Credit Research Foundation

Special Edition

Focus on the Economy

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CRF's Annual Economic Projections for 2016

From 4 Venerable Economists

U.S. Macro Outlook: Going Full Tilt in 2016

By Mark Zandi
Moody's Analytics

Special Edition

Twenty fifteen was a good year for the U.S. economy, and 2016 should be even better. The economy is on track to return to full employment by midyear. It will have been almost a decade since the economy was last operating at full tilt.

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Full employment is consistent with a 5% unemployment rate, which has already been achieved, and a 9% underemployment rate. Underemployment includes the unemployed, part-timers who want more hours, and potential workers that have stepped out of the workforce and thus are not counted as unemployed but say they want a job. This is the so-called U-6 unemployment rate, which currently stands at 9.8%. On a full-time equivalent basis—translating the part-timers into full-timers—it is about 9.6%.

At the current pace of job growth of more than 200,000 per month, if sustained, the economy will be back to full employment by next summer. To be even more precise, given that the working-age population is growing by only 100,000 per month, the underemployment or U-6 unemployment rate should stand at 9% by August. There is clearly much uncertainty around this estimate, but there is little doubt that full employment is approaching fast.

Job Machine

Businesses are adding jobs at a consistent and prodigious rate. Payrolls will expand by almost 3 million in 2015, about the same as the year before and the year before that. The last time job growth was as consistently strong was during the technology boom of the late 1990s.

The oil price collapse and resulting rationalization in the energy industry, and the stronger U.S. dollar and weakening in trade-sensitive manufacturing have slowed job growth a notch in recent months. But these constraints should fade by the spring. Moreover, job creation in the rest of the economy shows no signs of slowing.

Most encouraging is that job openings are about as plentiful as they have ever been. There are now less than three underemployed for every open job position.

Full Employment Is Approaching fast

U-6 underemployed per open job position

Sources: BLS, Moody's Analytics

For context, at the worst of the recession, there were closer to one open position for every 11 underemployed. Openings are widespread across most industries, but particularly in healthcare and professional services; two industries adding aggressively to their roles. Layoffs also remain extraordinarily low, with nearly record low numbers filing for unemployment insurance.

Wage Resurgence

The tightening job market is evident from the recent firming in wage growth. According to the Bureau of Labor Statistics, average hourly earnings and wages as measured by the employment cost index have picked up meaningfully over the past year. After abstracting from the short-term ups and downs in these measures, wage growth is up nearly half a percentage point over the past year; well over the near 2% year-over-year growth that had prevailed since the recession.

Wage growth is even stronger than indicated by the BLS wage data. The BLS calculates wages based on reports from establishments that average pay across all their employees. Measured wage growth is being depressed as many lower-paid millennials are coming into the workforce, while higher-paid boomers are leaving it. The tighter labor market also means that those now finding jobs are likely less productive and thus lower-paid.

The importance of these worker-mix effects is evident from wage data constructed by Moody's Analytics based on payroll records maintained by human resource company ADP. The ADP data are derived by tracking the wages of individuals, and is thus not impacted by the changing mix of workers in establishments. According to ADP, year-over-year wage growth for individuals is just over 4%. Like the BLS data, ADP measured wage growth has accelerated by about half a percentage point over the past year.

A positive near-term leading indicator of future wage growth in the ADP data is the pickup in wages paid to workers switching jobs. Across all switchers, pay increases have increased substantially over the past year. Part-timers switching to either another part-time job or a full-time job enjoyed the biggest improvement. Switcher wages have accelerated across all but the energy industry, and are up most in the construction trades and in healthcare. All age groups are enjoying increased switcher wages, but those in their prime working years of 35 to 54 have seen the largest acceleration. Switcher wages are up in all parts of the country, but most in the South and Midwest.

