-market equities experienced some multiple expansion in Q2, due to earnings growth again lagging equity performance. However, the valuations of most developed and emerging markets remain below U.S. levels, with P/Es in peripheral Europe and emerging markets still below long-term averages.

## Cyclical P/Es: Price-to-Five-Year Peak Earnings



## Trailing 12-Month P/E Ratios



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. DM: developed market. EM: emerging market. 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. EM – MSCI Emerging Markets Index; EAFE ex-U.S. – MSCI EAFE ex-U.S. Index; U.S. – MSCI USA Index. **LEFT:** Five-year peak earnings are adjusted for inflation. Source: FactSet, country statistical organizations, Haver Analytics, Fidelity Investments (AART), as of 5/31/15. **RIGHT:** Forward P/E valuations are price divided by next-twelve-months earnings estimates. Source: FactSet, Fidelity Investments (AART), as of 5/31/15.

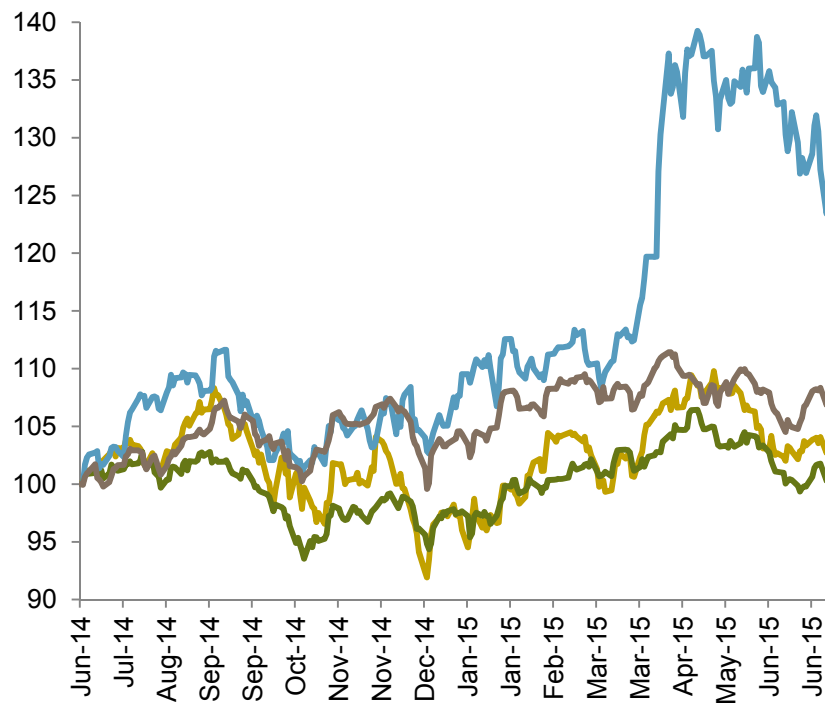
# Chinese Equity Rally Boosted EM But Turned Volatile

After a rapid ascent in recent months, Chinese equities rose again in Q2, but they suffered a steep correction at the end of the quarter. The rally had been spurred by monetary easing and encouragement by Chinese policymakers, but it has belied weaker corporate fundamentals as well as lackluster equity and currency performance in countries linked to China's growth.

## Emerging Market Equities

Commodity Exporters China-Related ex-China  
China Other EM

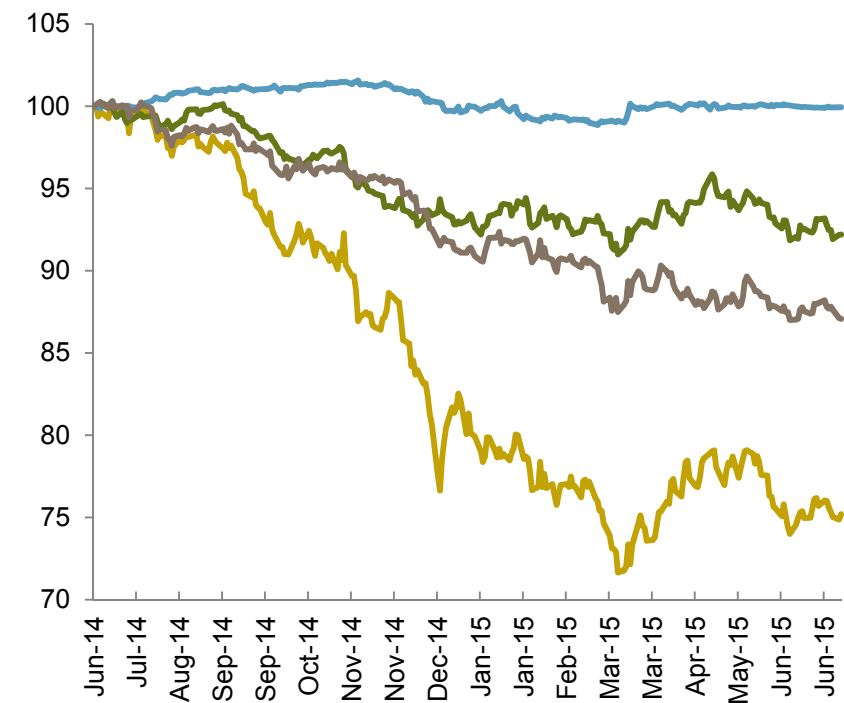
Total Return Index Level (6/30/14=100)



## Emerging Market Currencies vs. USD

Commodity Exporters China-Related ex-China  
China Other EM

Index Level (6/30/14=100)



China-Related (Asia): China, Korea, Malaysia, Taiwan, Thailand. Commodity Exporters: Brazil, Chile, Colombia, Indonesia, Peru, Russia, South Africa. Other EM: Czech Republic, Hungary, India, Mexico, Philippines, Poland, Turkey. **LEFT:** Source: MSCI, Haver Analytics, Fidelity Investments (AART), as of 6/30/15. **RIGHT:** Source: Bloomberg Finance L.P., Haver Analytics, Fidelity Investments (AART), as of 6/30/15.

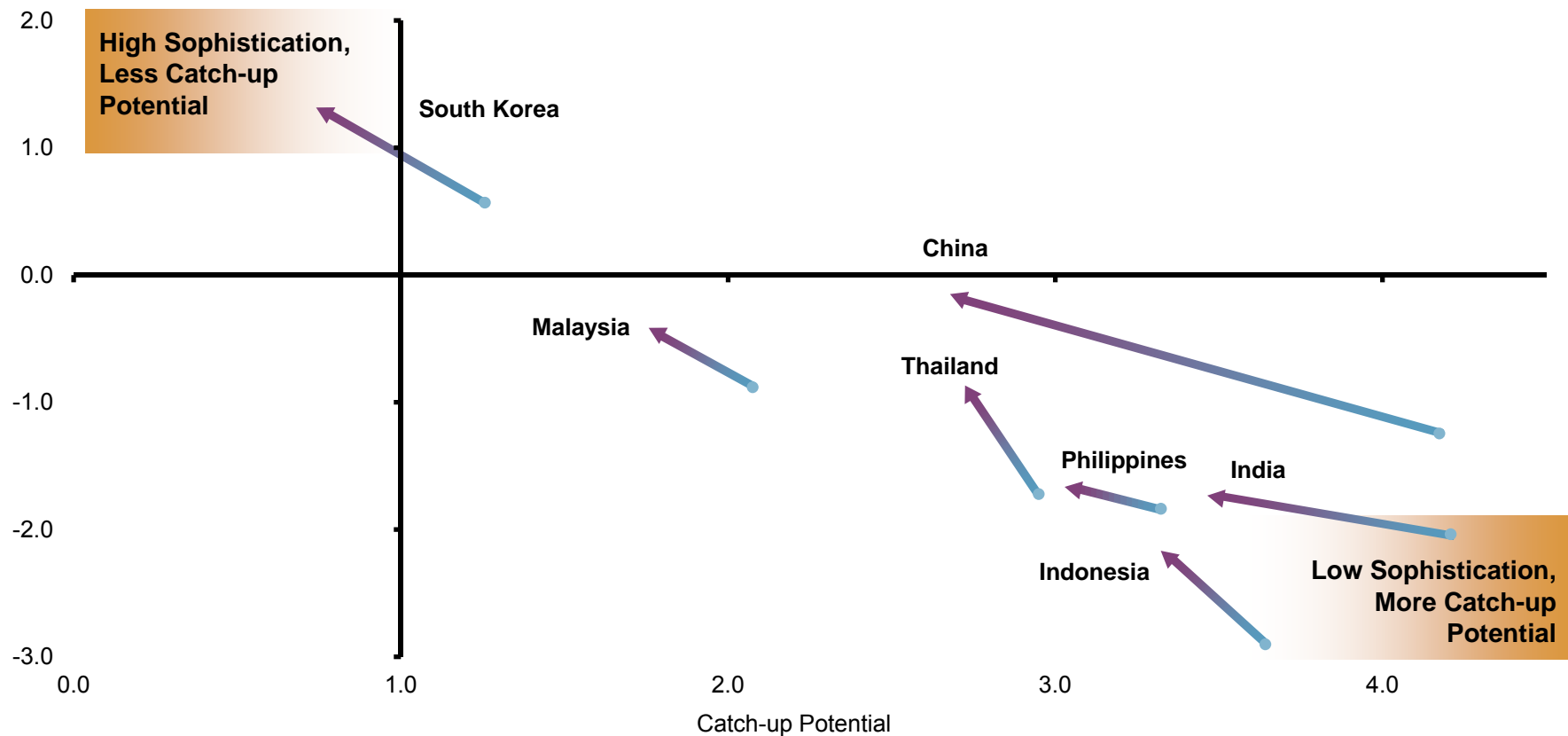
# Higher Living Standards and Sophistication in Emerging Asia

