



# 2016 Economic and Investment Outlook

## Executive summary



Timothy Hopper, Ph.D.  
Chief Economist

- Diverging monetary policy reflects varying rates of economic growth, with the Fed tightening as central banks in Europe and Asia ease further.
- U.S. inflation will rise, but probably not by as much as the Fed thinks. For that reason, our base case calls for three interest-rate hikes in 2016, one fewer than the Fed projects.
- Growth and a gradual return to normalized U.S. interest rates should drive demand for dollar-denominated assets, but we do not foresee a repeat of 2015's sharp dollar appreciation.
- Low valuations and improved corporate earnings trends should help European equities outperform U.S. shares. Identifying compelling opportunities in emerging-market equities will require selectivity and a degree of caution.
- We expect modestly positive returns for U.S. investment-grade fixed income, while high-yield bonds may be choppy, despite the firming economy and a potential trough in oil and commodity prices.



William Riegel, CFA  
Chief Investment Officer

### Asset class preferences

#### Equities ↔

- Large Cap ↓
- Mid Cap ↑
- Small Cap ↑
- Growth ↓
- Value ↑
- Developed Markets ↓
  - United States ↓
  - Europe ↑
  - Japan ↑
- Emerging Markets ↑

#### Fixed Income ↔

- Government Debt ↓
  - United States ↓
  - Europe ↑
  - Japan ↔
- TIPS ↑
- Munis ↔
- Corporate (Investment Grade) ↑
- High Yield ↑
- Emerging Markets (USD) ↓
- Emerging Markets (LC) ↑

↑ = overweight; ↓ = underweight. TIPS = Treasury Inflation-Protected Securities. LC = Local currency. Allocations based on an unhedged, U.S.-dollar-denominated portfolio. Please note the forecasts above concern asset classes only and do not reflect the experience of any product or service offered by TIAA-CREF. These forecasts are for informational purposes only and should not be considered investment advice or constitute a recommendation to purchase or sell securities. Market forecasts are subject to uncertainty and may change based on varying market conditions, as well as political and economic developments. Past performance is not an indicator of future results.



## Global asset returns

	Market Value (\$tr)	Relative P/E (%)*	Dividend Yield (%)	Total Return (%)			
				Fourth Quarter 2015		Full Year 2015	
				USD	Local	USD	Local
<b>Equities</b>							
<b>Global</b>	<b>\$36.0</b>	<b>-0.5%</b>	<b>2.6%</b>	<b>7.1%</b>	<b>7.8%</b>	<b>-2.1%</b>	<b>1.7%</b>
World ex-US	13.4	-9.5	3.2	5.5	7.0	-5.0	3.0
Developed Markets	32.3	2.2	2.6	7.6	8.3	-0.7	2.4
United States	22.1	11.0	2.0	8.2	8.2	0.7	0.7
Large Cap	14.5	9.6	2.2	9.7	9.7	2.5	2.5
Mid Cap	5.9	15.0	1.7	5.6	5.6	-2.3	-2.3
Small Cap	1.7	12.0	1.4	5.5	5.5	-3.8	-3.8
Growth	11.4	13.4	1.5	9.1	9.1	5.3	5.3
Value	10.7	16.3	2.5	7.3	7.3	-4.1	-4.1
High Dividend	5.6	30.9	3.3	9.6	9.6	0.0	0.0
REITs	0.7	6.1	4.0	7.6	7.6	1.1	1.1
Europe	8.0	11.8	3.4	4.8	7.7	-1.5	6.7
Japan	2.9	-15.4	1.9	12.1	12.4	10.4	11.5
Pacific ex-Japan	1.4	-0.6	4.4	10.2	7.6	-7.4	0.0
Emerging Markets	3.4	-11.4	2.8	3.0	3.1	-14.7	-4.8
Asia	2.5	-13.8	2.6	5.6	4.6	-8.4	-4.6
Latin America	0.4	5.4	3.1	1.6	-0.2	-33.8	-7.8
Europe, Middle East and Africa (EMEA)	0.5	-15.0	3.7	-6.4	-0.1	-21.1	-1.4
<b>Bonds</b>							
	Market Value (\$tr)	Duration (Years)	Yield (%)	Total Return (%)			
				Fourth Quarter 2015		Full Year 2015	
				USD	Local	USD	Local
<b>Global (Multiverse in USD)</b>	<b>\$45.7</b>	<b>6.5</b>	<b>2.2%</b>	<b>-1.0%</b>	<b>-1.0%</b>	<b>-3.4%</b>	<b>-3.4%</b>
Short (1-3 years)	\$10.1	1.9	1.3	-0.9	-0.9	-3.7	-3.7
Intermediate (3-5 years)	9.5	3.7	1.8	-1.1	-1.1	-3.2	-3.2
Intermediate (5-7 years)	7.5	5.1	2.4	-1.0	-1.0	-3.1	-3.1
Intermediate (7-10 years)	8.9	6.9	2.6	-0.7	-0.7	-2.7	-2.7
Long (10+ years)	9.6	14.7	2.8	-1.1	-1.1	-4.2	-4.2
U.S. Universal	21.6	5.5	3.2	-0.5	-0.5	0.5	0.5
Treasury	6.6	5.9	1.7	-1.0	-1.0	0.9	0.9
Inflation-Linked (TIPS)	1.0	4.9	2.3	-0.6	-0.6	-1.2	-1.2
Agency	0.7	4.1	2.1	-0.6	-0.6	-0.5	-0.5
Municipal	1.4	6.2	2.1	1.5	1.5	3.4	3.4
Mortgage-Backed Securities	5.2	4.5	2.8	-0.1	-0.1	1.6	1.6
Corporate (Investment Grade)	4.4	7.0	3.7	-0.6	-0.6	-0.6	-0.6
High Yield	1.2	4.3	8.9	-1.9	-1.9	-4.4	-4.4
Pan-European	12.7	6.8	1.1	-2.8	0.4	-8.5	2.4
Japan	6.3	9.0	0.3	0.6	0.6	0.4	0.4
Emerging Markets	1.4	5.5	6.0	1.4	1.4	1.3	1.3
Sovereign (USD)	0.4	6.6	6.4	1.7	1.7	1.2	1.2
Corporate (USD)	0.2	5.2	6.4	0.6	0.6	1.2	1.2
Local Currency	0.6	4.8	7.1	1.1	2.0	-15.1	3.4
<b>Currencies</b>							
	Exchange Rate			Fourth Quarter 2015		Full Year 2015	
Euro	1.09/€			-3.0%		-10.2%	
Pound	1.47/£			-2.6		-5.4	
Yen	120.30/\$			-0.4		-0.3	
Canadian Dollar	1.39/\$			-4.7		-19.2	
Swiss Franc	1.00/\$			-2.5		-0.7	
Emerging Markets†	-			-2.7		-15.8	

Data as of December 31, 2015. Equity categories are for the respective MSCI index. Bond categories are for the respective Barclays index, except for emerging markets, which are for J.P. Morgan indexes. \*Relative P/E compares current 12-month forward P/E (price/earnings) ratio versus median value since 1987 (except Latin America since 1992, EMEA since 1997, Japan since 2000, High Dividend since 2006, and REITs since 2002). †Based on the J.P. Morgan Emerging Market Currency Index. It is not possible to invest in an index. Performance for indexes does not reflect investment fees or transactions costs. Sources: Bloomberg, FactSet, TIAA-CREF Asset Management.

## 2016: The Fed awakens

After six and one-half years of a moderate and sometimes painfully slow recovery, the U.S. economy has arrived at the point where the Federal Reserve has begun to normalize interest rates. Many questions remain, however, both at home and abroad. Policy divergence among countries implies that global growth is not uniform, but perhaps more importantly, fundamental economic issues about growth in the U.S. still go unanswered:

- Why has productivity in the U.S. stalled in recent years?
- What is causing the uneven income distribution since the financial crisis?
- Why has strong aggregate job creation not led to better wage growth?
- And why is the Fed raising interest rates in the face of significantly slower—indeed, contracting—industrial activity?

We cannot begin to answer all of these questions, but we can put today's growth in context amid the uncertain environment.

