leadership series | FOURTH QUARTER 2016

Quarterly Market Update

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Market Summary

Overview: Global Economy Holds Up, Markets Bounce Back

Markets recovered from the initial shock of the late-June U.K. referendum vote to leave the European Union, as lower bond yields, expectations of additional monetary accommodation, and stable global economic data soothed investor concerns. With the global expansion intact but late-cycle indicators rising, smaller cyclical tilts to portfolio allocations may be warranted.

	Q3 2016 TRENDS	OUTLOOK Q4 2016
MACRO	• Global economy held up better than markets expected post-Brexit – U.K. and Europe activity still expansionary – Pickup in China's growth boosted EMs – U.S. mix of mid- and late-cycle dynamics • Ample global liquidity, though expectations of greater monetary easing largely unfulfilled – Fed, ECB, and BOJ kept policy rates unchanged – BOJ shifted to target longer yields	• Global economic stability; much of world in maturing phase of business cycle – China's stimulus-induced steadiness providing stability to EMs and commodities – Eurozone expansion tepid but stable – Low recession risk in U.S. • U.S. shifting to late cycle – Slow pace of global improvement and Fed tightening stretch mid-late cycle transition – Inflation may surpass low expectations as low "base effect" lifts commodities • Secular anti-globalization political risks on the rise
MARKETS	• Post-Brexit recovery in risk assets • Bond yields rose modestly, remained major driver of relative returns	• Policy uncertainty likely to boost market volatility • Favor global equities but smaller allocation tilts • Inflation-resistant assets may offer protection against an upside surprise

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Brexit: U.K. referendum vote to leave E.U. Fed: Federal Reserve. EM: emerging market. ECB: European Central Bank. BOJ: Bank of Japan.
Past performance is no guarantee of future results.

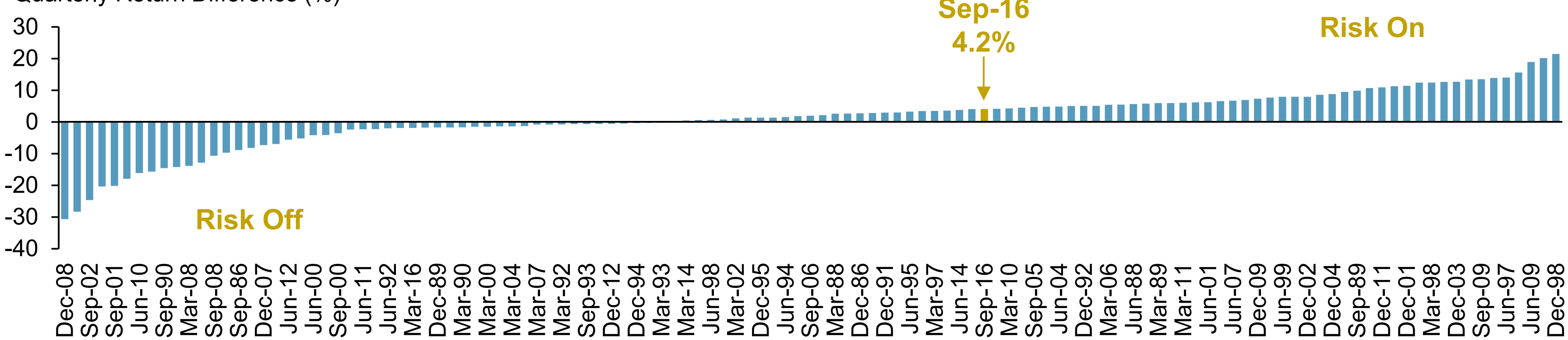
Global Equities Led Broad-Based Market Gains

Assets most sensitive to the global economic and liquidity environment spearheaded the rally during Q3, including non-U.S. equities, small-capitalization stocks, and high-yield bonds. Interest rates ticked up during the quarter and cooled off the rally in bond-proxy assets such as REIT stocks, but most bond and rate-sensitive assets have strong year-to-date returns.

	Q3 2016 (%)	Year-to-Date (%)		Q3 2016 (%)	Year-to-Date (%)
Emerging-Market Stocks	9.2	16.4	Emerging-Market Bonds	3.7	15.0
U.S. Small-Cap Stocks	9.0	11.5	Long Government & Credit Bonds	1.2	15.7
Non-U.S. Small-Cap Stocks	8.7	5.5	U.S. Corporate Bonds	1.2	8.9
Non-U.S. Developed-Country Stocks	6.5	2.2	Investment-Grade Bonds	0.5	5.8
High-Yield Bonds	5.5	15.3	Gold	0.1	24.8
U.S. Mid-Cap Stocks	4.5	10.3	Real Estate Stocks	-1.2	12.3
U.S. Large-Cap Stocks	3.9	7.8	Commodities	-3.9	8.6

Risk Meter: U.S. Large-Cap Stock minus Treasury Bond Returns, 1986–2016

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 – 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 – 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. Sources: Bloomberg Finance L.P., Haver Analytics, Fidelity Investments (AART), as of 9/30/16.

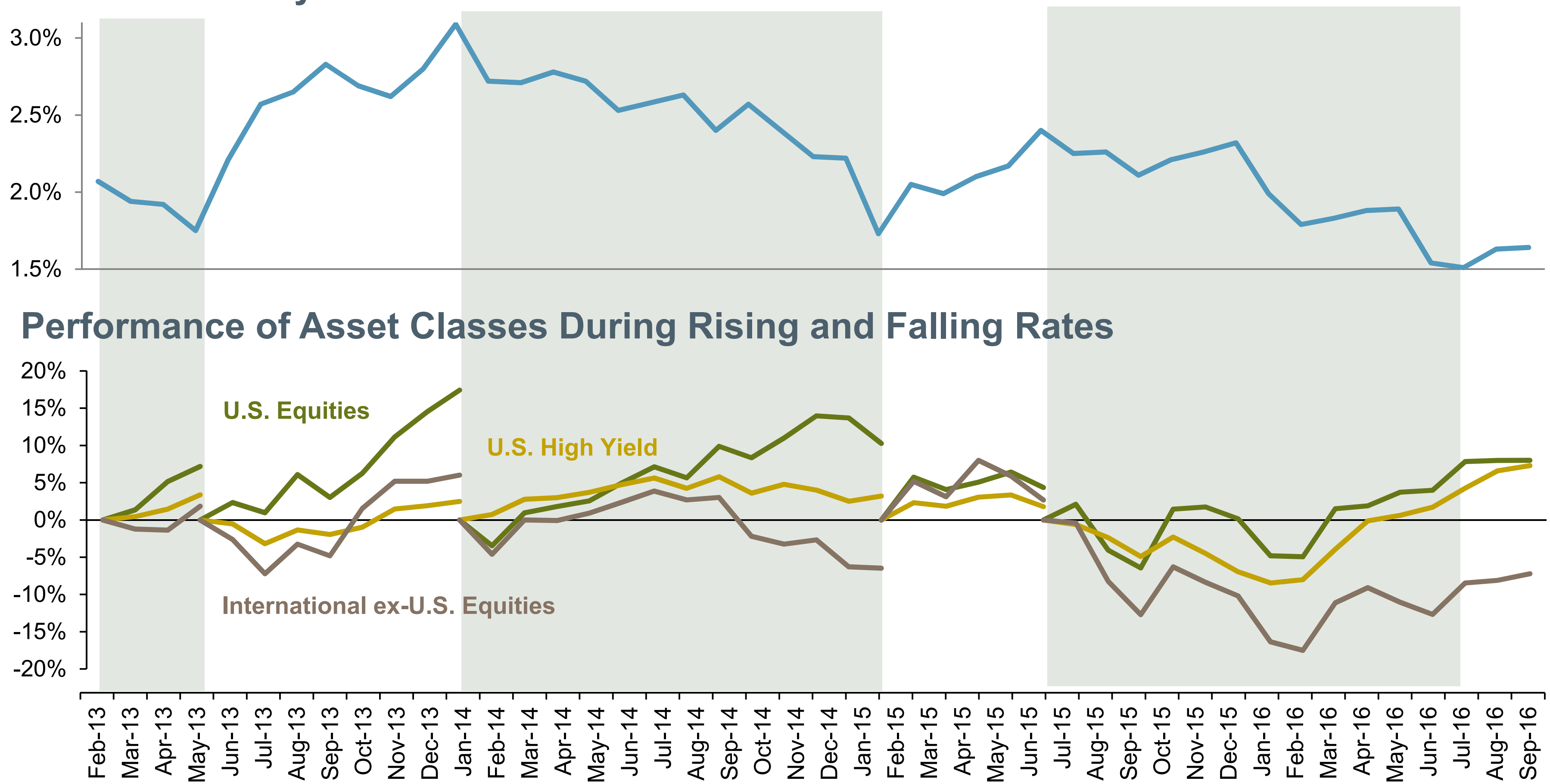
Theme:
All About Rates?

Drivers of Yields (Not Just Direction) Crucial for Asset Prices

The context for why yields may rise or fall—such as improving or flagging expectations of growth—is a critical element of asset-class performance. Since 2013, the performance of riskier asset classes has often been positive during periods when rates were rising, while risky asset prices have both risen and fallen during different periods when rates declined.

10-Year Treasury Yield

Performance of Asset Classes During Rising and Falling Rates

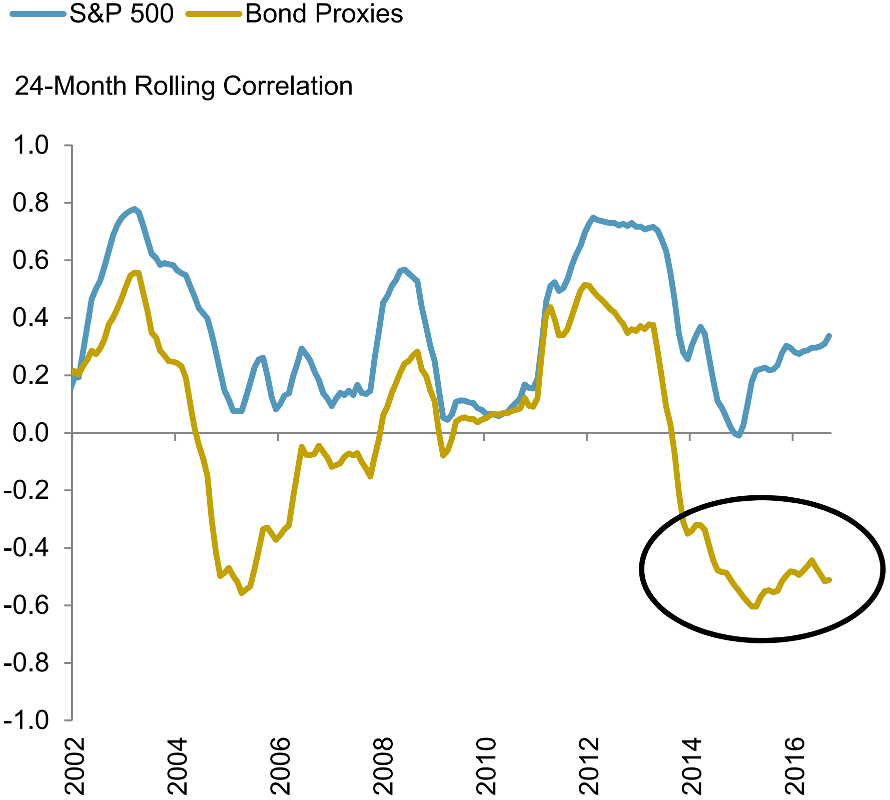


Past performance is no guarantee of future results. It is not possible to invest directly in an index. Shaded areas represent period when the 10-year Treasury yield was falling. 10-year yield data is month-end. U.S. Equities: S&P 500 Index. U.S. High Yield: Bank of America High Yield Master II Index. International ex-U.S. Equities: MSCI All Country World Ex-U.S. Index. See appendix for important index information. Sources: Federal Reserve, MSCI, Standard & Poor's, Bank of America, Haver Analytics, Fidelity Investments (AART), as of 9/30/16.

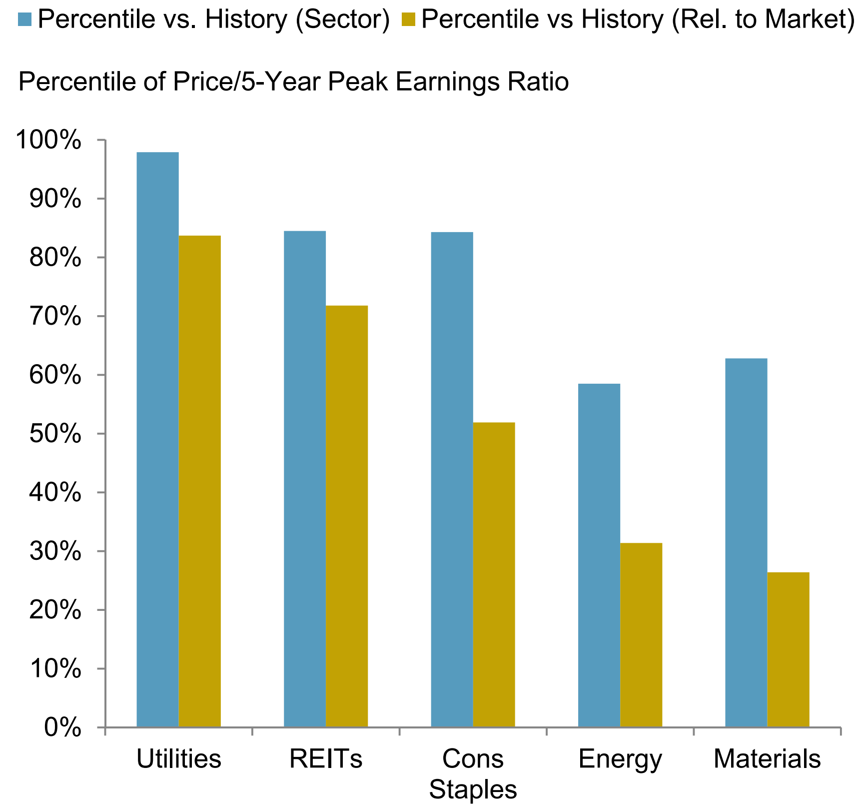
Bond-Proxy Sectors Closely Tied to Yield Movements

Asset prices have been particularly sensitive to changes in bond yields over the past year, especially the performance of bond-proxy equity sectors such as utilities, REITs, and some consumer staples. Benefiting from their attractiveness in a low-yield environment, the relative valuations of these high-dividend payers have reached extreme levels on a historical basis.

Correlation with 10-Year Treasury Yields



Equity Sector Valuations, 1976-2016

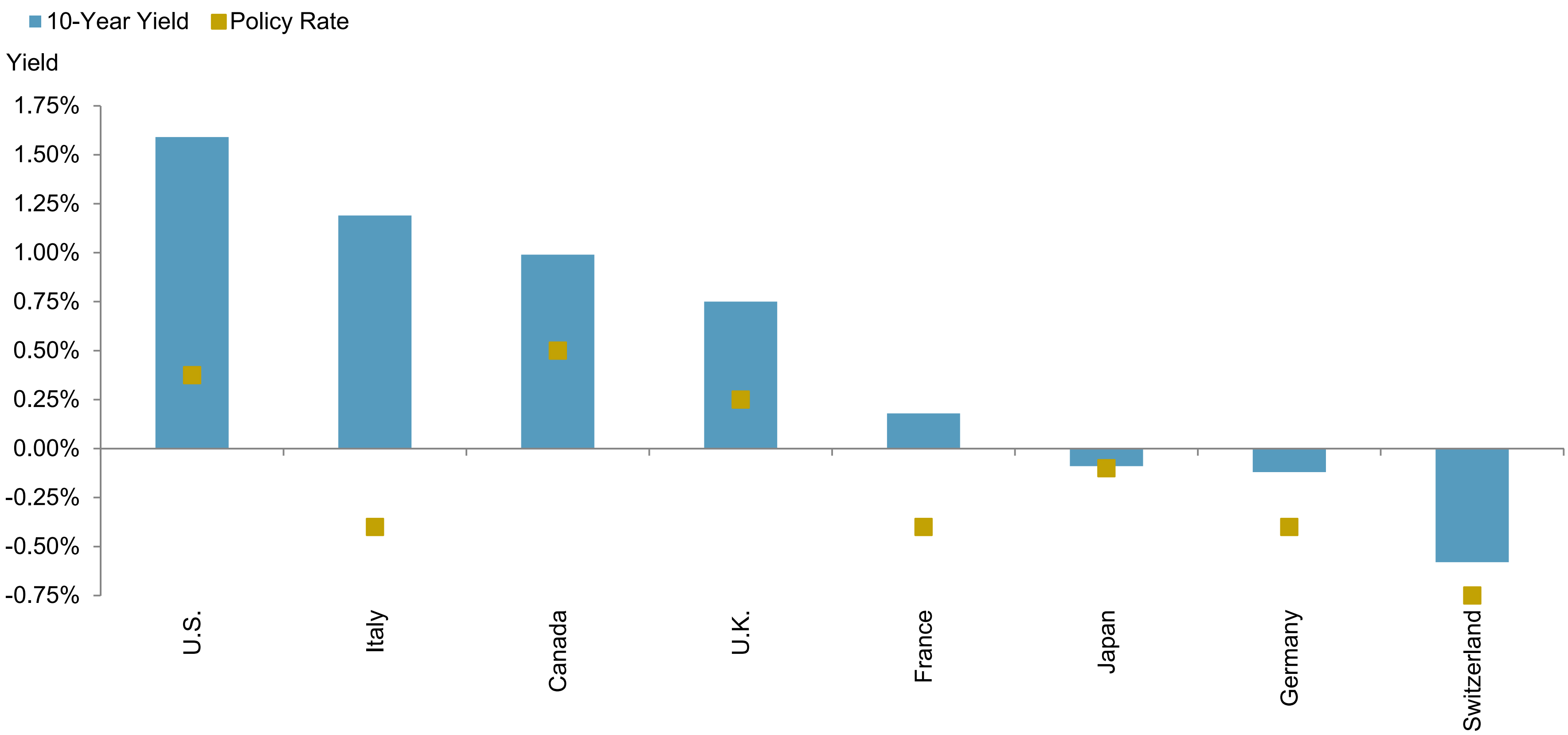


LEFT: Data shown as a three-month average. Bond proxies include utilities, consumer staples, and REIT equities, equally weighted. Sources: Bloomberg Finance L.P., Standard and Poor's, Fidelity Investments (AART), as of 9/30/16. **RIGHT:** Percentile vs. history (sector) refers to the sectors' historical P/E ratios. Percentile vs. history (relative to market) refers to sector's historical premium/discount to the broader stock market. Source: Fidelity Investments (AART), as of 8/30/16.

Easy Monetary Policies Act as Anchor on Global Rates

Expectations for even easier monetary policy kept a lid on global bond yields in the immediate aftermath of the Brexit vote, but short-term policy rates were largely unchanged in Q3. Trillions of dollars of government bonds traded in negative territory, although longer-term yields ticked up and U.S. yields remain higher than those of many other advanced economies.

Sovereign Bond Yields and Policy Rates



Sources: Bloomberg Finance LP, Fidelity Investments (AART), as of 9/30/16.

