

Mid-Year Economic and Investment Outlook

Is slower growth the new normal?

Executive summary



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- The U.S. economy picked up steam in the second quarter but will likely revert to a slower pace in the second half of the year. Our base case calls for GDP growth of 1.8% for 2016 as a whole, faster than in Europe and Japan.
- Long-term headwinds in place since the Great Recession, including slower trade activity, slumping commodity prices, a strong dollar, and industrial overcapacity, are keeping global growth in check.
- The slow-growth, low-inflation environment gives central banks leeway to maintain dovish policy. Extended QE programs in Europe and Japan are likely, while the Fed is in no hurry to resume rate hikes.
- Although the June Brexit vote delivered a shock to markets, losses have largely been recouped. We view the referendum outcome primarily as a political—not economic—event that does not alter our fundamental outlook.
- We continue to see room for the S&P 500 to reach new highs but still favor Europe based on relative valuations and greater potential upside in earnings and margins. Emerging-market (EM) equities offer compelling opportunities after five years of underperformance.
- Demand for both yield and lower risk should benefit higher-quality segments of U.S. investment-grade and high-yield fixed-income classes. We remain generally positive on EM debt.



William Riegel, CFA
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Asset class preferences

Equities ↔	Fixed Income ↔
Large Cap ↓	Government Debt ↓
Mid Cap ↑	United States ↓
Small Cap ↑	Europe ↔
Growth ↓	Japan ↔
Value ↑	TIPS ↑
Developed Markets ↓	Munis ↔
United States ↓	Corporate (Investment Grade) ↑
Europe ↑	High Yield ↑
Japan ↔	Emerging Markets (USD) ↓
Emerging Markets ↑	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. 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

Equities	Market Value (\$tr)	Relative P/E (%)*	Dividend Yield (%)	Total Return (%)			
				Second Quarter 2016		Year to Date	
				USD	Local	USD	Local
Global (ACWI)	\$35.7	-1.0%	2.7%	1.3%	1.5%	1.2%	-0.3%
World ex-US	12.8	-12.4	3.4	-0.4	0.1	-3.0	-6.1
Developed Markets	32.1	0.5	2.7	1.3	1.5	0.7	-0.7
United States	21.9	8.8	2.1	2.9	2.9	3.6	3.6
Large Cap†	14.5	8.0	2.2	2.5	2.5	3.0	3.0
Mid Cap†	5.8	10.7	1.8	3.4	3.4	5.5	5.5
Small Cap†	1.6	14.7	1.5	4.2	4.2	2.2	2.2
Growth†	11.0	3.3	1.5	1.0	1.0	1.1	1.1
Value†	11.0	13.1	2.6	4.7	4.8	6.3	6.3
High Dividend REITs	5.9	34.7	3.2	4.9	4.9	10.2	10.2
	0.8	10.9	3.6	7.4	7.4	13.7	13.7
Europe	7.5	5.1	3.7	-1.6	1.8	-5.1	-3.7
Japan	2.7	-20.2	2.4	1.7	-7.1	-5.6	-19.5
Pacific ex-Japan	1.4	4.1	4.3	1.1	2.8	2.5	0.5
Emerging Markets	3.8	-3.4	2.8	0.7	0.7	6.4	3.5
Asia	2.7	-9.5	2.5	0.7	1.3	2.4	1.5
Latin America	0.5	14.4	3.0	6.3	2.6	25.7	14.4
Europe, Middle East and Africa (EMEA)	0.6	2.9	3.6	-0.2	-1.2	11.7	5.9

Bonds	Market Value (\$tr)	Duration (Years)	Yield (%)	Total Return (%)			
				Second Quarter 2016		Year to Date	
				USD	Local	USD	Local
Global (Multiverse in USD)	50.1	6.8	1.5%	3.0%	3.0%	9.1%	9.1%
Short (1-3 years)	10.2	2.0	0.9	1.2	1.2	4.8	4.8
Intermediate (3-5 years)	12.4	3.4	1.4	1.6	1.6	5.7	5.7
Intermediate (5-7 years)	8.2	4.9	1.7	1.6	1.6	6.2	6.2
Intermediate (7-10 years)	7.6	7.4	1.6	3.0	3.0	9.7	9.7
Long (10+ Years)	11.6	15.7	1.8	7.1	7.1	19.0	19.0
U.S. Universal	22.9	5.4	2.4	2.5	2.5	5.7	5.7
Treasury	7.0	6.5	1.1	2.1	2.1	5.4	5.4
Inflation-Linked (TIPS)	1.0	5.4	1.5	1.7	1.7	6.2	6.2
Agency	0.7	4.4	1.6	1.8	1.8	4.4	4.4
Municipal	1.4	5.6	2.1	2.6	2.6	4.3	4.3
Mortgage-Backed Securities	5.3	2.4	2.0	1.1	1.1	3.1	3.1
Corporate (Investment Grade)	4.9	7.5	2.9	3.5	3.5	7.7	7.7
High Yield	1.3	4.2	7.4	5.4	5.4	9.1	9.1
Pan-European	13.2	7.4	0.5	-0.7	1.7	5.9	3.6
Japan	8.1	9.7	-0.2	12.1	2.7	25.6	7.1
Emerging Markets	1.6	5.9	4.8	4.6	4.6	9.4	9.4
Sovereign (USD)	0.4	6.9	5.3	5.0	5.0	10.3	10.3
Corporate (USD)	0.2	5.1	5.1	4.0	4.0	8.6	8.6
Local Currency	0.7	5.0	6.3	2.7	3.2	14.0	8.3

Currencies	\$ Exchange Rate	Change vs. USD (%)	
		Quarterly Returns	Year to Date
Euro	1.11/€	-2.4%	1.9%
Pound	1.33/£	-7.6	-9.5
Yen	103.22/\$	8.3	14.2
Canadian Dollar	1.29/\$	-0.6	-7.0
Swiss Franc	1.02/\$	-1.5	2.4
Emerging Market Basket‡	N/A	-0.3	4.5

Data as of June 30, 2016. *Relative P/E compares current 12-month forward P/E (price/earnings) ratio versus median value since 1987 (except U.S. Large Cap since 1997, Latin America since 1992, EMEA since 1997, Japan since 2000, High Dividend since 2006, and REITs since 2002). Equity categories are for the respective MSCI index, except as noted. Bond categories are represented by the respective Barclays index, except for emerging markets, which are based on J.P. Morgan indexes. †Based on respective Russell Index. ‡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 Investments.