The fast pace of industrialization and growth in per capita incomes over the past 20 years has left emerging Asian economies with larger middle classes, greater human capital, and higher economic structural complexity. Growth from catch-up potential may be slower going forward, but it is partly offset by potential productivity gains from more sophisticated economies.

## Emerging Asia: 1990s vs. Today

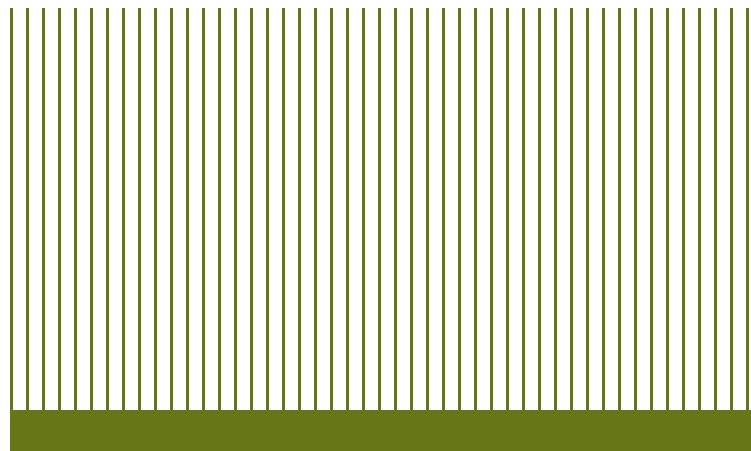
▲ 2014 ● 1994

Human Capital and Complexity





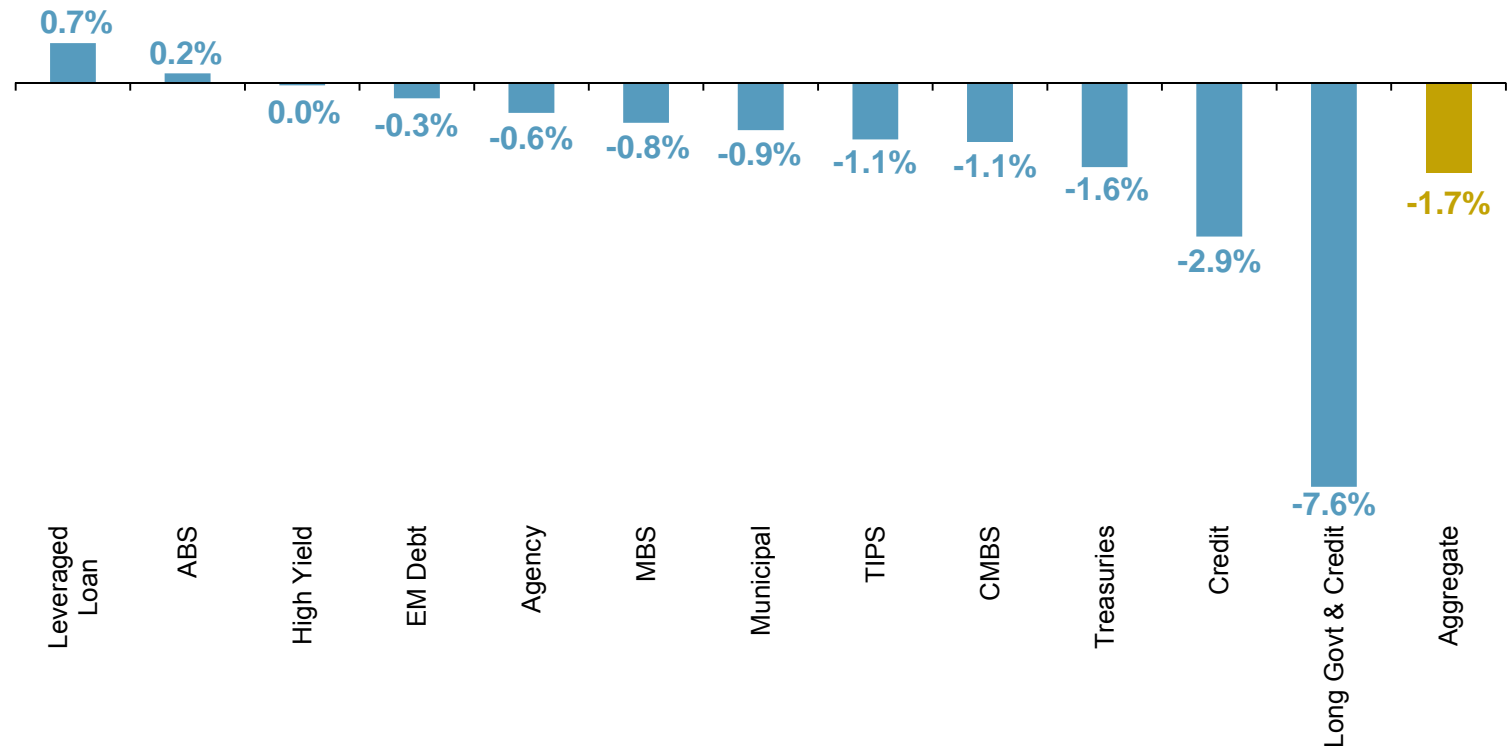
## Fixed Income Markets



# Bonds Suffer From Both Rising Rates and Wider Spreads

Rising rates and wider spreads caused most fixed-income categories to experience negative returns during the quarter, with long duration bonds having the largest decline. Lower-credit-quality categories outperformed since their higher coupons helped offset rising rates, while the investment-grade aggregate turned negative on a year-to-date basis.