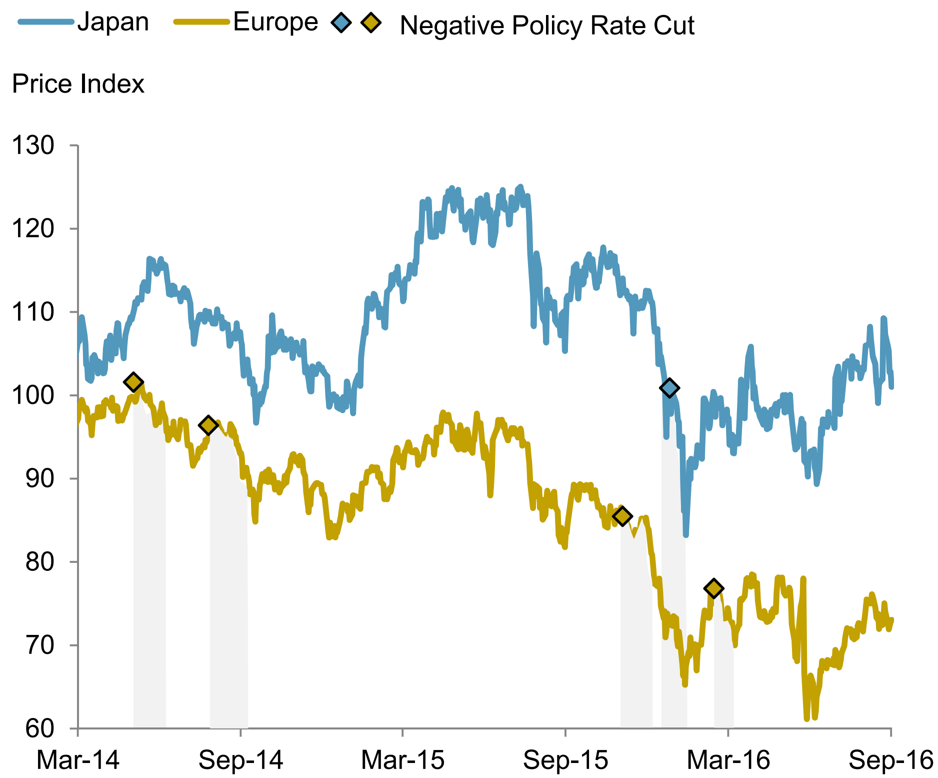
Negative Rates Show Limits of Monetary Policy

Major central banks in Japan and Europe have enacted negative policy rates, but each rate-cut into negative territory was immediately followed by a decline in bank stock prices. In fact, the real-world impact of negative policy rates may run counter to several of their intended goals, and the BOJ and ECB opted not to reduce policy rates further during Q3.

Negative Policy Rate Considerations

Intended Central Bank Goals	Unintended Consequences
Stimulates consumption	Reduces return potential: households, pensions, insurers save
Incentivizes bank lending	Hurts bank margins, reduces loan supply
Reduces debt service burden	Keeps weak firms alive, lowers productivity
Weakens currency	Currencies have strengthened

European and Japanese Financial Stocks

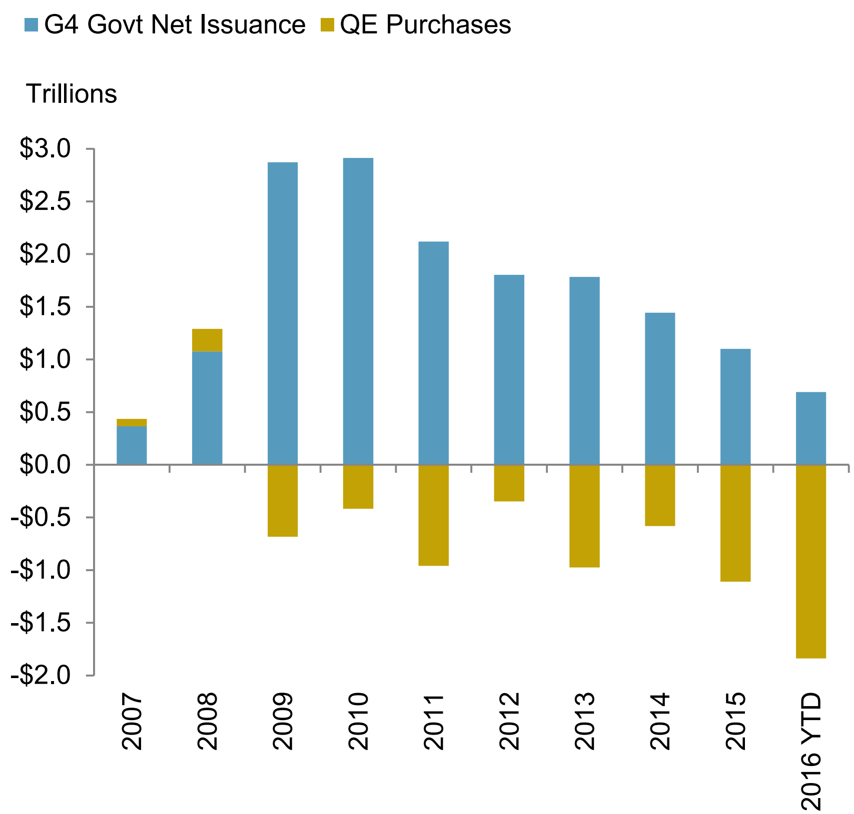


Prices indexed to 100 = first cut to negative rates. Japan financial stocks: MSCI Japan Financials Index. BOJ: Bank of Japan. ECB: European Central Bank. Europe financial stocks: MSCI Europe Financials Index. Sources: MSCI, Bloomberg Finance L.P., Fidelity Investments (AART), as of 9/30/16.

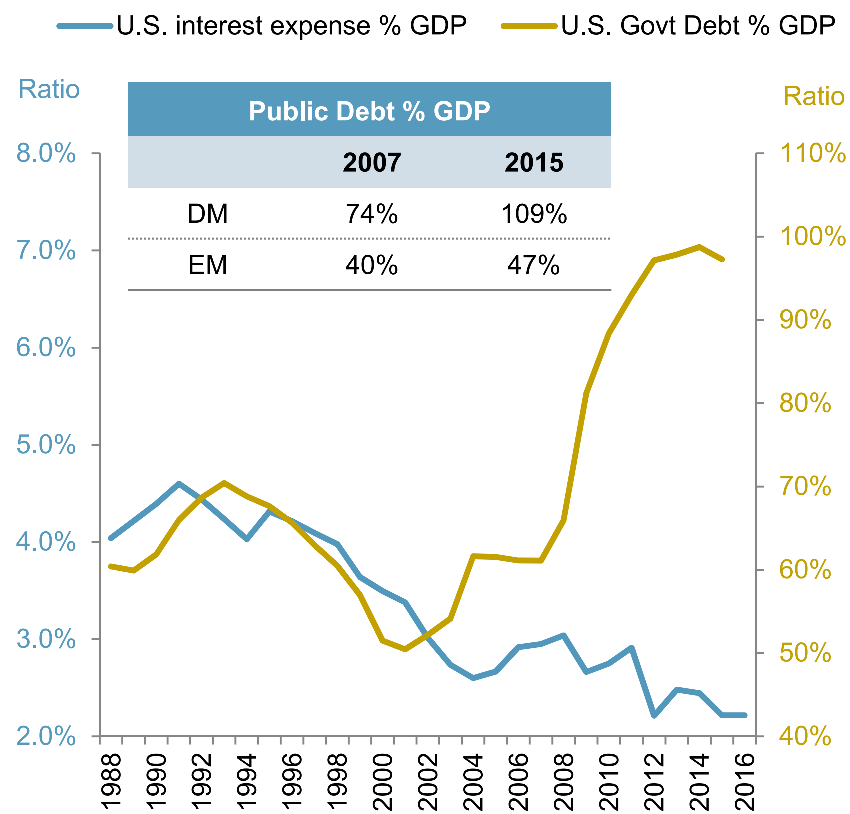
Large Government Debt, but Bond Supply Dwindles

Large post-crisis budget deficits caused a dramatic increase in public debt in many developed economies over the past decade, but low yields have kept debt service from rising. Fiscal austerity in recent years, coupled with ambitious bond-buying programs by central banks, have drastically limited the net supply of government bonds available to investors in 2016.

G4 Government Debt Issuance and QE



U.S. Public Debt & Interest Expense



Public Debt % GDP		
	2007	**2015**
DM	74%	109%
EM	40%	47%

LEFT: G4: U.S., U.K., Euro area, and Japan. QE: Quantitative easing. CB: Central Bank. ECB sovereign debt purchases include local and regional government debt. Central bank purchases do not include reinvestments. Source: Japan Security Dealers Association, U.K. Debt Management Office, European Central Bank, U.S. Bureau of Public Debt, Federal Reserve, Bank of Japan, Bank of England, Haver Analytics, Fidelity Investments (AART), as of 9/30/16. **RIGHT:** Sources: U.S. Treasury, Bureau of Economics, Federal Reserve, Haver Analytics, Fidelity Investments (AART), as of 9/30/16.

Global Private Debt Supercycle

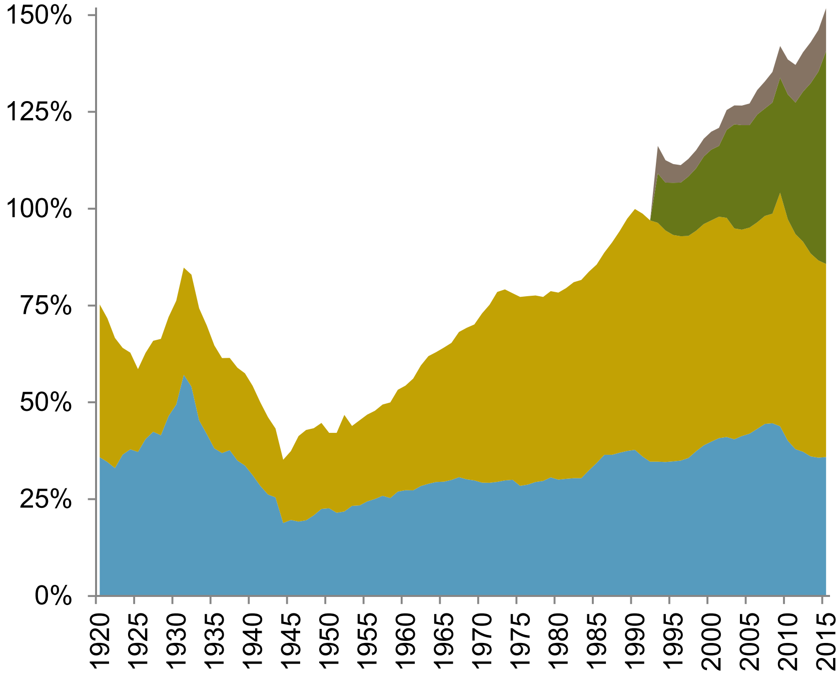
The stock of global private-sector debt has expanded at an astounding pace in recent decades, with China's credit binge magnifying the rise in recent years. While low borrowing rates have allowed U.S. corporate debt service obligations to remain below historical average levels, corporate bond issuance reached record highs and interest expense has begun to move up.

THEME

Global Private Non-Financial Debt

US Other DM China Other EM

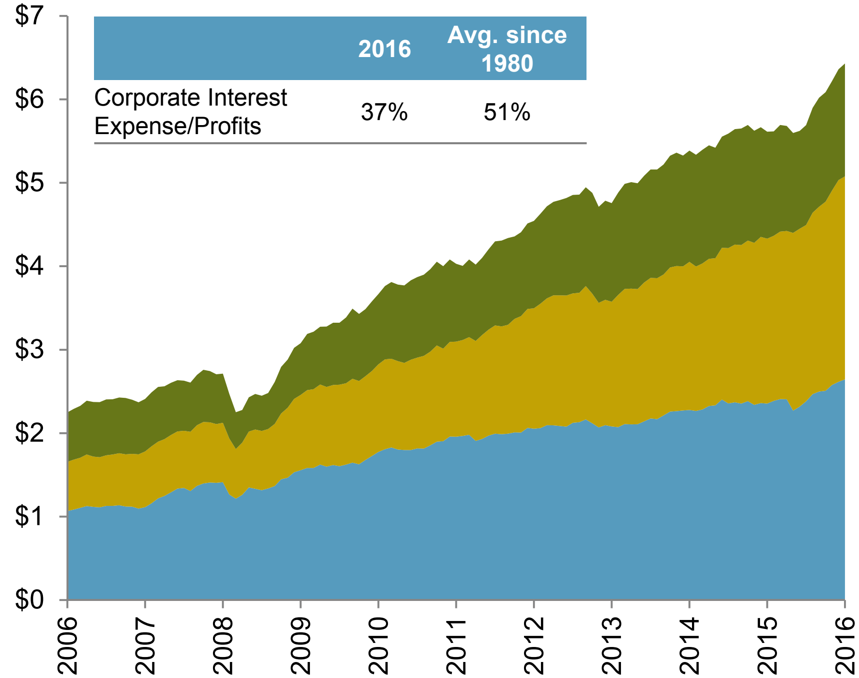
Debt / Global GDP



US Corporate Bonds Outstanding

A/Aa/Aaa Baa High Yield

Trillions



	2016	Avg. since 1980
Corporate Interest Expense/Profits	37%	51%

LEFT: Includes 13 developed-market & 5 emerging-market countries. Country debt/GDP ratios are weighted by PPP-adjusted GDP from Maddison Project/IMF. Sources: BIS, Nat'l Stats Bureaus, IMF, Alan Taylor Dataset, Reinhart-Rogoff Dataset, Maddison Project as of 12/31/15. **RIGHT:** Total amount of bonds in the Bloomberg Barclays US Corporate IG and HY Bond Indices. High yield bonds have ratings of BB or lower as determined by Bloomberg Barclays with S&P/Moody's and Fitch credit ratings. Interest expense for all non-financial U.S. firms as defined by Bureau of Economic Analysis. Sources: Barclays, Bureau of Economic Analysis, Haver Analytics, Bloomberg Finance L.P., Fidelity Investments (AART), as of 8/31/16.

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Many Reasons Yields So Low, Some May Not Last Forever

Several fundamental factors (slow global growth, subdued inflation, easy monetary policies) and technical trends (reduced supply and higher demand for government bonds) have sent bond yields lower. With yield levels implying expectations of a global recession followed by secular stagnation, a modest alternative surprise could put upward pressure on yields.

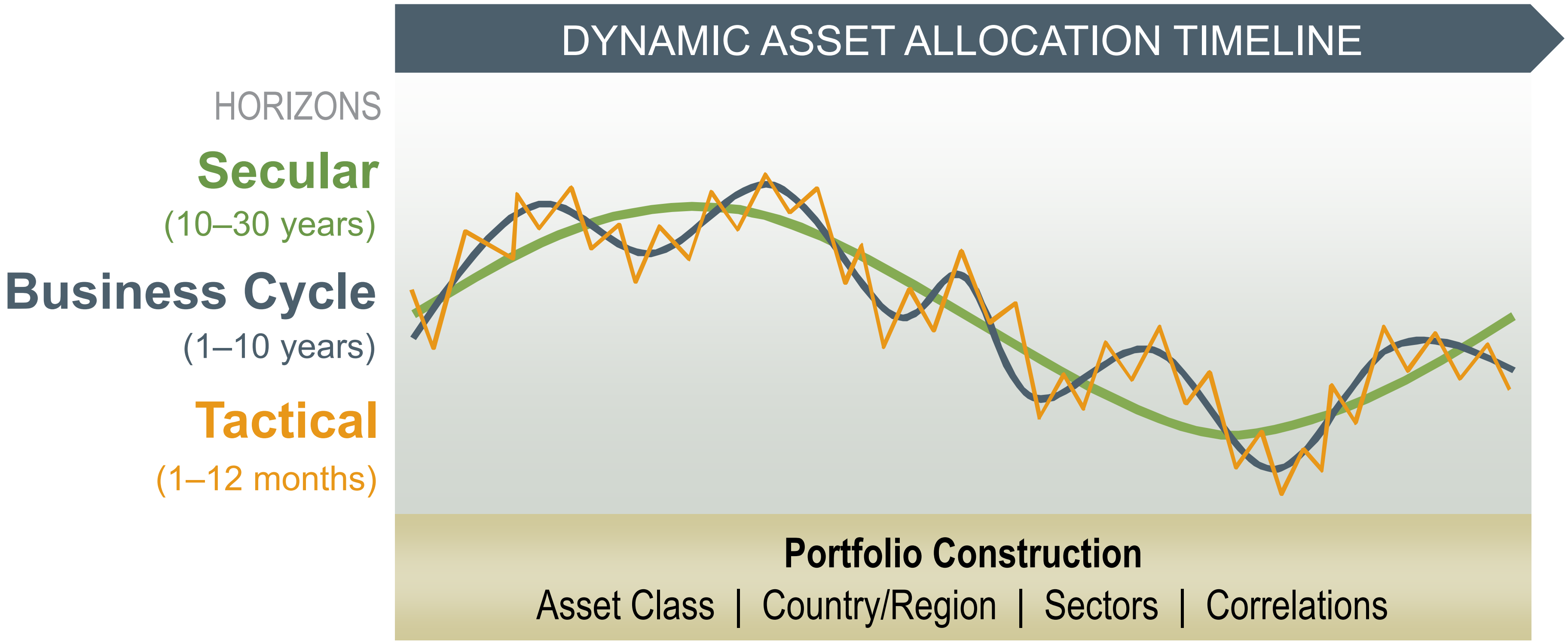
	Why rates are low	What might push them up
	Fundamentals	
Cyclical and secular	Slow growth	Better than expected growth
	Low inflation	Higher than expected inflation
	Monetary easing	Less easy monetary policies
	Technicals	
Reduced supply	Quantitative easing	Less QE than expected
	Fiscal tightening	Fiscal easing
Increased demand	Regulatory backdrop	(Very low probability of change)
	Demographics	(Very low probability of change)

Source: Fidelity Investments (AART).

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).

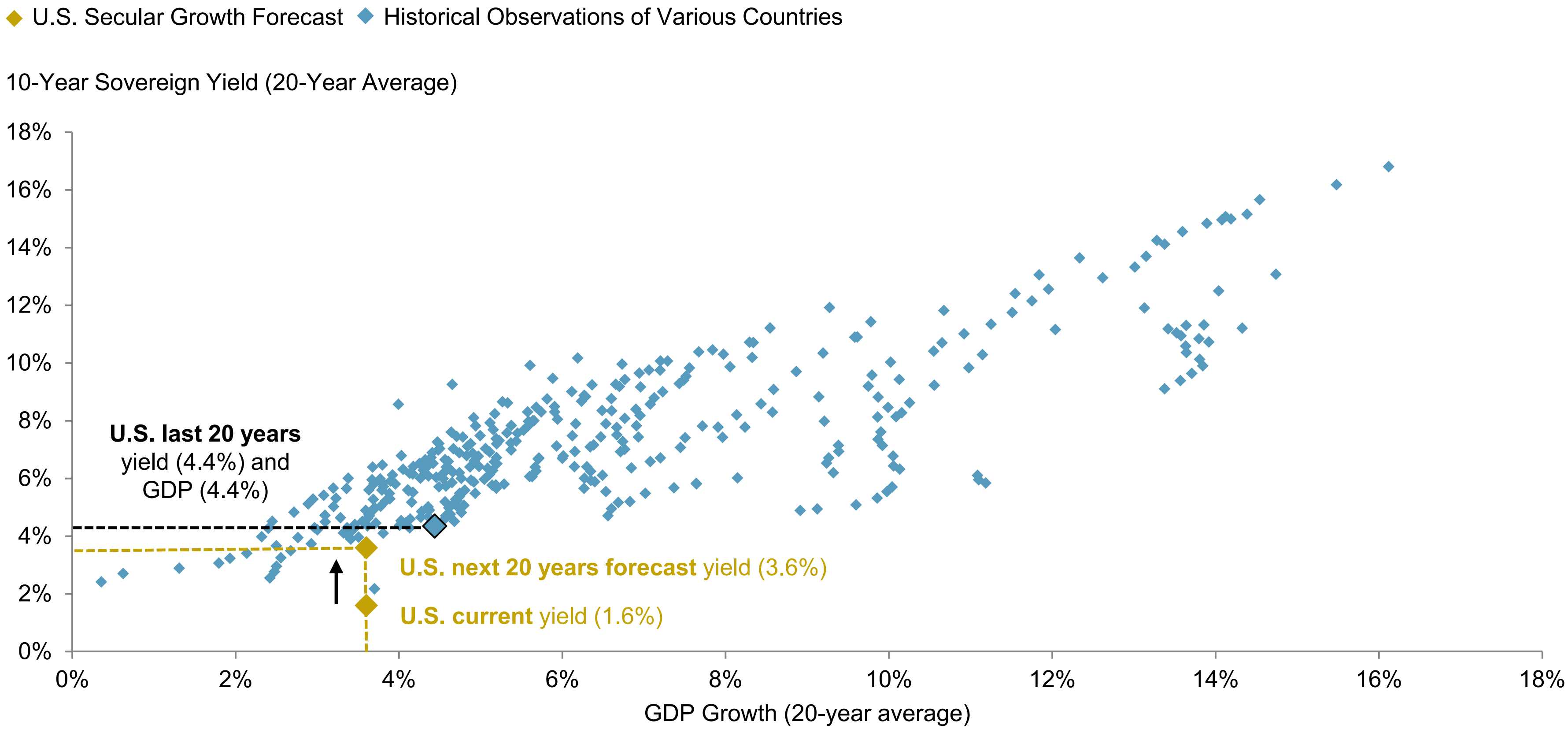


For illustrative purposes only. Source: Fidelity Investments (AART).