Despite these many unanswered questions, the U.S. economy has operated at a pace above potential growth—loosely defined as productivity growth plus labor force growth—for several years, and we believe that the gradual normalization of interest rates will help bring about more normalized behavior in the rest of the economy. But overseas economies are telling a slightly different story. Commodities have come under pressure in recent years, and this has finally begun to hinder growth in many emerging markets. The dollar has strengthened significantly, which has added pressure to policymakers in many countries. Europe, while steadily improving, remains under a cloud of low credit

growth and a fragile industrial backdrop. China continues its transformation from an industrial and export powerhouse to a more consumer-driven economy, which translates to slower growth. And Japan continues to struggle with its own growth and inflation dynamics. Collectively, this adds up to global deceleration at a time when the world's largest economy—the U.S.—is experiencing rising rates. Thus, we face the challenge of how to interpret global growth in the context of these divergent economic and policy paths.

The story is not necessarily all negative. Historically, much of the adjustment in financial markets occurs before the first Fed rate hike takes place. Rising rates imply a healthier economy, one that demands foreign goods and services. Consequently, the beginning of a rate-hike cycle is usually coincident with stronger global growth and rising equity markets. Ironically, the dollar often falls in the face of the initial rate hikes, at least for a short period of time. The risk, if any, comes from the potential for rising longer-term interest rates, in particular debt associated with many smaller foreign countries. From 2000 through the 2008–2009 financial crisis, many emerging-world countries grew their debt levels. Today, these countries are broadly divided in terms of how markets perceive their respective balance sheet strength. (See Figure 1 for our real GDP forecast for all major regions of the world.)

Overall, while we are reasonably confident that U.S. growth will improve in 2016, we are somewhat less sanguine about economic prospects overseas. Some regions, such as Europe and Japan, are moving in a moderately positive direction. But others are not. China's growth rate is decelerating thanks to a transformation occurring within that economy, while several other emerging-market (EM) countries in Asia are also slowing, as are South Africa, Turkey and Brazil, among others.

Figure 1: Real GDP growth rates

	Real GDP (%)		Real GDP (%), SAAR				
	2015	2016	Q4 15	Q1 16	Q2 16	Q3 16	Q4 16
U.S.	2.5	2.6	2.5	1.8	3.3	2.7	3.2
China*	6.9	6.7	6.6	6.1	7.4	6.6	7.4
Eurozone	1.4	1.7	1.1	2.0	1.7	1.7	2.1
Japan	0.7	1.0	1.2	1.0	1.0	1.2	2.0

\*Quarterly estimates for China's seasonally adjusted annual rate (SAAR) do not correspond to officially published YTD figures.

Sources: Haver Analytics, TIAA-CREF Asset Management.

## United States: A tale of two economies?

Today there are two prevailing views about the U.S. economy. The first suggests that growth has and will continue to slow; that the economy is subject to a weak international commodity demand cycle, in particular declining oil prices and a strong dollar; that manufacturing activity is decelerating; and that low capital expenditures will translate to yet more trouble. The second view points out that employment and incomes far exceed the peak of the last business cycle; that debt burdens are lower today; that the housing market is recovering; and that in spite of lackluster growth, slack in the economy is still disappearing.

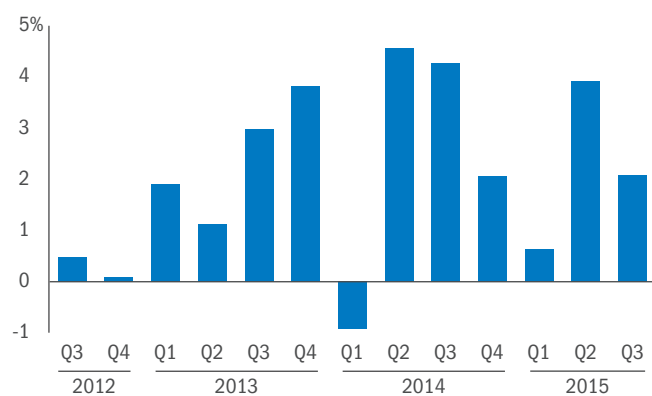
Both of these views are supported by ample evidence. Which one is ultimately borne out will determine not only the direction of monetary policy, but also the shape of the yield curve, the value of the dollar, and probably even the price of oil. We believe the balance of evidence favors the argument for further growth, but it is by no means a foregone conclusion. Consequently, a thorough examination of both views is in order.

### View one: Negative

Figure 2, which shows quarterly real U.S. GDP growth rates for the last two quarters in 2012 to the third quarter of 2015, is probably the best descriptor of the negative view on the economy. As we were writing our 2015 Outlook piece about a year ago, we expected the economy to accelerate—and why not? GDP growth was at or above 3% in four of the previous five quarters, and the mood at the time was calling for another quarter of stronger growth. Was this a new trend

Figure 2: Real GDP growth

Quarterly, SAAR\*



\*Seasonally adjusted annual rate.

Source: Haver Analytics.

toward normalized growth, or simply a smaller cyclical pattern in a broader slow-growth scenario—one that would soon reverse? Our forecast for further acceleration reflected underlying factors that supported a continuation of this positive trend. However, from today's perspective, the third quarter of 2014 turned out to be the peak, and the trend in 2015 was decidedly down.

Several factors have contributed to this reversal. Capital expenditures, which had performed well through mid-2014, began to soften, with several important sectors decelerating through year-end. Oil prices tumbled from nearly \$110 per barrel during the summer of 2014 to about \$38 per barrel in the waning days of 2015, contributing to the decline in capital expenditures. The impact of falling oil prices has been felt in areas beyond just corporate spending, and the debate about whether the decline is supply or demand related continues. Equally important, an ongoing rout in broader commodity prices has led to a tremendous slowdown in economies worldwide. This has hampered manufacturing employment and output and hurt our export machine, turning net exports from a tailwind to a headwind for the broader economy. Finally, consumer spending, while still relatively stable, is just that—stable. Because it failed to accelerate as predicted last year, it has somewhat clouded the picture of future growth.

The direct and indirect impact of falling oil prices on the economy was greater than 1% in 2015, taking into account the drop in capital expenditures, along with shrinking employment in the energy and related manufacturing and transportation sectors. The slump in oil prices was augmented by a rising dollar. All of these factors have combined to put increased pressure on earnings across a wide swath of corporate America, driving decisions to reduce dividends, capital expenditures, and employment in certain segments, and fueling an increase in expected bankruptcies among energy companies. Energy has been responsible for close to 40% of capital expenditures (capex) across the economy for most of the recovery, so the sector's dramatic curtailment in spending in 2015 has weighed heavily on the aggregate. Further, the expected boost to consumer spending due to lower oil prices has not materialized. The only measurable impact can be seen in higher demand for gasoline and a greater percentage of larger vehicles purchased.

What isn't completely known is the underlying reason for the plunge in oil prices. Is weak demand to blame, or an overabundance of supply? At the same time, capex has been one of the least additive components of growth during much of this recovery, underperforming the contribution of both consumer spending and housing investment. Perhaps sluggish final demand and the lack of investment appetite is

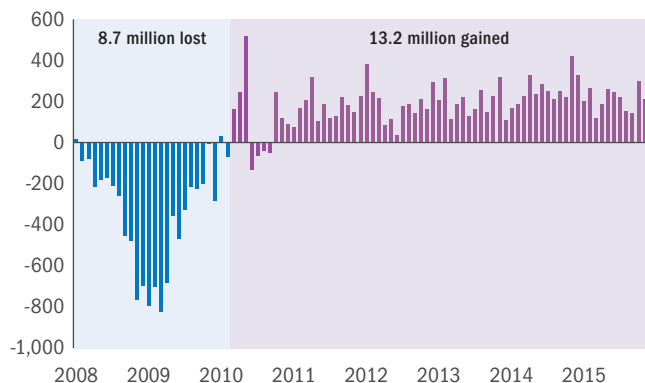
the underlying culprit that has caused capex spending and oil prices to fall. Finally, looking at Figure 2, isn't it just as much of a mistake to forecast a continued deceleration in the growth trend from late last year as it was to myopically forecast an acceleration in growth based on the trend prior to late last year? Or is today's deceleration somehow different?