## Q2 2015 Total Return



**Year-to-Date**      2.9%    1.1%    2.5%    1.8%    0.6%    0.3%    0.1%    0.3%    0.7%    0.0%    -0.8%    -4.5%    -0.1%

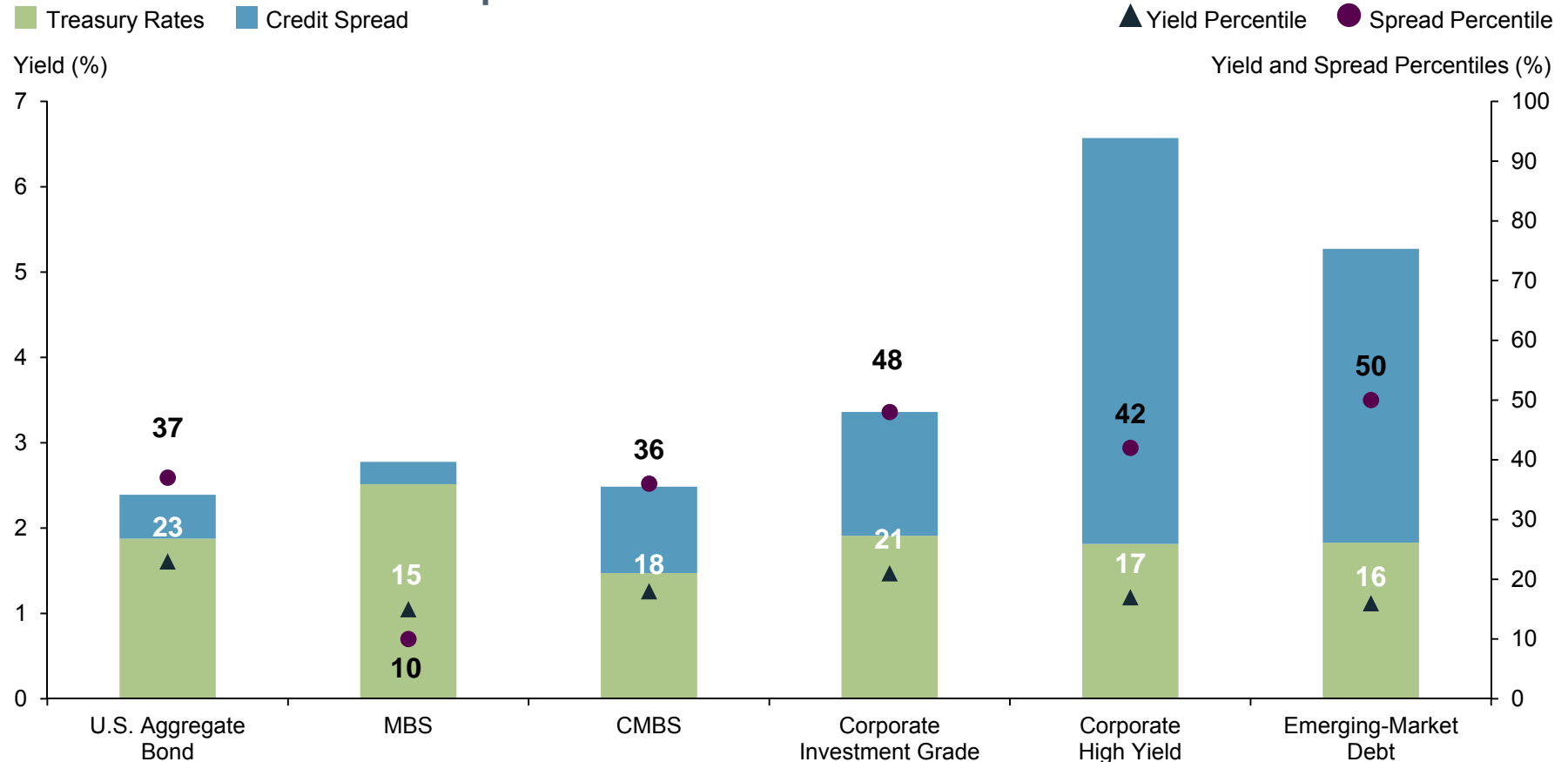
Past performance is no guarantee of future results. It is not possible to invest directly in an index. All indices are unmanaged. Index returns represented by: ABS (Asset-Backed Securities) – Barclays ABS Index; Agency – Barclays U.S. Agency Index; Aggregate – Barclays U.S. Aggregate Bond Index; CMBS (Commercial Mortgage-Backed Securities) – Barclays Investment-Grade CMBS Index; Credit – 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) – Barclays Long Government & Credit Index; MBS (Mortgage-Backed Securities) – Barclays MBS Index; Municipal – Barclays Municipal Bond Index; TIPS (Treasury Inflation-Protected Securities) – Barclays U.S. TIPS Index; Treasuries – Barclays U.S. Treasury Index. Source: FactSet, Fidelity Investments (AART), as of 6/30/15.



# Yields Still Historically Low; Spreads Closer to Averages

Although interest rates rose during the quarter, bond yields remain well below their historical averages. Credit spreads however, are now closer to their historical averages across most investment-grade and higher-yielding categories, providing more attractive valuations.

## Fixed-Income Yields and Spreads



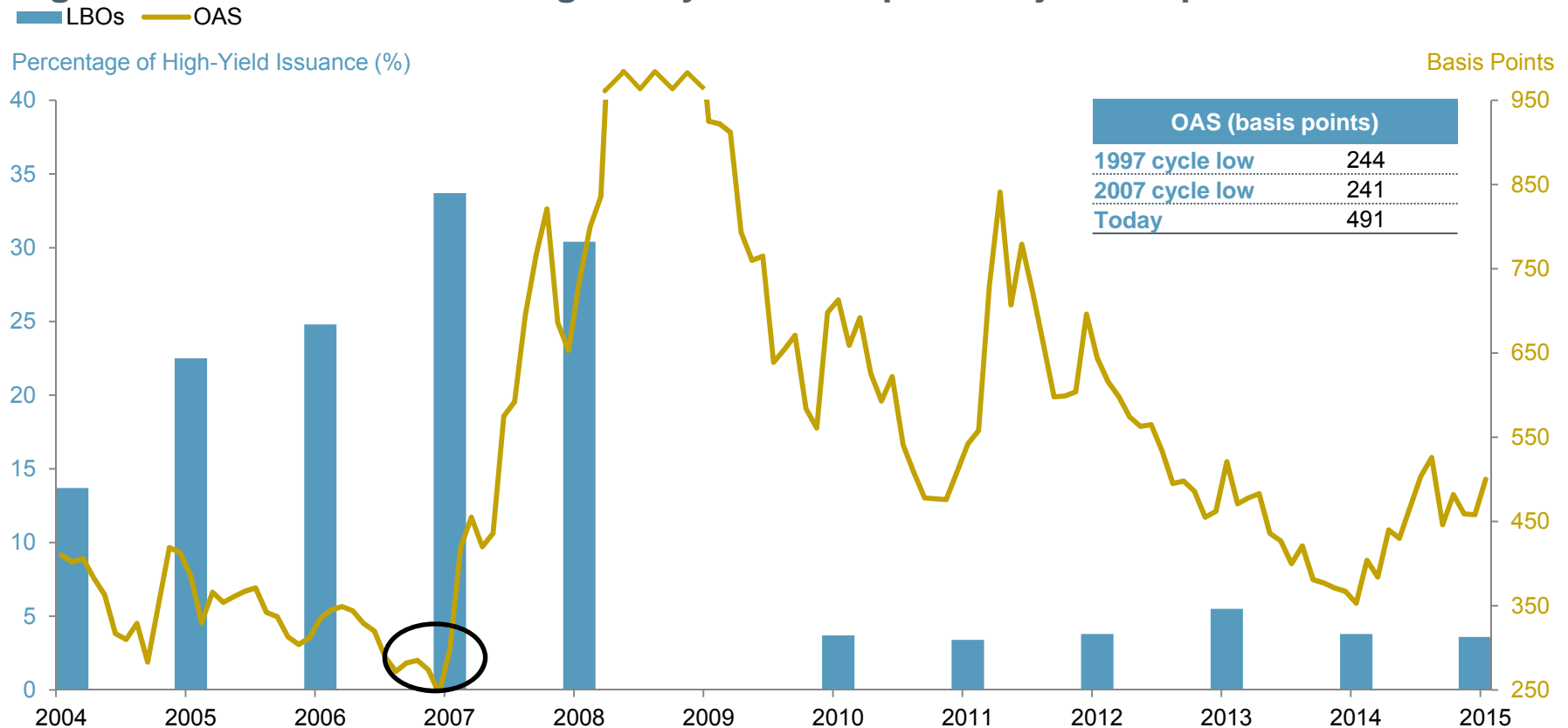
Past performance is no guarantee of future results. It is not possible to invest directly in an index. All indices are unmanaged. Please see appendix for important index information. Percentile ranks of yields and spreads based on historical period from 2000 to 2015. MBS: Mortgage-Backed Security; CMBS: Commercial Mortgage-Backed Security. All categories represented by respective Barclays bond indices. Source: Barclays, Fidelity Investments (AART), as of 6/30/15.



