## ECONOMIC OUTLOOK



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## 2017 U.S. Economic Outlook: What Could Possibly Go Wrong - Right?

If the calendar says "January" then that means it's time for us to offer a discussion of our economic outlook for the year ahead. Here's hoping 2017 will be a bit more challenging than 2016 turned out to be. Not to brag or anything, but, really, in terms of how hard it was, accurately forecasting the major events of 2016 turned out to be on the order of taking candy from a baby, shooting fish in a barrel, and hitting the broad side of a barn, all rolled into one. So, sure enough, while we're pondering the 2017 economic outlook, President-elect Clinton is preparing to take the oath of office, the good people of the United Kingdom are celebrating their renewed commitment to the European Union, terminally suffering Chicago Cubs fans are hoping, against all hope of course, that this will at long last be their year, and the director and cast of *Zoolander 2* are carefully crafting their acceptance speeches for the upcoming Oscar awards.

Wait, what? No Oscars on tap for Zoolander 2? Really? Wow.

Sure, a lot of people got a lot of things wrong in 2016. And while that in and of itself is nothing new, at least in our case, 2016 seems different, in the sense that so many things that so many people never saw coming did just that. Or, to borrow from broadcasting legend Vin Scully, in a year that was so improbable the impossible happened. As any true St. Louis Cardinals fan can tell you, of all the surprising outcomes 2016 offered up, the hardest to take was the sight of the Cubs hoisting the World Series trophy. Oddly enough, though, despite that and the rest of 2016's it-will-never-happen happenings, many analysts are making calls for 2017 with a degree of confidence bordering on "can't miss."

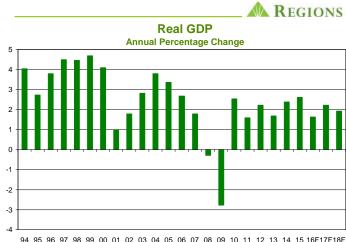
If those calls were for another year of the middling real GDP growth we've all come to know but not necessarily love since the end of the 2007-09 recession, that would be understandable. After all, it's almost as though we've been battered into submission by a seemingly endless drumbeat of 2.1 percent real GDP growth over the past seven-plus years. Instead, thanks to one of 2016's it-will-never-happen outcomes, 2017 is the year in which many analysts believe the U.S. economy will shift into a much higher gear.

To be sure, Republican control of both houses of Congress and the White House raises the possibility of significant changes in fiscal and regulatory policy that could lead to materially faster economic growth. If that were the end of the story then, sure, we'd be on board. As we discussed in our December 2016 *Outlook*, however, reality is a bit more complex. We do not know what policies will be proposed, let alone what policies will emerge from the legislative process, when those policies will emerge, or when they will impact the economy. And one cannot dismiss potential drags to growth from trade policy, higher interest rates, and a stronger U.S. dollar.

These caveats, however, haven't stopped some analysts from cranking out forecasts for real GDP growth of between 3.0 and 4.0 percent in 2017. Indeed, we heard one analyst proclaim any arguments to the contrary are "a pile of rubbish." Okay then, that settles it, and, thanks so much for the insight. As a general rule, we're never quite that confident in any call we make; we're even less confident about any calls we will make for 2017 given the high degree of policy uncertainty looming over the horizon.

So, at least for us, there are plenty of questions around the outlook for the U.S. economy in 2017, some of which we'll touch on in what follows. As we do each year at this time, we'll look both back and ahead; back to see how we did with our 2016 forecast, and ahead to discuss what we think 2017 holds in store. Per our usual format we'll do so in the form of questions, the answers to which will lay down markers for how we expect 2017 to turn out. As we go, we'll look back on some of our 2016 calls and see how they turned out. Doing so, as we do each year, is a useful reminder that those practitioners who do not find economic forecasting to be a humbling exercise probably should.

QUESTION 1: Real GDP growth – over or under 2.5 percent? <u>Under</u>. By lowering the bar (for the economy) here, we've actually raised the bar (for ourselves). For the past three years our marker was growth of 3.0 percent, and our answer "evolved" from "over" in our 2014 outlook to "over – what, are you crazy?" in our 2016 outlook. Still, if there were ever a year to set the bar at 3.0 percent and take the over, 2017 would seem to be it. Well, at least based on all the talk of how we're in for "Morning In America – The Sequel" and how amped up expectations amongst market participants and several analysts seem to be.