A notable trend in 2015 was the weakness emanating from the EM world, reflected in global trade. Trade has historically grown at a rate close to twice that of global GDP, a phenomenon that accelerated in the early 2000s as China joined the World Trade Organization (WTO). That, along with a broader move toward faster growth in the EM space and ever-declining interest rates in the U.S., led more investment dollars to that part of the world, which also helped lower interest rates in those markets. Some of the knock-on effects of that trend were swelling foreign-exchange (forex) reserves in many of these countries, faster growth, looser monetary policy, and appreciating currencies.

These effects slowed dramatically after the financial crisis in 2008–2009. Today, global trade and global GDP are growing at a pace that's closer to parity, driven by a number of factors: China is exporting deflation; demand for commodities and the entire trading complex is plummeting; many of the same EM countries are burning through forex reserves as investment dollars leave; and interest rates and inflation are rising rapidly in many economies that are slowing at the same time.

**Figure 3: Total U.S. job losses vs. gains**

Thousands per month, 2008–2015



Data through November 2015.

Source: Haver Analytics.

This global dynamic has had a real impact on manufacturing at home. Gone are the days when the EM space was closing the real income gap with the U.S., where expensive transportation costs pushed domestic manufacturers to re-onshore production. The only piece of the onshoring story that holds true today is low energy prices, which remain lower here than just about anywhere else. Again, though, we have a conundrum. Is a slowdown in U.S. manufacturing activity related to falling oil prices, lower demand from overseas, a lack of investment at home, a lack in domestic demand, or some combination?

### View two: Positive

The other, somewhat more positive, view, suggests the U.S. economy is moving along at a slow but nevertheless positive pace that is fundamentally not decelerating. This perspective generally points out that both employment growth and nominal incomes have pushed past the last business cycle as consumer balance sheets have by and large healed, debt levels declined, savings rates risen, and housing activity improved. This view is decidedly domestically focused and consumer-oriented. But that's not an indefensible premise, given that consumer spending still makes up nearly 70% of growth and the U.S. remains one of the most insulated countries from overseas dynamics.

By almost every conceivable measure, employment has returned to pre-crisis levels. According to the Bureau of Labor Statistics (BLS) establishment survey, which tallies nonfarm payrolls, total employment in the economy surpassed the last business-cycle peak in April 2014. Meanwhile, based on the BLS household survey, which includes the unemployment rate, the return to pre-crisis levels took place in September 2014. Figure 3 shows job growth from another perspective: the total number of jobs lost during and immediately following the financial crisis, and all jobs gained since then. These measures clearly demonstrate that employment growth in the economy has recovered completely and sufficiently, something the Federal Reserve has stated is a mandatory condition to warrant higher interest rates.



That said, certain factors temper the enthusiastic mood surrounding U.S. employment. Wage growth, the labor force participation rate, and even productivity growth are often cited as reasons to be concerned about the employment recovery, and indeed the broader economic recovery. But wage growth is less important than nominal wages paid to employees. Thus, with a complete recovery in total jobs in the economy, the level of wage income has also surpassed that from the last business cycle peak, as long as wage rates themselves are not below the previous peak. Figure 4 shows real (i.e., after inflation) wage growth. After remaining rather stagnant for much of the recovery, wage growth moved higher in 2015. However, much of the move can arguably be related to lower oil-price induced inflation rather than to better wages.

But we may be closer to full employment than we realize. The rolling number of months in which job creation has exceeded 200,000 suggests the economy is close to full employment today. Going back to 1980, this measure of job growth has been a good predictor of when labor markets reach a key point—when wage growth finally begins to accelerate. The good news for those employed is that wage rates should start rising in early 2016. Lastly, on income, the proportion of total income that stems from financial market activity has increased since the financial crisis, suggesting that those who have diligently invested for retirement in equity and fixed-income markets since the crisis have fared better than those who have remained on the sidelines.

Falling participation rates and productivity have also been blamed as culprits for the weak labor recovery. However, if we consider the entire post-WWII era, participation rates (whether compared to the civilian labor force as a whole or to those employed) are comparable to pre-1980 rates. In

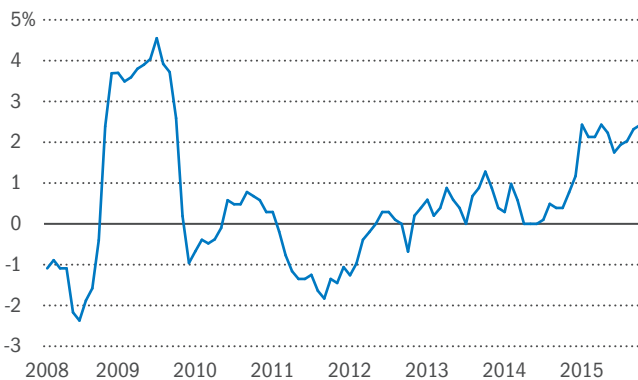
fact, the anomaly in the long-term data appears to be the period between 1985 and 2000. Thus, there is a valid argument that today's participation rates are not structurally deficient, but merely reverting to the long-term mean. The same conclusion could be drawn from annual productivity rate measures, as annual nonfarm business productivity has steadily trended higher since 1980, including during the most recent decade of below-trend productivity growth.

The only true criticism—and most likely the primary reason why so many feel disenfranchised about the labor market recovery—lies in the changing composition of the labor market. If we examine the number of employed, there are clear delineations between those with less and more education and between low- and high-skill jobs. Employment of adults with a high school degree or less has not recovered, whereas it has for those possessing at least some college education. Similarly, according to the establishment survey of job categories, manufacturing and construction jobs have not fully recovered. Mining employment has, but will soon drop below levels seen during the last cycle peak.

Meanwhile, as the economy has continued to become more service oriented, professional and business services, education, healthcare, transportation, and trade (such as retail employment) have all more than recovered. Many of these groupings are higher skilled in nature, requiring a more advanced level of education. However, those in financial and insurance services, despite having attained a higher level of education, have thus far not benefited from the jobs recovery. Perhaps more important than this list of job gainers and losers is the sheer number of employed who have shifted job categories since the financial crisis. Many people who have lost jobs in one category have switched to lower-paying positions. This partially explains the persistent

Figure 4: Real wage growth (%)

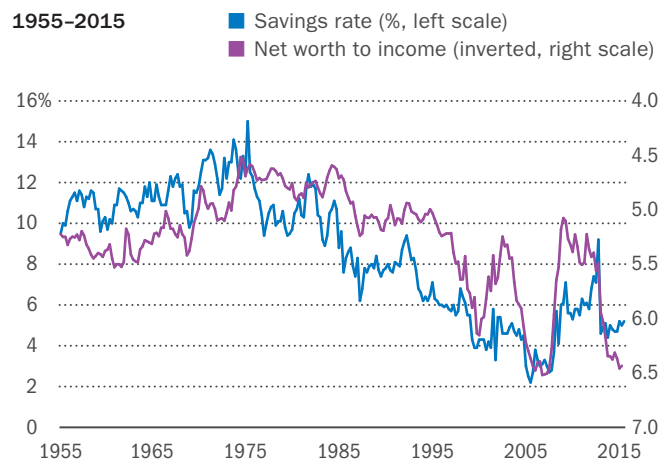
2008–2015



Data through October 2015.  
Source: Haver Analytics.

Figure 5: Net worth and the savings rate

1955–2015



Data through second quarter of 2015.  
Source: Haver Analytics.

weak aggregate wage growth, as does the fact that many people who were laid off during the crisis were in more advanced stages of their careers, and therefore more expensive employees. However, as labor markets tighten further from this point, those employed should benefit from higher wage rates.

With the recovery in labor markets, and thus incomes, one would surmise that personal consumption expenditures would have recovered, too. This is true—but only partially. Consumer spending growth has indeed improved in recent years and is now growing around 3% on a quarter-over-quarter basis. But compared to the average recovery, consumer spending is lagging. And in Figure 5, we can see that savings rates have increased significantly since the last business cycle. Consumer behavior appears to have changed since the financial crisis. People are much more cognizant of debt levels, and conspicuous consumption has fallen out of favor.