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 averaging the same as nominal growth). We expect interest rates will rise over the long-term to average closer to our 3.6% nominal GDP forecast, but this implies they would settle at a significantly lower level than their historical average.

Nominal Government Bond Yields and GDP Growth

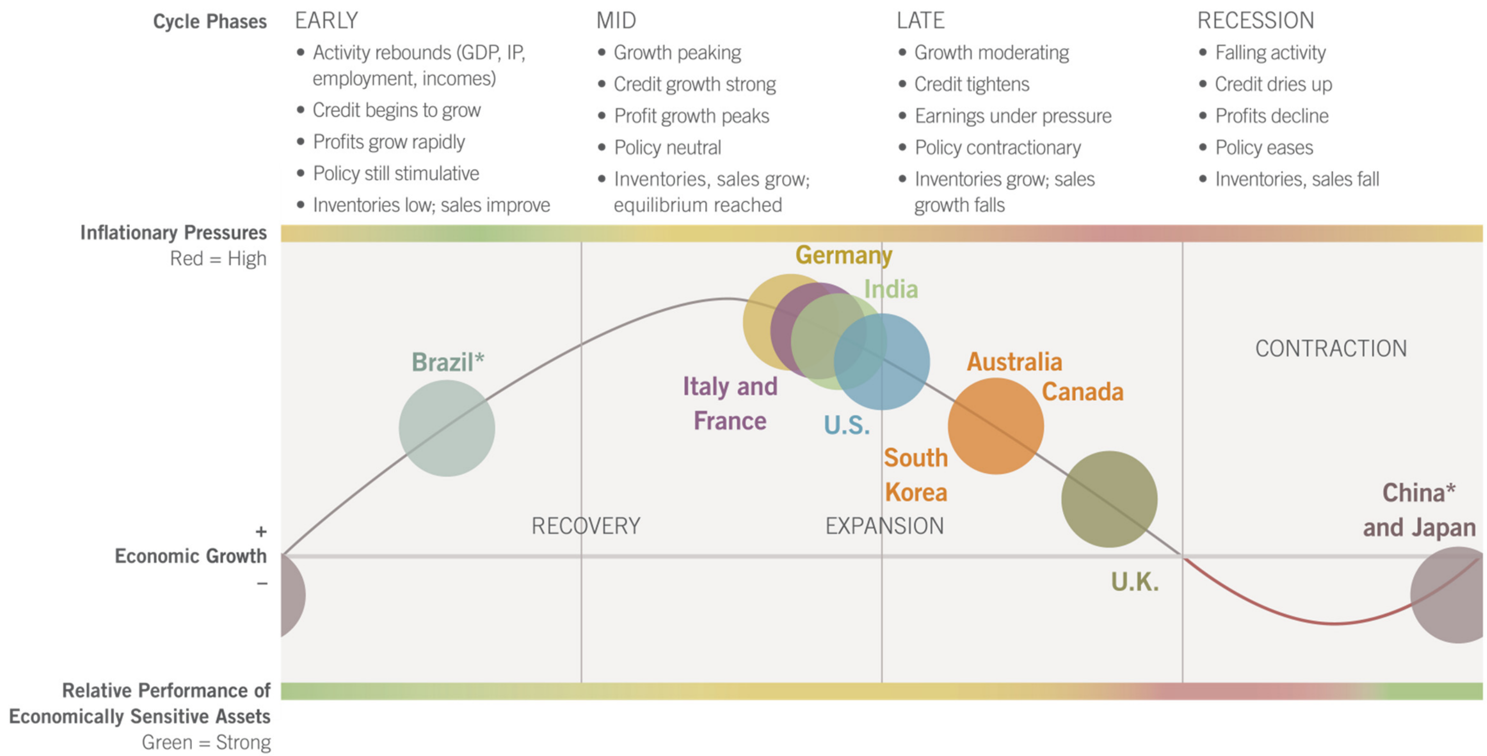


Sources: Official Country Estimates, Haver Analytics, Fidelity Investments (AART), as of 9/30/16.

Slow Growth, but Stable Global Business Cycle

Most of the developed world is in the mid- to late stages of economic expansion, and China's improved cyclical trajectory has helped boost many emerging economies, such as Brazil. The global economic expansion continues at a slow, yet steady pace. The odds of global recession remain low, although the overall global trend can be characterized as relatively mature.

Business Cycle Framework

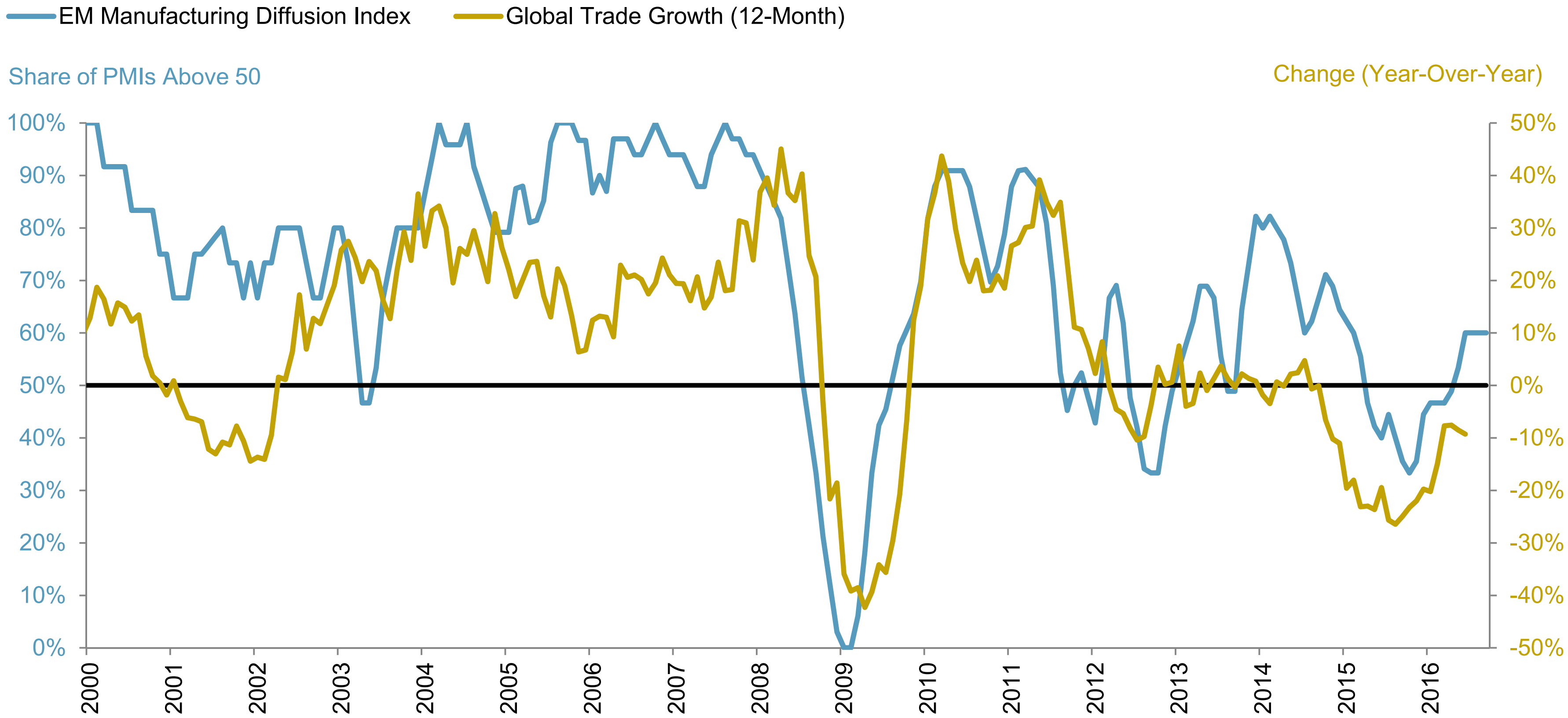


Note: The diagram above is a hypothetical illustration of the business cycle. There is not always a chronological, linear progression among the phases of the business cycle, and there have been cycles when the economy has skipped a phase or retraced an earlier one. *A growth recession is a significant decline in activity relative to a country's long-term economic potential. We have adopted the "growth cycle" definition for most developing economies, such as China, because they tend to exhibit strong trend performance driven by rapid factor accumulation and increases in productivity, and the deviation from the trend tends to matter the most for asset returns. We use the classic definition of recession, involving an outright contraction in economic activity, for developed economies. Source: Fidelity Investments (AART), as of 9/30/16.

EM Improvement Key to Ending Global Industrial Recession

After one of the worst global trade recessions on record in 2015, underlying trends in global activity have continued to improve. The turnaround has been spearheaded by the rebound in emerging-market manufacturing activity, which has benefited from policy-driven stabilization in China and a reduction in inventories.

Global Trade Growth vs. EM Manufacturing Activity

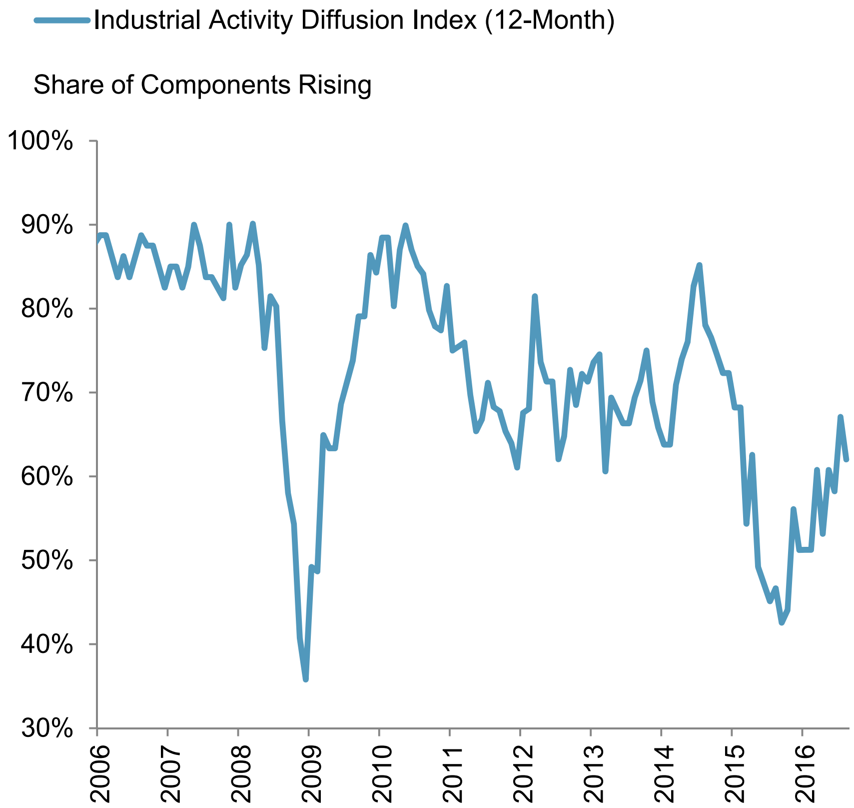


EM: Emerging Markets. Sources: IHS Markit, International Monetary Fund, Haver Analytics, Fidelity Investments (AART), as of 9/30/16.

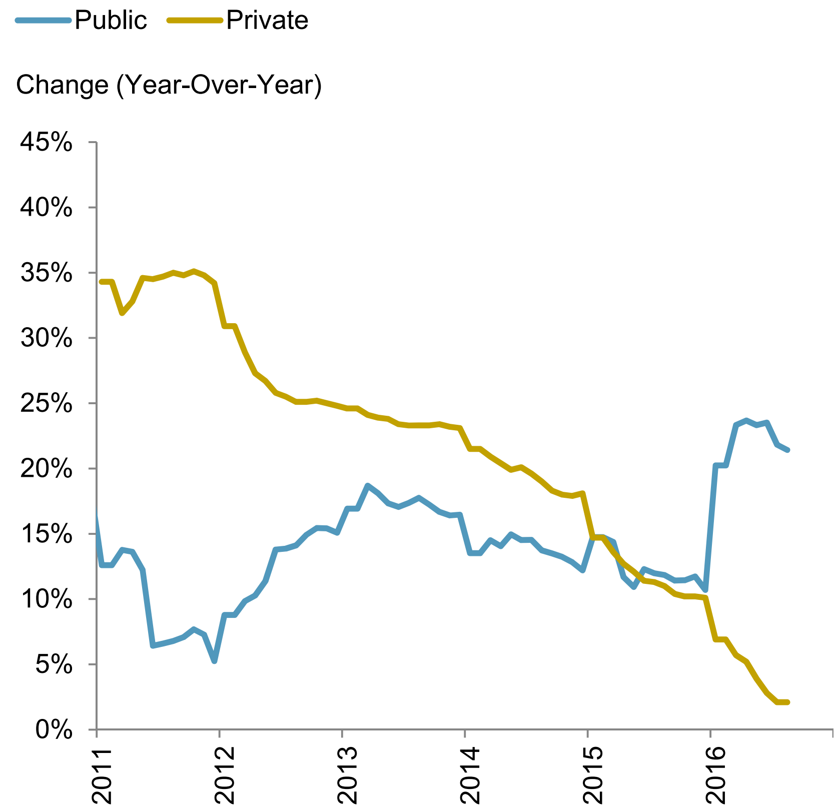
Policy Drives China's Near-Term Stabilization

China's industrial sector and general activity levels have rebounded after a significant slowdown during 2015, with policymakers demonstrating a commitment to near-term stability via substantial fiscal spending on infrastructure. However, a typical early-cycle reacceleration is unlikely, as China's private sector is still burdened with overcapacity and excess debt.

China Industrial Activity



China Fixed Asset Investment

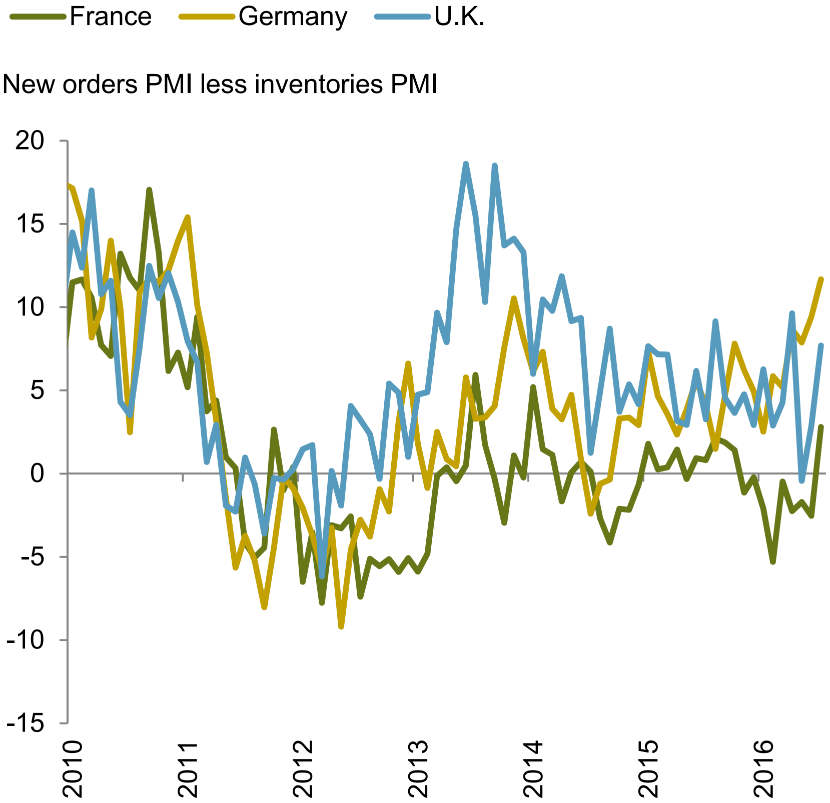


LEFT and RIGHT: Sources: China National Bureau of Statistics, Haver Analytics, Fidelity Investments (AART), as of 8/31/16.

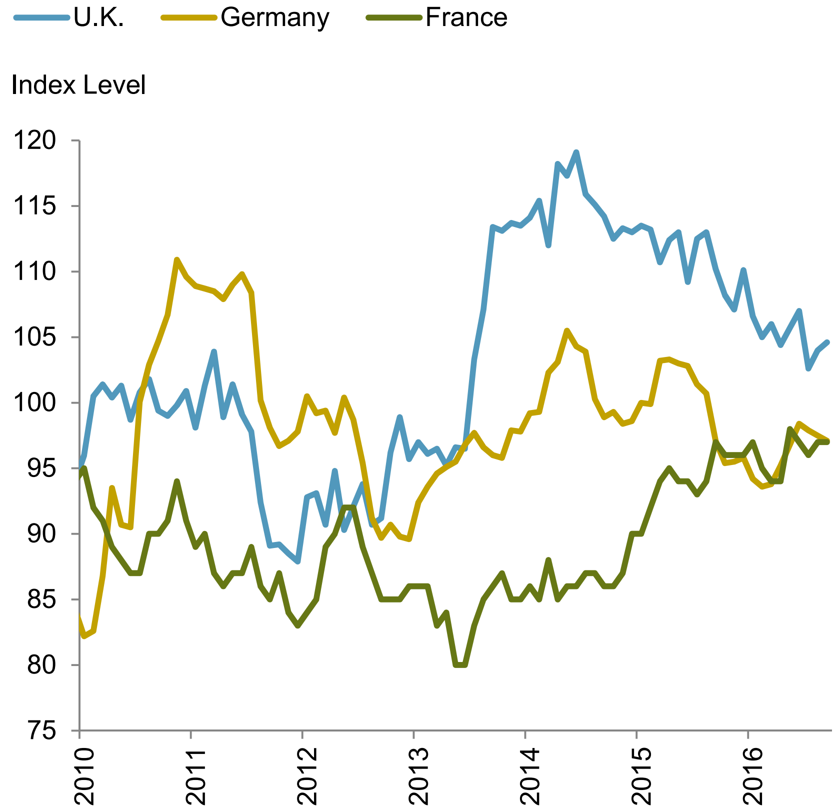
Europe Weathers Brexit, But Expansion Remains Sluggish

Europe's economy, including the U.K., appears resilient in the wake of Brexit, with surveys of manufacturing activity surprising to the upside. However, the picture remains mixed, as political uncertainty weighs on sentiment indicators. Many European economies remain solidly in the mid-cycle phase, but growth remains tepid.

European Manufacturing Bullwhip



European Consumer Confidence

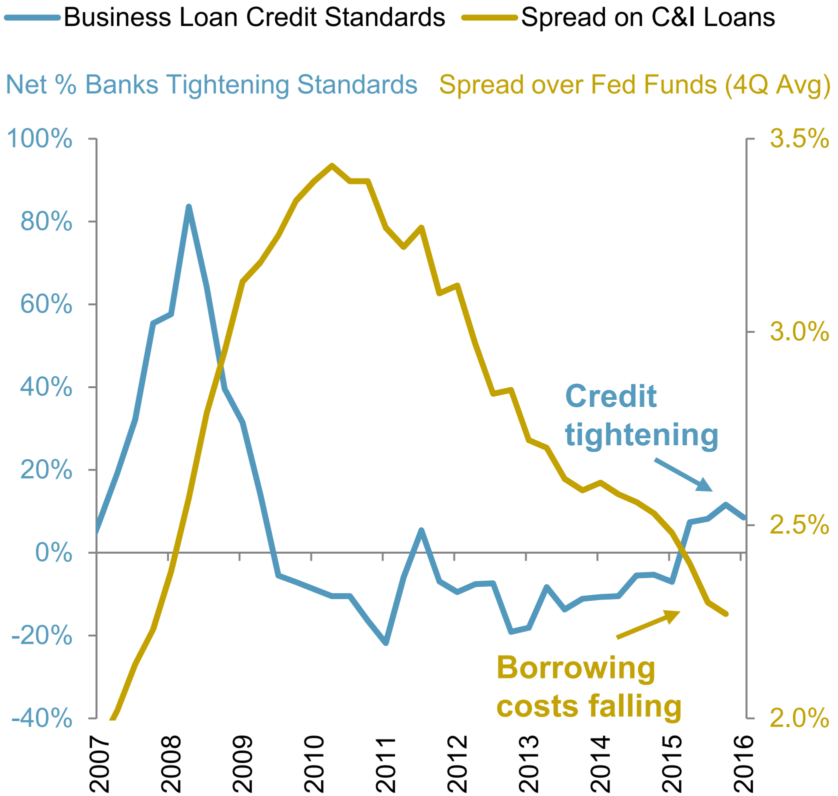


LEFT: IHS Markit, Haver Analytics, Fidelity Investments (AART), as of 9/30/16. **RIGHT:** European Commission, Haver Analytics, Fidelity Investments (AART), as of 9/30/16.