Wage Risks

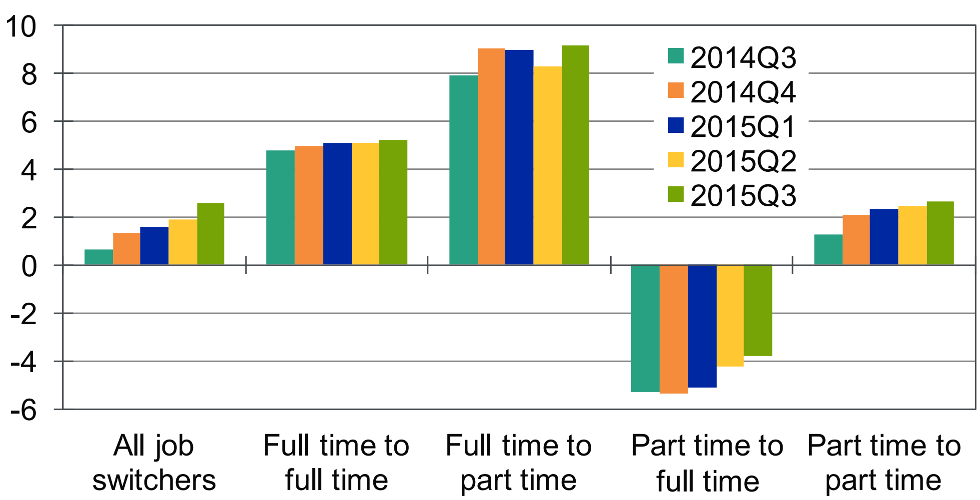
Wage growth is expected to accelerate substantially as the economy attains full employment. It may take a while, but wages are ultimately expected to reach a 3.5% growth rate. This is equal to the sum of inflation, which is expected to be near the Federal Reserve's 2% target, and 1.5% trend labor productivity growth. At this pace of growth, labor's share of national income will stabilize; labor's share has been shrinking more or less since the early 1980s.

There are both downside and upside risks to this outlook. On the downside is persistently weak productivity growth, which has been well below 1% per annum in recent years. Productivity is expected to pick up as businesses refocus on it. With labor costs so low since the recession, businesses have felt little pressure to invest in labor-saving technologies. This should change as businesses realize that their labor costs are rising with the tightening job market, but this is still a forecast.

On the upside is the likelihood that the job market will overshoot full employment. By the end of 2016, it will be clear that the economy'sbiggest problem isn't unemployment, but a lack of qualified labor. Businesses in a rising number of industries will be in bidding wars for workers. According to homebuilders, this is already an issue in the construction trades, and manufacturers are also complaining they can't find the highly skilled workers they need.

Job Switchers Enjoy Bigger Wage Increases

Wage increase, 4-qtr MA, %



Sources: ADP, Moody's Analytics

Rate Normalization

Firming wage growth is the signal that the Federal Reserve has needed to begin normalizing interest rates. Policymakers indicate that the coming rate hikes will be gradual, with the funds rate ending 2016 at just over 1%. This is a reasonable forecast given that inflation remains well below the Fed's target, and the Fed's desire to err on the side of too strong an economy rather than a struggling one. The Fed desperately wants to avoid backtracking on the rate hikes, or even worse, having to resume quantitative easing or adopting other nontraditional policies.

Policymakers also rightly want to see what impact the rate hikes will have on broader financial market conditions. The stock market appears vulnerable given its currently high valuation, an even stronger U.S. dollar seems likely, and credit spreads have the potential to significantly gap out, particularly for below investment grade corporate bonds. The seeming lack of transactional liquidity in markets could also exacerbate the volatility in all markets.

Financial pressures on already-fragile emerging markets could also intensify. Most vulnerable are countries that rely heavily on capital inflows and whose nonfinancial businesses have issued debt in dollars.