What's keeping global growth in check?

This summer marks the seventh year since the end of the Great Recession. The recovery has been defined by weak growth, uncertain fiscal policy, and bouts of political and economic upheaval in several regions of the world. This year has been no different. January began with a financial market correction triggered by the fear of unsustainable currency policy in China, in addition to uneasiness over moves by the European Central Bank (ECB) and the Bank of Japan (BoJ) to push their policy rates into negative territory.

While we have recovered from the first-quarter swoon, volatility in economic data and financial markets has continued since the U.K. voted to leave the European Union (EU). Potentially important events on the horizon include the impeachment trial of Brazil's president, an important election cycle in the U.S., and a constitutional referendum in Italy. Arguably, though we have become used to all of this uncertainty, it has had a noticeable impact on economic growth, as decision making has been slowed and hiring postponed. On the demand side of the economy, purchase decisions have been delayed.

In addition to these one-off but seemingly endless risk events, longer-term issues are also constraining global growth. Trade activity has slowed precipitously since the recession, commodity prices have slumped, and, in particular, oil prices have fallen while the dollar has seen its strongest gains since the 1980s. Additionally, economic expansion has been hampered by declining population growth or anemic labor-force participation rates, as well as by slow productivity. These negative forces are related to the compositional changes in both employment and incomes

across many economies, especially in North America and Europe, and are just a few of the many causes of the lack of consumption and loan growth and the startling increase in the U.S. savings rate since 2009.

One particularly vexing headwind is that of overcapacity. The global economy has too much industrial capacity and has been dealing with this problem to varying degrees since about 2000. Overcapacity can develop in many ways. In many advanced economies, for example, it has resulted from plateauing (or even shrinking) labor-force measures. On the other hand, in much of the emerging world, excess capacity is due to overbuilding, primarily since China joined the World Trade Organization (WTO) in December 2001. This chronic condition is partially responsible for the sluggish growth trend and also ensures that the current business cycle will remain tepid at best.

Viewing today's economy in the context of these long-term trends helps put growth in perspective. Although risk events drive much of the volatility in economic data from quarter to quarter, the longer-run forces provide the underlying trends. This year, we expect U.S. annual growth rates in the 1.75% to 2.25% range, while Europe, on average, will eke out average gains of just under 1.5%. In Asia, China will continue to see softer performance going forward, while Japan will barely register positive growth this year. Figure 1 displays expected growth rates for 2016 and 2017, along with quarterly GDP estimates for the U.S., China, the Eurozone, and Japan.

Meanwhile, central banks are also wrestling with these very issues. Stubbornly weak growth and decelerating—often declining—inflation suggest that policy rates should be low. But economic theory can't explain why the sheer volume

Figure 1. GDP growth forecasts (%)*

	Real GDP growth		Forecasted real GDP growth				
	2016	2017	Q1 16	Q2 16	Q3 16	Q4 16	Q1 17
U.S.	1.8	2.2	1.1	3.1	1.7	1.8	2.5
China*	6.5	6.4	6.7	6.1	6.4	6.6	6.5
Eurozone	1.4	1.1	1.7	1.5	1.4	1.2	1.2
Japan	0.7	1.1	1.9	1.0	1.2	2.0	0.9

* Quarterly GDP for China and the Eurozone are reported as year-over-year growth rates, while quarterly GDP for the U.S. and Japan are reported at seasonally adjusted annual rates (SAAR).

Sources: Haver Analytics, TIAA.

Figure 2. Labor participation rate



Source: Haver Analytics.

of money pumped into the global economy has had little to no impact on either growth or inflation. The spectrum of proposed solutions has some positing that economic policy has been ineffective because growth has topped out, and we should get used to lower growth rates. Others believe that more fiscal stimulus is the answer to today's ills. But the answer is probably in the middle: industrial capacity was built for larger populations and growth rates and is now adjusting to new realities.

Simultaneously, employment composition is changing based on the global economy's drifting needs, leaving some segments with a smaller share of income and opportunities. The bottom line is that nothing occurring in this business cycle is necessarily permanent. A growing theory suggests that "normalization" may not occur until after the next recession, effectively making for a very long and painful adjustment period, but one in which more normal growth rates can follow. Whichever theory ends up holding the most water, we can be reasonably confident that policy rates will remain relatively low for the balance of this business cycle.

United States

Good news and caution flags

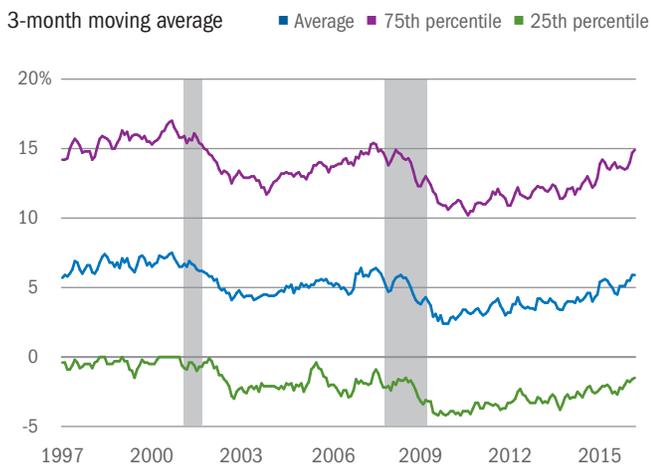
The U.S. is arguably in the best shape of all the world's major economies. It has continued to advance in the face of tremendous regulatory uncertainty, bouts of political division from Europe, immense stress on global commodity markets, and an ongoing shift in domestic labor markets. Currently, U.S. consumers are spending more than at any point during the recovery, wage rates are finally beginning to accelerate

modestly, businesses have made enormous progress in improving their bottom lines, and the government sector is adding to growth. Additionally, over the past few years, residential real estate markets have made great strides in recovering, and two temporary factors that have weighed on growth on the corporate side of the economy—low oil prices and the stronger dollar—are in the process of lifting. The dollar plateaued for much of this year, and in spite of the recent Brexit vote, we believe it will remain roughly stable after adjusting to the vote.