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For those not yet on this earth in the 1980s or those who were but just aren't morning people, in the wake of a deep recession, the 1983 through 1989 period saw average annual real GDP growth of

4.4 percent after President Reagan oversaw significant tax cuts, faster growth in government spending, and a wave of deregulation. For both economic and non-economic reasons, the Reagan years are often referred to as "Morning In America." As a general rule, though, sequels seldom live up to the original, and we expect that rule to hold in this case.

Our baseline forecast calls for real GDP growth of 2.2 percent in 2017. Again, we'll stress that this forecast comes before we have any actual policy changes to assess and incorporate into our forecasting model. Sure, we could make a forecast based on our assumptions and best guesses, and we could even go a step further and brush aside potential negatives like trade policy ("just talk" according to some analysts) and higher interest rates ("don't matter" according to some analysts) and come up with a much higher forecast for 2017 growth.

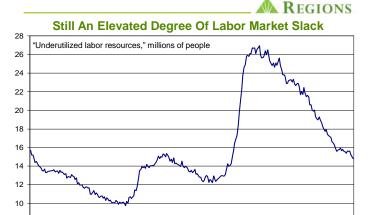
We could; we just won't. We will, however, once again say that given the likely contours of the various policy and regulatory changes we'll see in 2017, we think the risks to our baseline outlook are tilted to the upside. In other words, it is likely real GDP growth will top our 2.2 percent forecast, but, nonetheless, we don't expect growth to top 2.5 percent. Our baseline outlook is premised upon further solid growth in consumer spending, further growth in residential construction, and slightly faster growth in total public sector spending (before any additional stimulus). These supports for growth, however, would be softened by continued sub-par business investment and a wider trade deficit.

In the context of likely changes to the policy mix, i.e., fiscal, regulatory, and trade, we can point to both upside and downside risks to our baseline outlook. As we did so in detail in our December 2016 *Outlook* we won't repeat that discussion here, but the quick version is there are upside risks to business investment spending and consumer spending and downside risks to U.S. exports, and the net effects of higher U.S. interest rates and a stronger U.S. dollar are uncertain. All in all, though, we suspect there will be less net fiscal stimulus than many are now banking on, and we expect the full effects of any policy changes will come later, i.e., in 2018, rather than sooner, i.e., in 2017. As such, we expect top-line real GDP growth to fall shy of 2.5 percent in 2017.

As for 2016, our forecast was for real GDP growth of 2.3 percent. We must have been feeling downright giddy that day, as growth looks set to come in no better than 1.6 percent. This is based on year-to-date data through Q3, as the first estimate of Q4 2016 GDP won't be released until later this month. Our forecast for 2.7 percent growth in real consumer spending in 2016 looks like it will be on the mark, but business and residential investment were weaker than we had forecasted. Business investment in equipment and machinery will have actually contracted in 2016, even with the modest rebound we expect to turn up in the Q4 data, and spending on business structures will also have contracted in 2016. While to some extent this reflects further pullbacks in the energy industry, weakness in business capital spending was more broad based. Additionally, the inventory correction in the nonfarm business sector was more tenacious than we had expected. As a result, our forecast for the rate of inventory accumulation was too high.

**QUESTION 2**: "Underutilized labor resources" – over or under 13.5 million people at year-end? We have for some time pointed

to underutilized labor resources, or, the combined number of those who are unemployed, working part-time for economic reasons, or marginally attached to the labor force, as the most relevant gauge of the degree of labor market slack. Our point all along has been that there is significantly more labor market slack than is implied by the "headline" unemployment rate (note that the pool of underutilized labor resources comprises the numerator of the broader "U6" measure), which in turn factors into the rate of wage growth. It has been on this basis that our forecasts for growth in average hourly earnings have consistently been below consensus.