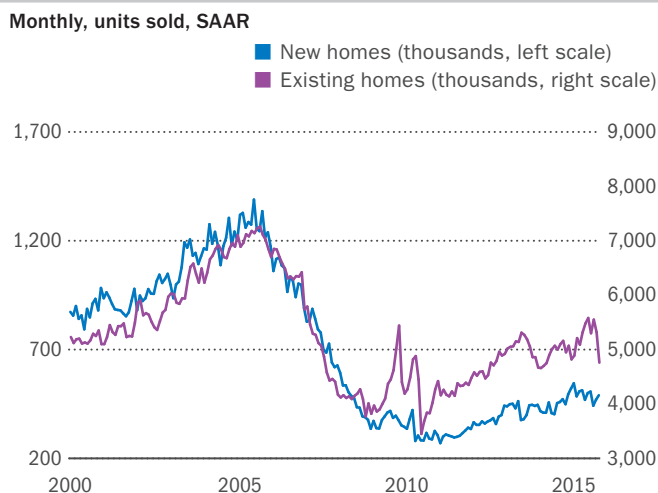
However, another reason for increased saving is that interest rates are near zero. For anyone saving for retirement (or any other goal), earning zero interest on deposits requires saving more money. And here is the silver lining to higher interest rates: as rates rise slowly from zero to about 1% or 1.5%, the amount needed to reach a financial goal declines, which should spur further consumer spending on the margin. After all, if you are saving for something and the deposit rate you earn rises, then you can set less aside to meet that goal.

Another staple of the positive view on the economy is the recovery in housing activity. Figure 6 shows that annual housing activity still has a way to go before getting close to

what we saw during the last cycle, but the sector has nonetheless made tremendous strides. On the other hand, housing prices (Figure 7) have mostly recovered. Importantly, both of these key segments of the economy—consumer spending and housing—have more room to grow. In both cases, demand is advancing and should continue to increase over the next few years—even in the face of rising interest rates, because rising incomes will offset the higher cost of mortgages going forward.

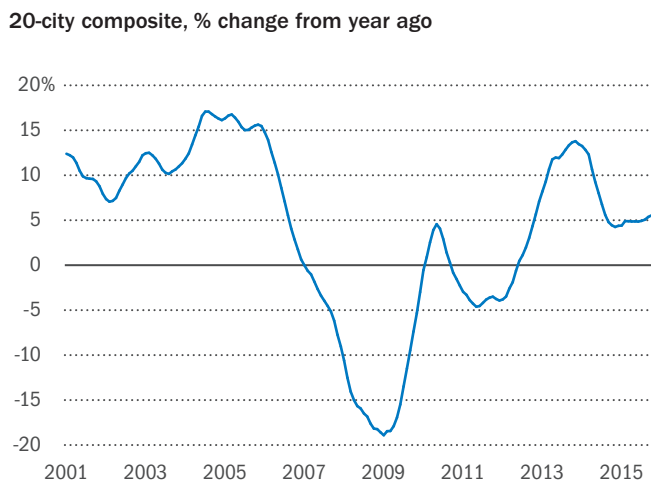
Whether you subscribe to the more negative view or the more positive view on U.S. growth depends largely on your perspective, as there is evidence to support either case. When you aggregate the sum of all the parts, the truth probably lies somewhere between the two. Ultimately, the underlying issue with growth today is a cyclical mismatch between consumer health and industrial weakness that is emanating primarily from the EM world but affecting much of the industrial segment of our domestic economy. We tend to err on the side of further growth, because rising interest rates will benefit a much larger segment of the economy, at least at first. Moreover, we have yet to see the benefits of falling oil prices for the consumer. Lastly, income rates are starting to rise on top of already strong nominal income levels. Therefore, what we will lose in capex and inventory spending over the coming year should be more than compensated for by increased consumer spending and continued growth in housing investment. Given this near-equal balance of positive and negative forces, our forecast calls for only the slightest improvement, with average annual GDP growth rising from about 2.5% in 2015 to about 2.6% in 2016.

**Figure 6: Home sales**



Data through November 2015.  
Source: Haver Analytics.

**Figure 7: S&P/Case-Shiller Home Price Index**



Data through October 2015.  
Source: Haver Analytics.

## Federal Reserve

Understanding the need to begin hiking short-term interest rates in today's environment requires first understanding that the Fed's immediate and primary goal is to get off the zero lower bound. The intent is not to slow the economy. There are observable imbalances in the financial economy that have crept up because of excessively low interest rates. In other words, interest rates that are too low cause a misallocation of capital. The Fed knows this, but to date the risks of anemic growth have outweighed the risks of too-low interest rates. However, as the economy improves, that balance shifts, and rates need to rise. Understanding this also implies that rate increases will most likely be both moderate and slow to materialize.

Forecasting the actual path of rate hikes requires a close examination of the Fed's two mandates: full employment and price stability. Full employment is either already at hand or around the corner, and wage increases should bear this out in the coming months. Stable prices are a different story, though, which is why the Fed will shift its focus to this mandate as we move forward. Figure 8 shows year-over-year (yoy) headline Personal Consumption Expenditure (PCE) inflation rates for the U.S. On the surface, this graph should be concerning because it shows a move towards deflation, something that would be disastrous for any economy. However, the precipitous fall in prices does not reflect a lack of underlying demand in the economy, but rather a steep fall in oil prices, and to a lesser degree a strong rise in the value of the dollar. The implication for yoy calculations is that headline inflation will increase once we pass the

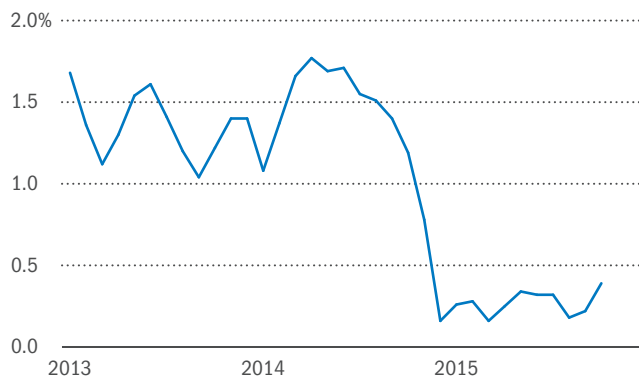
one-year anniversary of falling oil prices, the base effect. Indeed, November's Consumer Price Index (CPI) has already moved higher, suggesting that the Fed's favorite inflation measure, the PCE, will follow suit. We expect the CPI measure to reach 1.4% by the end of 2016.

But herein lies the true uncertainty about future Fed hikes. If inflation indeed materializes back toward the pre-oil price drop level, it would exceed 1.5%, indicative of a Fed that is behind the curve. On the other hand, if inflation materializes but remains on the weaker side, then there would be little reason to expect too many rate hikes in 2016. Markets have focused on the latter expectation and are therefore pricing in about two rate hikes of 25 basis points each this year. Fed communications suggest there may be as many as four 25-basis-point hikes in 2016, an indication that the Fed believes inflation will re-emerge.

Our perspective acknowledges that inflation will re-emerge, but probably not by as much as the Fed currently thinks. Inflation has undershot the Fed's forecast for a number of years and is likely to do so again in 2016. This is partially driven by oil prices, which continue to fall, but also from a stronger dollar, which has lowered import prices significantly. However, the pass-through effects of deflation exported by China, along with the lack of demand for export goods and services on our domestic manufacturing sector, will also translate to lower-than-otherwise expected inflation. Thus, the Fed will indeed raise rates in 2016, but our base case calls for three rate hikes (see Figure 9).

Figure 8: PCE inflation measure (%)

Monthly, 2013-2015



Data through November 2015.  
Source: Haver Analytics.

Figure 9: Fed funds target rate

Year	Quarter	Fed funds (%)	
2015	Q4	0.25	
	2016	Q1	0.25
		Q2	0.50
		Q3	0.75
Q4		1.00	
2017	Q1	1.25	
	Q2	1.50	
	Q3	1.75	
	Q4	2.00	

Source: TIAA-CREF Asset Management forecast.



Understanding what policy settings imply about prevailing interest-rate structures is also key for the coming year. Figure 10 shows the U.S. yield curve from 1983 to the end of 2015. The movement in the two-year U.S. Treasury note suggests that markets are pricing in not only a first rate hike, but also further hikes. The truly important observation, though, is the spread between the two-year and 10-year Treasury notes, which is unlikely to widen any further. Historically, the spread is at its largest point at the beginning of a rate-hike cycle. Thus, as the Fed raises the fed funds rate, short-term market interest rates rise by about as much as the fed funds rate. But longer-term rates generally do not increase by as much. This should be especially true today, given the strong divergence in monetary policy around the world and extensive foreign ownership of U.S. Treasuries.