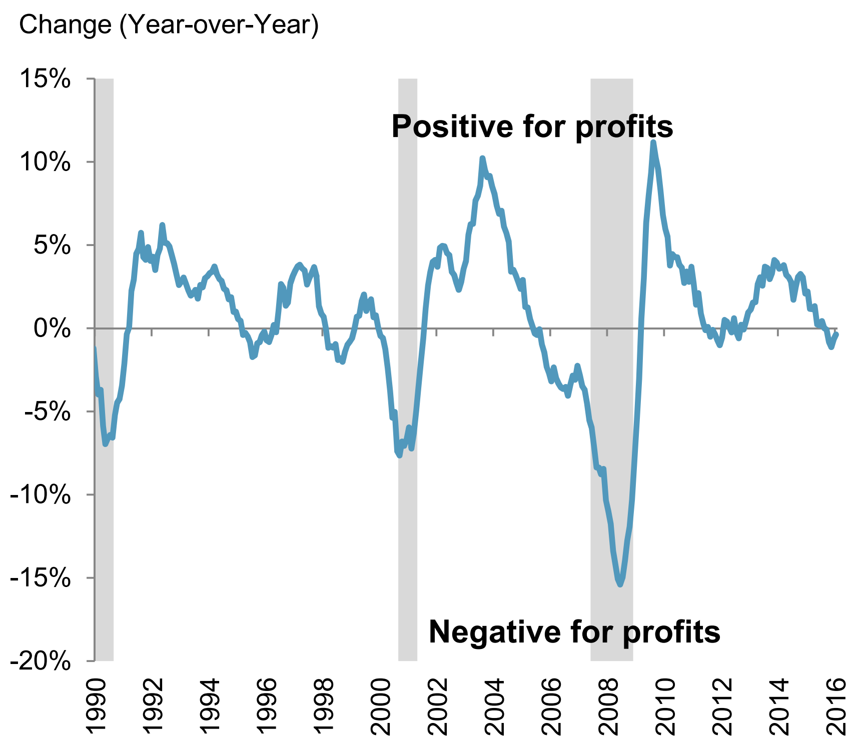
A Mix of Mid- and Late-Cycle Dynamics in the U.S.

Typically during late cycles, credit lending standards tighten and profit margins come under pressure. Bank standards for business loans have tightened for several quarters, but corporate borrowing costs have continued to decline. Meanwhile, cyclical productivity growth has started to falter amid rising wages, which typically pressures profit margins.

Bank Lending Standards and Spreads



Cyclical Productivity Growth

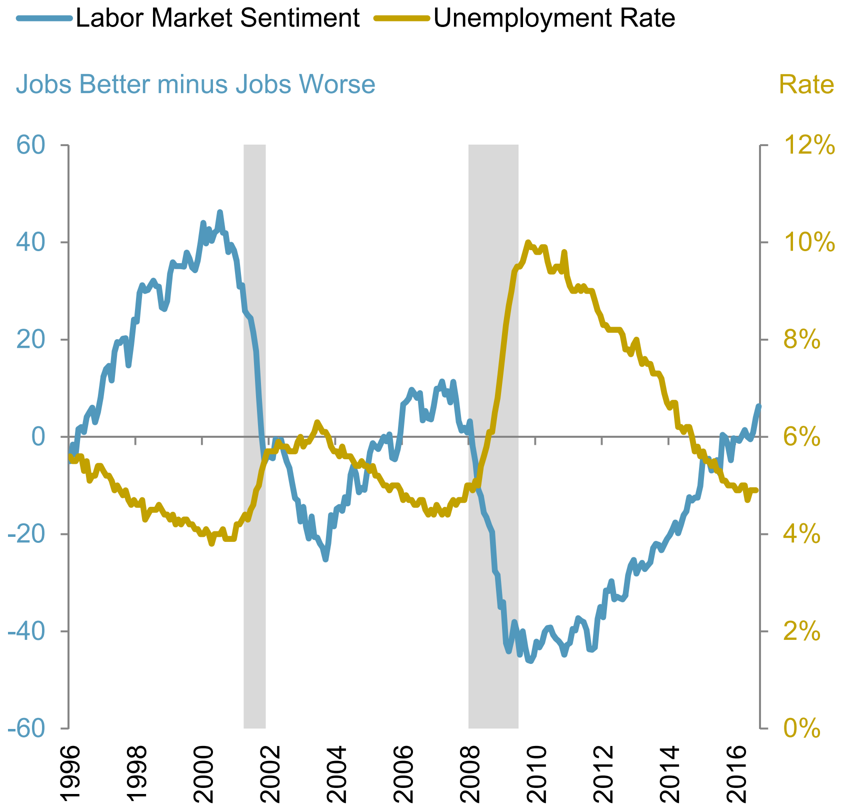


LEFT: C&I: commercial and industrial. Sources: Federal Reserve, Haver Analytics, Fidelity Investments (AART), as of 8/2/16. **RIGHT:** Shaded areas represent U.S. recession as defined by National Bureau of Economic Research (NBER). Productivity is measured by a proprietary proxy of U.S. economic productivity that tracks cyclical corporate productivity. Sources: Haver Analytics, Fidelity Investments (AART), as of 8/31/16.

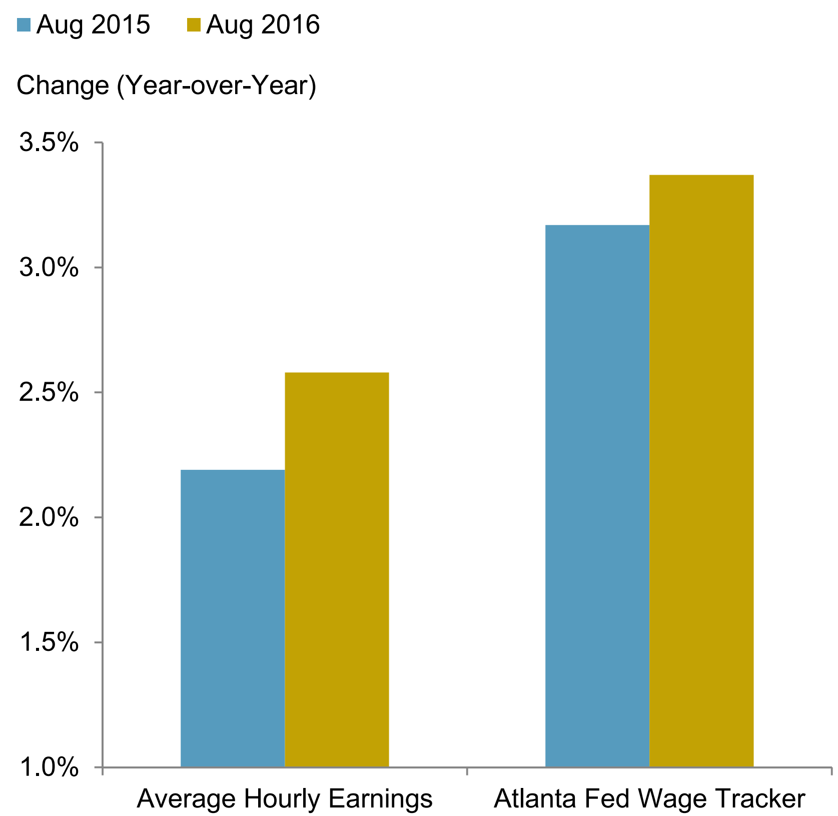
Rising Employment and Wages Support U.S. Consumer

Consumers' perceptions of the labor market have improved in tandem with labor markets and wages. This improving outlook bodes well for consumer spending and suggests low odds of recession for the U.S. in the near term. However, tight labor markets and rising wages are late-cycle dynamics and suggest the pace of hiring may begin to slow.

Labor Market Indicators



Wage Growth

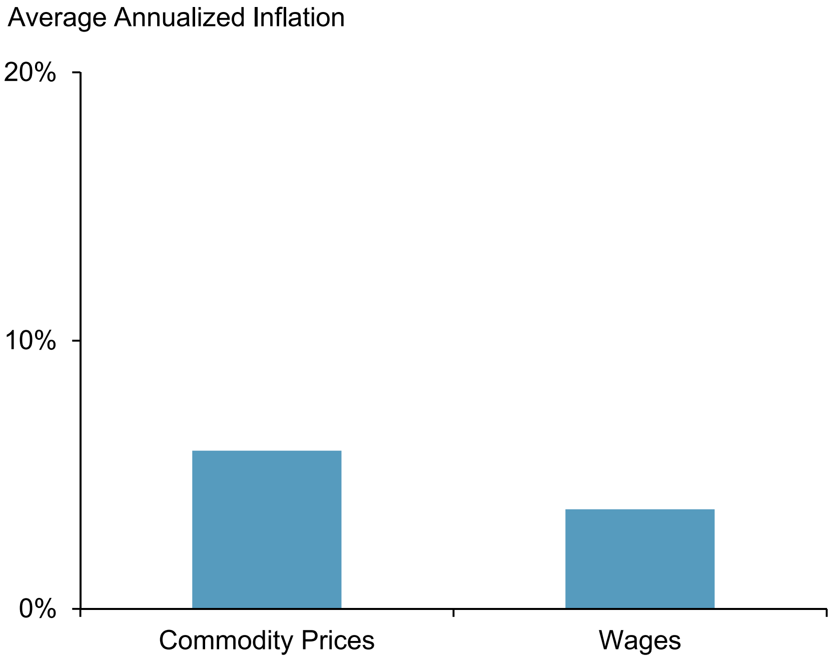


Atlanta Fed: Federal Reserve Bank of Atlanta. **LEFT**: Jobs Better minus Jobs Worse sentiment is a survey of consumers that gauges whether their current appraisal of the labor market is that it is improving or deteriorating. Shaded areas represent U.S. recession as defined by National Bureau of Economic Research (NBER). Sources: NBER, Conference Board, Bureau of Labor Statistics, Haver Analytics, Fidelity Investments (AART), as of 8/31/16. **RIGHT**: Data shown as a three-month average. Sources: Atlanta Fed, Bureau of Labor Statistics, Haver Analytics, Fidelity Investments (AART), as of 8/31/16.

Inflation Impulse Is Typically a Key to Late-Cycle Transition

The transition from a mid-cycle to a late-cycle phase typically involves a pickup in inflation indicators, with commodity prices and wages tending to accelerate. These rising input-cost pressures adversely affect profit margins and credit conditions and induce monetary tightening. Today, wage inflation is gaining traction, but commodity inflation remains generally subdued.

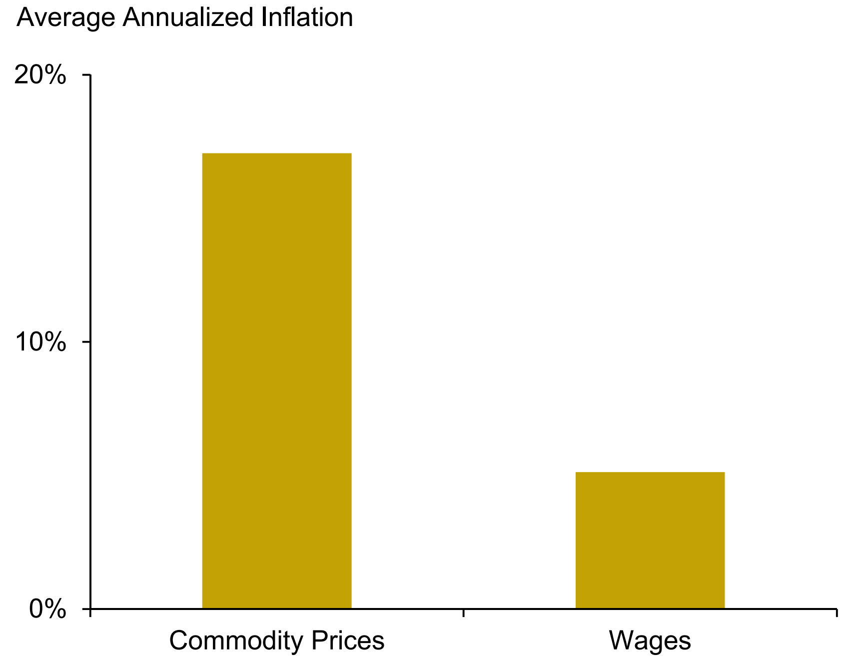
Mid-Cycle Inflation, 1966–2010



Improving macro conditions

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

Late-Cycle Inflation, 1966–2010



Deteriorating macro conditions

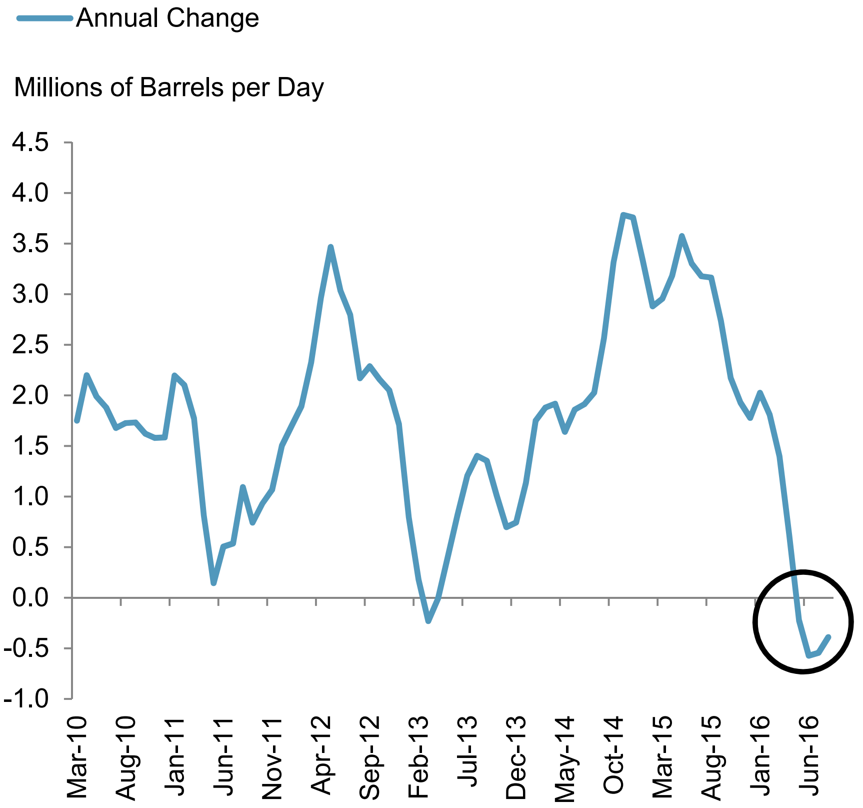
- Profit margins under pressure
- Credit tightens/spreads widen
- Monetary policy becomes restrictive

Fidelity Investments proprietary analysis of historical commodity performance, using data from BP Statistical Review of World Energy, U.S. Department of Agriculture, U.S. Geological Survey, and U.S. Foreign Agricultural Service. Wages = average hourly earnings. Sources: Bureau of Labor Statistics, Haver Analytics, Fidelity Investments (AART), as of 9/30/16.

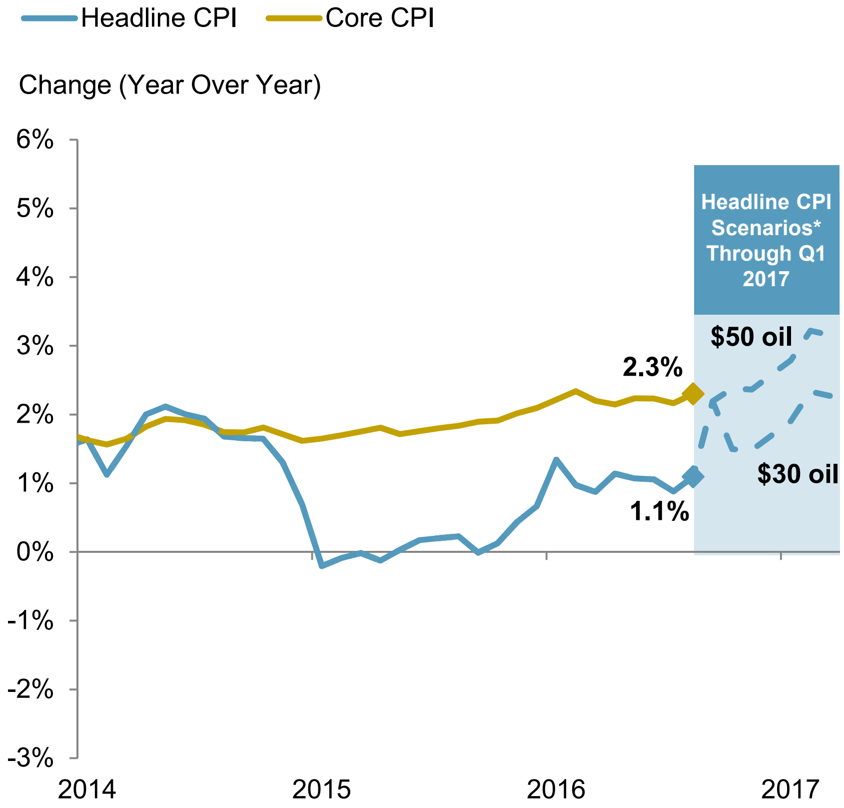
Improving Oil Fundamentals Likely to Lift Inflation

Contracting global oil production could potentially bring greater supply-demand balance (and higher prices) for oil going forward. With core inflation in the U.S. already firm, a continued stabilization in energy prices will begin to push headline inflation higher on a year-over-year basis, even without a powerful rebound in growth or commodity prices.

Global Crude Oil Supply Growth



U.S. Inflation: The Base Effect

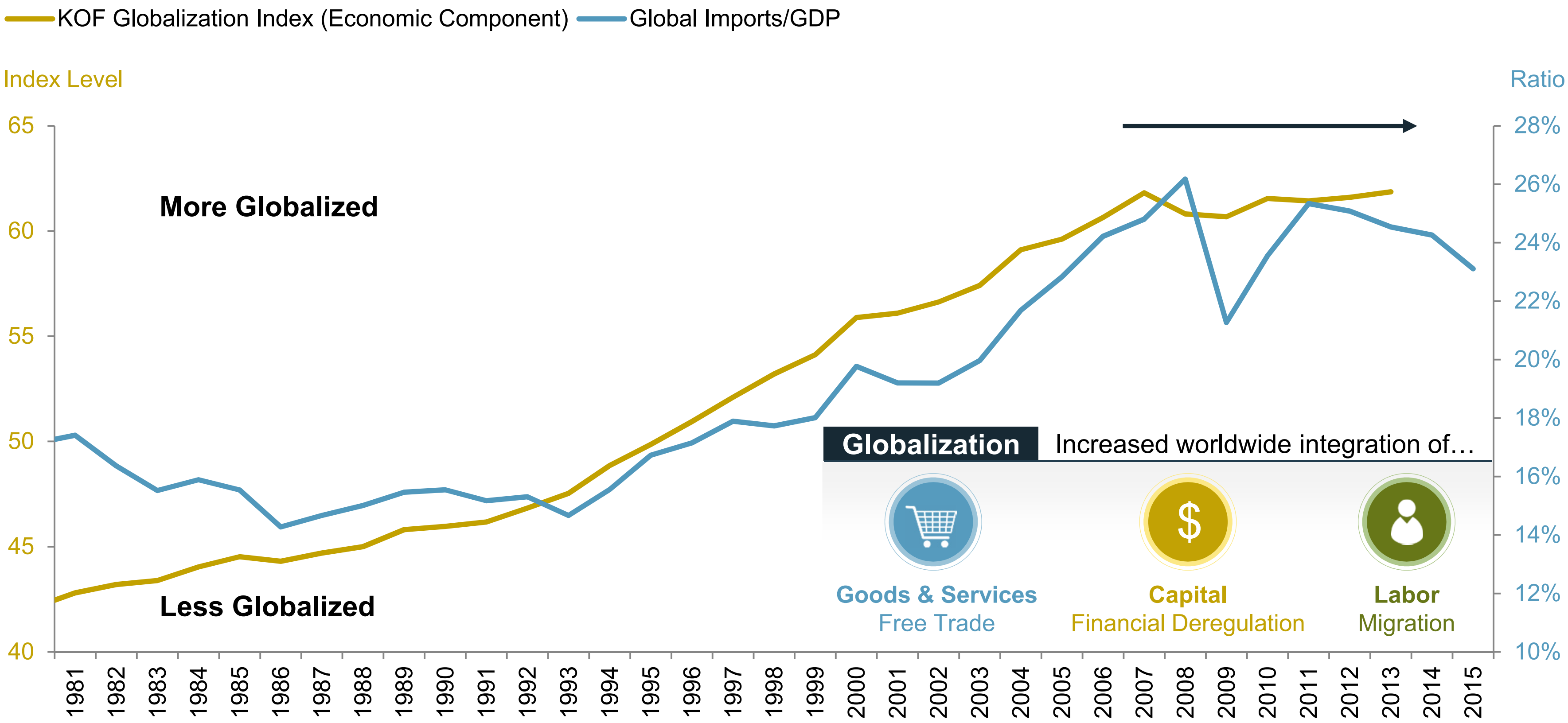


LEFT: Data shown as a three-month average. Source: Based on IEA data from the IEA Oil Data Service. © 2016 OECD/IEA, IEA Publishing, Fidelity Investments (AART), as of 9/30/16. **RIGHT:** *Scenarios assume core CPI and food cost growth rates remain constant and vary only by the cost of oil each month. Sources: Bureau of Labor Statistics, Haver Analytics, Fidelity Investments (AART), as of 8/31/16.