Despite the relatively good economic news, however, there are real concerns going forward. Although labor markets are either at or very near full employment, the number of underemployed workers remains elevated, and the labor-force participation rate is still subdued (see Figure 2). Moreover, job categories such as construction and manufacturing, both of which have suffered in recent years relative to the improving prospects evident at the recovery's beginning in 2009, continue to struggle. This uneven improvement in job creation partially explains the level of frustration with the recovery and the fact that, while nominal income has recovered across the economy, wage rates and spending have been stuck in low gear. In contrast, the savings rate has continued to increase, reaching 5.8% in the first quarter—about double where it stood right before the recession.

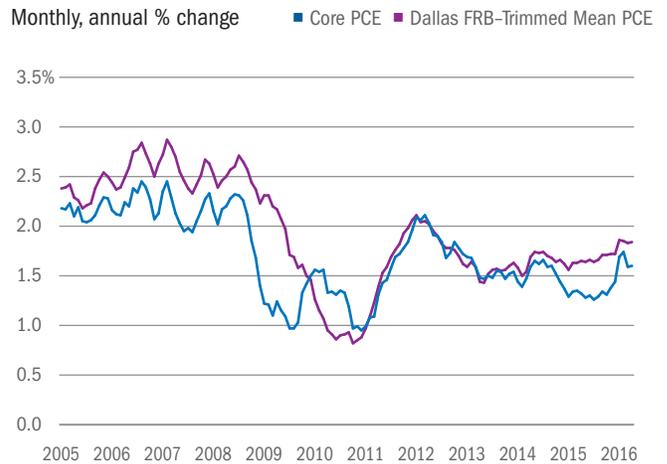
Part of the problem stems from longer-term shifts in the labor pool, which are affecting not only the potential growth rate of the economy, but also the amount of "things" the economy produces. At the same time, technological advancements and changes in tastes are influencing what is produced in addition to how we make and consume things. For example,

Figure 3. Wage growth (%) across income distribution



Gray bars represent recession periods.
Sources: FRB Atlanta, Haver Analytics, DB Global Markets Research.

Figure 4. Core inflation rate



Source: Haver Analytics.

we now ask, “How many cars are needed in an era of Uber?” or “How many manufacturing plants are required in an age of space sharing?” or “How many office buildings, grocery stores, or hotels are required at a time when fewer assets can more efficiently serve more customers?”

What is considered a normal, healthy capacity utilization rate for an expanding U.S. economy is yet another issue. Economists used to believe that 82% was the right figure. Today that number might be correct, but with a different mix of capacity that means the economy might have to shed unproductive assets. The appropriate capacity utilization rate could also be higher, in which case the adjustment process would take longer and be more painful.

However, even with these long-run headwinds to potential growth, the U.S. economy has made strides and continues to develop. The economy is now growing at an average annual rate of between 1.75% and 2.25%, after a subpar first quarter of 2016 marked by seasonality issues, an inventory spending cycle that hurt growth, and financial market turmoil. But second-quarter data has already rebounded, suggesting that temporary factors are just that—temporary. As a result, annualized GDP growth for the second quarter will finish at 3% or better, while the second half of 2016 will likely return to the more modest trend seen for much of the recovery.

That said, there is a chance that the U.S. economy may perform a bit better this year. Labor markets are approaching full employment, a potentially positive sign, because wages have to increase if labor demand begins to outstrip labor supply. We saw what looked like the beginning of this dynamic during the first quarter, when year-over-year wage growth accelerated to between 2.5% and 4%, depending on the measure. The disparity in wage gains among income groups, however, remains significant, with lower-income (25th percentile) earners largely left behind (see Figure 3). This income disparity helps partially explain slow consumption performance since 2009, but also points hopefully toward a recovery in wages.

Along with wages, consumption increased nicely during April and May—the first indication that consumers are becoming less cautious. This could have a positive impact on growth during the second half of the year as long as the trend continues, potentially pushing overall GDP growth to or even beyond 3%. How far this trend goes or its overall impact on the economy remains a question mark, but evidence of resurgent consumer spending is the most positive sign we have seen since the recovery began.

Finally, on the inflation front, it appears prices once again are normalizing. Prior to the summer of 2014, when oil prices started to fall, core inflation rates (i.e., prices for all items less food and energy) for both the Consumer Price Index (CPI) and the Personal Consumption Expenditures (PCE) Chain Price Index—the Federal Reserve’s favored measure—were running at just over 1.5%. Headline inflation fell after that summer, as did core inflation. Today, oil prices have bottomed and partially recovered, while the stronger dollar looks like it will stabilize going forward. This suggests that inflation rates will also recover and likely head toward about 2% (the Fed’s target) next year. Figure 4 compares the core PCE rate with a “trimmed mean” version of the rate, as calculated by the Dallas Fed. This alternative series trims (eliminates) the highest and lowest outliers among price changes for individual components of the overall PCE average, resulting in what economists consider a truer picture of inflation.

We will keep a more cautious forecast in place (see Figure 5) and wait to see whether wages and prices indeed accelerate. If so, Fed officials would likely view this scenario as justification to resume rate increases, although we anticipate they will be inclined to leave rates close to unchanged until political uncertainties in Europe are resolved. We anticipate one hike this year and two in 2017. At that pace, the Fed’s moves will only keep up with rising inflation, leaving the real federal funds rate solidly in negative territory. Such a stimulative stance, along with continued strong foreign demand for U.S. Treasuries, should keep the long end of the yield curve relatively low.