## Equities

U.S. equities endured a challenging year in 2015, punctuated by spikes in volatility and, in the third quarter, a textbook correction—i.e., a decline of 10% or more from a prior peak—in the S&P 500. While unnerving to investors, the 12.3% drop in the S&P 500 between May and August was actually an expected and healthy move within the context of the long-running U.S. equity bull market. Contributors to market volatility included plummeting oil prices, fears of a sharper-than-expected deceleration of China’s economy, and uncertainty about the timing of Fed rate lift-off. The S&P 500 rebounded in the fourth quarter (see Figure 11) and returned 1.4% for the year as a whole.

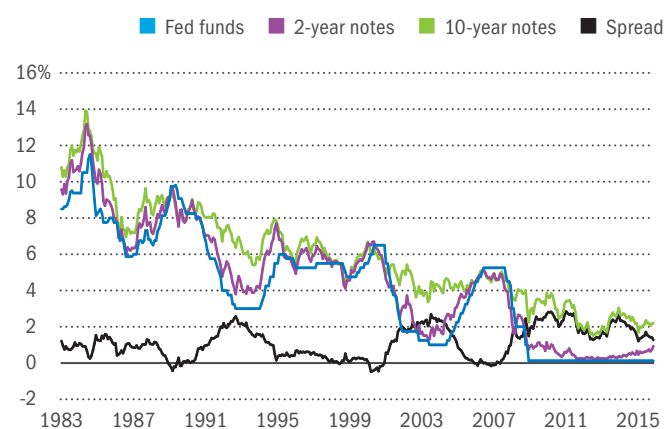
The extremely negative investor sentiment that prevailed during most of the year seemed to belie the fact that we are still in a bull market. It is certainly the least-loved bull market we have ever seen. This was underscored by the scale of outflows from equity mutual funds in 2015—almost \$150 billion, exceeding even the heavy withdrawals made during the height of the financial crisis in 2008–09.

Returns among styles, market caps, and sectors varied, in some cases with a clear shift in preferences from the first half of 2015 to the second. Small- and mid-cap stocks led large-cap shares in the first half of the year but suffered more during the late-summer market selloff and ended the year down 4.4% and 2.4%, respectively, based on Russell indexes. Meanwhile, growth consistently outperformed value. In terms of S&P 500 sectors, Consumer Discretionary (+10.1%) was the top performer by far, while Energy’s 21.1% decline reflected the continued drop in oil prices.

The slump in oil was accompanied by a stronger U.S. dollar, which appreciated 10.2% and 0.3% against the euro and yen, respectively. Dollar strength had a substantially adverse impact on U.S. earnings in 2015, by some estimates costing roughly \$10/share on the S&P 500.

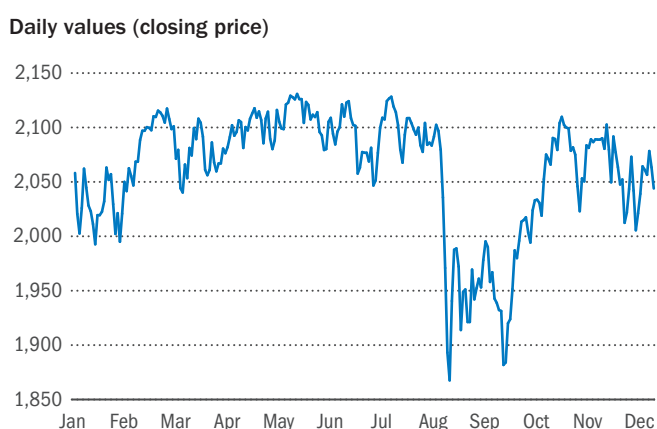
For 2016, we expect another year of positive returns in the U.S., but nothing beyond low single digits, accompanied by periodic bouts of volatility as markets adjust to normalizing interest rates. In general, we favor cyclical sectors, including Industrials and Materials, which have lagged for the past 18 months, and consumer-oriented stocks, as consumers stand

Figure 10: Yield curve



Data through November 2015.  
Source: Haver Analytics.

Figure 11: S&P 500 performance during 2015



Data through December 2015.  
Source: Standard & Poor’s.

to benefit from strong employment, rising home prices, and moderately higher wages. We are less favorable toward defensive sectors such as real estate investment trusts (REITs), Utilities, and Health Care, and neutral on Technology.

Additionally, we think there may be select opportunities in the beaten-down Energy sector. In our view, demand/supply dynamics offer upside potential, highlighted by declining U.S. rig counts. Energy exploration and production names focused on the Permian Basin—the largest crude oil-producing region in the U.S.—look particularly compelling.

As for valuations, the S&P is trading at or around 15x to 16x earnings, which, while not inexpensive, is basically “normal” and in line with history. While some observers have suggested that U.S. stocks are overvalued, presaging the end of the bull market, most bull markets don’t end at normal levels of valuation; they end when exuberance pushes price-to-earnings multiples up well into the 20s.

Similarly, although margins are at record levels, that is primarily because of very low interest rates and taxes. Margins on an EBITDA (earnings before interest, taxes, depreciation, and amortization) basis are essentially at or below “normal” levels. Thus, if interest-rate rises remain modest and productivity picks up, a case could be made for a potential earnings surprise to the upside, which could be augmented by a dollar that either stays flat or weakens in the coming year. That is not in anybody’s playbook now, but markets have been known to behave in ways that nobody expects.

As for risks, we think the greatest potential threat to U.S. equity market performance in 2016 is an unexpected burst of inflation, which would lead the Fed to try to play catch-up with its rate hikes. While this is not our base case scenario, inflation could accelerate more quickly if growth in average hourly earnings—typically where broader inflation begins to manifest—reaches 4% (up from the current pace of 2% to 2.5%).

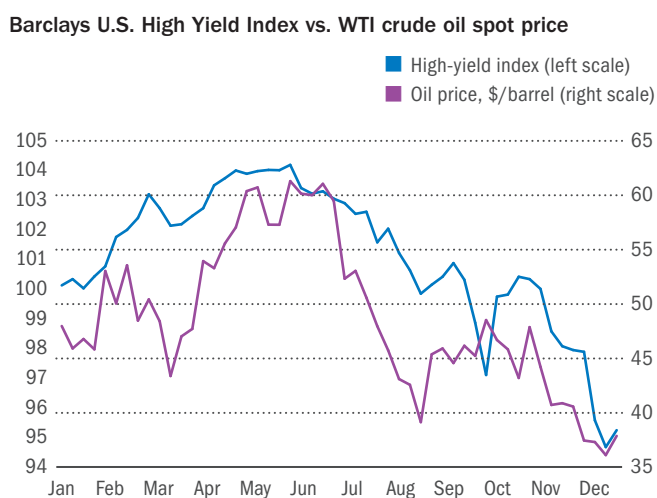
### Fixed income

Fixed-income performance was decidedly mixed in an environment of Fed rate speculation and significant spread widening in the high-yield market. Short-term U.S. Treasury yields rose sharply during the year, while intermediate- and long-term yields inched only marginally higher, resulting in a flatter yield curve. Investment-grade bonds as a whole, measured by the Barclays U.S. Aggregate Index, realized a total return of 0.6%. Within the index, higher quality tended to outperform: Treasuries (0.8%), Aaa rated debt (+1.1%), and agency-issued mortgage-backed securities (+1.5%) were among the leaders, while Baa rated securities (-2.7%) and corporate bonds (-0.7%) struggled. Meanwhile, short- and intermediate-term categories (with positive returns ranging from 0.7% to 1.6%) outpaced longer-term issues of 10+ years (-3.3%).

The biggest headline story of the year was the poor performance of high-yield bonds, whose prices sank and yields climbed, concurrent with the drop in oil and commodity prices (see Figure 12). Energy firms—including coal, shale, and oil-related pipeline and exploration companies—make up about 20% of the below-investment-grade debt market. Against this backdrop, the Barclays U.S. High Yield Index returned -4.5%, its worst one-year performance since 2008. We think high-yield performance will remain choppy in 2016, even as the economy continues to improve, given the likelihood that higher-yielding debt will have to compete for inflows amid a higher risk-free (Treasury) rate. That said, higher-quality high-yield bonds may offer potential opportunities on a tactical basis.