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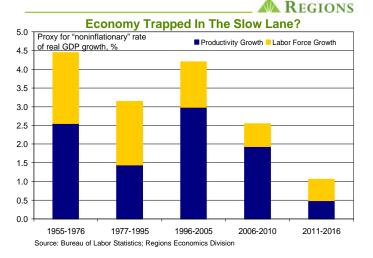
Source: Bureau of Labor Statistics; Regions Economics Division

We were surprised by how the count of underutilized labor resources basically flat-lined for much of 2016 after several years of steady, rapid declines. As such, we were too ambitious in our 2016 forecast that this number would be below 14 million – we see somewhere around 13.5 million consistent with full employment. We think the number will be over 13.5 million at year-end 2017, though not by much. We do think there will be more progress in paring down this labor market slack in 2017 than was seen in 2016, but nonetheless at a rate gradual enough for this slack to remain a drag on wage growth. As a side note here, in our 2016 outlook we offered that the unemployment rate would end 2016 below 4.8 percent, and the December 2016 rate was 4.7 percent. We look for the unemployment rate to be no lower than 4.5 percent at year-end 2017.

QUESTION 3: Average hourly earnings growth (year-on-year) above or below 3.0 percent in Q4 2017? Above, though on an annual average basis for 2017 earnings growth will fall short of 3.0 percent. In last year's outlook our call was hourly earnings growth would be no higher than 2.8 percent in Q4 2016, and it came in at 2.7 percent. We have for the past few years been below consensus in our forecast for hourly earnings growth and we have, in each year, been closer to the mark. As discussed in our answer to Question 2, we have consistently estimated greater degrees of labor market slack than have many other analysts, and that is still the case. So, even though we expect that slack to have largely dissipated by year-end 2017 we nonetheless expect acceleration in hourly earnings growth to be more gradual over much of the year than some other analysts are expecting to be the case. Keep in mind that, "normal" growth in hourly earnings would be around 3.5 percent (year-on-year), reflecting productivity growth of

around 1.5 percent and 2.0 percent inflation. Both productivity growth and inflation have been easily below these benchmarks for some time, which has helped inform our forecasts of earnings growth. While inflation will be closer to "normal" in 2017, this will not be the case for productivity growth (see below), hence our still below consensus call on growth in hourly earnings.

**QUESTION 4**: Nonfarm labor productivity growth – above or below 1.0 percent in 2017? <u>Below.</u> Well, it can hardly get worse for productivity, which was on course to decline for 2016 as a whole (down 0.11 percent year-to-date through Q3), so the question isn't can it get better in 2017 but how much better it can get. Annual productivity growth hasn't topped 1.0 percent since 2010 and, while we think it will come close in 2017, it will again fall short – our forecast is for productivity growth of 0.9 percent.



This is a topic we spend considerable time on, and the above chart is familiar to our regular readers and at least one of our colleagues, who greets each appearance of this chart with a derisive "what, again with your little bar chart?" To which we simply reply that, sure, you may hate it now, but 15 years ago everyone loved our little bar chart. In any event, the chart shows the economy's "speed limit" – which can be approximated by summing the rates of productivity growth and labor force growth – barely breaks the 1.0 percent barrier. And, yes, the economy has grown at a faster rate over the past several years. So, if you're wondering where the inflation is, the answer is that given ample degrees of slack in the labor market and unused industrial capacity, the economy can grow above its speed limit without sparking inflation pressures.

This would suggest that as labor market slack dissipates further over the course of 2017, inflation could become a more pressing concern – at what would still be a low rate of overall economic growth. This in turn has implications for how aggressive the FOMC may have to be in raising the Fed funds rate. We also think the above chart should be a starting point for anyone laboring under the notion the economy can not only grow at a rate of between three and four percent but can do so for a sustained period to explain how they think this can, or will, come about.

Our argument has, for some time now, been that the primary culprit behind what has been an anemic trend rate of productivity growth is underinvestment in plant and equipment on the part of U.S. firms. On the basis of its contribution to top-line GDP growth, business fixed investment has been historically weak over the course of the current expansion. The economy's stock of physical capital is at present older than has been the case at almost any time in the life of the data – which date back to the 1920s. Even should we see a meaningful rebound in business investment in 2017 (see below), it takes time for that investment to translate into faster productivity growth, hence our modest expectations for productivity growth in 2017.

It is true that, as we near full employment, firms must find ways to enhance worker productivity in order to be able to meet demand growth. But, we think that in addition to what we still see as an elevated degree of labor market slack, there is additional capacity for firms to add to aggregate labor input by increasing hours worked, which are still short of what has historically been the case in a fully healthy labor market. In other words, the economy can grow at a faster rate next year, at least up to a point, even with productivity growth remaining well below historical norms, which is precisely what our baseline forecast envisions. And, to be clear, we by no means believe the speed limit implied in our chart is set in stone. To the contrary, we believe there is some room for policy to impact labor force participation and much more room for policy to impact business investment and, in turn, productivity growth. We have been guite consistent in pointing this out. The guestion, however, is to what extent we think any such changes will manifest themselves in 2017, and our hunch is "not a lot."