# High-Yield Valuations Well Below Prior Cycle Peaks

Corporate and cyclical fundamentals remain strong, and new high-yield issuance has yet to become frothy, in part because regulatory changes inhibit the level of highly-leveraged buyouts. However, high-yield credit spreads were much higher than the lows registered during the past two cycles, perhaps compensating investors for the risk of higher interest rates.

## High-Yield Issuance for Leveraged Buyouts vs. Option-Adjusted Spread

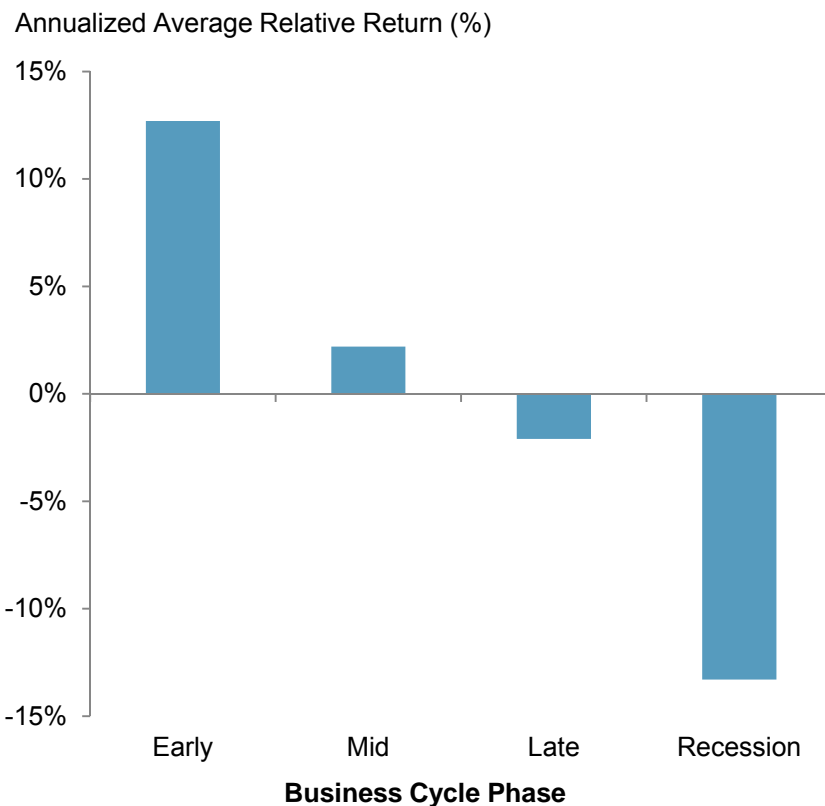


LBOs: Leveraged Buyouts. OAS: Option-Adjusted Spread. \*OAS peaked at 2,182 on 12/15/08. Source: Bloomberg Finance L.P., Bank of America Merrill Lynch (BofA ML) High Yield Index, Fidelity Investments (AART), as of 6/30/15.

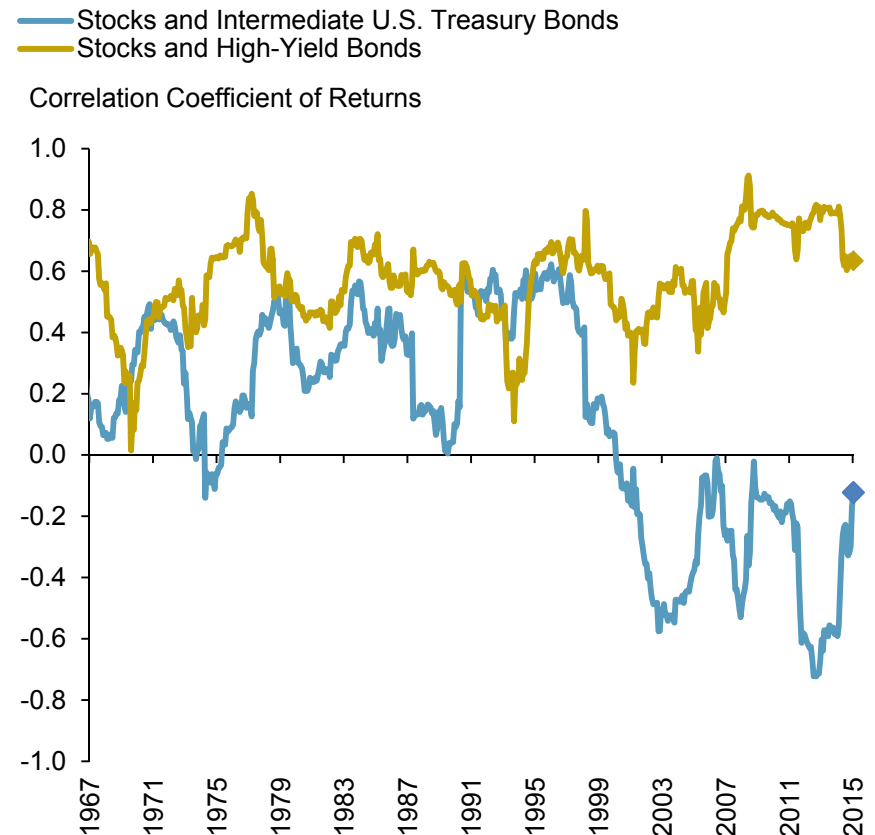
# Managing Interest Rate and Credit Risk

Credit-sensitive bonds such as high-yield corporates typically outperform their investment grade counterparts during mid-cycle expansions amid strong credit and profit growth. However, lower-credit-quality bonds provide less diversification of equity risk within an overall portfolio, a particularly important consideration during a transition to the late-cycle phase.

## High-Yield Bond Minus Investment Grade Bond Performance (1950-2010)



## Stocks and Bonds 3-Year Correlations



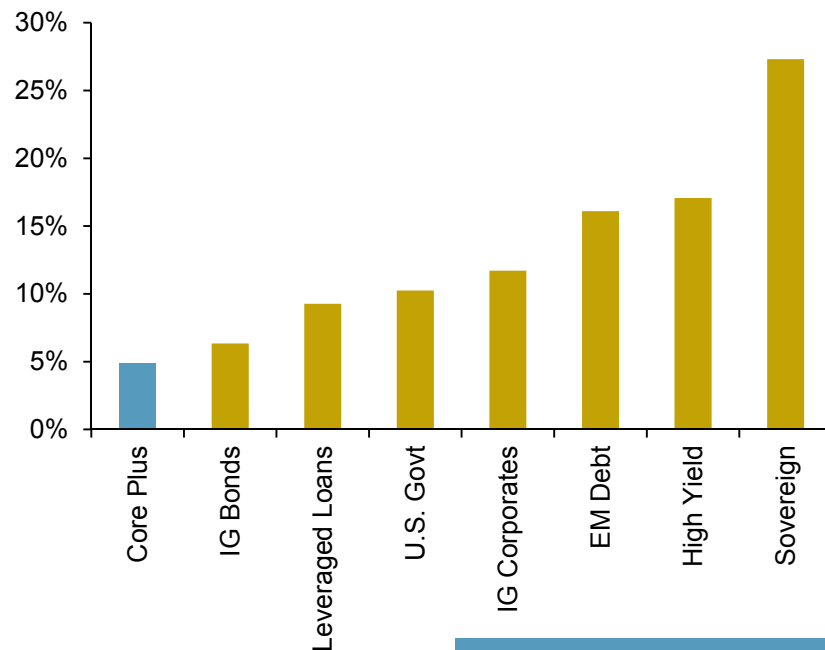
**LEFT:** Past performance is no guarantee of future results. Fidelity Investments proprietary analysis of historical asset class performance, using data from indices from: Bank of America Merrill Lynch, Barclays. Source: Fidelity Investments (AART), as of 6/30/15. **RIGHT:** Source: BofA ML High Yield Index, Morningstar, Barclays, Bloomberg Finance L.P., Fidelity Investments (AART), as of 6/30/15.