Figure 5. Interest rates and foreign exchange forecast

	Year-end rates (%)			Year-end FX		
	2015	2016	2017	2016	2017	
10-year U.S. Treasury yield	1.90	2.25	2.50	Euro	1.05	1.10
Federal funds rate	0.63	1.13	1.63	Yen	105.00	110.00
				Renminbi (yuan)	7.00	7.50
				Brazilian real	3.25	3.00

Source: TIAA.

Equities

U.S. equities extended their recovery from mid-February lows, with the S&P 500 Index rising 2.5% in the second quarter and 3.8% year to date through June 30, 2016. During the period, stocks were supported by evidence of accelerating U.S. economic growth after a disappointing first quarter. Positive signs included improvements in wages and consumer spending, continued strength in the housing market, and manufacturing activity that expanded for the fourth consecutive month in June. And though markets were rattled by May’s surprisingly weak jobs data, the subsequent release of a much stronger than expected nonfarm payrolls report for June restored faith in the longer-term trend of steady job creation.

A weaker dollar has helped, too. After a steep rise in 2015, the dollar lost roughly 5% versus major currencies in the first half of 2016, alleviating pressure on overseas earnings for U.S. firms. Meanwhile, interest charges have fallen in the low-rate environment, and prices for oil and other commodities have stabilized amid better supply/demand dynamics—suggesting an increase in capital spending may finally be at hand. Against this backdrop, in May we began to see positive revisions to S&P 500 earnings forecasts. After a year of declines, earnings could potentially grow 6% or more in the second half of this year.

The June 23 Brexit vote sent U.S. equity markets sharply lower, but the losses sustained in the two trading days following the referendum were mostly recouped by quarter-end. Of course, this does not rule out further Brexit-related volatility. Importantly, though, Brexit has not altered our fundamental outlook for U.S. equities, which remains cautiously optimistic.

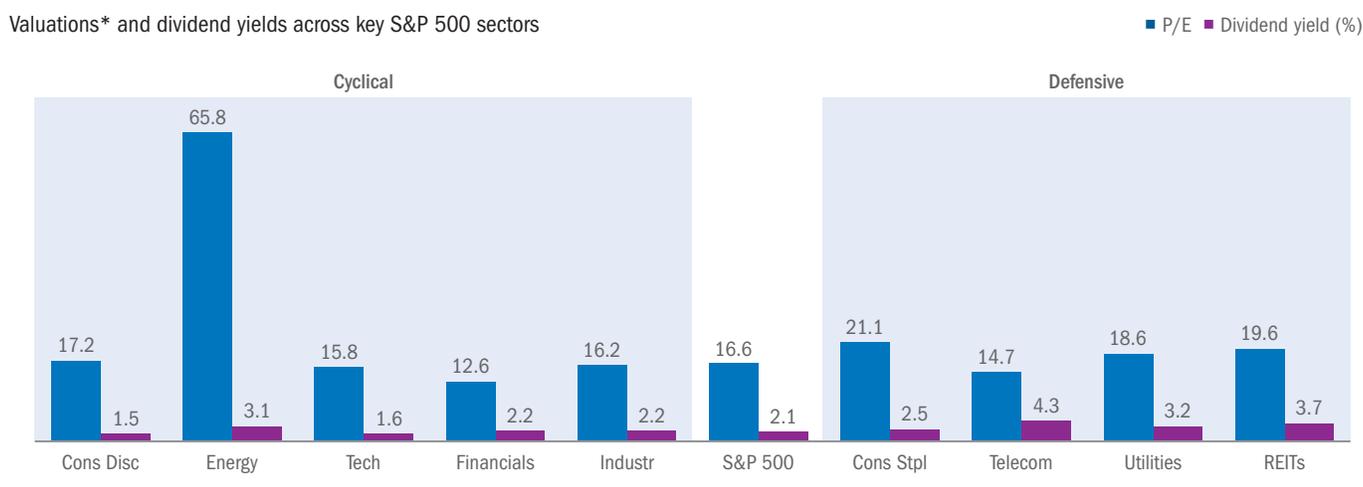
In particular, we see many opportunities in cyclical (economically sensitive) sectors, including Consumer Discretionary, Energy, Technology, Industrials, and Financials (see Figure 6). Within the Technology sector, both “old tech” (value-oriented) and “new tech” (growth-oriented) names have appeal. In contrast, defensive sectors such as Consumer Staples, Telecommunications, Utilities, and REITs (Real Estate Investment Trusts) are somewhat less compelling in the current environment. These sectors pay high dividend yields now but have limited potential to grow their dividends over time.

A sector that has been very difficult to call this year is Health Care, which is sensitive to political and regulatory uncertainty (and thus tends to be volatile) but in many cases represents good value. Demographic changes, massive pipeline growth, and the money being poured into R&D and capital expenditures make Health Care a potentially powerful story for the long term.

Various other factors support our generally positive outlook for equities:

- The equity risk premium—i.e., the excess return that stocks offer relative to risk-free alternatives such as U.S. Treasuries—is wide, and may widen further if Treasury rates continue to slide.
- Measures of long-term sentiment, such as hedge funds’ net exposures to equities, remain at severely depressed levels that typically presage a market upturn.
- Heavy outflows from equity funds have continued, with investors pulling money out at a rate that surpasses even the exodus during the 2008 financial crisis.

Figure 6. Cyclical vs. defensive stocks



*12-month forward P/E ratios. All data as of 6/30/2016.

Source: FactSet.

Lastly, with the U.S. presidential election coming in November, there has been no shortage of speculation about its potential impact on U.S. equity markets. History suggests that the S&P 500 tends to perform well during election years, posting gains 84% of the time since 1940, as shown in Figure 7. Returns in the year following an election have been mixed (negative 42% of the time), and we would expect to see some post-election volatility next year no matter who prevails.

On balance, there are reasons to believe that the S&P 500 can reclaim and surpass its previous highs by year-end, but investors should expect a bumpy ride along the way.