Economic Globalization Has Stalled

After two decades of rapid global integration, economic openness has stalled in recent years. With free trade and cross-border flows of capital and labor coming under political fire in many advanced economies, the U.S. Presidential elections and future policy direction will affect risks to the market-oriented global order. Populist pressures may prompt fiscal easing.

Measures of Globalization



KOF= KOF Swiss Economic Institute. Sources: KOF, International Monetary Fund (IMF), World Bank, 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 asset allocation strategies across Fidelity's asset management unit, believes that policy uncertainty may be a source of volatility in the coming months, but global recession risks remain low. At this point in the cycle, smaller cyclical allocation tilts may be warranted.

U.S. economy is between mid- and late cycle, and recession risks remain low	Political uncertainty in the global environment may incite volatility	Pace of Fed tightening will likely be gradual

Asset Allocation Considerations

- Less reliable relative asset performance patterns generally merit smaller cyclical tilts
- Asset allocation environment is challenging, emphasizing importance of diversification and a disciplined strategy
- Potential inflation and growth surprises not priced into markets

Potential Risks

- Maintain expectation of higher volatility due to political uncertainty and unconventional monetary policies
- At this point in the cycle, risks may be asymmetrical, with generally more limited upside for returns
- Rich valuations for many fixed-income categories and bond-like equity sectors

Fed: Federal Reserve. Sources: Market Assessment Statement of Global Asset Allocation's Business Cycle Board, Fidelity Investments, as of 9/30/16.

QUARTERLY MARKET UPDATE

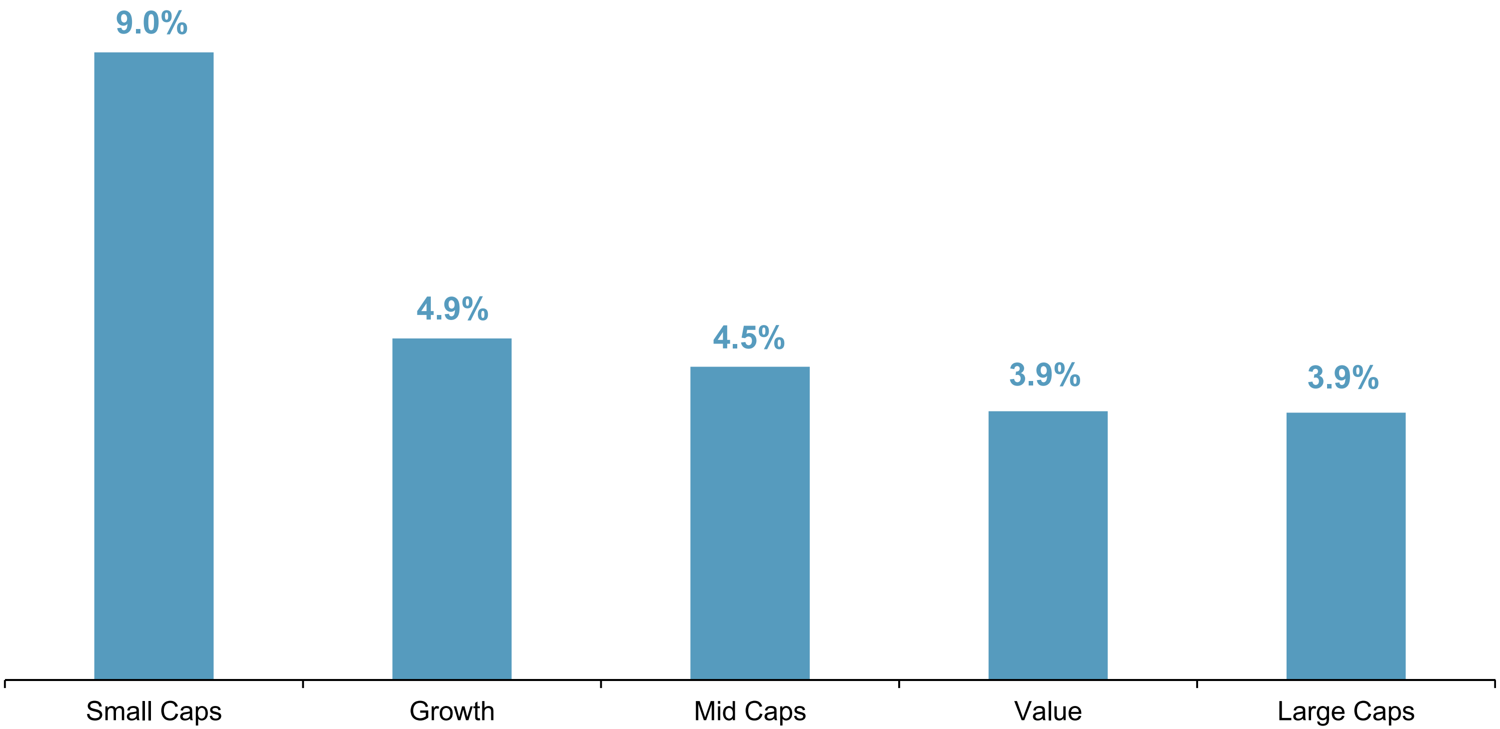
Fourth Quarter 2016

U.S. Equity Markets

Small Caps Led Widespread Gains

Small-cap equities outperformed large-cap equities during the third quarter for the first time in over a year. Growth stocks modestly outpaced value during the quarter, although value continues to outperform year to date.

Q3 2016 Total Return



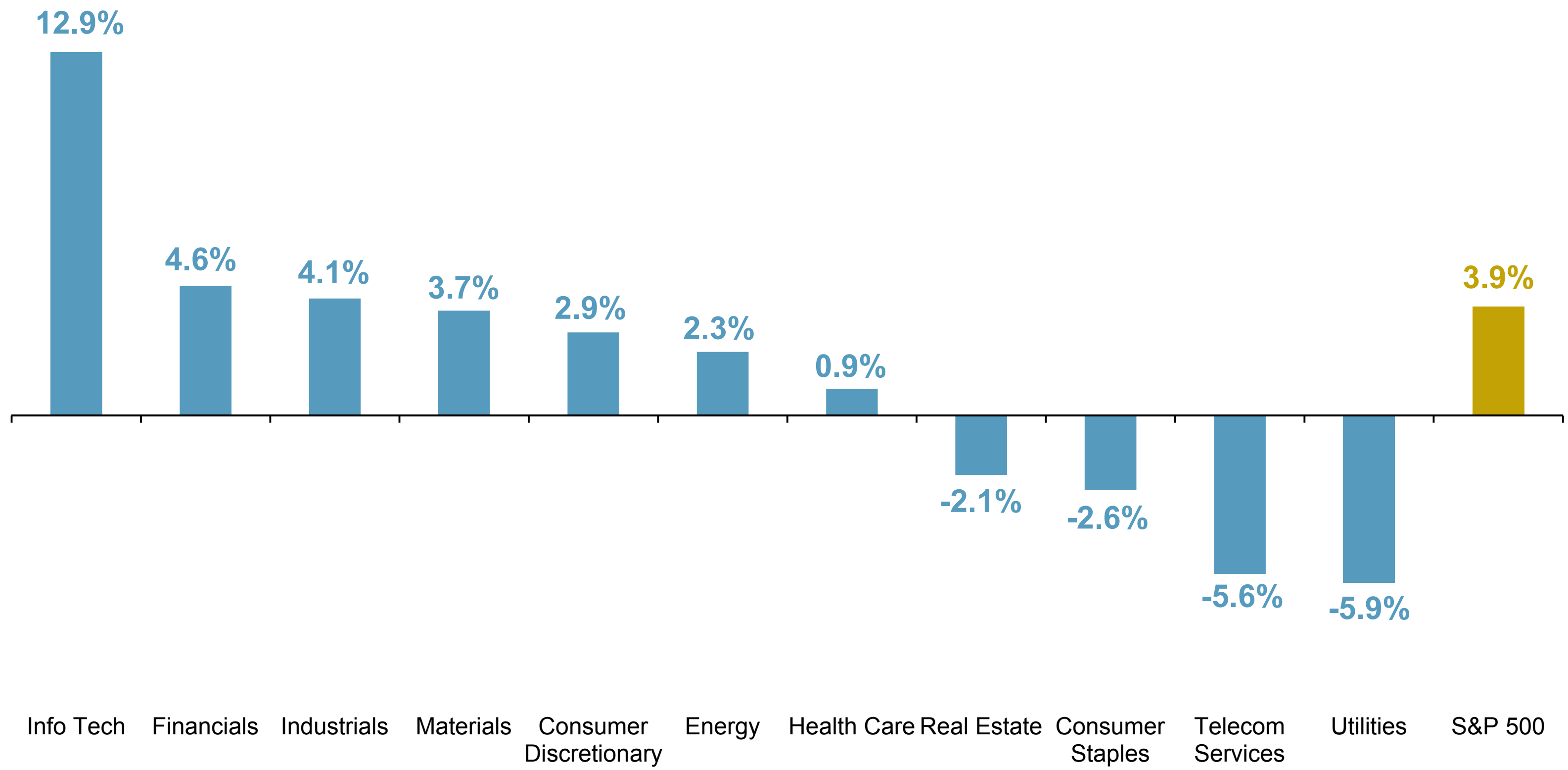
	Small Caps	Growth	Mid Caps	Value	Large Caps
Year-to-Date	11.5%	6.1%	10.3%	10.4%	7.8%

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. Sources: FactSet, Fidelity Investments (AART), as of 9/30/16.

Cyclical Equities Outperformed, Bond Proxies Declined

The modest risk-on environment during Q3 boosted cyclical equity sectors, such as information technology, financials, and industrials. Rising bond yields during the quarter resulted in outright declines in bond-proxy sectors, such as utilities, staples, and real estate, though these high-dividend payers have still outpaced the overall market on a year-to-date basis.

Q3 2016 Total Return



	Info Tech	Financials	Industrials	Materials	Consumer Discretionary	Energy	Health Care	Real Estate	Consumer Staples	Telecom Services	Utilities	S&P 500
Year-to-Date	12.5%	1.4%	10.9%	11.4%	3.6%	18.7%	1.4%	8.2%	7.6%	17.9%	16.1%	7.8%

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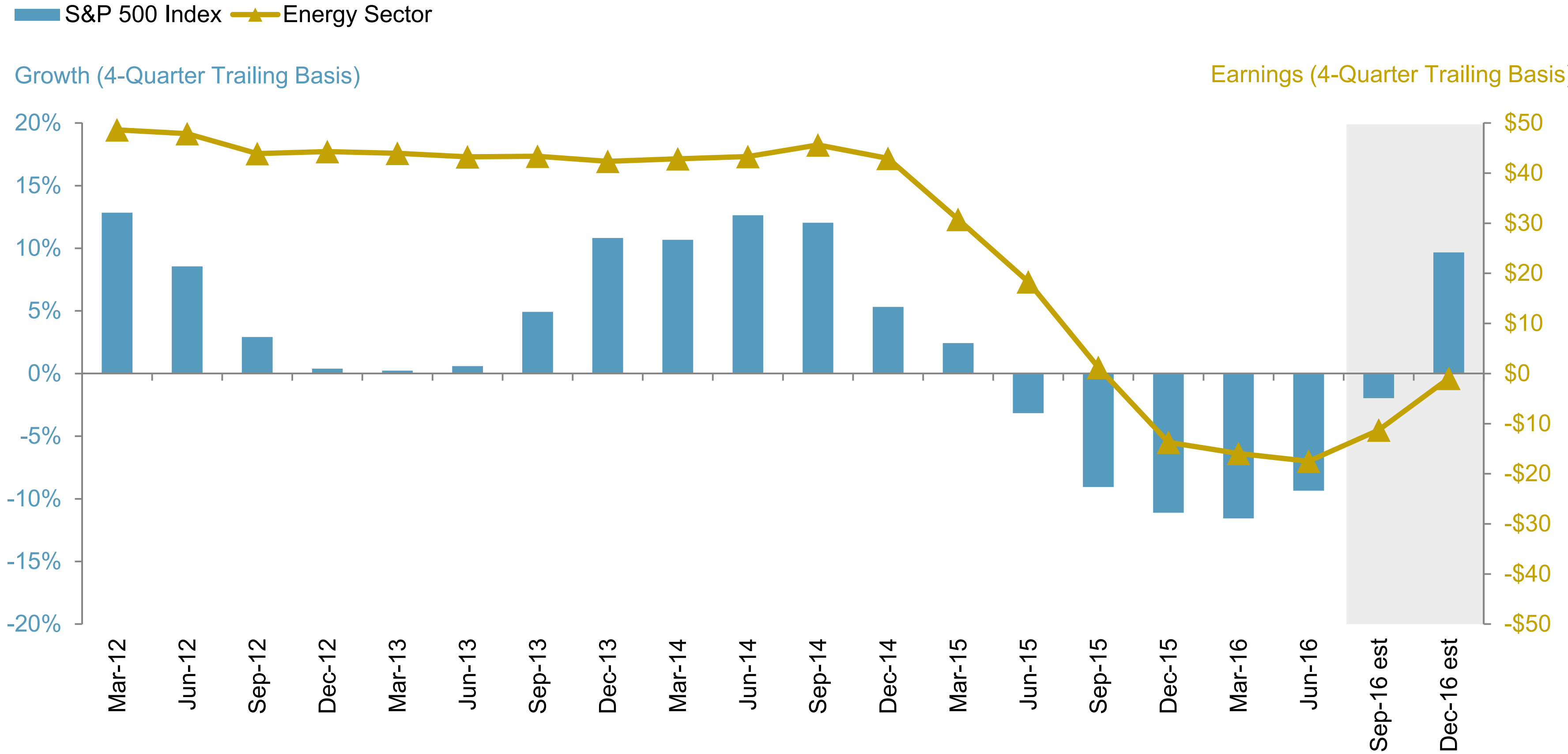
Past performance is no guarantee of future results. It is not possible to invest directly in an index. All indices are unmanaged. Please see appendix for important index information. Sector investing involves risk. Because of its narrow focus, sector investing may be more volatile than investing in more diversified baskets of securities. Sector returns represented by S&P 500 sectors. Sources: FactSet, Fidelity Investments (AART), as of 9/30/16.

Profits Stabilizing in Tandem with Energy Sector

The persistent weakness in U.S. exporters and multinationals—particularly energy companies—has resulted in declines in corporate earnings since mid-2015. However, most other sectors posted profit gains during that time, and now that oil prices and the global macro backdrop are stabilizing, mid-single-digit earnings growth could once again be achievable.

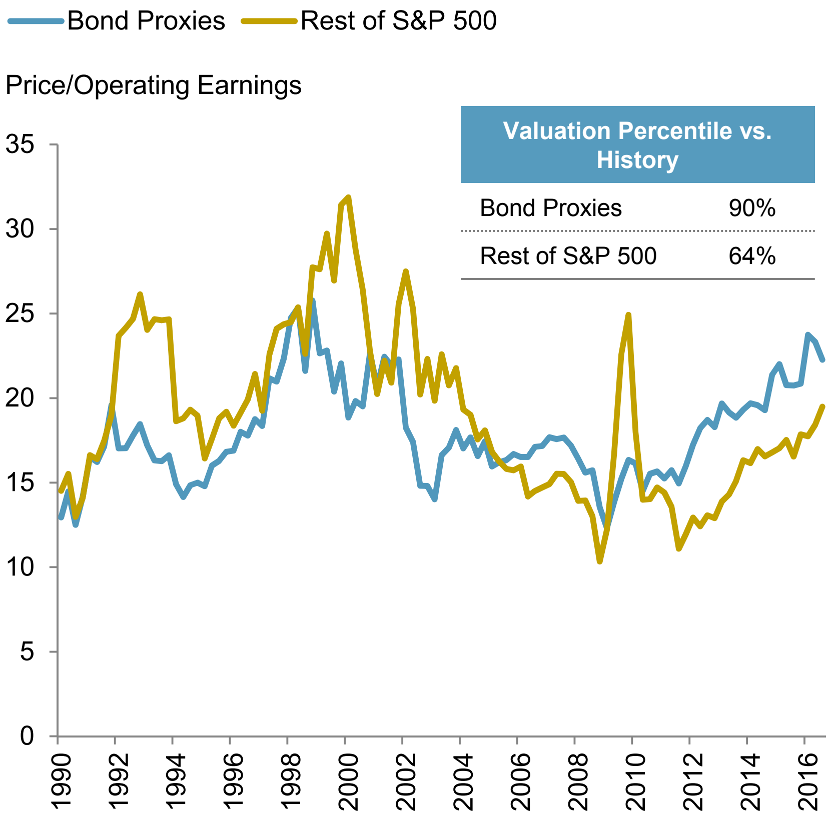
Large-Cap Earnings per Share



Bond-Proxy Valuations Above Historical Averages

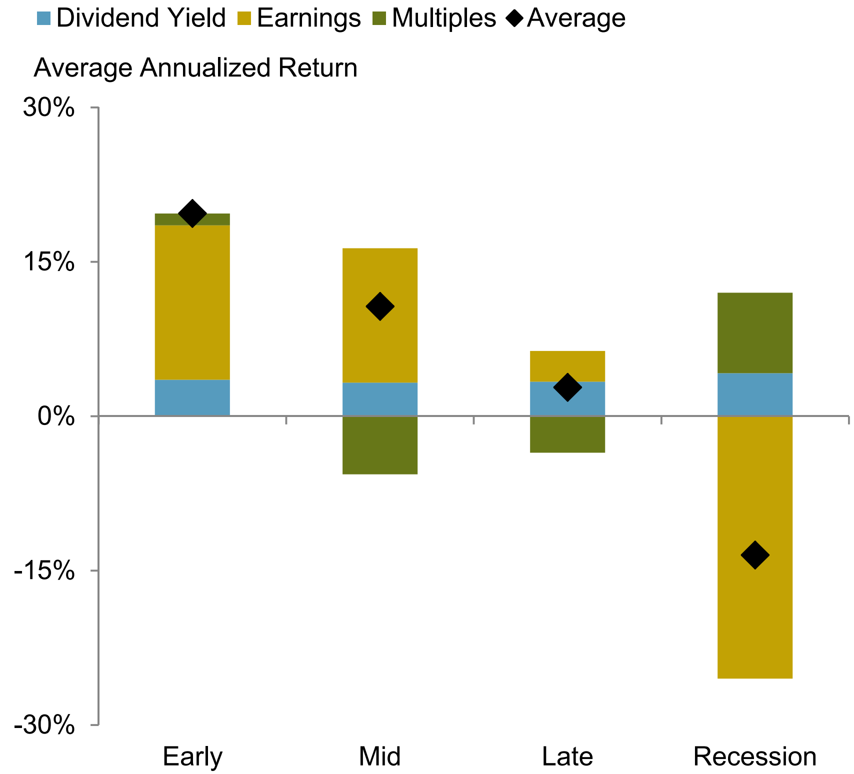
Bond-proxy sectors remain extremely expensive relative to history—much more so than the rest of the market. Historically, mid- and late-cycle phases have not been conducive to multiple expansion for the market as a whole, which could be a particular headwind for the performance potential of bond proxies, given their elevated multiples.