# Benefits of High-Quality Core in a Multi-Sector Bond Portfolio

A multi-sector fixed-income strategy with a foundation of high-quality bonds and the addition of higher-yielding “plus” sectors has exhibited consistent downside protection. A “core plus” portfolio has generated fewer periods of negative returns than any individual bond sector, while providing a significantly lower magnitude of losses than lower-quality sectors.

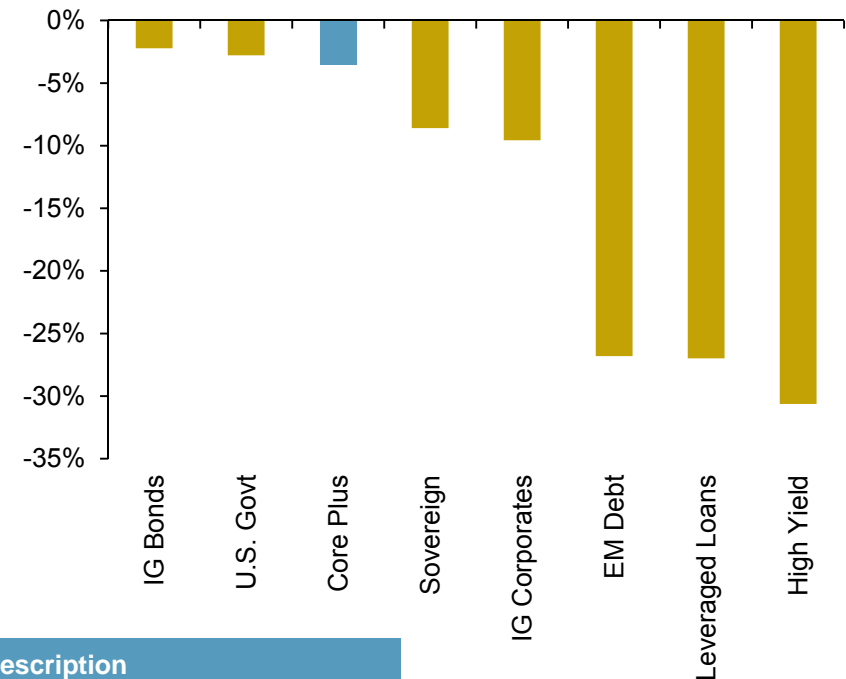
## 1-Year Negative Return Periods, 1998–2014

% of Rolling Periods



## Worst 1-Year Returns, 1998–2014

Total Return (%)



Portfolio	Description	
Core Plus	80% U.S. Investment Grade 5% Leveraged Loans	10% U.S. High Yield 5% Emerging Market



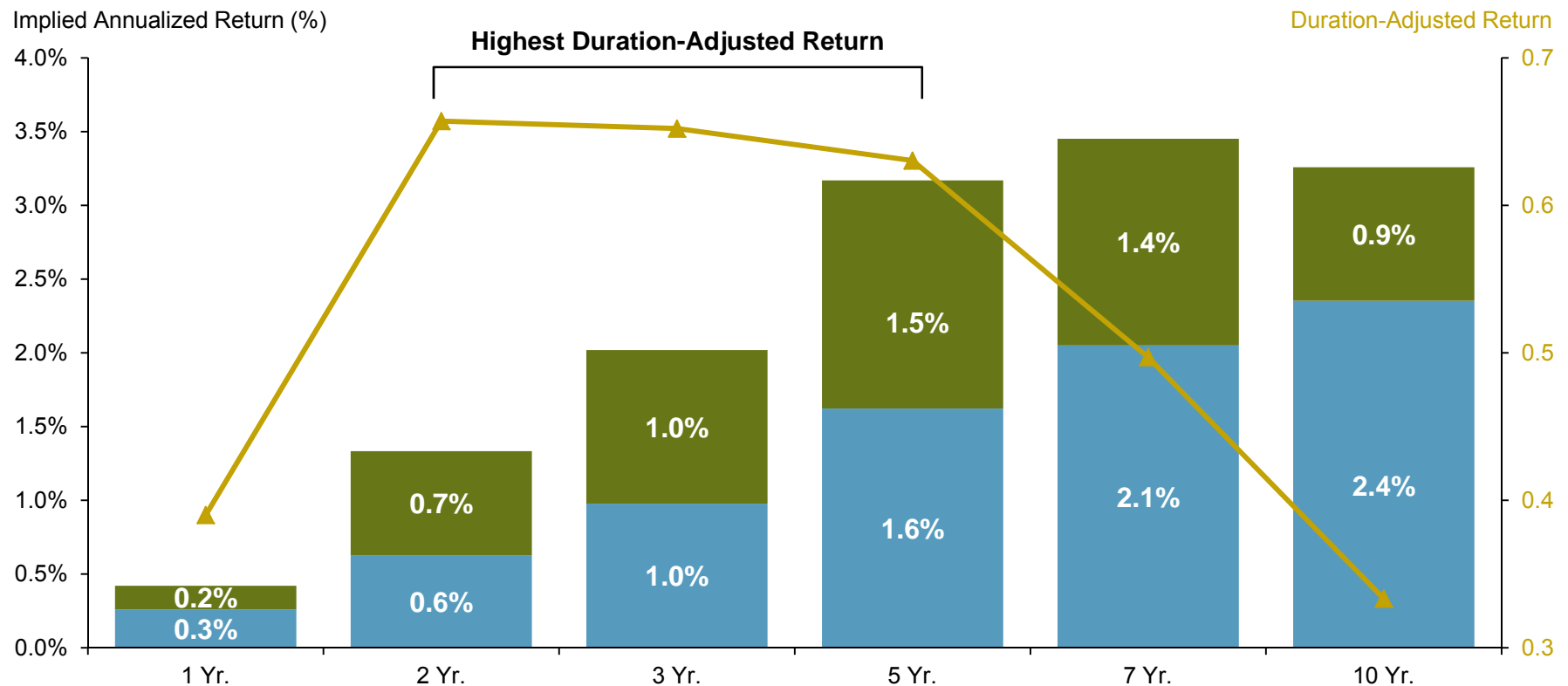
Past performance is no guarantee of future results. It is not possible to invest directly in an index. Index returns represented by: Emerging Market Debt – JPM EMBI Global Composite Index; Foreign Developed-Country Bonds – Citigroup G-7 Non-USD Bond Index; Leveraged Loans – S&P/LSTA Performing Loan Index; U.S. Government – Barclays U.S. Government Index; U.S. High Yield – BofA ML High Yield Index; U.S. Investment Grade – Barclays U.S. Aggregate Bond Index. Source: Morningstar Direct, Fidelity Investments (AART), as of 12/31/14.

# Short Duration: An Income Solution with Lower Rate Risk

Despite the prospects of a Fed rate hike, cash yields are expected to remain low relative to history. Short-duration fixed-income strategies may provide a better opportunity to outpace inflation without significant interest-rate risk. The yield curve continues to be steep in short- to intermediate-duration bonds, providing the potential to earn additional roll returns.

## Return Potential of U.S. Treasuries

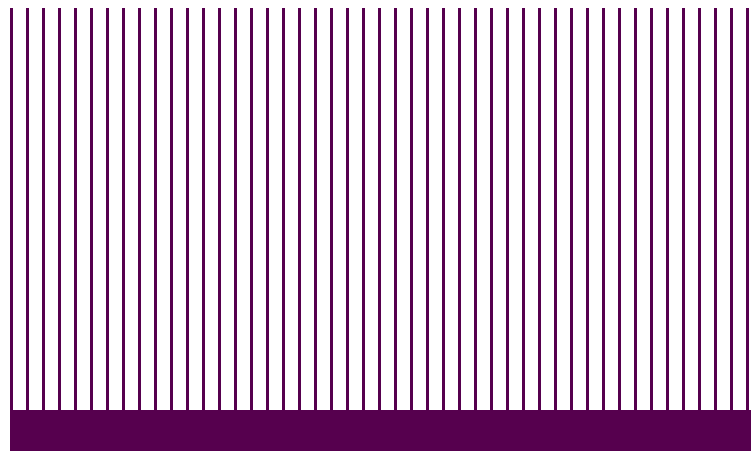
Yield Roll Return Duration-Adjusted Return



Roll refers to the yield of a bond moving along the yield curve as it approaches its maturity date and the influence this has on the bond's price, assuming an unchanged yield curve. Yield refers to the current yield-to-maturity of each bond on the yield curve. Implied Annualized Return assumes yield curve slope remains unchanged and coupons are reinvested at current market rates. Source: Bloomberg Finance L.P., Fidelity Investments (AART), as of 6/30/15.