R* Equilibrium

Just where the rate hikes end depends on the equilibrium funds rate or R*—that funds rate consistent with an economy operating at its potential and inflation at the Fed's 2% target. There is a general consensus that R* has fallen since the Great Recession, but there is little consensus regarding by how much. The Fed's long-run forecast of the funds rate would suggest that the equilibrium funds rate is approximately 3.5%. This is equal to the sum of the Fed's 2% inflation target, the economy's potential growth rate, and the impact of various economic "headwinds."

While not well-defined, the most significant headwind is the higher required capitalization and liquidity of the banking system post-crisis.

If regulators require that banks must hold more capital and be more liquid, then the banks' return on equity and assets will be lower. Thus for the system to extend the same amount of credit to the economy at the same lending rates, the system's cost of funds needs to fall by a like amount as its returns. That is, banks' lending margins—loan rates less cost of funds—must be maintained. This can be achieved if the Fed adopts a lower R*, and thus lower banks' cost of funds.

Emerging Markets Exposed to Fed Normalization

	External Financing Vulnerability				Other Sources of Vulnerability				
	Current Account Balance	External Debt	Maturing External Debt	Government Foreign Currency Debt	Commodity Net Exports	GDP Growth Forecast	Inflation Forecast	Summary Vulnerability	Foreign Exchange Pressure
	Share of 2015F GDP	Share of 2015F GDP	Share of 2015F Reserves	Share of 2015F Govt Debt	Share of 2013 GDP	2015-2016	Dec 2014 - Dec 2015	Average of Standard Deviations	
Turkey	-5.0%	51.2%	176.1%	31.0%	0.0%	3.2%	7.0%	1.0	
Chile	-1.3%	51.9%	98.3%	14.4%	9.5%	3.5%	3.0%	0.5	
Brazil	-4.0%	29.2%	30.7%	6.1%	2.7%	0.5%	7.5%	0.4	
South Africa	-5.4%	31.6%	70.9%	9.1%	5.1%	2.7%	5.5%	0.4	
Malaysia	3.7%	64.8%	121.2%	2.7%	8.2%	4.9%	3.2%	0.3	
Peru	-4.4%	34.2%	21.4%	47.8%	7.5%	4.7%	2.8%	0.3	
Indonesia	-2.7%	32.9%	61.3%	45.3%	4.4%	5.4%	5.3%	0.3	
Colombia	-4.7%	25.0%	44.5%	26.3%	8.6%	4.2%	3.3%	0.2	
Mexico	-2.3%	36.7%	64.5%	20.0%	4.2%	3.5%	3.3%	0.1	
Thailand	-0.8%	38.3%	44.6%	2.1%	6.2%	3.9%	2.6%	-0.1	
India	-0.6%	22.0%	70.1%	6.4%	1.0%	7.5%	6.5%	-0.4	
Philippines	4.2%	26.5%	15.7%	36.3%	0.3%	6.4%	4.0%	-0.6	
Korea	6.0%	31.7%	45.3%	0.0%	0.1%	3.6%	1.5%	-0.8	

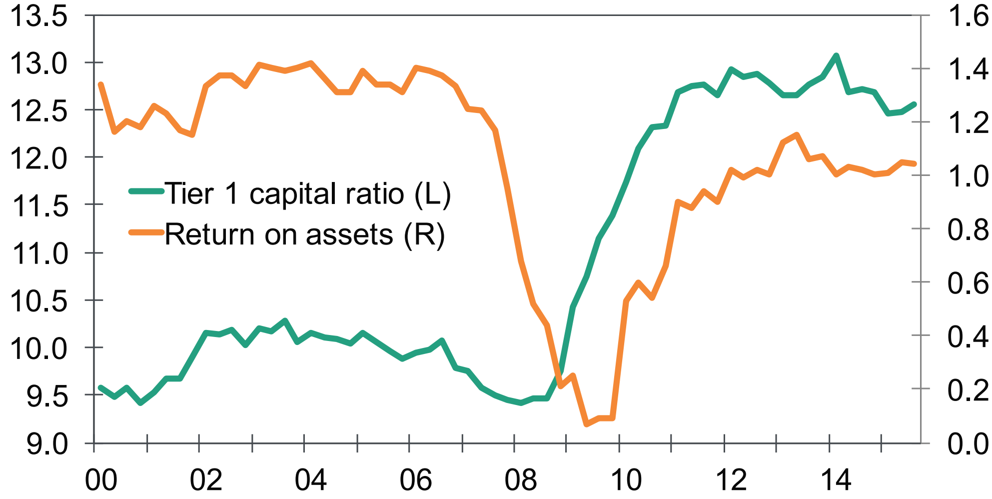
Sources: Moody's Investor Service, Moody's Analytics