Fixed income

U.S. fixed-income performance was broadly positive in the first half of 2016, despite an environment of continued Fed rate uncertainty and the watershed Brexit vote. Expected higher market interest rates in the wake of the Fed's December rate hike failed to materialize during the period. The bellwether 10-year Treasury yield declined from 2.27% on January 1 to 1.49% on June 30—a drop accelerated by the Brexit result, which drove the 10-year to a new all-time closing low of 1.37% on July 5.

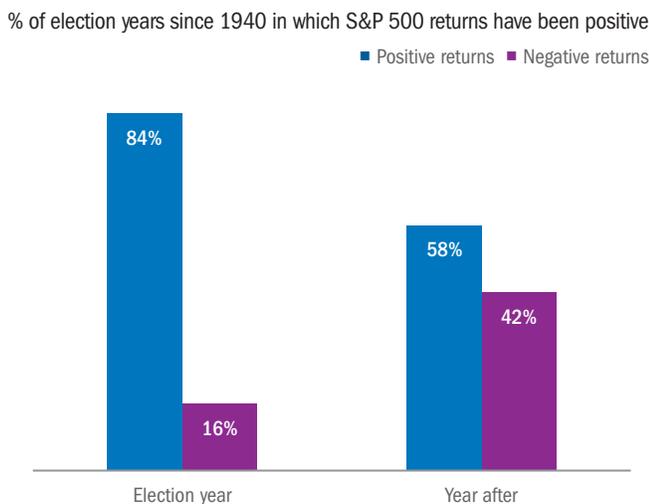
This decline in U.S. rates indicates heightened global demand for safe-haven assets, slower global growth, and the likelihood that central bank inflation targets, including the

Fed's 2% level, will not be met any time soon. On balance, these factors suggest the bond market is not overvalued relative to inflation risks (see Figure 8).

Despite robust investor appetite for Treasuries over the past six months, total returns for the Treasury component (+5.4%) of the Barclays U.S. Aggregate Bond Index lagged those of lower-rated fixed-income assets, including investment-grade (+7.7%) and high-yield (9.1%) corporate bonds. Higher-quality high-yield securities have remained attractive on a risk-adjusted basis, as their default rate, while rising, is not expected to peak for some time. Moreover, as long as global growth does not slow significantly, we believe oil prices will likely stay range-bound or move slightly higher, benefiting the high-yield bond universe and its significant energy exposure.

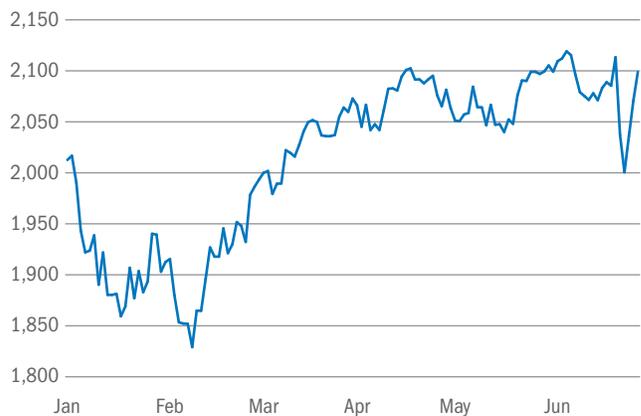
Looking ahead to the remainder of 2016, we believe demand for higher-quality fixed-income assets will outstrip demand for the riskiest segments of the market. Investors will be seeking both yield and quality, with an eye on the pace of global growth and further potential Brexit fallout. We expect the 10-year Treasury yield to rise to about 1.90% by year-end, though a further downside move over the next few months is possible. This is because the risk of global deflation has increased, and the Fed will be in no hurry to resume rate hikes unless and until they see sustained wage growth.

Figure 7. Election impact on U.S. stock returns



S&P 500 Index YTD

Daily closing values through 6/30/16



Sources: Haver Analytics, FactSet, TIAA.

Europe

The European picture will be dominated this year by the U.K.'s June 23 vote to leave the EU. This decision has created a tremendous amount of uncertainty for financial markets and the respective populations involved, but first and foremost, it was a political—not an economic—event. So while there will be economic reverberations from the vote, one should not compare it to the 2008 financial crisis and Lehman collapse, or the 1997 Asian financial crisis. Those events were indicative of systemic economic problems. In the case of the Brexit referendum, there were no inherent economic problems. The various economies will need to adjust to a new political reality, but life should eventually return to normal. This implies that the damage sustained from Brexit will be regional in nature, and we are therefore not changing our baseline expectations for the U.S. economy going forward.

Our forecast for the U.K. and Europe

The actual economic path will largely be determined by the divorce process, the length of the negotiations, and how contentious they are. But the guiding principle will be that current economic activity in both the U.K. and on the continent is moderately positive, without a large risk of recession.

Brexit will not alter the operating principles in either economy, nor should it lead to drastic changes in regulations or trade relationships. We view both the U.K. and the EU as having very similar regulatory structures, so the likely outcome will be something akin to a drift apart rather than an about-face.

Thus, after an adjustment period (which may include near-recession conditions in the U.K.), we would anticipate that economic activity would resume at about the same level and pace as before the split. For the U.K., we expect economic growth to slow for the next four to six quarters as uncertainty weighs on business decision making and investment. GDP growth in the U.K. is currently in the 1.5% to 2% range, and we think it will likely sustain a drop of about 1.0% from this level during this period, to approximately 0.5% to 1.0%. The third and fourth quarters of 2016 should see the brunt of the slowdown. If we assume negotiations will proceed relatively smoothly, a recession is unlikely.

The rest of the EU should experience a slowdown on the order of about 0.5% from current growth levels over the same period, mostly due to political uncertainty and concerns about the EU's stability. Business investment will fall marginally, but other sectors should be less affected. The U.S. economy will experience an even smaller impact because more of our trade runs through continental Europe than through the U.K. In terms of monetary policy, the Bank of England will likely lower rates, the ECB will extend quantitative easing (QE) and may also lower rates, and the Fed will raise rates more gradually than it would have prior to the Brexit vote.