## Asset Allocation Themes

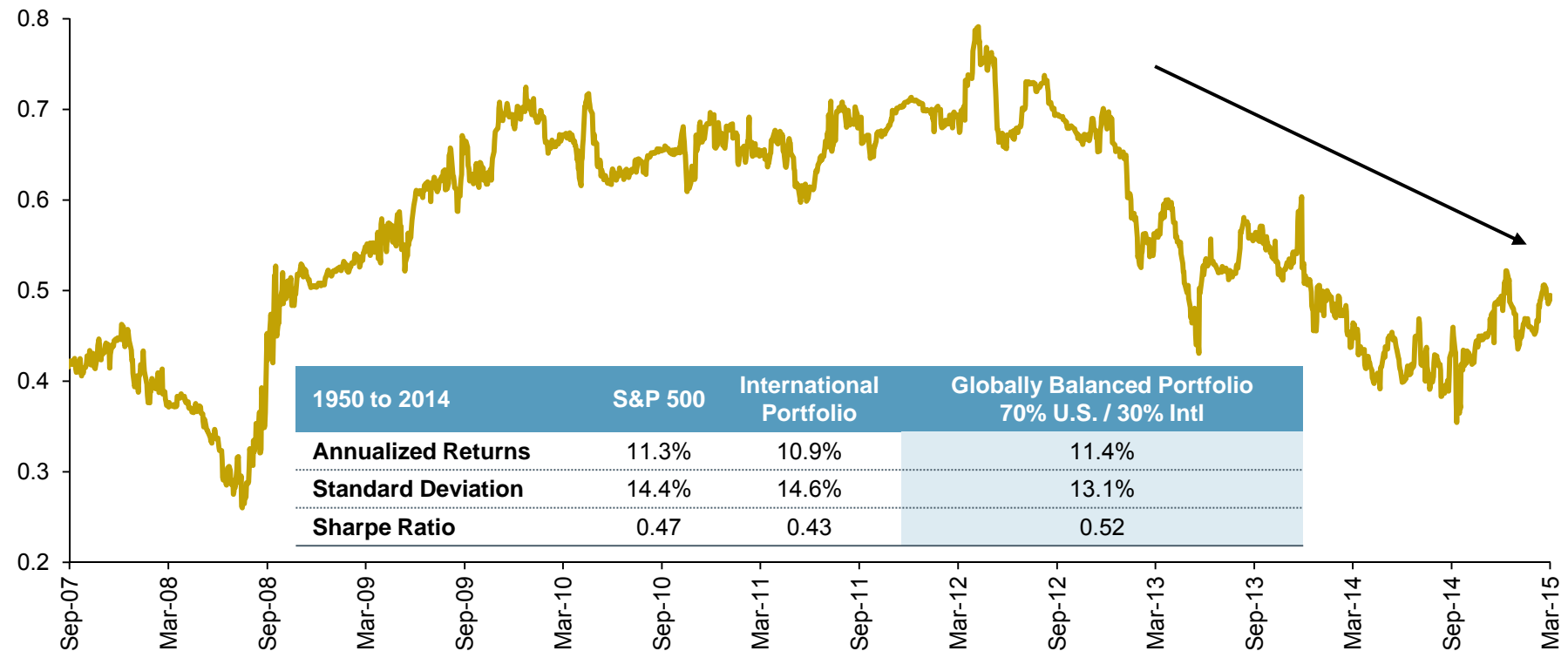


# International Equities: The Case for Diversification

A portfolio consisting of 70% U.S. and 30% international equities has provided higher returns, lower volatility, and better risk-adjusted returns than the S&P 500 over the long run. Though they rose in the second half of 2014, correlations between U.S. and international equities have trended down toward prerecession levels, signaling increased global diversification benefits.

## Correlations: International and U.S. Equities

Six-Month Rolling Correlations of Daily Returns



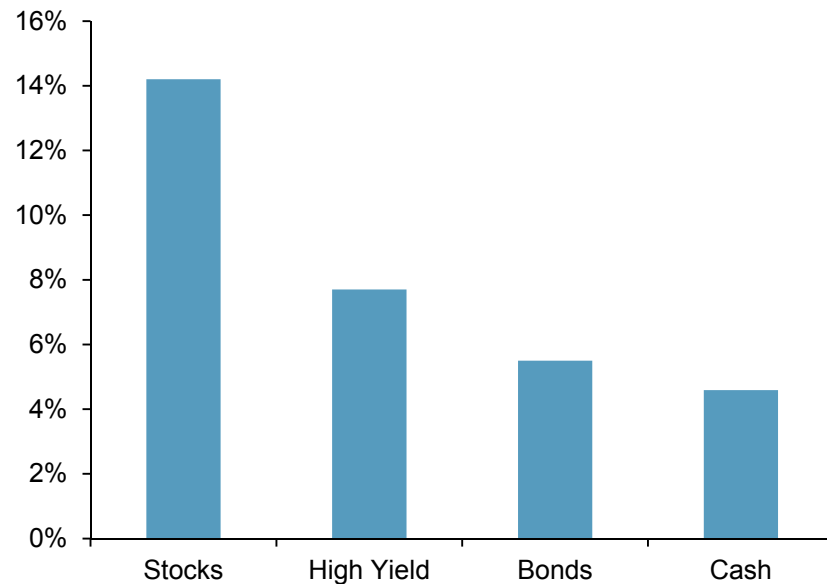
Past performance is no guarantee of future results. It is not possible to invest directly in an index. All indices are unmanaged. Please see appendix for important index information. **CHART:** International Equities – MSCI World ex-U.S.; U.S. Equities – S&P 500, as of 12/31/14. **TABLE:** Hypothetical “globally balanced portfolio” is rebalanced monthly in 70% U.S. equities, 25% developed-market (DM) equities, and 5% emerging-market (EM) equities. U.S. equities – S&P 500 Total Return Index; DM equities – MSCI EAFE Index, Morningstar, Global Financial Data (GFD) World x/USA Return Index; EM equities – MSCI EM Index, GFD Emerging Markets Index. Source: Bloomberg Finance L.P., Fidelity Investments (AART), as of 3/31/15.

# Late Cycle Often Causes a Key Shift in Asset Performance

The U.S. remains in a mid-cycle expansion. The late-cycle phase has the most mixed performance of any business cycle phase, with the leadership of economically sensitive assets typically faltering, and relative and absolute returns becoming more mixed. Monetary policy often becomes more neutral during the mid cycle, and outright restrictive during the late cycle.

## Mid-Cycle Asset Class Performance, 1950–2010

Average Annual Return

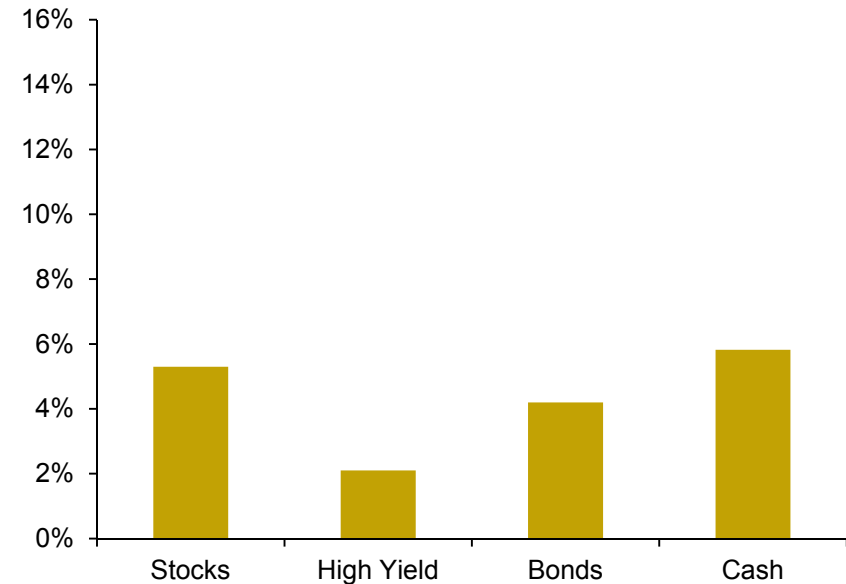


### Favor Economically Sensitive Assets

- Monetary policy accommodative/neutralized
- Profit growth solid/peaks
- Credit spreads narrow

## Late-Cycle Asset Class Performance, 1950–2010

Average Annual Return



### Mixed Asset Class Performance

- Monetary policy becomes restrictive
- Earnings under pressure
- Credit spreads widen



Past performance is no guarantee of future results. Fidelity Investments proprietary analysis of historical asset class performance, using data from indices from: Bank of America Merrill Lynch, Barclays, Fidelity Investments, Morningstar. Source: Fidelity Investments (AART), as of 6/30/15.