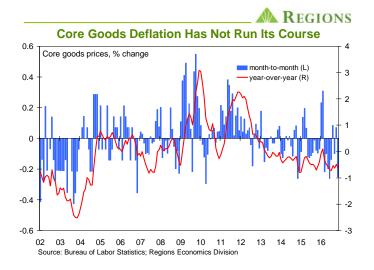
QUESTION 5: Growth in real business fixed investment in 2017 – above or below 5.0 percent? <u>Under</u>. To our point that business fixed investment has been notably weak during the current expansion, it was on course to decline for 2016 as a whole (down 0.68 percent year-to-date through Q3). While we do expect it to rebound in 2017, as with productivity growth our expectations as to the extent of that rebound are tempered. That said, we do see upside risk to our forecast. Should we see further increases in crude oil prices, we would almost surely see a bounce in energy related investment, which has been weak over the past two years. One mistake many analysts have made, however, is to attribute all weakness in business fixed investment to the energy industry, which is clearly not the case.

Another source of upside risk to our forecast is the possibility that changes in regulatory and tax policy will alter not only the financial incentives of firms to undertake capital investment but also their willingness to do so. While it is important to not overestimate the former, it is equally as important to not underestimate the latter. A key premise behind our argument that firms have underinvested during the current cycle is they had little need to do so. In a persistently slow-growth world, firms had little need to invest to expand their capital stocks, even less so given what has been an ample pool of cheap and readily available labor. Adding labor input has, for the most part, been sufficient to enable firms to match persistently tepid demand growth.

The ability to substitute labor for capital will, by year-end 2017, largely have run its course. If our forecast on real GDP growth is on or close to the mark, however, that would suggest a limit to any rebound in business investment spending. That limit could be even lower when one takes into account that, at present, over one-quarter of the economy's productive capacity is idle, which

implies firms have ample room to utilize the current capital stock without making new investments. We are, however, somewhat uncertain as to the depth of this idle capital, given our earlier point as to the age of the aggregate capital stock. Even so, firms may be feeling somewhat better about their prospects in 2017 and beyond, but our sense is that feelings alone won't be sufficient to drive a meaningful rebound in business investment spending.

QUESTION 6: PCE inflation – above or below 2.2 percent in 2017? <u>Below</u>. In our 2016 outlook, our inflation question was if PCE inflation would be above or below 2.0 percent in Q4 2016, and we answered "under" for both headline and core PCE inflation. The December data are not out yet, but data for Q4's first two months show headline PCE inflation running at 1.4 percent and core PCE inflation running at 1.7 percent. Even before factoring in any "off to the races" forecasts for 2017, headline inflation will likely pick up due to the effects of lower energy prices washing from the inflation data. Beyond that, however, there are a number of reasons we expect inflation to remain fairly tame this year.



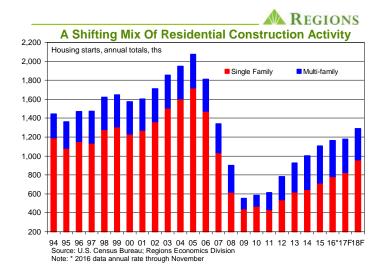
As we have noted, there is still enough slack remaining in the U.S. economy to help blunt inflation pressures, but as that slack is further pared down there figures to be at least some acceleration in inflation. Some argue that, as the labor market tightens further, faster wage growth will in and of itself lead to inflation in the broader economy. Unless firms are taking on workers and paying them to not do anything, this is simply not correct. Productivity growth is the buffer between higher wages and inflation in the broader economy, and even the modest productivity growth we expect in 2017 will provide some such buffer, and keep in mind our top-line growth forecast is still just 2.2 percent.