Equity Sector Valuations



Valuation Percentile vs. History	
Bond Proxies	90%
Rest of S&P 500	64%

Decomposition of Equity Returns, 1950-2010



Past performance is no guarantee of future results. **LEFT:** Bond proxies include utilities, REITs, and consumer staples. Sources: Standard and Poor's, FactSet, Fidelity Investments (AART), as of 9/30/16. **RIGHT:** Proprietary decomposition of equity returns calculation by business cycle phase. Sources: Haver Analytics, Fidelity Investments (AART), as of 9/30/16.

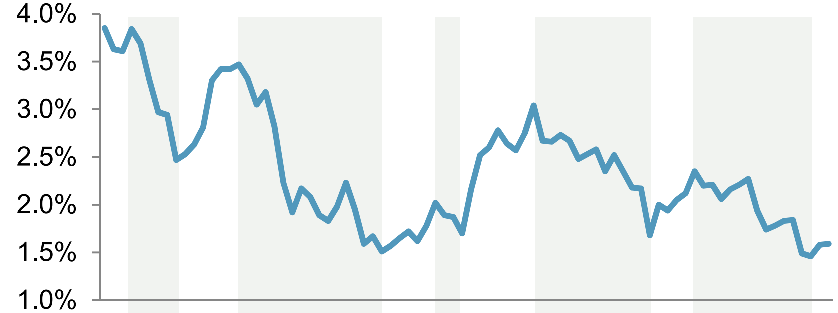
Sector Considerations: Defensive Equities

A business-cycle approach to sector allocation may produce active returns. Defensive bond-proxy sectors have been highly sensitive to the change in yields of late. While the earnings stability of some of these sectors has historically resulted in outperformance during late cycles, the potential for rising yields may inhibit their near-term performance.

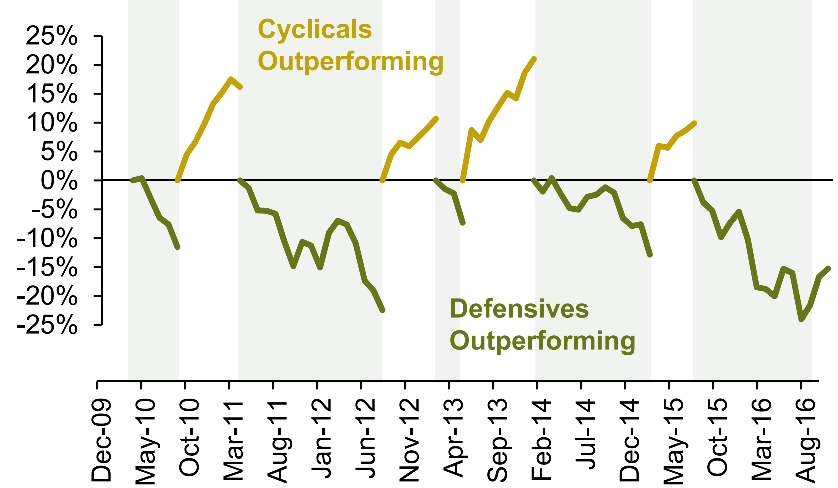
Business Cycle Approach to Sectors

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

10-Year Treasury Yield



Cyclical vs Defensive Equities



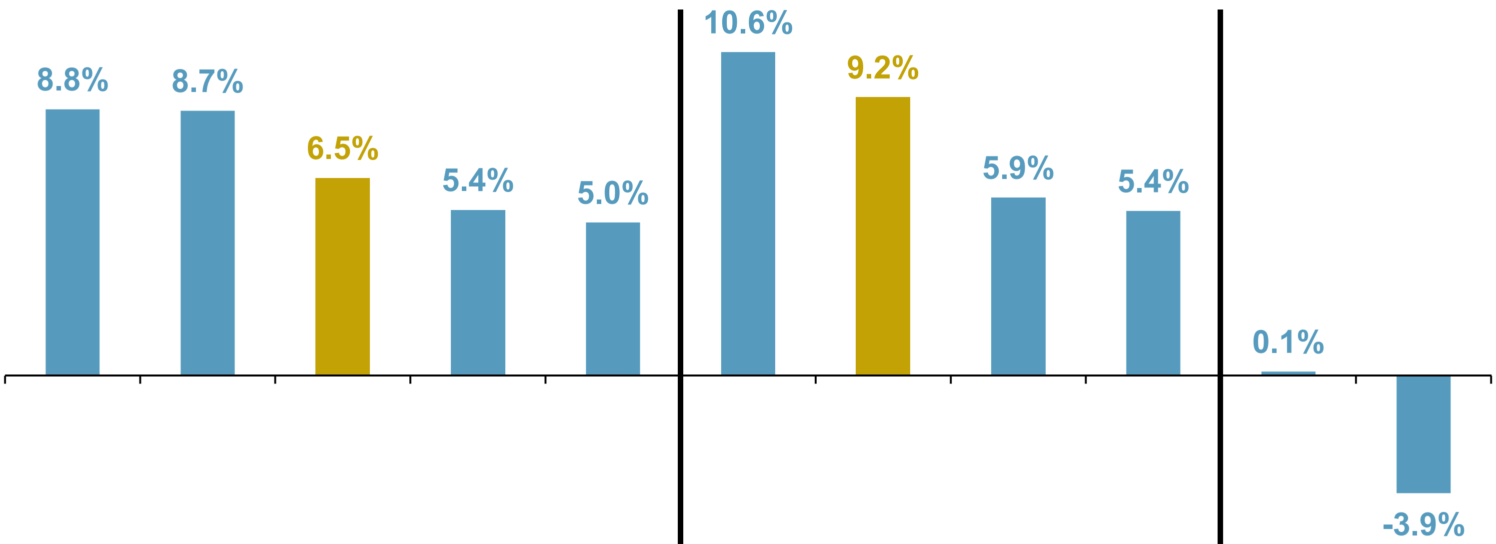
Past performance is no guarantee of future results. Sectors as defined by GICS. **LEFT:** Unshaded (white) portions above suggest no clear pattern of over- or underperformance vs. broader market. Double +/– signs indicate that the sector is showing a consistent signal across all three metrics: full-phase 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:** Defensive Equity: S&P 500 Staples, REITs, Telecom, and Utilities. Cyclical Equity: S&P 500 Discretionary, Energy, Financials ex. REITs, Health Care, Industrials, Technology, and Materials. Sources: Standard and Poor's, Fidelity Investments, as of 9/30/16.

International Equity Markets & Global Assets

Broad-Based Gains for International Equities

International equity markets posted strong returns in Q3, with modest currency appreciation boosting gains in U.S. dollar terms. Commodity-producing regions, including Canada and many emerging markets, held up despite a fall in commodity prices. EM equities have enjoyed double-digit gains year to date, a reversal of underperformance in recent years.

Q3 2016 Total Return



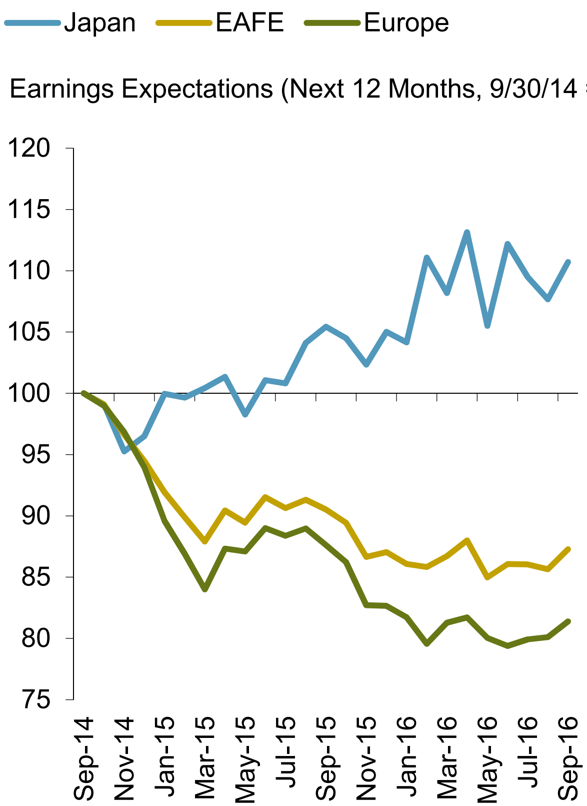
	Japan	EAFE Small Cap	EAFE	Europe	Canada	EM Asia	Emerging Markets	EMEA	Latin America	Gold	Commodities
Q3 2016 LC	7.4%	8.2%	6.1%	5.7%	6.3%	8.9%	7.7%	2.6%	7.6%	#N/A	#N/A
Year-to-Date USD	2.9%	5.5%	2.2%	0.6%	21.3%	13.3%	16.4%	18.2%	32.5%	24.8%	8.6%
	Developed-Market Equities					Emerging-Market Equities				Commodities	

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. Sources: FactSet, Fidelity Investments (AART), as of 9/30/16.

Earnings Backdrop Still Weak but Worst May Be Over

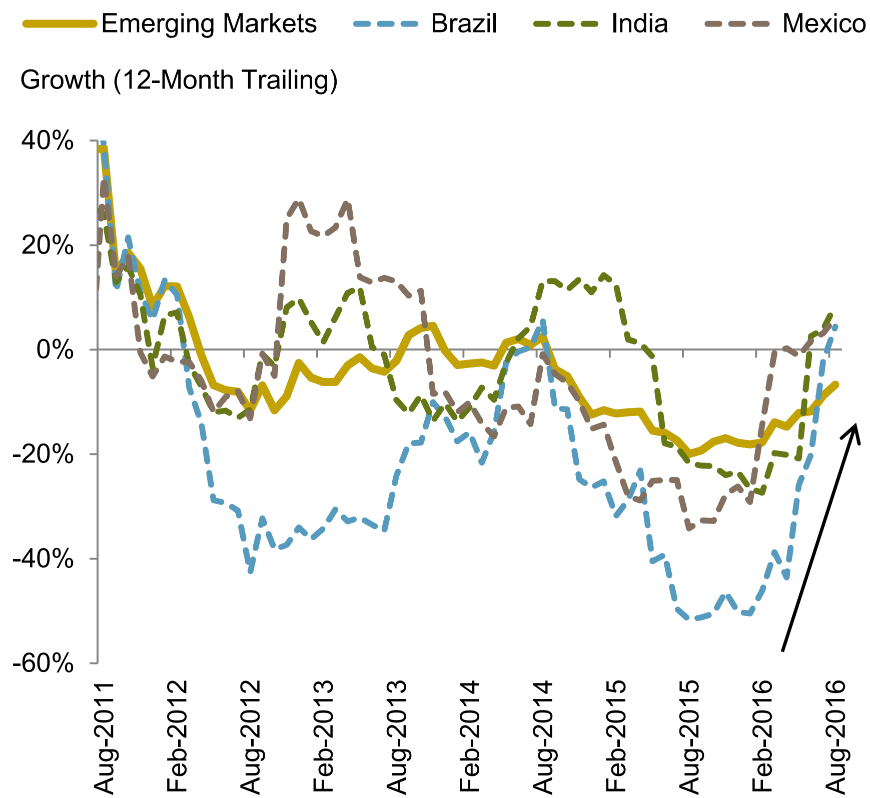
After a long dry spell of negative earnings growth, earnings expectations have begun to stabilize from low levels in recent quarters. Trailing earnings growth remains negative in both DM and EM on a year-over-year basis. However, the pace of decline has slowed, and the profit outlook—particularly for EMs—has improved, with growth now positive in some countries.

DM Earnings Expectations



Earnings Growth Expectations	
Next 12 Mos.	Last 5-Yr. Avg.
7%	20%
9%	10%
9%	8%

Emerging Market Earnings Growth

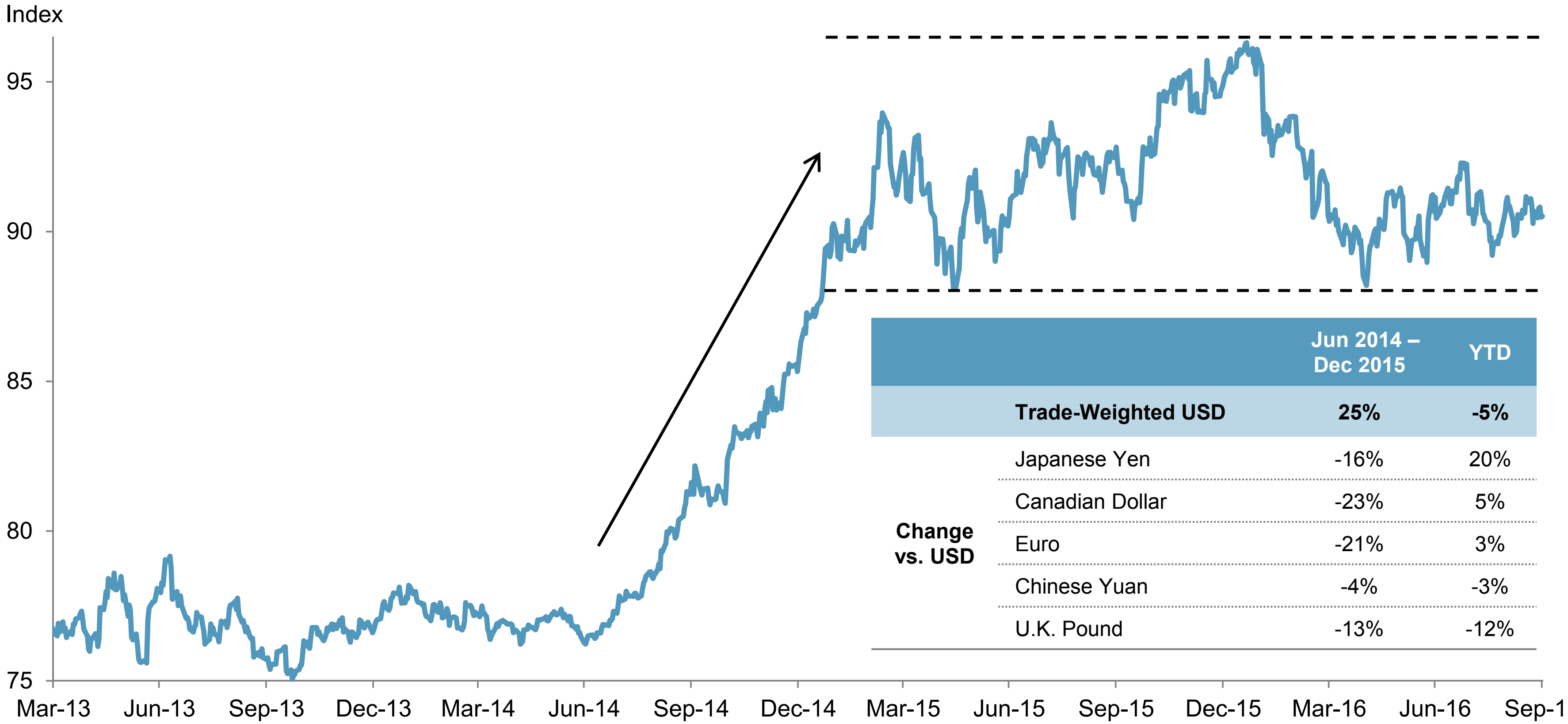


LEFT: DM: developed market. EM: emerging market. Past performance is no guarantee of future results. You cannot invest directly in an index. Please see appendix for important index information. Index returns represented by: Emerging Markets – MSCI Emerging Markets Index; EM Asia – MSCI Emerging Market Asia Index; Latin America – MSCI Latin America Index; EMEA – MSCI Emerging Markets Europe, Middle East, and Africa Index; Europe – MSCI Europe Index; Japan – MSCI Japan Index; U.K. – MSCI U.K. Index; EAFE – MSCI EAFE Index. Sources: FactSet, Fidelity Investments (AART), as of 8/31/16. **RIGHT:** Sources: MSCI, FactSet, Fidelity Investments (AART), as of 8/31/16.

After Dollar Rally, Currencies Have Been in Trading Range

After a prolonged period featuring a rising U.S. dollar against all major global currencies, the greenback has been locked in a narrow trading range over the past 18 months. Currency performance has been mixed year to date relative to different currencies, highlighting the difficulty for those attempting to hedge currency exposure.

U.S. Trade-Weighted Dollar



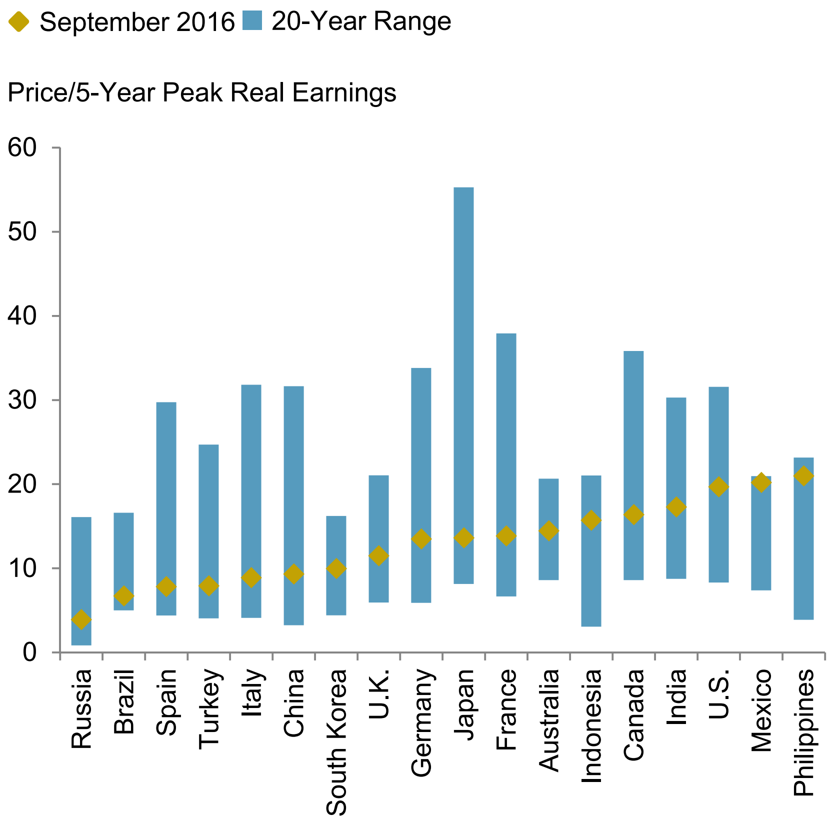
		Jun 2014 – Dec 2015	YTD
	Trade-Weighted USD	**25%**	**-5%**
Change vs. USD	Japanese Yen	-16%	20%
	Canadian Dollar	-23%	5%
	Euro	-21%	3%
	Chinese Yuan	-4%	-3%
	U.K. Pound	-13%	-12%

Nominal trade-weighted exchange value of U.S. dollar vs. major currencies. Sources: Haver Analytics, Fidelity Investments (AART), as of 9/30/16.

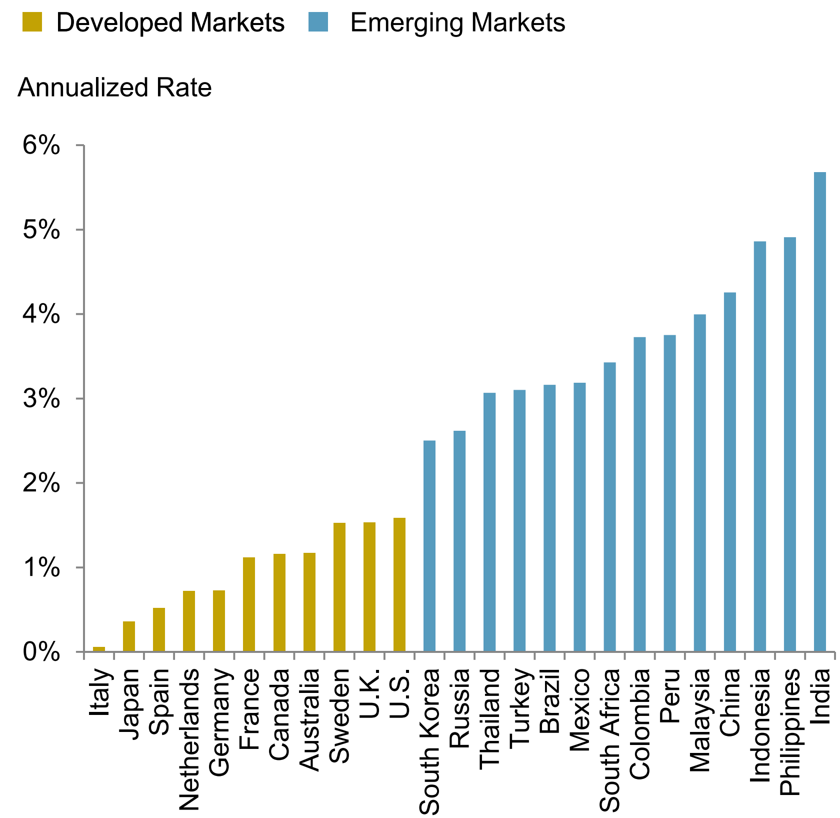
Secular Positives for EMs: Valuations and Growth Outlook

Price-to-earnings multiples in most EM countries' equity markets remain at the lower end of their 20-year averages. Moreover, we expect growth of emerging countries to outpace that of developed markets over the long term. Both factors should provide a favorable long-term backdrop for EM equity returns.