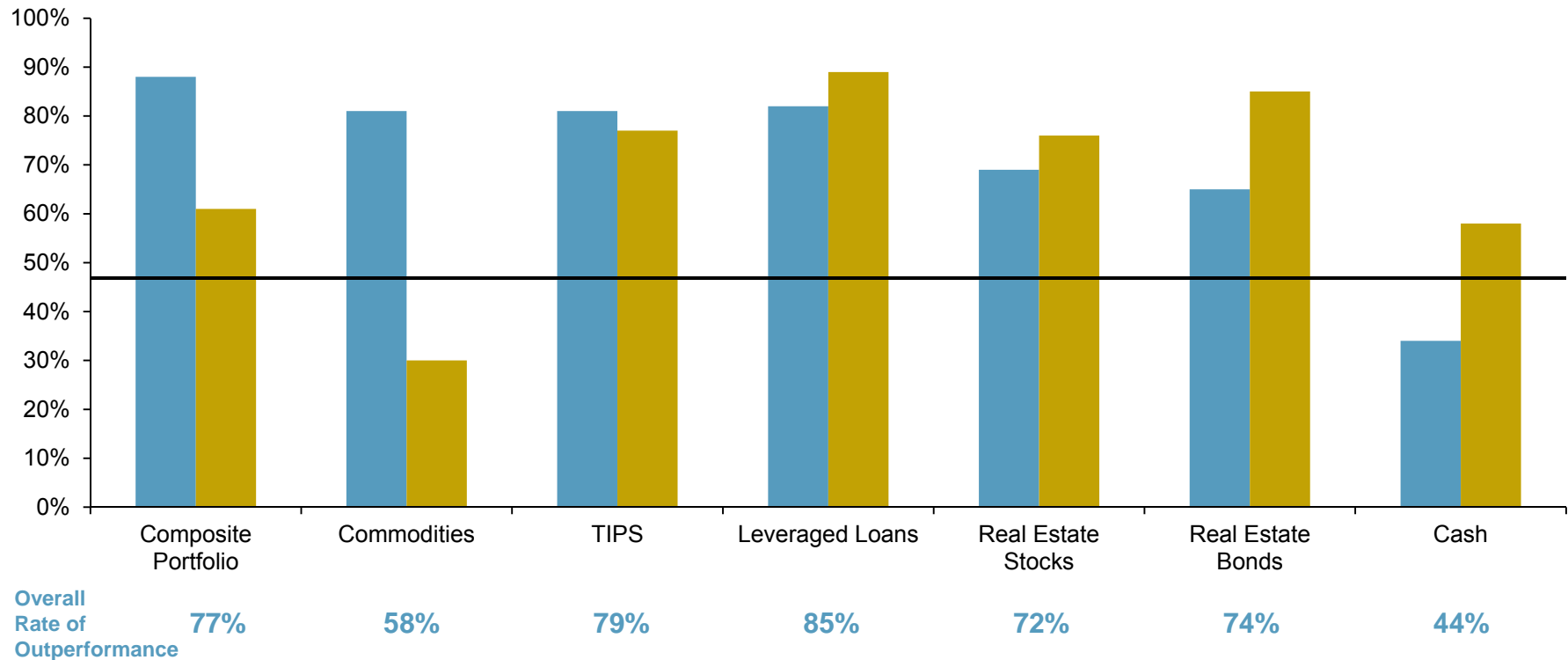
# Real Return: Managing Inflation Risk Still Matters

Investments with hard-asset or income-adjusting characteristics have historically offered inflation resistance, particularly when investors needed it most—as inflation increased. Combining assets into a diversified real-return composite has increased the frequency of outpacing inflation as it rises, a difficult task for cash in today’s low-rate environment.

## Frequency of Outperforming Inflation, 1998–2014

■ Outperformed during Rising Inflation ■ Outperformed during Falling Inflation

% of Periods Outperforming Inflation Rate



Past performance is no guarantee of future results. Diversification does not ensure a profit or guarantee against loss. It is not possible to invest directly in an index. Please see appendix for important index information. Inflation rate: year-over-year change in the consumer price index. Asset classes represented by: Cash – IA SBBI U.S. 30 Day Treasury Bill Index; Commodities – Bloomberg Commodity Index; Composite portfolio – 30% TIPS, 25% leveraged loans, 25% commodities, 10% real estate equity, 10% real estate income; Leveraged Loans – S&P/LSTA Leveraged Performing Loan Index; Real Estate Bonds – BofA ML U.S. Corporate Real Estate Index; Real Estate Stocks – Dow Jones U.S. Select Real Estate Securities Index; TIPS (Treasury Inflation Protected Securities) – Barclays U.S. TIPS Index. Source: Morningstar, Fidelity Investments (AART), as of 11/30/14.



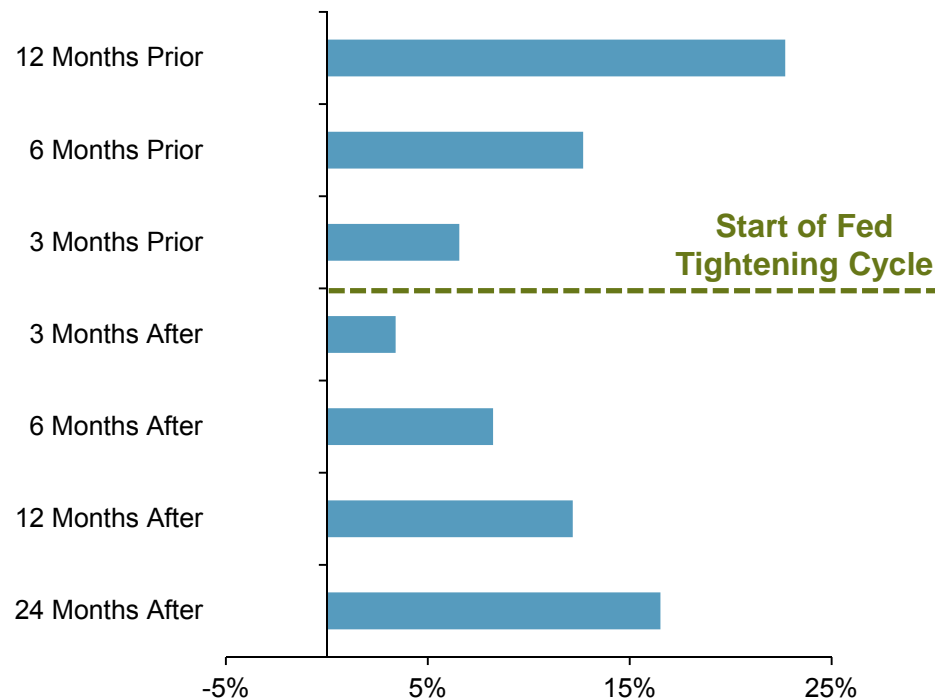


# First Fed Rate Hike Typically Not a Showstopper

Historically, U.S. stocks have posted solid returns prior to and immediately following the Fed's first hike of a tightening cycle, with double-digit average returns one year ahead of and one year after the first rate increase. Bond performance has tended to slow prior to and just after the first hike, though returns have generally been solid two years later.