Overall, we anticipate slightly better performance for investment-grade, intermediate-term fixed-income categories in 2016, compared to 2015. Total returns will consist primarily of coupon (interest-rate) income, as price action should be slightly negative given the increase in rates. We expect a moderate rise in the bellwether 10-year Treasury yield, from a year-end 2015 level of 2.27% to a range of 2.5% to 2.75%, or possibly even 3%, by the end of 2016.

**Figure 12: High-yield performance tracked decline in oil prices during 2015**



Data through December 2015.

Sources: Haver Analytics, Morningstar, TIAA-CREF.

### Europe

Europe continues on its recovery road, helped along by a very accommodative European Central Bank (ECB). Industrial activity, credit growth, consumer spending, and investment have accelerated compared to a year ago. Lending standards have eased, contributing to more robust business-loan volume. Overall, banks appear to be reasonably healthy, with profits and revenues increasing as loan losses have declined. Although some large international banks with significant corporate and investment banking divisions have struggled amid regulatory uncertainties and difficulty finding stable sources of revenue, more retail-oriented commercial banks have benefited from their profitable insurance and asset management businesses.

It also appears that the Eurozone dodged another bullet last summer after successfully navigating the second Greek crisis. Indeed, the peripheral Eurozone economies performed much better than expected in 2015, pulling up the average compared to the larger core countries. For the region as a whole, leading economic indicators have risen in 11 of the past 12 months, and manufacturing and service-sector activity have expanded for 29 consecutive months.

Moreover, according to European Commission (EC) estimates, the recent influx of migrants from the Middle East and other conflict zones will provide a modest boost (about 0.2%) to GDP this year for the European destination countries most affected by the crisis. This will be mostly due to the positive impact of greater public spending and a larger labor force. Longer term, the new arrivals will help replenish the supply of younger workers in Europe, which has some of the world's most rapidly aging populations.

To maintain its steady growth trajectory, the Eurozone must continue to implement structural reforms. Progress on this front has been patchy, but we see some encouraging signs. In France, for example, the region's second-largest economy and one of the countries most in need of reform, the government recently enacted an ambitious (and controversial) set of provisions designed to modernize the French economy, streamline its labyrinthine labor code, and create jobs. France is also trying to deregulate government-run industries such as transportation and health care, while planning to cut its corporate tax rate from 33% to 28% by the end of 2019.

Another key to continued growth in the Eurozone is the implementation of stimulative fiscal policy to accompany the ECB's monetary easing program. Along these lines, the EC's "Juncker Plan" (after EC President Jean-Claude Juncker) is a three-year, €315 billion (\$342 billion) infrastructure program designed to address a multi-year shortfall in Eurozone investment.

While these positive developments are welcome, the optimism is tempered by some concerns: inflation expectations don't appear to be as anchored in the Eurozone as they are in the U.S.; credit growth, while improving, is still anemic; and many European countries, most notably Germany, are suffering due to the loss of exports from a weaker EM world. There are also indications that quantitative easing (QE) is becoming less effective. Capital that has been freed up through the ECB's program is pooling in core country bank accounts, mostly in Germany. A similar dynamic occurred in the U.S., but a larger percentage of the freed-up capital ended up in equity and fixed-income markets here than will likely be the case in Europe.

#### Equities

European equities outpaced U.S. shares in 2015 (in local currency terms), with the MSCI Europe Index returning 4.9%, versus 1.4% for the S&P 500. We expect this trend to continue in 2016, driven by a number of catalysts that argue for an overweight allocation to the region.

Valuations in Europe are relatively attractive compared to those in the U.S., with the MSCI Europe Index trading at 14.9x earnings, compared to 16.1x earnings for the S&P 500. This suggests the potential for stronger European equity returns, which we believe will be driven by a corporate earnings revival. Companies in the region have suffered almost five years of earnings downgrades. Industrials, Consumer Discretionary, and other economically sensitive sectors, which together make up more than 60% of the MSCI Europe Index, have been hit the hardest. A combination of the declining euro, lower commodity prices, and the ECB's continued accommodative monetary policy should help reverse this negative trend.

Year-end 2015 data supports our view, as profit margins in the U.S. may be close to "normal" on an EBITDA basis, while those in Europe have ample room to grow (see Figure 13). To illustrate, the margin (next 12 months) for the MSCI Europe was just 7.4%—25% below its 15-year high of 9.9% in August 2007. This opportunity for margin expansion bodes well for the ability of European companies to maintain (or even increase) their generous dividend yields, which are currently above their long-term average and greater than those found in other global markets.

#### Fixed Income

In local currency terms, European investment-grade bonds fared better in 2015 than their U.S. counterparts, based on Barclays indexes. The yield on the Pan-European Aggregate Index held steady, ending the year at 1.06%, while the yield on the U.S. Aggregate Index climbed 34 basis points, to 2.57%. We expect Eurozone bond yields to remain range

bound in a market that may be more prone to trading on technical factors than fundamentals. Positive supply dynamics, along with the ECB's ongoing QE actions, will likely limit yield-curve elevation, thereby putting a ceiling on yields.

## Japan

Japan endured one quarter of recessionary growth in 2015 but is likely to break out of that trend shortly. In our view, last year's lack of performance was caused more by the dislocations of raising the sales tax rate than weak underlying demand. Prime Minister Shinzo Abe has been instituting an aggressive program to increase inflation, stimulate growth, and improve confidence in Japan's future, following two full decades of deflation and stagnant growth. So far, his reform agenda has worked. Wages have increased for two successive years and are likely to increase again in 2016, the first such stretch in at least a decade. Inflation remains low but rose steadily throughout 2015. And for the first time in many years, one hears about a slow re-emergence of domestic capital spending in Japan.

Despite these positives, it is still far too early to declare victory. Japan will have to see much stronger growth over a much longer time period before we can be certain that its economic engine has been restarted. During the first half of 2016, Abe will focus on helping his ruling Liberal Democratic Party retain its majority in the June parliamentary elections. To that end, we expect him to announce politically popular stimulus measures, including government programs to support pensioners, farmers, and women (in the form of childcare benefits). With tax reform—part of the “third arrow” of Abenomics—high on his list, Abe may seek to

eliminate the spousal deduction, which has discouraged stay-at-home spouses from entering the workforce. Supporting dual-income households should broaden Japan's tax base and boost wages. He may also attempt to modify the highly unpopular 2% consumption tax increase scheduled to take effect in April 2017. Doing so may not be politically feasible, though, as the government has long promised to fund social programs with the extra revenue.

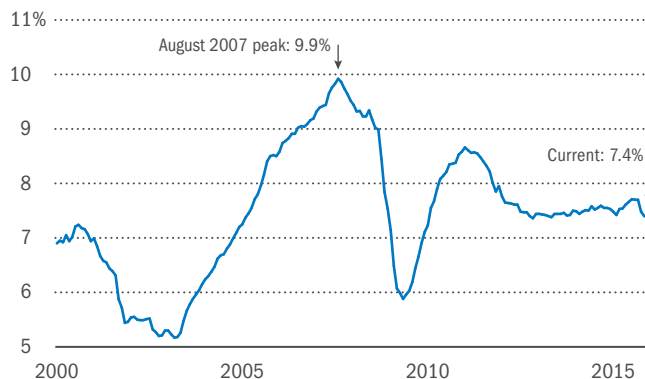
Whether Abe will be able to maintain momentum on the corporate governance front is likewise worth watching. Two recent moves include the Tokyo Stock Exchange's adding corporate governance guidelines to its stock listing requirements, and Japan's adoption of a governance code designed to make its corporations more transparent and responsive to shareholders.

## Equities

With its 10.6% gain in 2015 in local currency terms (10.2% in USD terms), the Nikkei 225 Index logged its fourth consecutive annual increase—just the second time since the collapse of Japan's “bubble economy” in the late 1980s that the Nikkei has produced such a run.