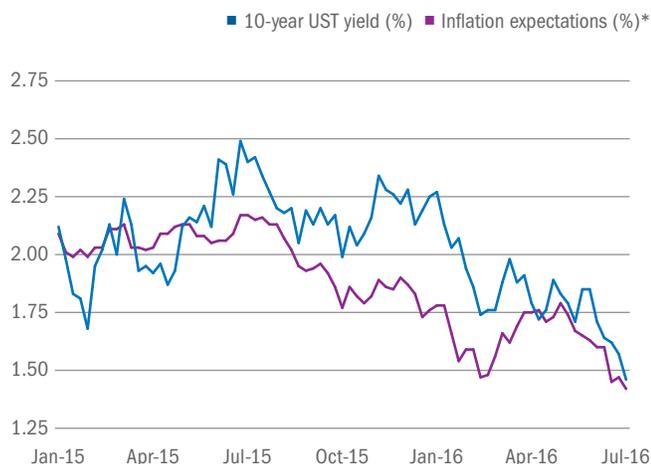
Potential risks to the baseline forecast

Risks to this forecast will be wide-ranging, from political to economic. If we assume that the EU holds together, the economic risks will vary in scope, based in large part on how smoothly the negotiations *could* go, versus how they actually *will* go. It's important to note that all monetary transfers and rules in place prior to the vote will remain in place through the negotiation process. Thus, there should be no fiscal transfer issues hampering the U.K. economy until after the exit. This should help smooth talks at the negotiating table by ensuring that the U.K. doesn't slip into recession.

Political risks for the U.K. and the continent

Besides the obvious near-term turmoil in Britain, there are movements in several countries to leave the EU, including Italy's Five Star Movement and factions within the Podemos party in Spain and the AfD party in Germany, among others. In the wake of the Brexit vote, the EU's current stance is to take a hard line toward any country that may want to leave. But this approach does not take into account the reason for the outcome of the U.K. vote: immigration. The risk to the EU, which might play in Britain's favor, is that a harsh response to the U.K. might simply further alienate those countries who prefer not to remain in the EU fold. In fact, there are already calls for a renegotiated EU treaty to deal with the immigration issue.

Figure 8. Inflation expectations and 10-year Treasury yield have moved lower



*5-year, 5-year forward inflation expectations, weekly, NSA. Data as of July 1, 2016. Source: FRB St. Louis.

The divorce process

The negotiating clock will commence once the U.K. invokes Article 50, the exit clause in the EU treaty. Once triggered, there is a two-year phase in which to negotiate an exit, with allowances for extensions where necessary. Allowing the U.K. to start the process is important for several reasons. First, the U.K. government will need to reorganize after the vote and Prime Minister David Cameron's resignation. This will take time. Second, the Scots have already begun the process of opening negotiations with the U.K. and the EU to find an alternative arrangement that would allow them to remain an EU member, a scenario Northern Ireland is also likely to follow.

Equities

European stocks lagged U.S. shares during the first half of 2016 (in both local currency and U.S. dollar terms), but we continue to believe that overweighting the region can offer compelling relative results, despite the recent Brexit-fueled uncertainty.

First, valuations in Europe are more attractive than those in the U.S., with the MSCI Europe Index trading at 14x forward earnings, compared to 16.5x for the S&P 500 Index. This suggests the potential for stronger European equity returns, which we believe will be driven by a rebound in corporate earnings.

In our view, Europe's earning cycle has troughed after some five years of downgrades. Industrials, Consumer Discretionary, and other economically sensitive sectors—which together make up about 60% of the MSCI Europe Index—have been hit especially hard. In fact, many of Europe's cyclical businesses are still reporting earnings below their 2007 peaks.

Figure 9. European profit margins are poised to recover



Based on MSCI Europe Index data through June 2016. Source: FactSet.

A combination of the declining euro, lower commodity prices, and the ECB's ongoing accommodative monetary policy should help improve their profitability.

Quarter-end data supports our outlook, as margins in the U.S. may be close to "normal," while those in Europe have ample room to grow. To illustrate, Europe's profit margin for the next 12 months is just 7.2%—27% below its 15-year high of 9.9% (see Figure 9). This opportunity for margin expansion bodes well for the ability of European companies to maintain (or even increase) their generous dividend yields.

Meanwhile, the Eurozone's economic landscape continues to strengthen: inflation is back in positive territory after four consecutive months below zero; leading economic indicators have risen in 16 out of the past 18 months; manufacturing activity hit a six-month high in June; unemployment is at its lowest point since August 2011; and household spending has picked up, contributing significantly to the region's better-than-expected 1.7% year-over-year GDP growth in the first quarter of 2016.

Fixed income

Even though the Eurozone is already awash in negative-yielding debt, government bond yields in Germany and other core countries in the region could decline further as the ECB extends QE. Meanwhile, government debt in peripheral nations such as Spain should trade within a narrow range, with any pickup in yield capped by the ECB's asset-purchase program. However, these bonds might rally if the ECB decides to abandon or loosen its "capital key" requirement, which stipulates that central bank purchases of any individual member country's government debt must be in proportion to the amount of capital that country has paid into the bank. That amount, in turn, is based on the size of the country's economy and population. Tweaking the rule to enable a better balance of sovereign bond purchases across euro-area member states would expand the pool of securities eligible for ECB purchase.