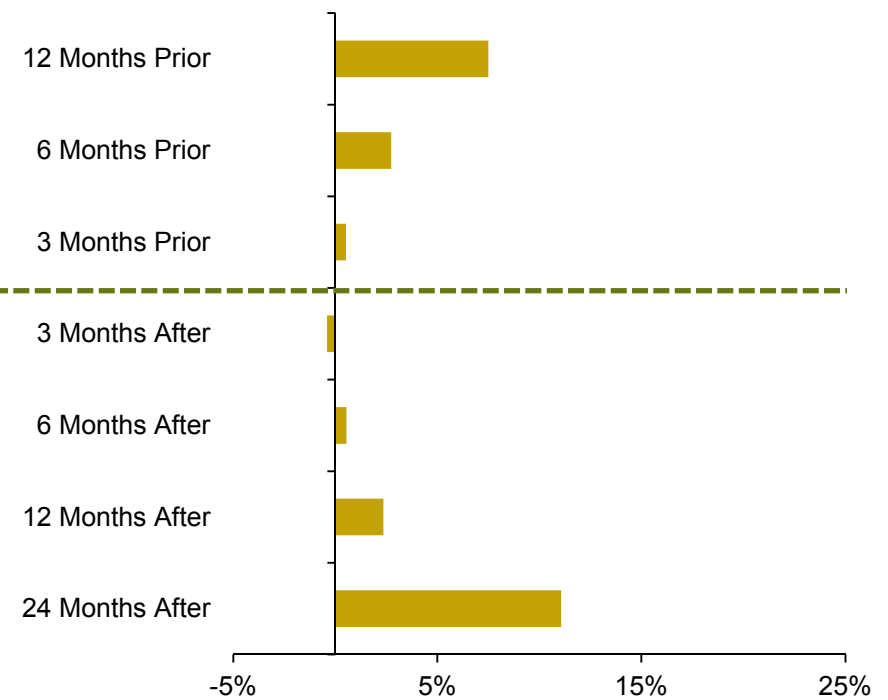
## Equity Performance around Fed Tightening Cycles, 1950–2010

Average Return (%)



## Bond Performance around Fed Tightening Cycles, 1950–2010

Average Return (%)



Fed: Federal Reserve. Past performance is no guarantee of future results. Fidelity Investments proprietary analysis of historical asset class total returns, using data from indices from: Barclays, Fidelity Investments, Morningstar, Standard & Poor's. Source: Fidelity Investments (AART), as of 6/30/15.

# 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 simple portfolio allocation with 60% in U.S. equities and 40% in U.S. bonds 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*	Legend
18%	75%	17%	38%	35%	35%	35%	66%	32%	14%	26%	56%	32%	35%	35%	40%	5%	79%	28%	8%	20%	39%	28%	6%	Foreign-Developed Country Stocks
17%	33%	8%	37%	23%	33%	29%	34%	26%	8%	10%	47%	26%	21%	33%	16%	-20%	58%	27%	8%	19%	34%	14%	5%	Small Cap Stocks
15%	20%	3%	37%	23%	29%	21%	27%	12%	5%	4%	39%	21%	14%	27%	12%	-26%	37%	19%	4%	18%	33%	13%	4%	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%	3%	Emerging-Market Stocks
11%	19%	1%	28%	22%	22%	14%	21%	-1%	-2%	-6%	31%	17%	7%	18%	7%	-36%	28%	17%	2%	16%	23%	11%	3%	High-Yield Bonds
8%	17%	0%	20%	16%	20%	9%	21%	-3%	-4%	-9%	31%	11%	5%	16%	6%	-36%	27%	16%	2%	16%	19%	6%	1%	Large Cap Stocks
8%	10%	-1%	18%	15%	13%	3%	12%	-5%	-4%	-15%	29%	11%	5%	12%	5%	-37%	26%	15%	0%	16%	7%	5%	1%	60% Large Cap 40% IG Bonds
7%	10%	-2%	15%	11%	10%	-3%	7%	-9%	-12%	-16%	28%	9%	5%	11%	2%	-38%	20%	15%	-4%	15%	3%	3%	0%	Investment-Grade Bonds
5%	10%	-2%	15%	6%	2%	-18%	3%	-14%	-20%	-20%	24%	8%	4%	9%	-1%	-38%	19%	12%	-12%	11%	-2%	-2%	-1%	Value Stocks
4%	4%	-3%	12%	6%	-3%	-25%	-1%	-22%	-20%	-22%	19%	7%	3%	4%	-2%	-43%	18%	8%	-13%	4%	-2%	-4%	-2%	Commodities
-12%	-1%	-7%	-5%	4%	-12%	-27%	-5%	-31%	-21%	-28%	4%	4%	2%	2%	-16%	-53%	6%	7%	-18%	-1%	-10%	-17%	-5%	Real Estate Stocks

\*2015 as of 6/30/15. 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 – MSCI Emerging Markets Index; Foreign-Developed Country – MSCI EAFE Index; Growth – Russell 3000 Growth Index; High Yield – Bank of America Merrill Lynch U.S. High Yield Index; Investment-Grade – Barclays U.S. Aggregate Bond Index; Large Cap – S&P 500 Index; Real Estate – FTSE NAREIT Equity Index; Small Cap – Russell 2000 Index; Value – Russell 3000 Value Index. Source: Morningstar, Standard & Poor's, Haver Analytics, Fidelity Investments (AART), as of 6/30/15.

# Appendix: Important Information

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.

Investment decisions should be based on an individual's own goals, time horizon, and tolerance for risk.

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**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.

All indices are unmanaged, and performance of the indices includes reinvestment of dividends and interest income and, unless otherwise noted, is not illustrative of any particular investment. An investment cannot be made in any 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.

## Market Indices

**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.

# Appendix: Important Information

## Market Indices (continued)

**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. **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. **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.

**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. **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. **Barclays Emerging Market Bond Index** is an unmanaged index that tracks total returns for external-currency-denominated debt instruments of the emerging markets. **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. **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. **Barclays Municipal Bond Index** is a market value-weighted index of investment-grade municipal bonds with maturities of one year or more. **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. **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. **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. **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. **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. **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). **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. **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.

**The Citigroup Non-USD Group-of-seven (G7) Equal Weighted Index** is designed to measure the unhedged performance of the government bond markets of Japan, Germany, France, Britain, Italy, and Canada. The index is equal weighted by country. Issues included in the index have fixed-rate coupons and maturities of one year or more.

**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).

**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 Global Financial Data (GFD) World x/USA Return Index** is a multi-country composite index with constituents weighted by relative GDP and stock market capitalizations; it is designed to approximate continuous and comparable world ex-U.S. equity returns from 1919 to 1969. **GFD Emerging Markets Index** is a composite of various regional EM indices in use before 1987 using a qualitatively selected weighting of constituent countries; it is designed to approximate continuous and comparable EM equity returns from 1920 to 1987.

**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. **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 speculative grade.



# Appendix: Important Information

## Market Indices (continued)

**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 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 & 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. & 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 China Index** is a market capitalization-weighted index designed to measure equity market performance in China. **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 2500 Index companies with lower price-to-book ratios and lower forecasted growth rates. **Russell Midcap® Index** is a market capitalization-weighted index designed to measure the performance of the mid-cap segment of the U.S. equity market. It contains approximately 800 of the smallest securities in the Russell 1000 Index.

The **S&P 500® 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.

**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 & services and technology hardware & 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.





# Appendix: Important Information

## Market Indices (continued)

### 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 China Home Price Diffusion Index—70 Cities** is a price index for existing residential buildings in 70 cities in China.

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

**The Producer Price Index (PPI)** measures the average change over time in the selling prices received by domestic producers for their output. The prices included in the PPI are from the first commercial transaction for many products and some services.

**The London Bullion Market Association (LBMA)** publishes the international benchmark price of gold in USD, twice daily.

**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.

## 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.

**Sharpe ratio** compares portfolio returns above the risk-free rate relative to overall portfolio volatility. A higher Sharpe ratio implies better risk-adjusted returns.

**Standard deviation** shows how much variation there is from the average (mean or expected value). A low standard deviation indicates that the data points tend to be very close to the mean, whereas a high standard deviation indicates that the data points are spread out over a large range of values. A higher standard deviation represents greater relative risk.

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