Beyond this, we expect prices for non-energy goods to remain weak in 2017, as a high degree of idle productive capacity in the global economy coupled with a stronger U.S. dollar (see Question 9) keeps downward pressure on goods prices. As of November 2016, prices for core goods (i.e., goods excluding food and energy) had declined on an over-the-year basis in 43 of the past 44 months based on data from the Consumer Price Index. To the extent the U.S. dollar appreciates further over coming months, this will be a source of persistent downward pressure on goods prices and will help check overall inflation. We also expect rent growth, which has

been a primary support for core inflation, to moderate in 2017, which again will help check both total and core inflation.

To be sure, firmer global economic growth would provide a further boost to energy prices, which poses some upside risk to our inflation forecast, though this is another instance in which there is considerable capacity for supply growth, so we see this upside inflation risk as being somewhat limited. Before we leave this question, we'll note that in our 2016 outlook we stated we saw crude oil prices (WTI) ending 2016 below \$50 per barrel, the yearend price was right at \$53 per barrel. As we expected, another year of rapid rent growth kept core CPI inflation above 2.0 percent in 2016 (rents account for roughly 40 percent of the core CPI).

QUESTION 7: Housing Starts – over or under 1.250 million? <u>Under</u>. We're sticking with an approach that has served us well over the past several years – a below-consensus forecast on housing market activity that has proven to be much closer to the mark than have the consensus forecasts. In our 2016 outlook we predicted housing starts would be below 1.250 million units; while December data are not yet available, in the 12 months ending in November 2016 there were 1.162 million housing units started, so it's a safe bet that December's construction activity won't push the annual total for 2016 over the 1.250 million mark.



The consensus forecast is for around 1.280 million housing starts in 2017. Our 2017 forecast is for housing starts of 1.179 million units, but we've kept our marker at 1.250 million units - the same as in our 2016 outlook. One reason we've consistently been below consensus in our housing calls over the past few years is that while many analysts have focused solely on the demand side of the market, which we agree remains quite healthy, they have neglected demand's pesky friend - supply. While it may not be hard to assess a market without considering both supply and demand, it is hard to actually get it right, or even come close, without considering both. We've factored in supply constraints that have weighed on single family construction over the past few years, and we don't expect those constraints to ease meaningfully in 2017. At the same time, higher mortgage rates will take a bite out of single family activity in 2017 - our forecast has come down over the past month as mortgage interest rates have gone up. There are many analysts who discount the impact of higher

mortgage interest rates, correctly noting that faster income growth can help blunt the impact of higher mortgage rates. But, while mortgage rates have already risen and could go higher still in coming months, that faster income growth is not here, and there remains considerable uncertainty as to when, and to what extent, that faster income growth will materialize. Consistent with how we see the economy evolving, we hold out more hope for 2018 in terms of single family activity.

In the multi-family segment we're not sure whether neglect or denial is causing people to overlook the supply side. Unlike single family construction, however, the issue with multi-family construction is not that there has been too little but that there has been too much. It is funny, though in a decidedly non-humorous way, that each time we raise concerns about multi-family supply we get angry lectures about how we don't understand demand. After all, the millennials are coming and, as we've been told, "none of them want to own homes." Someone should perhaps break this to the 35.2 percent of householders under the age of 35 who, you know, owned homes as of Q3 2016, the latest available data point.

The relevant number here is 600,000 - as in just over 600,000 multi-family units under construction in each of the final six months of 2016 (including our assumption for December). One has to go all the way back to the mid-1970s to see this many multifamily units under construction. We have actually been quite constructive (no pun intended!) on multi-family demand, but from the start we've argued there is not sufficient demand to absorb all of the multi-family units in the pipeline, particularly when one considers asking rents for new Class A apartments in larger metro areas. For some time now these asking rents have tilted the math in favor of owning versus renting, and while that math will change to some degree with higher mortgage interest rates, that won't make asking rents any more affordable. Rents could come under significant downward pressure as more and more new units come on line, but before we get to that point we expect to see a fairly pronounced slowdown in multi-family starts. In other words, multifamily is a contributor to our below-consensus 2017 forecast for residential construction, unlike in previous years.

**QUESTION 8**: The mid-point of the Fed funds rate target range at year-end 2017 – over or under 1.375 percent? <u>Under</u>. Much like with our call on housing starts, we're sticking with something that's worked in the past. In this case, our forecast for the year-end funds rate target range midpoint is below that implied by the "dot plot" in the FOMC's December projections. In both our 2015 and 2016 outlooks, we forecast fewer than the four 25-basis point hikes in the funds rate implied by the FOMC projections for each year. In hindsight, that may seem like the easy and obvious call but rather than assessing the call with the knowledge that there have been a grand total of two such funds rate hikes, not the total of eight implied by the year-end dot plots, think about it in the perspective of when the FOMC released those projections.