Japan

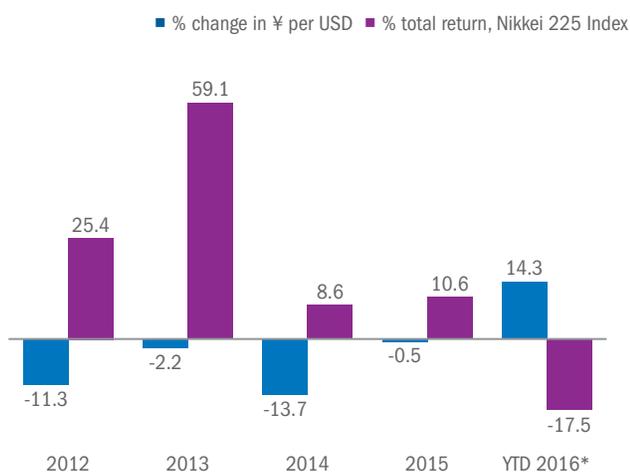
Since his election as Prime Minister of Japan in December 2012, Shinzo Abe has embarked on an aggressive program to revitalize his economy. Known as "Abenomics," the program was founded on three principles, or "arrows": loose monetary policy, strong fiscal stimulus, and structural reform of the economy and tax code. The first two of these arrows generally hit their respective targets, but Abe's structural reform efforts have become bogged down in political gridlock. Additionally, tax-code reform, which was intended to help pay for part of the fiscal stimulus, has created a headwind to consumer spending since the first of two intended sales-tax hikes went into effect

in April 2014. The Japanese economy has also struggled with lower business investment and construction spending.

Slower growth out of China and other Asian trading partners has also contributed to Japan's ills. These external factors have tended to strengthen the yen, considered a safe-haven currency. This year has been no different. In January, soon after the BoJ pushed its policy rate into negative territory—with the expectation of weakening the yen to stimulate exports and overall growth—perceived weakness in China rattled global markets, prompting risk-averse investors to flock to the yen. Then, in June, post-Brexit vote volatility helped boost the yen to levels not seen since 2012. So while Japan's first-quarter economic growth accelerated to just under 2% on an annualized basis, we believe that growth will settle back toward zero as the year proceeds.

On the other hand, the victory by Abe's Liberal Democratic Party in Japan's upper house of parliament elections on July 10 should give him renewed momentum for his structural reform efforts, followed shortly thereafter by further BoJ monetary stimulus. These factors, and Japan's relative stability compared to the uncertainty in Europe, could mean Japanese markets experience less volatility for the remainder of this year.

Figure 10. Yen up, Nikkei down in 2016, reversing a multi-year trend



*Through 6/30/2016.

Sources: FactSet, Haver Analytics, TIAA.

Equities

The more than 14% surge in the value of the yen versus the dollar during the first half of 2016 took a toll on Japanese exports, profits, and stock prices, with the exporter-heavy Nikkei 225 Index tumbling 17.5% in local currency terms. This decline was a sharp reversal of a four-year trend that saw the yen weaken and the Nikkei post strong gains (see Figure 10).

In our view, the pullback has created potential investment opportunities in high-quality Japanese companies with strong balance sheets. These stocks are trading at 12x to 13x earnings and a price-to-book ratio of 1.1—compared to 16.5x and 2.6, respectively, for the S&P 500 Index. Moreover, Japan's blue-chip stocks offer dividend yields of about 2.5%, versus a -0.2% yield on the country's 10-year government bond.

We believe Japanese companies will strive to maintain their focus on enhancing investor returns. Last year, Japan passed its first corporate governance code, which called on businesses to adopt more shareholder-friendly policies rather than stockpile cash. This greater pressure on management has shown signs of paying off, as Japanese firms spent a record ¥16.2 trillion (about \$157 billion as of 6/30/16) on dividends and buybacks during fiscal year 2015.

Despite these positive forces, potential headwinds loom for Japanese equities. The increased likelihood of “lower-for-longer” interest rates in the U.S. could translate into a weaker dollar and thus a stronger yen. In addition, the prospect of global market uncertainty in the second half of 2016 could also boost demand for the yen.

Fixed income

Yields on longer-dated (10+ years) Japanese government bonds (JGBs) continued to decline during the second quarter, pushed down by the BoJ's monthly JGB purchases and a flight to safety that benefited safe-haven assets. Meanwhile, the BoJ's negative interest-rate policy has thus far failed to move the needle on inflation, which continues to decline and remains well below the government's 2% target. Unless the Abe administration implements a large fiscal stimulus program—which we don't anticipate but which could lead to a steeper yield curve—Japanese yields are likely to stay on their downward path.

Emerging markets

Emerging-market (EM) economies have been in defensive mode since the peak in the commodity cycle, while also managing through the long-run consequences of overbuilding. These countries can broadly be divided into those that have maintained a positive current account balance and those that have not. India is a prime example of an EM country that has worked to address inefficiencies in its economy and has continued to grow. Several central and eastern European countries also fall into this group, partially benefiting from their proximity to the Eurozone. Countries in the other group, however, have generally not saved for the proverbial rainy day. So whether they have been hurt by the global slowdown or events in their own country, most have fared much worse. South Africa and Turkey stand out as countries that have experienced increased volatility in this environment.

Brazil is another example of a country experiencing economic trouble in the past several years. But Brazil is a special case. It has moved significantly in the right direction, politically and institutionally, over the past two decades, opening its investment borders and legal framework to become a major participant in the global economy. Brazil also happens to be one of the world's most resource-rich countries, allowing it to benefit tremendously during the run-up period in commodity prices between the early 2000s and about 2011.

During that period, though, the government made several mistakes that have led the economy to where it is today—in steep decline. These mistakes will also likely cost the current president, Dilma Rousseff, her job. She has been temporarily removed from office and now faces an impeachment trial. In the meantime, acting president Michel Temer (Rousseff's former vice president) has initiated an aggressive reform agenda that promises to fix many of the country's ills. We now anticipate that Brazil's recession will trough this year. Further, if Temer's reform measures are put into law, growth should resume in strong fashion by 2018 or 2019. Importantly, Brazil's long-term prospects remain sound because its institutional integrity has held up well under conditions that in other EM countries have often led to unwelcome instability in government structures.