The ability of Japanese stocks to continue to deliver in 2016 depends on several factors, chief among them the impact of U.S. monetary policy. Higher U.S. interest rates following expected Fed rate hikes during the course of the year could translate into a stronger dollar and, in turn, a weaker yen. As shown in Exhibit 14, over the past decade the export-heavy Nikkei index has tended to perform well when the yen has fallen.

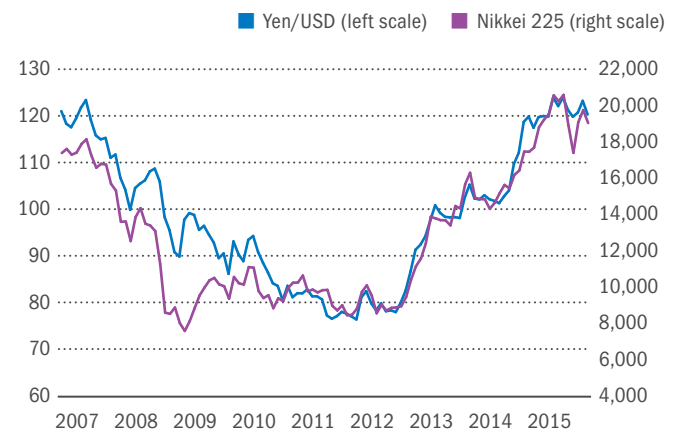
**Figure 13: European profit margins are poised to recover**



Based on MSCI Europe Index. Data through December 2015. Source: FactSet.

**Figure 14: As the yen goes, so goes the Nikkei**

**Yen per dollar vs. Nikkei 225 Index**



Data through December 2015. Source: Haver Analytics.



Although exporters may benefit in such an environment, we believe recovery in the broader Japanese economy will remain fragile, with annual GDP growth of around 0.8% and inflation in the 0.9% range—well below the 2% target set by the Bank of Japan (BoJ). Two days after Fed’s widely expected rate hike, the BoJ surprised markets by announcing that it would begin buying government bonds with longer maturities (7–12 years), as well as an extra ¥300 billion (\$2.4 billion) a year of exchange-traded funds of companies found in the JPX Nikkei 400 Index, a newly created benchmark that weights companies according to profitability and a variety of shareholder-friendly metrics.

In our view, the BoJ’s December 18 action may be a prelude to another dose of monetary easing prior to June’s parliamentary elections, which would likely send the yen lower and be a positive for stocks. Conversely, the BoJ’s December “tweak” may suggest that the central bank has nothing further planned—a prospect that disappointed equity markets in the wake of the announcement. Without additional stimulus, the yen could strengthen, putting pressure on exporters and local equity markets.

### Fixed income

After moving higher during the first six months of the year, the yield on the 10-year Japanese Government Bond (JGB) reversed course during the second half of the year, driven down by the BoJ’s aggressive quantitative easing purchases of JGBs. The BoJ’s “fine tuning” in December will likely boost performance of longer-dated JGBs. In a declining interest-rate environment, JGBs should outperform Eurozone government debt given their longer duration (8.5 years vs. 6.3 years, respectively, according to Barclays indexes).

## China and Emerging Markets

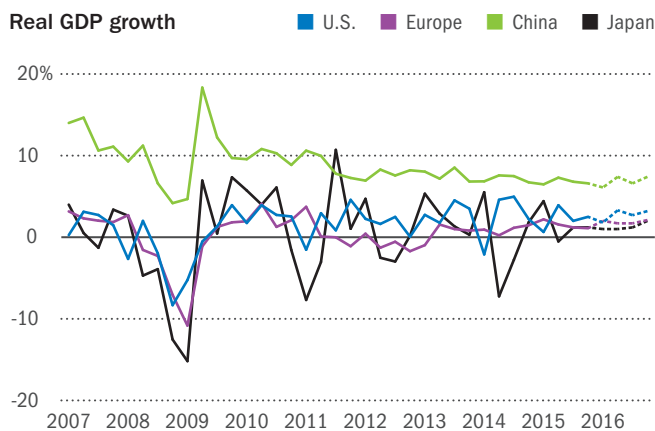
Emerging markets have been facing what might be called a perfect storm of currency declines, capital flight, and budgetary and political pressures—all while bracing for the first Fed rate hike in nearly a decade. The prospect of U.S. policy tightening has placed a particular strain on EM economies with higher current account deficits. For the first time in nearly 30 years, capital flows out of emerging markets turned negative in 2015—by \$541 billion, according to the Institute of International Finance. Meanwhile, EM stock and bond markets suffered amid souring investor sentiment and sharply negative net portfolio flows, the worst since 1988.

In our view, while caution is certainly warranted, the negativity surrounding EM economies may be overdone. External debt to GDP is noticeably smaller than during the 1997–98 EM currency crisis. Meanwhile, lower inflation, poor market sentiment, and battered currency values suggest that the initial stages of U.S. rate normalization have already begun to be reflected in EM asset prices. Finally, while economic growth rates are slowing across EM countries, we still expect GDP growth to exceed that of developed markets in 2016.

As always, the size of China’s economy makes what happens there important for growth not just in the emerging markets but everywhere around the world. Because China boasts the world’s second-largest economy by most measures and is by far the largest emerging market, it is essential to understand that country’s inner dynamics. Complicating that task, however, is a near complete lack of transparency in data, monetary policy, and politics. China operates in a similar fashion to most EM nations—behind closed doors. That said, China has embarked on the herculean task of modernizing its economy. The first stage of that developmental path was a dramatic increase in infrastructure spending, which coincided with a push to allow more people to migrate to urban areas. Today, more than half the Chinese population lives in urban centers, although the country as a whole still lags most of the developed world by this standard.

Job creation for a newly urbanized population was also a primary goal for the Chinese government. Thus, we have seen a strong push into manufacturing and trade. Whether China is succeeding in transforming its economy to allow for increased incomes and a better life for its population, or whether the Communist party is simply accommodating a trend that was already underway to stay in power, is open to debate. What we do know is that the changes that have taken place so far are irreversible and have put China on a path toward either complete reform or crisis.

Figure 15: Major country GDP forecast



Dotted lines = forecast.

Sources: Haver Analytics, TIAA-CREF Asset Management.



There are as many different definitions of “complete reform” as there are for “crisis.” China has not communicated a complete vision for its future, but the government’s actions to date would suggest that the new China will not be as open as the U.S. or as liberal in its freedoms. What about crisis? No advanced nation has completely developed without some form of crisis, whether economic or political. Because China is trying to break that mold, all reforms are designed to provide as much economic stability as possible. The question on everyone’s mind is whether it will be able to move forward without some form of roadblock.

Thus, China stands at a junction. Society is moving forward, income levels have increased, and the population seeks greater connection to the rest of the world. But that requires open trade, open borders, capital flows, and a liberalized currency—in addition to an institutional framework to support that new structure. It’s in these details that we find clues to China’s path over the next several years. Reform efforts by their very nature are investments in the future; they do not bear fruit today. This is the core of the China “hard landing” issue, and finding the proper balance of reforms and fiscal spending is the challenge.

Some pundits argue that there is no way China can avoid a hard landing. And while they may be right, we do not believe such an outcome is a foregone conclusion. China has ample foreign exchange reserves under current conditions and still maintains very tight control of its capital accounts, borders, and currency. One might say that, if China plays its cards right, it might succeed. But we also know that imbalances and capital misallocations are building in the economy, and

the longer these pressures mount, the higher the risk of a downside scenario. Against this backdrop, our baseline expectation remains a slow deceleration in economic growth accompanied by a slow acceleration in implementing policy reforms.

In this regard, China may well be the key to global economic growth in 2016 (see Figure 15). A slowdown in the second-largest economy will weigh on the average but will also affect other economies through lower trade volumes. As China pushes toward reform, it will also demand fewer commodities. This has already shown up in data across the commodity complex and is hurting nations that export raw materials.