Still, even when our forecasts for real GDP growth have been more ambitious than is our forecast for 2017, we've seen the FOMC moving much slower than the Committee saw itself moving. Our view was there was ample slack in the economy that would keep inflation pressures in check, thereby giving the FOMC the latitude to move slowly in the process of normalizing the funds rate. This year, however, we see it as a much closer call and we'd go so far

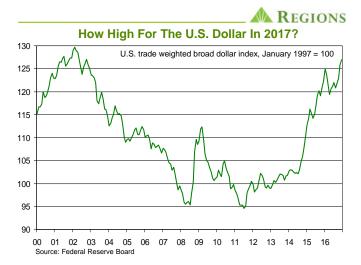
as to say the risks to our forecast of two 25-basis point hikes in the Fed funds rate target range mid-point in 2017 are to the upside and we could actually see the three hikes implied by the December 2016 dot plot. One reason to think there is upside risk to our call is that there are currently two vacancies on the Board of Governors that the incoming Administration will presumably fill in short order. This matters as Board members are permanent voting members of the FOMC. As with other potential policy moves, there is little to go on here other than campaign rhetoric; based on that we can expect the new Board members to be more aggressive in their policy stance than most current members. This could take the form of them favoring a more aggressive pace of funds rate hikes, actively paring down the Fed's roughly \$4.5 trillion balance sheet, or both. Again, we don't know who will be appointed or when they will be, but do not overlook this "X-factor" when pondering the course of monetary policy in 2017, which is exactly what we would have done had an insightful colleague not pointed this out.

Some would argue another source of upside risk to forecasts for monetary policy in 2017 is that there is now less slack in the labor market than in prior years, meaning the FOMC will be more mindful of potential inflation pressures. We don't fully buy into this, as is apparent in our answers to Questions 2 and 3. Aside from that, we'll also note that while there is less labor market slack now than in recent years, there is still considerable slack elsewhere in the form of unused industrial capacity. This is not simply a U.S. story but is a global story, one which those who argue we are at or close to full employment never seem to account for but nonetheless one that will act as a check on inflation pressures.

The more obvious difference this year is the highly uncertain outlook for fiscal, regulatory, and trade policy. At this point, the FOMC is doing what the rest of us are doing – waiting to see how the policy landscape evolves in order to assess the impact on the paths of economic growth, inflation, inflation expectations, asset prices, and the exchange value of the U.S. dollar. If we are wrong on our outlook and have underestimated the degree of stimulus and how early it will arrive, then we will almost surely be wrong on our call for the Fed funds rate. For now, though, taking the "under" on the funds rate is consistent with our baseline forecast.

QUESTION 9: U.S. dollar appreciation – over or under five percent from year-end 2016 to year-end 2017? <u>Under</u>. Our measure of the dollar's value is the Fed's Broad Dollar Index, which ended 2016 just 1.6 percent below its record high of 130.242 hit on February 27, 2002. This means we were correct in our call in last year's outlook that the dollar would not hit a new record high in 2016, but nonetheless we were surprised by how close a call it ended up being. Again, it helps to think about this in the context of conditions when we made our 2016 call – the U.S. economy figured to outperform its global counterparts and the FOMC was signaling four funds rate hikes during the year while its global counterparts were expected to add still more monetary stimulus. As such, expectations were for another year of robust appreciation of the U.S. dollar on top of the 10.3 percent increase in the Broad Dollar Index seen in 2015.

Our call, however, was based on our premise that there was more central bank policy divergence priced into the dollar than we would actually see in 2016. That turned out to be correct, but what we didn't bank on was the outcome of the Brexit vote, which led to a spike in the U.S. dollar as part of the flight to safety which knocked down yields on long-dated U.S. Treasury securities. What we also didn't bank on was the outcome of the November elections and the subsequent reaction in the financial markets that led to sharp appreciation of the U.S. dollar, with expectations of more to come.