This includes Turkey, South Africa, and a number of countries in Latin America and Southeast Asia. Growth in the EMs slowed sharply this past year, and the best that can be expected in the coming year is that they stabilize.

Like the Fed, we also estimate R* to be 3.5%, equal to 2% inflation, plus 2.2% potential real GDP growth, less 0.7% to account for the economic headwinds. The actual federal funds rate is expected to reach our 3.5% R* by spring 2018.

Bank Capitalization Is Higher, Profitability Lower

Commercial banks



Sources: FDIC, Moody's Analytics

Rate Risks

The Fed's path to R* is rife with risk. The equilibrium funds rate could be much lower than we are estimating, either because potential growth is lower or the headwinds are blowing harder. Financial markets seemingly believe this, as the futures market for fed funds puts the funds rate at closer to 2% by early 2018.

However, there is also the risk that the economy will overshoot full employment, generating significant wage and prices pressures and forcing the Fed to ultimately play catch-up in raising rates. Indeed, the more gradual the rate hikes are in 2016, the more likely the Fed will have to increase rates more aggressively in 2017-2018 to forestall an overheating economy.

Certainly a lot could go wrong between now and 2018. But that should be a worry for another day. We should enjoy 2016 and a full- employment economy.

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Dr. Zandi is a co-founder of Economy.com, which Moody's purchased in 2005.

Dr. Zandi conducts regular briefings on the economy for corporate boards, trade associations, and policymakers at all levels. He is often quoted in national and global publications and interviewed by major news media outlets, and is a frequent guest on CNBC, NPR, CNN, Meet the Press, and various other national networks and news programs.

Chicago Fed's Economic Outlook Symposium: *Review of 2015 and 2016 forecasts*

by William A. Strauss
Senior Economist and Economic Advisor
Federal Reserve Bank of Chicago

According to participants in the Chicago Fed's annual Economic Outlook Symposium, the U.S. economy is forecasted to grow at a pace slightly above average in 2016, with inflation moving higher and the unemployment rate edging lower.

The Federal Reserve Bank of Chicago held its 29th annual Economic Outlook Symposium (EOS) on December 4, 2015. More than 100 economists and analysts from business, academia, and government attended the conference. This Chicago Fed Letter reviews the forecasts for 2015 from the previous EOS, and then analyzes the forecasts for 2016 (see Chart) and summarizes the presentations from the most recent EOS.[1]

Forecasts from the 29th Annual Economic Outlook Symposium

	2014 (Actual)	2015 (Forecast)	2016 (Forecast)
Real gross domestic product[a]	2.5	**2.2**	**2.6**
Real personal consumption expenditures[a]	3.2	**2.9**	**2.7**
Real business fixed investment[a]	5.5	**3.0**	**3.5**
Real residential investment[a]	5.1	**8.0**	**7.7**
Change in private inventories[b]	78.2	**56.0**	**58.1**
Net exports of goods and services[b]	−436.6	**−555.0**	**−610.2**
Real government consumption expenditures and gross investment[a]	0.4	**1.3**	**1.4**
Industrial production[a]	4.4	**0.0**	**2.0**
Car and light truck sales (millions of units)	16.4	**17.4**	**17.6**
Housing starts (millions of units)	1.00	**1.13**	**1.24**
Unemployment rate[c]	5.7	**5.0**	**4.9**
Consumer Price Index[a]	1.2	**0.4**	**1.9**
One-year Treasury rate (constant maturity)[c]	0.15	**0.39**	**1.04**
Ten-year Treasury rate (constant maturity)[c]	2.28	**2.25**	**2.70**
J. P. Morgan trade-weighted dollar index[a]	6.2	**10.6**	**2.5**
Oil price (dollars per barrel of West Texas Intermediate)[c]	73.16	**45.00**	**53.25**