Cyclical P/Es



Real GDP Growth Forecasts, 2016–2035

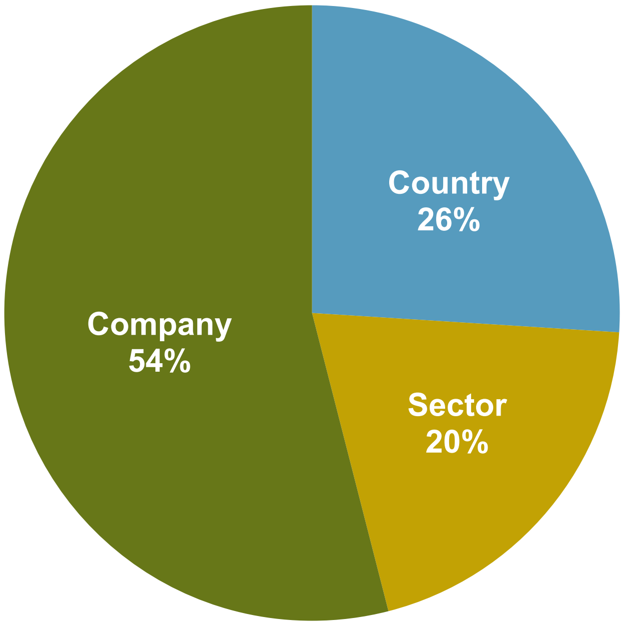


LEFT: Past performance is no guarantee of future results. It is not possible to invest directly in an index. All indices are unmanaged. Please see appendix for important index information. Price-to-earnings (P/E) ratio (or multiple): stock price divided by earnings per share, which indicates how much investors are paying for a company's earnings power. Five-year peak earnings are adjusted for inflation. Sources: FactSet, countries' statistical organizations, Haver Analytics, Fidelity Investments (AART), as of 9/30/16. **RIGHT:** Average forecasts are GDP weighted. Sources: Fidelity Investments (AART), as of 12/31/15.

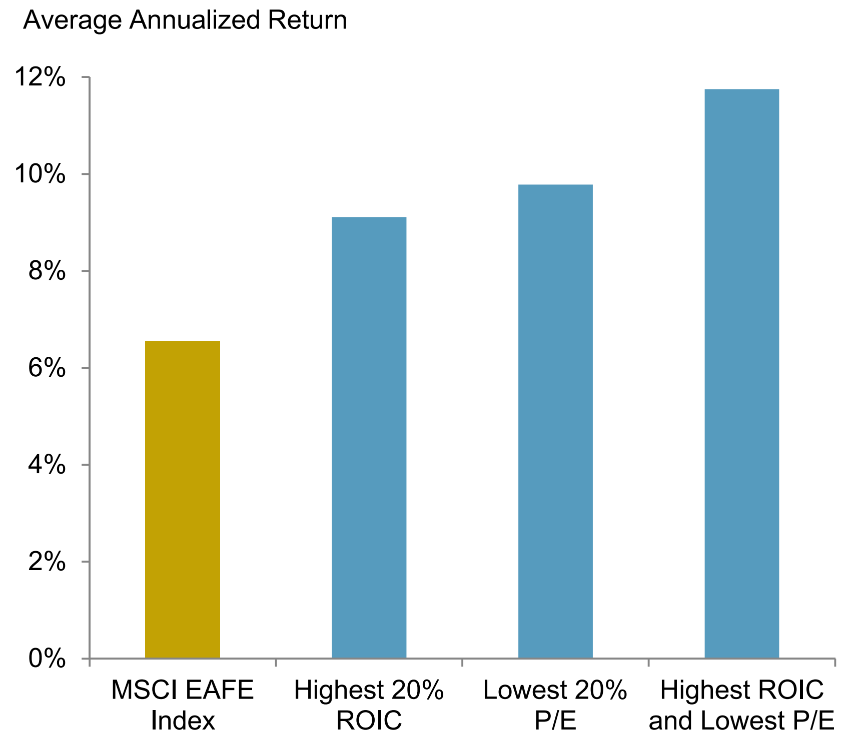
Security Selection Is Key for International Performance

Quantitative analysis of past equity returns shows that company exposure (security selection) is the most significant factor for explaining differences in performance among stocks. An active management strategy can potentially produce higher returns than the benchmark by identifying the highest-quality earnings growers (return on invested capital) at reasonable valuations.

Average Source of Return for Global Stocks (1990–2015)



International Equity Returns by Quality and Valuation (1995–2016)



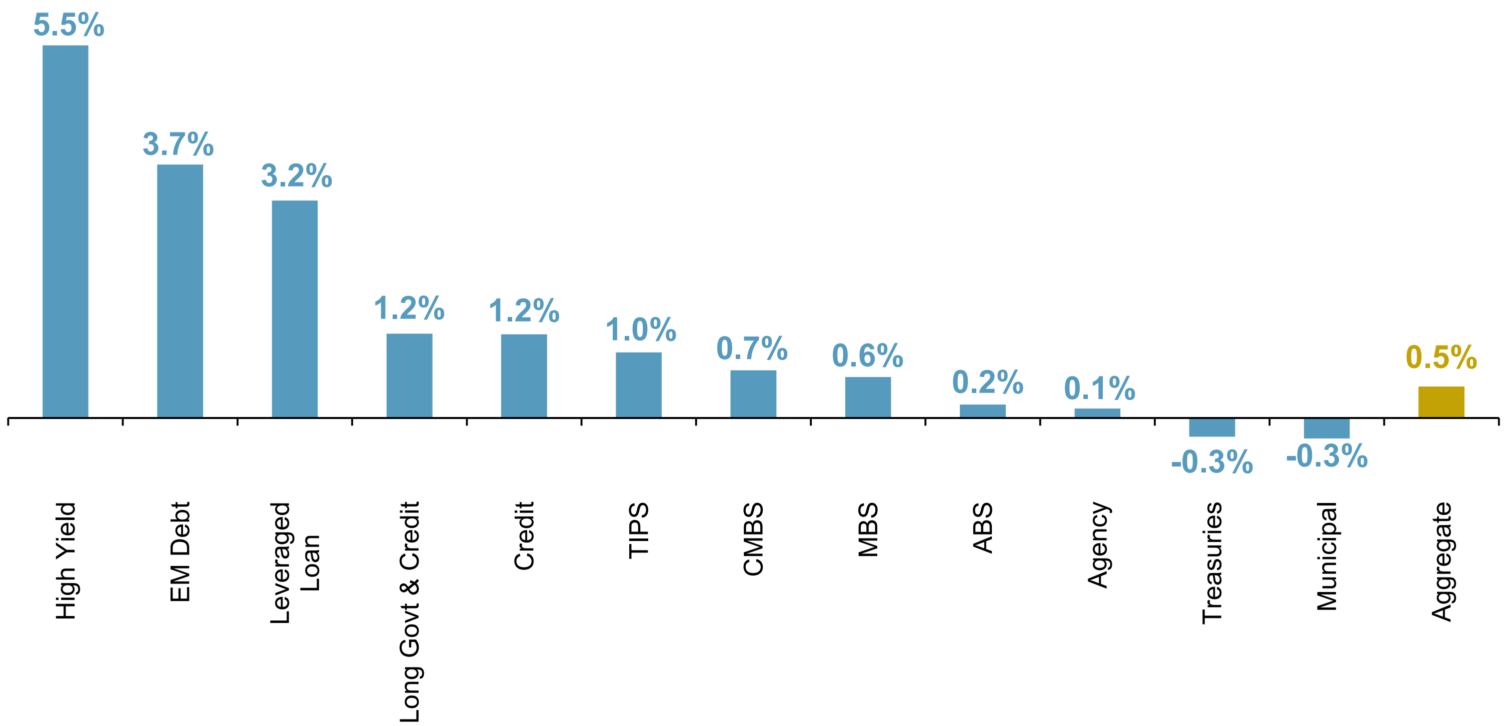
Past performance is no guarantee of future results. It is not possible to invest directly in an index. ROIC: return on invested capital. P/E: price to earnings ratio. **LEFT:** Based on Anova: analysis of variation. Sources: MSCI All Country World Index, Fidelity Investments, as of 8/31/15. **RIGHT:** Average annualized returns of stocks of companies with highest 20% and lowest 20% ROIC and P/E ratio. Sources: MSCI, FactSet, Fidelity Investments, as of 9/30/16.

Fixed-Income Markets

Credit Categories Boosted by Further Spread Tightening

Credit spreads narrowed again in Q3, boosting lower-credit-quality categories such as high-yield corporate bonds, emerging-market debt, and leveraged loans. Most other categories experienced muted returns for the quarter as rates rose just slightly, but all are solidly in positive territory on the year, as rates have fallen and spreads have narrowed during 2016.

Q3 2016 Total Return



	High Yield	EM Debt	Leveraged Loan	Long Govt & Credit	Credit	TIPS	CMBS	MBS	ABS	Agency	Treasuries	Municipal	Aggregate
Year-to-Date	15.3%	15.0%	7.8%	15.7%	8.9%	7.3%	6.6%	3.7%	2.7%	3.4%	5.1%	4.0%	5.8%

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) – 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. Sources: FactSet, Fidelity Investments (AART), as of 9/30/16.

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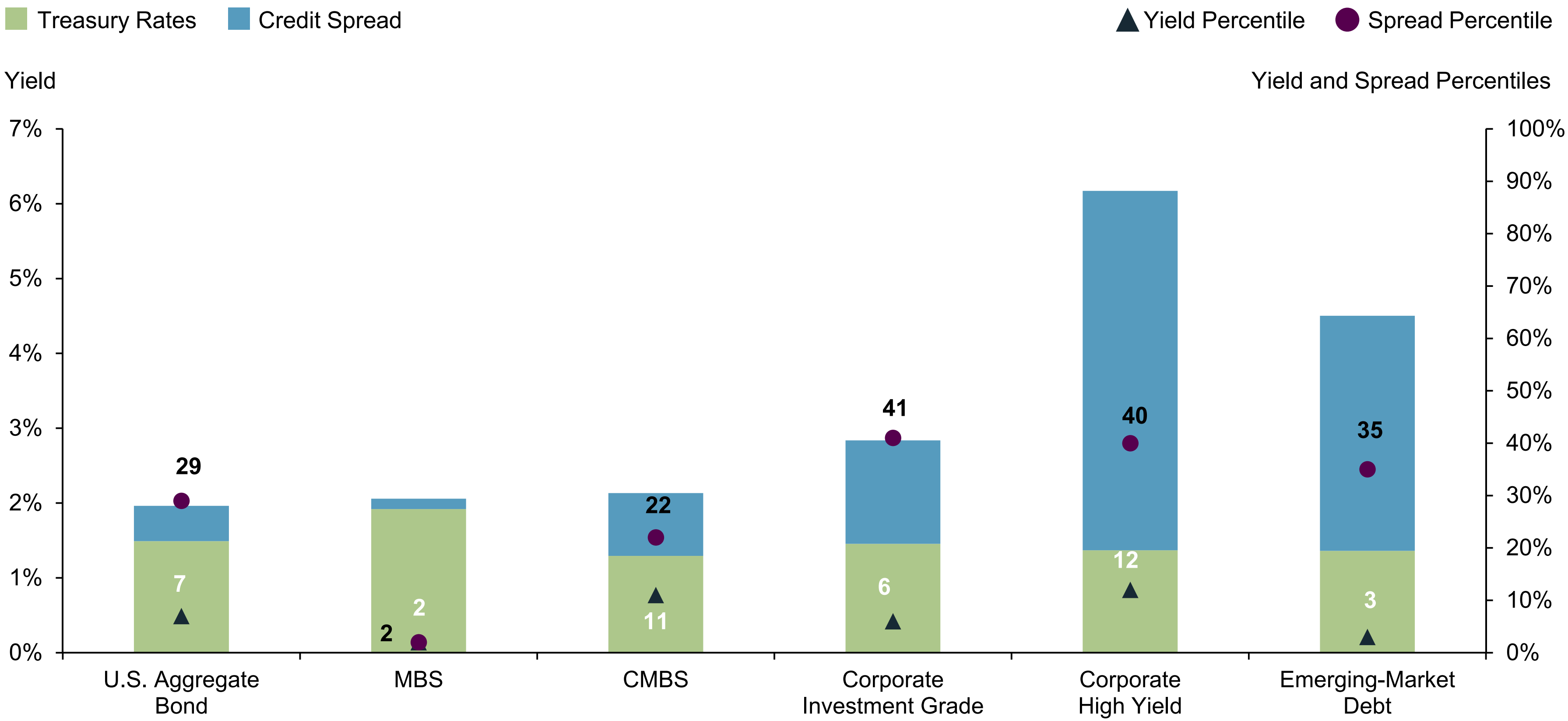
Spreads Move to Tight Levels, Yields Close to Historic Lows

After a tumultuous start to the year, spreads narrowed this quarter and are now below their historical averages across all categories. Yields ended the quarter slightly higher for most categories, but remain very close to historic lows.

Fixed-Income Yields and Spreads

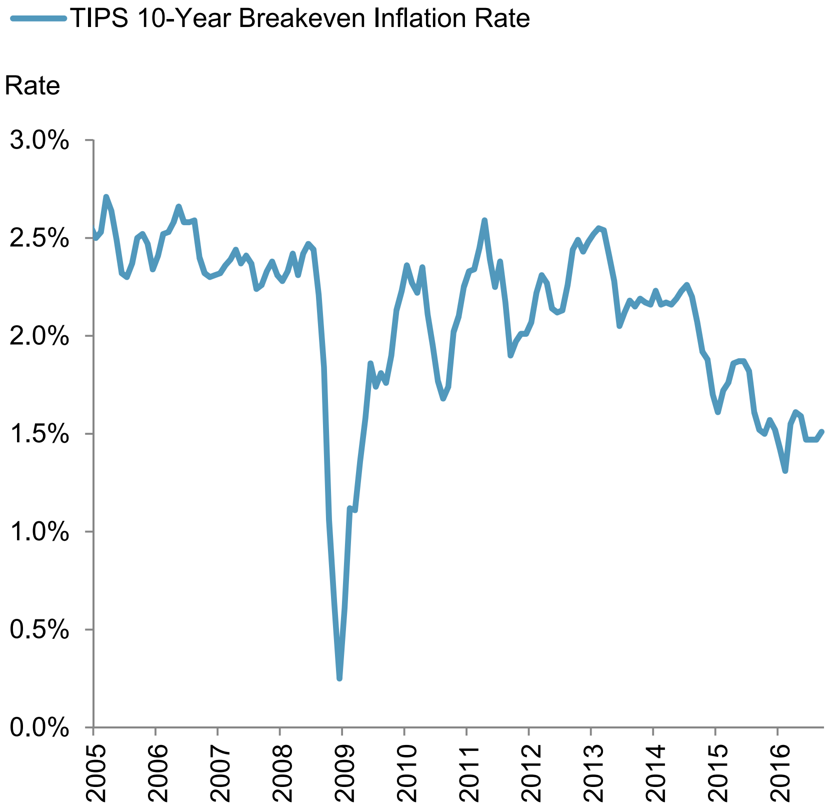


Past performance is no guarantee of future results. It is not possible to invest directly in an index. All indices are unmanaged. Please see appendix for important index information. Percentile ranks of yields and spreads based on historical period from 2000 to 2016. MBS: mortgage-backed security; CMBS: commercial mortgage-backed security. All categories represented by respective Bloomberg Barclays bond indices. Sources: Bloomberg Barclays, Fidelity Investments (AART), as of 9/30/16.

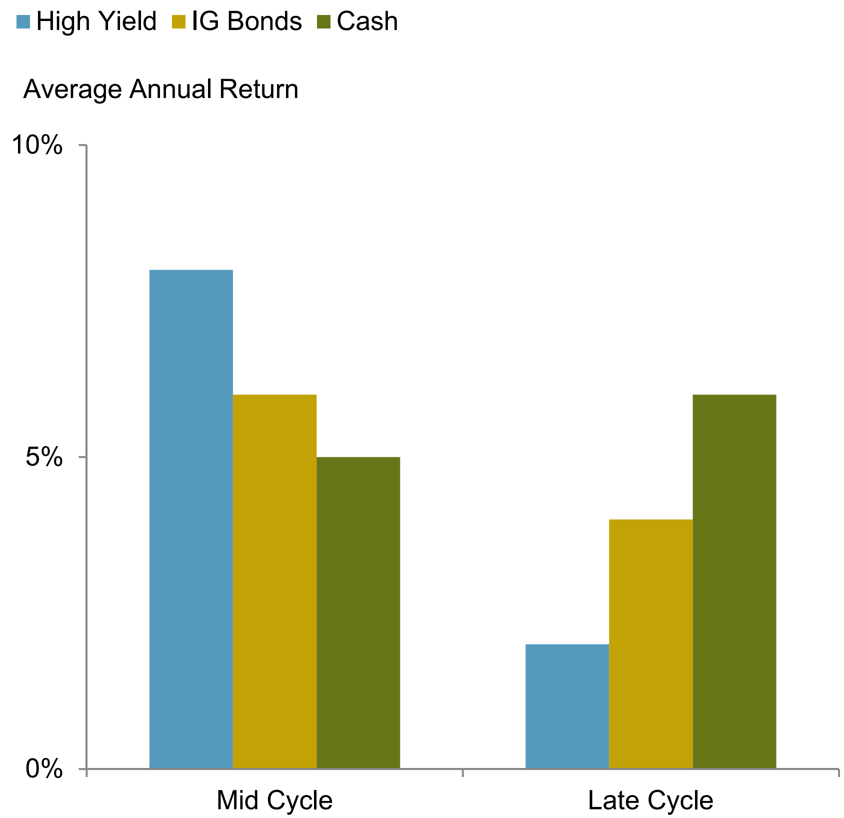
Inflation Resistance May Become an Important Attribute

With inflation expectations dropping to multi-year lows, implied inflation in the Treasury markets fell far below the Fed's target, making TIPS an attractively priced hedge against higher inflation. Meanwhile, the U.S. is closer to the start of the late-cycle than to the start of the mid-cycle phase, suggesting that it may not be too early to add exposure to short-duration categories.

TIPS Implied Inflation Rate



Asset Class Performance by Cycle

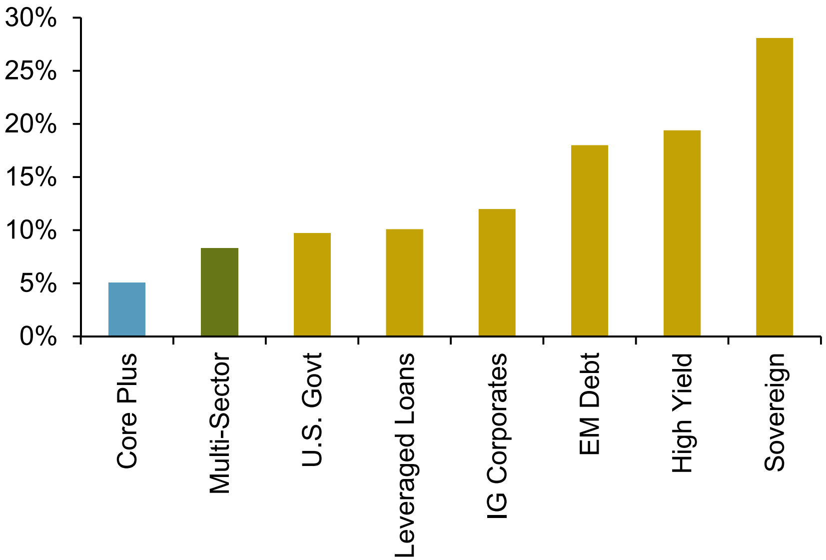


TIPS: Treasury Inflation-Protected Securities. TIPS breakeven inflation rate calculated as difference between real and nominal 10-year Treasury yields. **LEFT:** Sources: Federal Reserve, Haver Analytics, Fidelity Investments (AART), as of 9/30/16. **RIGHT:** Fidelity Investments proprietary analysis of historical asset class performance, using data from indices from Bank of America Merrill Lynch, Bloomberg Barclays, Fidelity Investments, Morningstar. Sources: Fidelity Investments (AART), as of 9/30/16.