Our call on the dollar is consistent with our broader economic outlook and our call on the Fed funds rate, so if we are wrong on these we'll be wrong on the dollar as well. But, we'll also note the FOMC will surely be mindful of the value of the dollar when they deliberate the path of the funds rate. A stronger U.S. dollar contributes to tighter overall financial conditions while acting as a drag on growth in U.S. exports (you know, assuming there is still such a thing as global trade) and weighing on U.S. corporate profits. Whether any of these factors would lead the FOMC to forego a funds rate hike to avoid fueling further dollar appreciation remains to be seen, but a stronger dollar won't be sustained if the FOMC is not as aggressive as is anticipated. Still, the prevailing view is that 2017 will see further robust appreciation of the U.S. dollar. While we do think the Broad Dollar Index will hit a new record high in 2017, our expectations for the dollar over the course of the year are less lofty than is the case for many market participants, as was also the case going into 2016.

**QUESTION 10:** What are the upside and downside risks to our forecast and which way does the balance of risks tilt? In our view, no forecast is complete, or worthwhile, if not accompanied by an assessment of the risks to that forecast. While we do so in this space each year, an assessment of risks is something we produce each month when we update our forecast. Regardless of whether or to what extent the risks change from one month to the next, it is always a useful exercise to go through.

To be honest, for the past couple of years we've had to reach high and hard to come up with meaningful upside risks, and we had little, if any, conviction in those we did identify. That is decidedly not the case this year. To be sure, many of the upside risks stem from potential changes to the policy and regulatory landscape, and if those changes are more substantive and come sooner than we anticipate, real GDP growth will almost surely top our baseline forecast of 2.2 percent. For instance, corporate tax reform and regulatory relief could lead to business investment spending being stronger than we expect. Not only would that boost current-year

real GDP growth, but it would also likely lead to faster growth in labor productivity that would support firmer longer-term growth.

At the same time, a larger increase in government spending than we expect would lead to top-line real GDP growth beating our baseline forecast. If there is meaningful regulatory relief for the financial sector, we could see faster growth in bank lending that would support a higher level of overall economic activity than we now anticipate. To the extent we see further appreciation in stock prices and house prices, rising household net worth could lead to further gains in consumer confidence that would in turn lead to growth in consumer spending being stronger than we anticipate.

Conversely, we worry that changes in U.S. trade policy, including tariffs on imported goods, could spark retaliation around the globe and lead to growth coming in below our baseline forecast, in addition to bringing higher inflation. And, for those who don't get that the flip side of a trade deficit is a capital inflow, restrictive trade policies would be a source of upward pressure on U.S. interest rates that wouldn't do much for overall economic growth. To the extent we do see meaningfully faster growth in government outlays coupled with lower tax rates, larger government budget deficits could lead to significant upward pressure on U.S. interest rates which, again, would choke off at least some economic growth. Were inflation to rise by more than we anticipate, that would be another source of upward pressure on market interest rates. We see the potential for sharp shifts in global capital flows over the course of 2017 which could have disruptive effects in global capital markets. Finally, in a rapidly changing economic, financial, and political environment, there is greater potential for FOMC missteps that could disrupt the economy.

Unlike last year, we now see the risks to our baseline forecast as being tilted to the upside. As with each year's outlook, check back next year at this time to see how our 2017 forecast holds up.

**ODDS AND ENDS:** In the interest of full disclosure, there are two forecasts from our 2016 outlook that we did not touch on above. Having by now lost all capacity for embarrassment, we'll account for them here. First, our forecast was the ISM Manufacturing Index would be below the 50 percent break between expansion and contraction in fewer than six months in 2016; the actual number turned out to be three months. Again, in the context of when we made this call it was no slam dunk and while the manufacturing sector expanded in 2016, it was by no means robust expansion. Hopes are much higher for the factory sector in 2017, but we continue to worry about the downside risks from a stronger dollar and potential changes to trade policy.

Also, our forecast for house price appreciation was a less than 5.0 percent increase in the CoreLogic HPI in 2016. Data for December are not yet available but year-to-date through November the index was up 5.54 percent. For most of 2016 our forecast was looking good, but the pace of house price appreciation accelerated sharply in the final few months of the year – November saw a year-on-year increase of 7.13 percent. Lean inventories coupled with healthy growth in demand fueled faster price appreciation as the year wore on. While inventories remain lean heading into 2017, we think higher mortgage rates will take some of the steam out of demand and, in turn, price appreciation, so we look for a smaller increase in the CoreLogic HPI this year than we saw in 2016.