China's balancing act

China is another emerging economy worthy of special attention. Not only has China been at the epicenter of the downward spiral in commodity prices since 2011, but it is now one of the largest economies in the world and undergoing enormous change. These factors make what happens in China important to the global economy—especially its regional neighbors and every other EM trading

partner. The government of Xi Jinping is undertaking the simultaneous goals of transforming China's economy to be more self-sufficient and domestically focused, while raising its status as a recognized economic leader on the global stage. The first goal means changing what is primarily a manufacturing base for other countries into services- and consumption-driven growth within China. The second goal requires difficult institutional development, opening the free flow of capital and business formation, as well as developing trust with global markets.

Xi recognizes there is a fragile balance between transforming his economy while not allowing it to slow too quickly during the process. Consequently, we see alternating episodes of reform on the one hand, and traditional fiscal spending to pump up the economy on the other. The cycle is typically a softer first quarter, a stronger second quarter brought on by increased government spending, a softer third quarter, and once again a stronger fourth quarter. In 2016, this cycle appears to have been reversed, because fourth-quarter growth last year was somewhat slower than planned, causing markets to panic in January amid perceptions that China would not be able to defend the stability of its currency. By March, there were indications that the economy had built up too much debt during the first quarter, and by May, the traditional signs of growth—manufacturing activity and spending across the broad economy, especially on real estate development—began to slow. This trend should continue in the near term, but we fully expect another mini-stimulus program later this year to boost growth back to plan.

Progress on Xi's second goal has been slow. Although he has begun to open capital markets, at least in name, his moves have been calculated. Rather than simply opening up China's borders to free capital flow, he has created a system for foreign investors to bring money into the country while keeping that money isolated from the rest of the economy. On the more traditional foreign direct investment side, it's still difficult to pull capital out of China once it has been invested. Meanwhile, it remains virtually impossible for Chinese citizens to get money out, except for a small annual quota. The concept of openness and connectivity to the global economy is founded on the principle of free markets. We should be able to gauge progress on this front by measuring the stress on China's foreign exchange reserve balance and the desire of citizens to move money out of the country.

Once free markets have begun to generate sufficient income and wealth for China's population, there will be less incentive for capital to flee the country. But one example demonstrates how far China still has to go in this respect. Xi recognizes that wealth creation must increase inside China to stabilize the economy. Yet rather than allowing free markets to generate that wealth, the government embarked

on a plan to double per-capita income by 2020 and therefore will raise wages by 10% per year, on average. This simply serves to boost consumer inflation and distort sentiment measures while large swaths of the manufacturing economy remain in deep recession. In the long run, these policies are not sustainable. The question is whether the government will recognize this in time.

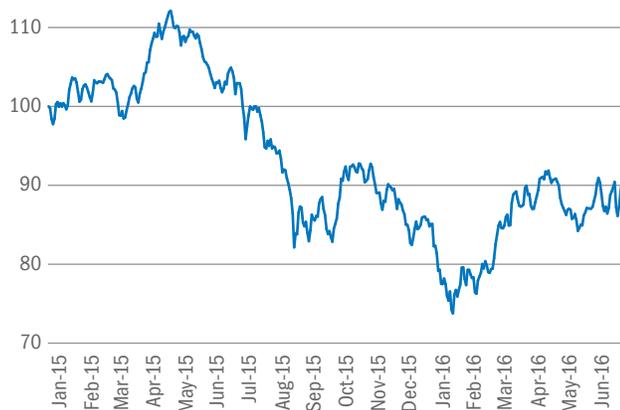
Equities

Oil price stability, firming emerging-market (EM) currencies, and the lower-for-longer rate stance taken by developed-market central banks may finally be creating a support level for formerly battered EM equities. During the first half of 2016, the MSCI Emerging Markets Index returned 6.4% in U.S. dollar terms and 3.5% in local currency, masking volatility early in the period. It appears that January's 6.5% drop in dollar terms may have marked the long-awaited bottom for the asset class.

EM equities have realized strong gains since January's lows (see Figure 11) but continue to trade at a discount relative to developed-market stocks. At 11.6x earnings—versus 16.5x for the U.S. and 14x for Europe, based on MSCI indexes—EM valuations are nearly 3% below their long-term average. Meanwhile, EM profit margins are 31% below the peaks reached before the 2008 financial crisis, offering plenty of upside potential for long-term investors.

Figure 11. Emerging-market equities ready to rebound?

MSCI EM Equity Index daily levels, 100 = Dec 31, 2015



Source: MSCI

Year-to-date returns varied widely by region: Latin American equities led the pack in U.S. dollar terms, highlighted by Peru (+50.1%) and Brazil (+46.3%). Markets in Asia (ex-China) and Eastern Europe posted solid results in the first quarter, tempered by second-quarter losses due to trade-related contagion risk stemming from industrial weakness in China and the Brexit vote.

Despite Brexit and an overall environment of heightened risk aversion, equity flows to EMs jumped by \$9.3 billion in June. If this continues, it may signal that investors are beginning to rethink the risks associated with EM equities. That, in turn, could mean the asset class has finally reached an inflection point after five years of underperformance.

Fixed income

EM bonds have also rallied thus far in 2016, outperforming other fixed-income sectors globally. U.S. dollar-denominated debt, as measured by the JPMorgan Emerging Market Bond Index (EMBI)-Global Diversified, returned 10.3%, while local-currency issues, based on the JPMorgan Government Bond Index (GBI)-EM Global Diversified Composite, realized a gain of 14%. With Brexit sparking a disinflationary shock and developed-market policy biased toward more central bank easing, the global hunt for yield continues. Because inflation in most EMs has peaked, central banks in these markets can follow with rate cuts of their own.

Attractive investment opportunities can be found in both local- and hard-currency EM debt markets in all major regions. In Asia, local institutional demand is particularly strong, while Latin American markets overall are benefiting from an improved inflation picture, stabilizing oil and commodity prices, and profound shifts in the political and economic landscape that we think will be positive in the long run. Central and Eastern Europe may be somewhat more volatile, given their interdependence with the U.K. and EU.

The year-to-date rally in EM debt markets could make them vulnerable to a subsequent downturn. We would view this as a buying opportunity. In an environment of slow global growth and loose central bank policy, we continue to favor this asset class.



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