Benefits of Diversification in a Bond Portfolio

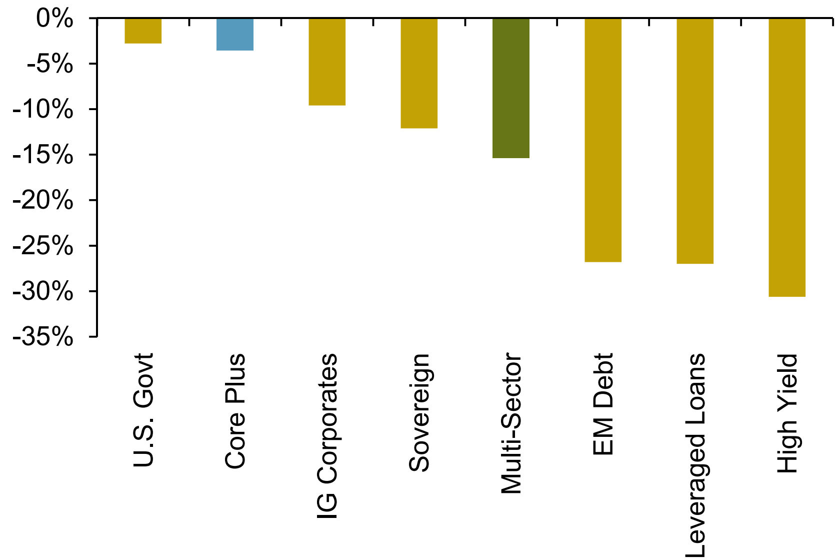
Fixed-income strategies with designated allocations in both high-quality bonds and higher-yielding sectors have exhibited consistent downside protection. Both a “core-plus” and a “multi-sector” portfolio have generated fewer periods of negative returns than any individual bond sector, while providing a lower magnitude of losses than lower-quality sectors.

1-Year Negative Return Periods, 1998–2015



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

Worst 1-Year Returns, 1998–2015



Portfolio	Description
Multi-Sector	40% High Yield 25% U.S. Government 15% Emerging Market 15% Foreign DM Bonds 5% Leveraged Loans

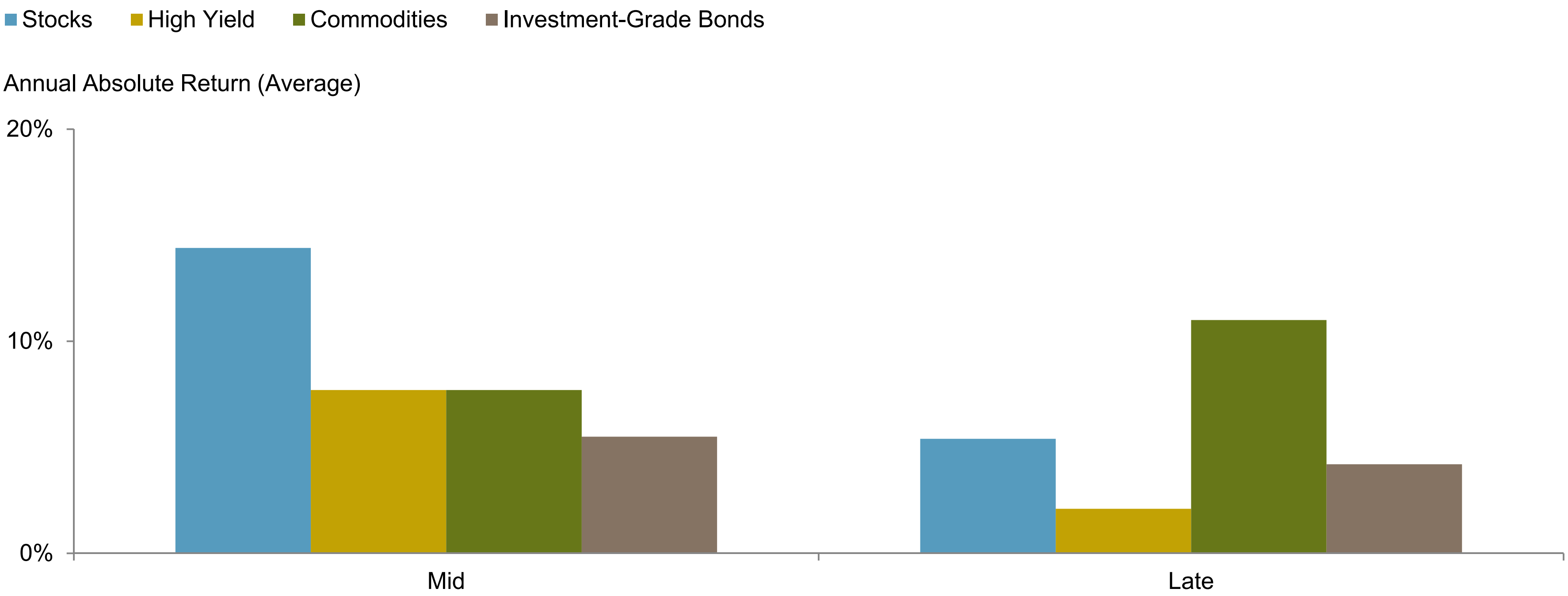
Past performance is no guarantee of future results. It is not possible to invest directly in an index. IG: investment grade. Index returns represented by: Emerging Market Debt – JPM EMBI Global Index; Foreign Developed-Country Bonds – Citigroup G-7 Non-USD Bond Index; Leveraged Loans – S&P/LSTA Performing Loan Index; U.S. Government – Bloomberg Barclays U.S. Government Index; U.S. High Yield – BofA ML High Yield Index; U.S. Investment Grade – Bloomberg Barclays U.S. Aggregate Bond Index. Sources: Morningstar, Fidelity Investments (AART), as of 12/31/15.

Asset Allocation Themes

Performance of Inflation Assets Improves in Late Cycles

Late cycles have the most mixed performance of any business cycle phase, with more limited overall upside than mid-cycle phases. There is 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 typically 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

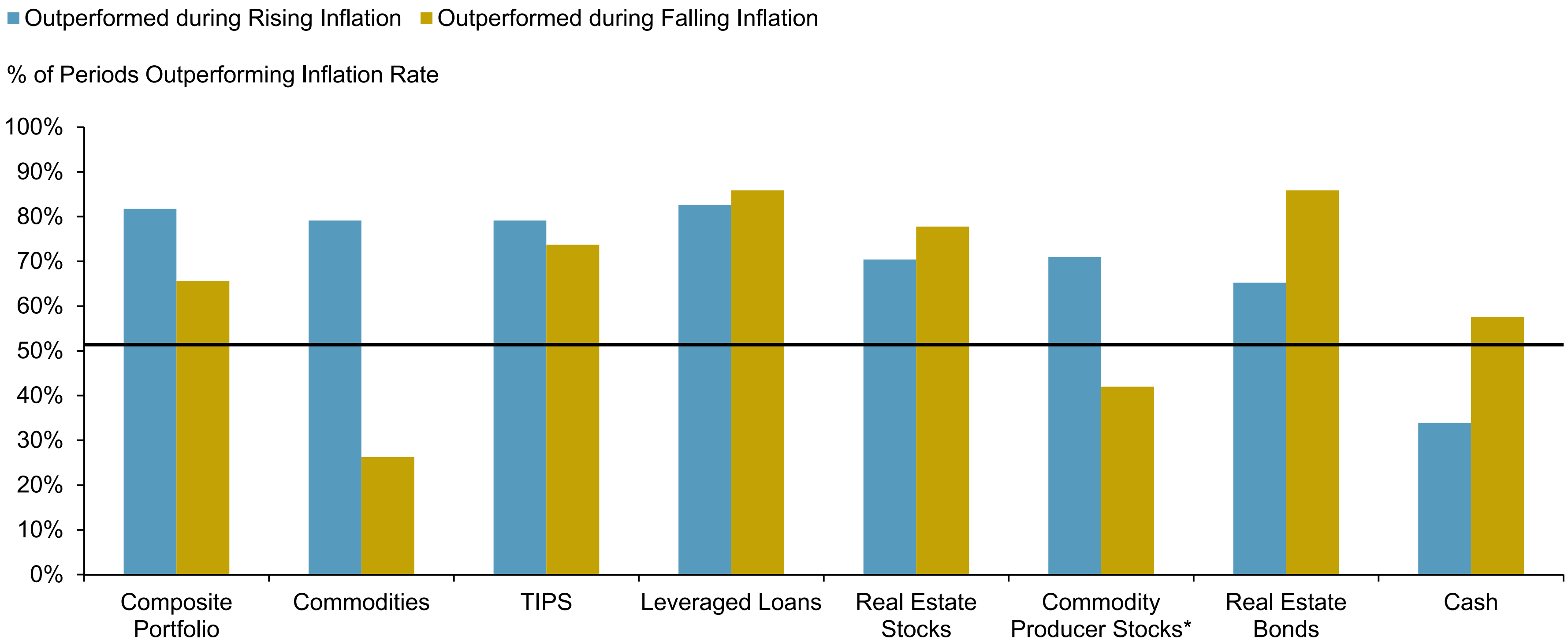
- Favor inflation-resistant assets
- Gains more muted

Past performance is no guarantee of future results. Asset class total returns are represented by indexes from the following sources: Fidelity Investments, Morningstar, Barclays. Source: Fidelity Investments proprietary analysis of historical asset class performance, which is not indicative of future performance.

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, 1998–2015



	Composite Portfolio	Commodities	TIPS	Leveraged Loans	Real Estate Stocks	Commodity Producer Stocks*	Real Estate Bonds	Cash
Overall Rate of Outperformance	**74%**	**55%**	**77%**	**84%**	**74%**	**58%**	**75%**	**45%**

*Commodity producer stocks not part of composite portfolio. 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) – Bloomberg Barclays U.S. TIPS Index, Commodity Producer Stocks – MSCI ACWI Commodity Producers (1999-2015), Fidelity proprietary calculation (1998). Sources: Morningstar, Fidelity Investments (AART), as of 12/31/15.

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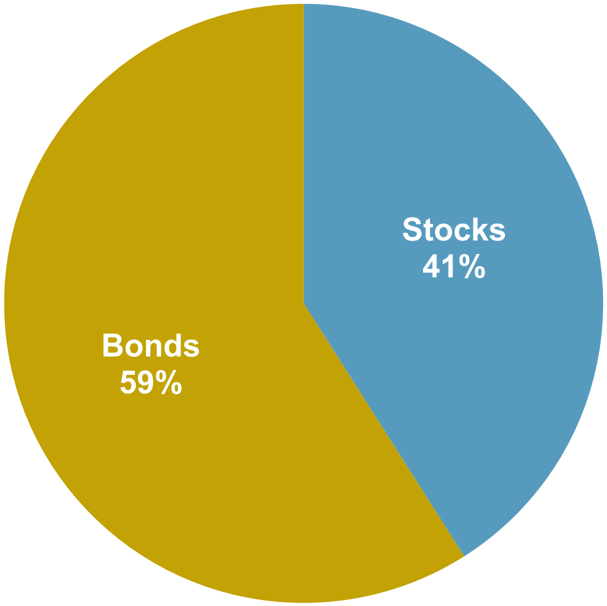
Myopic Loss Aversion Prompts Risk-Averse Behavior

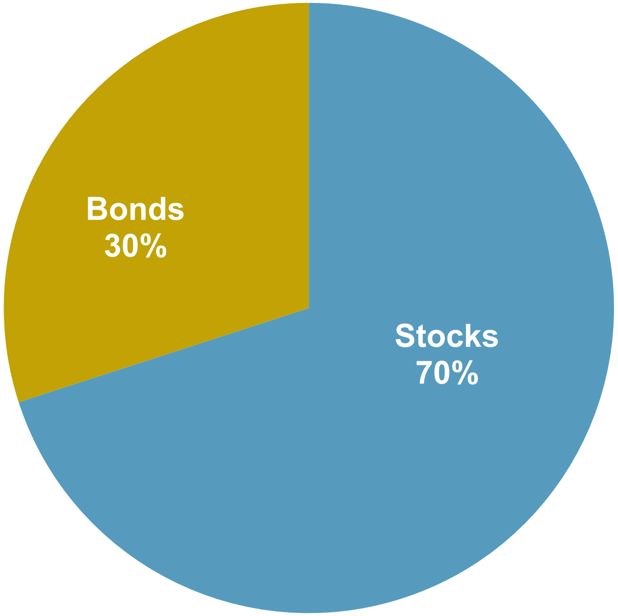
Myopic loss aversion describes a common bias in which greater sensitivity to losses than to gains is compounded by the frequent evaluation of outcomes. Investors who review their portfolios more frequently have tended to shift toward more conservative exposures, as increased monitoring raises the likelihood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

Impact of Feedback Frequency on Investment Decisions

Monthly



Yearly

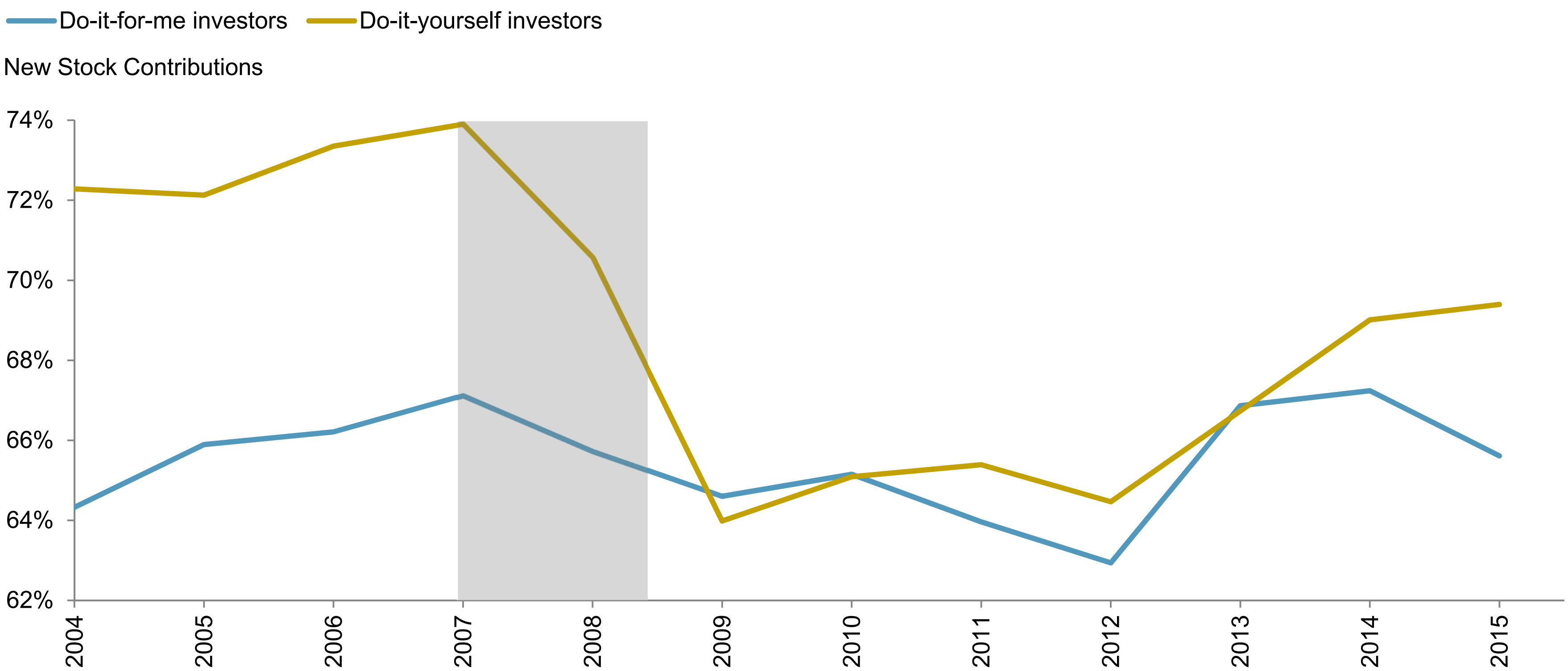


In the study, subjects were assigned simulated conditions that were similar to making portfolio decisions on a monthly or yearly basis. Sources: Thaler, R.H., A. Tversky, D. Kahneman, and A. Schwartz. “The Effect of Myopia and Loss Aversion on Risk Taking: An Experimental Test.” *The Quarterly Journal of Economics* 112.2 (1997), used by permission of Oxford University Press; Fidelity Investments (AART), as of 9/30/16.

Identifying the Appropriate Capacity for Portfolio Risk

Loss aversion and excessive emphasis on short-term market volatility may cause investors to make asset allocation changes that deviate from their long-term plans. Outsourcing asset allocation to a professional investment manager may help investors identify an appropriate amount of portfolio risk and stay on course to reach their long-term goals.

Baby Boomer Equity Contributions to Fidelity Retirement Plans, 2004–2015



Shaded area represents a bear market, when the stock market (S&P 500 Index) fell by more than 20% peak to trough. Stock contributions: the percentage of new directed deferrals (contributions) into stocks by Fidelity Personal & Workplace defined contribution active participants on an annual basis via the available investment options in plans administered by Fidelity Investments. Baby Boomers: participants born between 1946 and 1964. Stocks: includes investments in stock mutual fund strategies in addition to the equity portion of blended funds and strategies including balanced, target date, funds of funds, and managed accounts. Do-it-for-me (DIFM) investors: Plan participants who have 100% of assets in target date funds or are in a Workplace Managed Account. DIFM investors may be active or terminated in their DC plan. Do-it-yourself (DIY) investors: Plan participants who have <100% of assets in target date funds and are not in a Workplace Managed Account. DIY investors may be active or terminated in their DC plan. Sources: Standard & Poor's, Fidelity Investments, as of 12/31/15.

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	2016*
18%	75%	17%	38%	35%	35%	35%	66%	32%	14%	26%	56%	32%	35%	35%	40%	5%	79%	28%	8%	20%	39%	28%	5%	16%
17%	33%	8%	37%	23%	33%	29%	34%	26%	8%	10%	47%	26%	21%	33%	16%	-20%	58%	27%	8%	19%	34%	14%	3%	15%
15%	20%	3%	37%	23%	29%	21%	27%	12%	5%	4%	39%	21%	14%	27%	12%	-26%	37%	19%	4%	18%	33%	13%	1%	12%
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%
11%	19%	1%	28%	22%	22%	14%	21%	-1%	-2%	-6%	31%	17%	7%	18%	7%	-36%	28%	17%	2%	16%	23%	11%	1%	10%
8%	17%	0%	20%	16%	20%	9%	21%	-3%	-4%	-9%	31%	11%	5%	16%	6%	-36%	27%	16%	2%	16%	19%	6%	0%	9%
8%	10%	-1%	18%	15%	13%	3%	12%	-5%	-4%	-15%	29%	11%	5%	12%	5%	-37%	26%	15%	0%	16%	7%	5%	-4%	8%
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%
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%
4%	4%	-3%	12%	6%	-3%	-25%	-1%	-22%	-20%	-22%	19%	7%	3%	4%	-2%	-43%	18%	8%	-13%	4%	-2%	-4%	-15%	6%
-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%

Legend
Emerging-Market Stocks
High-Yield Bonds
Real Estate Stocks
Small Cap Stocks
Value Stocks
Commodities
Large Cap Stocks
Growth Stocks
60% Large Cap 40% IG Bonds
Investment-Grade Bonds
Foreign-Developed Country Stocks

*2016 as of 9/30/16. 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 – Bloomberg 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. Sources: Morningstar, Standard & Poor's, Haver Analytics, Fidelity Investments (AART), as of 9/30/16.

Fidelity INVESTMENTS

Appendix: Important Information

Information presented herein is for discussion and illustrative purposes only and is not a recommendation or an offer or solicitation to buy or sell any securities. Views expressed are as of the date indicated, based on the information available at that time, and may change based on market and other conditions. Unless otherwise noted, the opinions provided are those of the authors and not necessarily those of Fidelity Investments or its affiliates. Fidelity does not assume any duty to update any of the information.

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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.

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.

Market Indices (continued)

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 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.

The Citigroup Non-USD Group-of-seven (G-7) 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 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.

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 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.

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.

Appendix: Important Information

Market Indices (continued)

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.

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.

Appendix: Important Information

Definitions (continued)

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