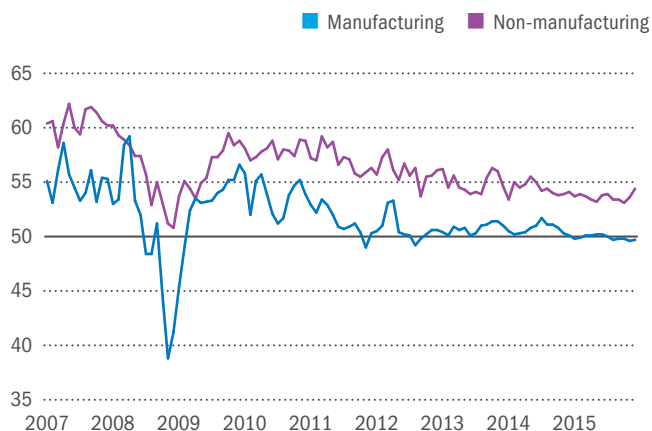
### Equities

EM equities have now underperformed their foreign developed-market counterparts for five consecutive years in local currency terms, based on MSCI indexes. In 2015, the underperformance was magnified when translated into U.S. dollars, with the EM benchmark (-14.92%) lagging the EAFE index by about 14 percentage points. This reflects the sharp drop in the value of EM currencies versus the dollar during the year (see Figure 17).

The significant decline in equity prices has left valuations at very depressed levels. Heading into 2016, EM stocks are trading at a discount on both a price-to-earnings and price-to-book basis, relative to developed markets, near the lows of the 2008 financial crisis. This suggests that we could see select buying opportunities, perhaps in some of the past year’s more resilient markets, such as Taiwan, Korea, and Mexico (where exporters may benefit from the U.S. recovery).

**Figure 16: China’s service sector is still expanding**

**China Purchasing Managers’ Indexes (PMIs): manufacturing vs. non-manufacturing**



Readings above 50 indicate expansion. Data through December 2015. Source: China Federation of Logistics & Purchasing.

**Figure 17: Emerging-market currencies vs. the U.S. dollar**

**JPMorgan Emerging Market Currency Index\***



\* Weighted average of currencies of Turkey, Russia, Hungary, South Africa, Brazil, Mexico, Chile, China, India, and Singapore. Data through December 2015. Source: Bloomberg.

The materials, mining, and energy sectors have curtailed capex spending but are ripe for consolidation. In addition, consumer discretionary stocks in China may be poised to take advantage of the country's shifting economic focus.

Overall, selectivity and a degree of caution are key in this asset class. Given the complex macroeconomic and political environment, there will be no easy country "bets," and successful investment outcomes will depend on individual stock selection.

### Fixed income

Fixed-income valuations have diverged among the 60+ countries in the EM debt universe, and an accurate assessment of each country's macro fundamentals will be key to outperforming. Fundamentals in export-dependent economies will deteriorate, but we expect better terms of trade for commodity importers.

Growth and governance challenges pose headwinds for hard currency (dollar-denominated) sovereign debt. Strong balance sheets should help issuers such as Romania, Panama, Paraguay, and the Philippines avoid serious issues during 2016, offsetting risks associated with inexpensive but lower-quality debt issued by select oil-producing nations. Generally, Asia is considered defensive because of better trade positions, higher savings rates, and stronger growth than in other regions.

In general, valuations for quasi-sovereign and corporate bonds appear relatively attractive. Valuations in Latin America remain volatile, given issuers' commodity exposure. Generous spreads offered by some Latin American and Indonesian quasi-sovereign issuers should help compensate for credit erosion. In Europe, the Middle East, and Africa, we favor Turkish exporters and top-tier private banks. In terms

of local currency bonds, we expect an improved environment in 2016, as the pace of depreciation among EM currencies slows and eventually troughs.

## Oil and currencies

Oil prices have been in virtual freefall since the summer of 2014, as shown in Figure 18. The West Texas Intermediate (WTI) crude oil benchmark came down from close to \$110 per barrel to the low \$40s by January of 2015, stabilized, and then fell once again, to the mid \$30s by December 2015. This pricing behavior has confounded the best of forecasters, primarily because there is no consensus on whether the price slide was driven by weak demand or strong supply fundamentals. On the one hand, oil demand has declined because of reduced growth in many EM countries. On the other hand, technological developments in shale have allowed a tremendous increase in U.S. onshore production, which has alleviated the need for as much imported oil. That glut in the U.S. has caused excess oil supply to back up across the globe, filling storage to capacity. However, the picture is muddled because oil imports in the U.S. have not dropped off as much as predicted, while exports of refined product have increased dramatically.

Meanwhile, demand in most of the developed world has held steady or increased, especially in the U.S., where strong consumer and industrial demand for gasoline remains intact. We also expect weaker oil prices to depress drilling rates and, in turn, production. In fact, this is already happening, with U.S. production declining by one million barrels per day, beginning the process of reducing excess supply and inventories. We expect this process to continue in fits and starts as we head into 2016.

Putting commodity dynamics together with trade, global growth, and divergent monetary policy also gives us an expected path for the dollar and other major currencies. Figure 19 shows our foreign-exchange forecast through the end of 2016. We expect growth and moderately tighter

Figure 18: Oil prices

West Texas Intermediate, dollars per barrel, weekly prices



Data through December 2015.  
Source: Haver Analytics.

Figure 19: Foreign exchange

	Period ending	
	2015	2016 (forecast)
Euro	1.09	1.05
Yen	120.30	135.00
Renminbi (yuan)	6.49	7.00
Canadian dollar	0.72	0.90
Australian dollar	0.73	0.75
Brazilian real	4.00	3.75

Sources: U.S. Federal Reserve, TIAA-CREF Asset Management.

monetary policy in the U.S. to drive demand for dollar-denominated assets and, on balance, exert downward pressure on commodity prices. But we do not expect the same degree of strong dollar appreciation that we saw in 2015. In fact, as with financial markets, the adjustment leading up to a Fed rate-hike cycle tends to occur prior to the first rate rise. Therefore, we even anticipate a slightly weaker dollar through the first part of 2016. Similarly, much of the adjustment in the euro happened during 2015. China's renminbi (or yuan) is still a highly managed currency, but China's central bank has been allowing it to devalue against the dollar since August 2015, and we believe that will continue through at least 2016, but at a decelerating rate.

### Conclusion

The long-run global trend is shifting growth from the emerging markets to the developed world. In that regard, it will likely still take several years to absorb the excess capacity that has built up across the commodity and trade complex. This is putting pressure on many countries, some of which (like Brazil) are hit directly, and some (like Germany) indirectly, through lower exports to EM countries. However, the other side of that coin is the benefit of strengthening economies, the prospect of improved productivity, and potential growth across much of the developed world. On balance, the net result of these forces still suggests a deceleration of global growth in 2016. But that likely won't be the case forever, as stronger growth in the U.S. has historically benefited EM countries over the long run.

If we look closer to home, the economy is likely to accelerate modestly in 2016. The current weakness in the industrial sector should ultimately respond to stronger consumer demand. However, consumers will increase consumption only if meaningful wage growth materializes and employment continues to improve. Our forecast depends on several

assumptions—mainly that inflation will not accelerate too quickly, so that the Fed stays true to its gradual tightening path, and that wage pressures continue to rise, thereby boosting spending and housing investment. Should one or all of these factors not come to pass, we could see modestly weaker growth.

We have a mildly positive outlook for equities in 2016. In the U.S., we expect low single-digit returns for the S&P 500. While some observers have suggested that U.S. shares are overvalued, presaging the end of this “unloved” bull market, we believe that valuations are below exuberant levels that historically have ended bull markets. Compared to the U.S., valuations in Europe are more attractive, and corporate earnings offer more upside potential, making the case for an overweight allocation to the region. Meanwhile, Fed tightening will likely influence the performance of Japan's export-heavy Nikkei 225 Index. A potentially stronger dollar and weaker yen could lead to a fifth straight year of gains. Lastly, prudent stock selection will be key in the emerging markets, given the complex macroeconomic and political environment in many of these markets.

In fixed-income markets, we expect U.S. investment-grade, intermediate-term debt performance to improve slightly in 2016, with coupon income more than offsetting price declines caused by rising interest rates. High-yield bonds, however, remain vulnerable to further choppiness, despite a modestly improving U.S. economy. Eurozone government bonds will likely remain range bound, while JGBs could outperform. In the emerging markets, an accurate assessment of each country's macro fundamentals is essential to successful investing, as valuations have diverged among the 60+ countries in the EM debt universe.

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