## ECONOMIC OUTLOOK A REGIONS January 2017



O2 '16 (a)	Q3 '16 (a)	Q4 '16 (f)	Q1 '17 (f)	Q2 '17 (f)	Q3 '17 (f)	Q4 '17 (f)	Q1 '18 (f)		2014 (a)	2015 (a)	2016 (f)	2017 (f)
1.4	3.5	2.2	1.8	2.3	2.1	2.2	1.9	Real GDP <sup>1</sup>	2.4	2.6	1.6	2.2
4.3	3.0	3.1	1.8	2.3	2.4	2.2	1.9	Real Personal Consumption <sup>1</sup>	2.9	3.2	2.7	2.5
								Business Fixed Investment:				
1.7	-1.4	3.0	3.0	2.9	2.6	2.7	2.6	Equipment, Software, & IP <sup>1</sup>	4.8	4.0	0.1	2.3
-2.1	12.0	-2.1	3.0	5.0	3.1	3.4	2.4	Structures <sup>1</sup>	10.3	-4.4	-2.9	3.2
-7.8	-4.1	6.3	5.3	3.8	2.3	5.1	7.0	Residential Fixed Investment <sup>1</sup>	3.5	11.7	4.7	2.7
-1.7	0.8	0.7	1.1	0.7	1.2	1.4	1.2	Government Expenditures <sup>1</sup>	-0.9	1.8	0.8	0.8
-558.4	-522.3	-565.7	-569.7	-575.4	-580.4	-590.3	-603.7	Net Exports <sup>2</sup>	-425.7	-540.0	-553.2	-578.9
1.159	1.145	1.177	1.172	1.161	1.178	1.203	1.240	Housing Starts, millions of units <sup>3</sup>	1.001	1.108	1.158	1.179
17.1	17.5	18.0	17.3	17.0	16.9	16.8	16.4	Vehicle Sales, millions of units <sup>3</sup>	16.5	17.4	17.5	17.0
4.9	4.9	4.7	4.7	4.7	4.6	4.6	4.6	Unemployment Rate, % <sup>4</sup>	6.2	5.3	4.9	4.7
1.8	1.7	1.6	1.4	1.4	1.3	1.2	1.1	Non-Farm Employment <sup>5</sup>	1.9	2.1	1.7	1.3
1.2	1.3	1.4	1.7	1.5	1.5	1.5	1.7	GDP Price Index <sup>5</sup>	1.8	1.1	1.3	1.5
1.0	1.0	1.4	1.9	1.8	1.9	1.9	1.9	PCE Deflator <sup>5</sup>	1.5	0.3	1.1	1.9
1.1	1.1	1.8	2.6	2.6	2.7	2.4	2.1	Consumer Price Index <sup>5</sup>	1.6	0.1	1.3	2.6
1.6	1.7	1.7	1.7	1.7	1.8	2.0	2.0	Core PCE Deflator⁵	1.6	1.4	1.7	1.8
2.2	2.2	2.2	2.0	2.0	2.1	2.2	2.2	Core Consumer Price Index <sup>5</sup>	1.7	1.8	2.2	2.1
0.20	0.20	0.42	0.63	0.67	0.00	0.02	4.42	Fold Freedy Toward Bade 944	0.43	0.44	0.20	0.77
0.38	0.38	0.42	0.63	0.67	0.88	0.93	1.13	Fed Funds Target Rate, %4	0.13	0.14	0.39	0.77
1.75	1.56	2.10	2.43	2.51	2.58	2.64	2.70	10-Year Treasury Note Yield, % <sup>4</sup>	2.54	2.14	1.83	2.54
3.60	3.45	3.74	4.08	4.16	4.25	4.33	4.41	30-Year Fixed Mortgage, % <sup>4</sup>	4.17	3.85	3.64	4.21
-2.6	-2.4	-2.7	-2.9	-3.0	-3.1	-3.2	-3.4	Current Account, % of GDP	-2.3	-2.7	-2.7	-3.1

a = actual; f = forecast; p = preliminary

1 - annualized percentage change Notes:

2 - chained 2009 \$ billions

3 - annualized rate

4 - quarterly average

5 - year-over-year percentage change