[a]Percent change, fourth quarter over fourth quarter.
[b]Billions of chained (2009) dollars in the fourth quarter at a seasonally adjusted annual rate.
[c]Fourth quarter average.

The U.S. economy entered the seventh year of its expansion in the third quarter of 2015. While the nation's real gross domestic product (GDP) is at its highest level in history, the rate of economic growth since the end of the Great Recession in mid-2009 has been very restrained. During the 25 quarters following the second quarter of 2009, the annualized rate of real GDP growth was 2.2%—roughly in line with the long-term rate of growth for the U.S. economy. Additionally, the annualized rate of real GDP growth over the first three quarters of 2015 matched that of the overall current expansion.

Two large shocks affected the growth rate of the U.S. economy in 2015. The first shock was the collapse in energy prices, which generally had a positive impact on the overall economy. The average price of oil (West Texas Intermediate crude oil) began falling in mid-2014: It dropped from nearly $106 per barrel in June 2014 to just under $76 per barrel in November 2014 (right before the 2014 EOS). Oil prices continued to tumble throughout 2015, and by November of last year, they had averaged just under $43 per barrel. Even though the United States is progressing toward energy independence, a significant share of its energy needs is still being imported. Therefore, the lower prices for energy should have aided growth in 2015 as users of energy—such as consumers, manufacturers, and the transportation sector—faced lower expenses. Offsetting some of this stimulative effect on the economy was the sharp reduction in investment in the domestic energy sector. This cutback contributed to a decline in real business fixed investment growth; real business fixed investment grew 5.5% in 2014, but over the first three quarters of 2015, its annualized growth rate was a modest 3.0%.

1 Also see https://www.chicagofed.org/events/2015/economic-outlook-symposium.

The second shock was the significant rise in the international value of the U.S. dollar, which generally had a negative impact on the overall U.S. economy. The real trade-weighted value of the U.S. dollar began to strengthen in August 2014: It rose 4.7% by November 2014 and then increased a further 10.9% over the next 12 months. This sharp rise made U.S.-produced goods significantly more expensive for foreign customers while making foreign-produced goods less expensive for domestic purchasers, leading to a jump in the trade deficit. The trade deficit rose from $429.1 billion in the third quarter of 2014 to $544.1 billion in the third quarter of 2015, subtracting 0.7 percentage points from economic growth over the past four quarters. The manufacturing sector's growth was negatively affected by the increasing value of the dollar against foreign currencies; industrial production increased by 4.1% in 2014, but its annualized growth rate was just 1.2% over the first 10 months of 2015—well below its historical growth rate.

That said, light vehicle sales (car and light truck sales) for the first eleven months of the year averaged 17.3 million units (seasonally adjusted annual rate) in 2015—a strong 5.8% increase over the comparable period a year earlier. In addition, the housing sector, which had contributed little to the economic expansion, finally began to pick up steam in 2015. Residential investment grew at an annualized rate of 8.9% over the first three quarters of 2015—the fastest pace in three years. And housing starts rose to 1.09 million (seasonally adjusted annual rate) for the first 10 months of 2015—up 10% relative to the same period in 2014.

Against this backdrop, the economy continued to increase employment in 2015: A little over 2.3 million jobs were added in the first eleven months of 2015, leading to an employment gain of 1.7% over the comparable period of 2014. Moreover, in November 2015, the unemployment rate stood at 5.0%—a rate that would normally be associated with full employment. However, other measures of the labor market suggest that slack is still present. For instance, by historical standards, there remains an outsized number of part-time workers who desire full-time employment, and a large percentage of unemployed workers who have been out of work for more than six months.

Given falling energy prices, lower prices on imports, and persistent slack in the economy, inflation remained extremely low in 2015. At 1.2% in both 2013 and 2014, inflation, as measured by the Consumer Price Index (CPI), had already been low by historical standards. By October 2015, year-over-year inflation had fallen to 0.1%.

Economic outlook for 2016

The forecast for 2016 is for the pace of economic growth to be slightly above the long-term average. In 2016, the growth rate of real GDP is expected to be 2.6%—an improvement from the projected 2.2% rate for 2015. The quarterly pattern reveals a fairly steady performance for real GDP growth throughout 2016; the annualized rate is predicted to tick higher in the second half of the year. Given that the economic growth rate is forecasted to be only slightly above its historical average, the unemployment rate is expected to edge lower to 4.9% in the final quarter of 2016. Inflation, as measured by the CPI, is predicted to increase from an estimated 0.4% in 2015 to 1.9% in 2016. Oil prices are anticipated to increase, but still remain fairly low; they are predicted to average just over $53 per barrel in the final quarter of 2016. Real personal consumption expenditures are forecasted to expand at a rate of 2.7% in 2016. Light vehicle sales are expected to rise to 17.6 million units this year. The growth rate of real business fixed investment is anticipated to improve to 3.5% in 2016. Industrial production is forecasted to grow by 2.0% this year—below its historical average rate of growth.

The housing sector is predicted to continue its fairly slow march toward normalization in 2016. The growth rate of real residential investment is forecasted to be a solid 7.7% in 2016. And housing starts are anticipated to rise to 1.24 million units in 2016—higher than the predicted total for 2015 but still below the 20-year annual average of roughly 1.34 million starts.

The one-year Treasury rate is expected to rise to 1.04% in 2016, and the ten-year Treasury rate is forecasted to increase to 2.70%. The trade-weighted U.S. dollar is predicted to rise an additional 2.5% in 2016, and the nation's trade deficit (i.e., net exports of goods and services) are anticipated to increase to $610 billion in 2016.

Conclusion

In 2015, the U.S. economy expanded at a pace roughly in line with the historical average. The economy in 2016 is forecasted to grow at a slightly faster rate than it did in 2015. The housing sector is predicted to continue to improve in 2016, as are light vehicle sales. The unemployment rate is expected to edge down by the end of 2016, and inflation is predicted to rise but remain low.

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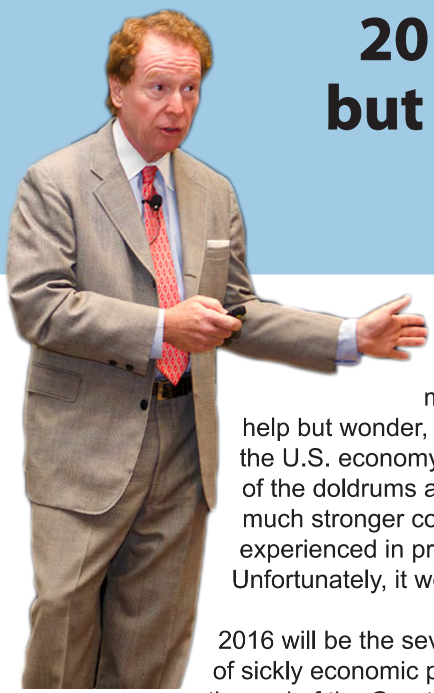
His research papers include analysis of the manufacturing sector, the automotive sector, the Midwest regional economy, the trade-weighted dollar, business cycles, and Federal Reserve payments operations.

Mr. Strauss has been interviewed on numerous television and radio shows and quoted in the major business magazines and newspapers. He has also provided testimony concerning manufacturing issues to the U.S. Senate.

2016 Will Be Another Slow Year, but Business Risks Are on the Rise



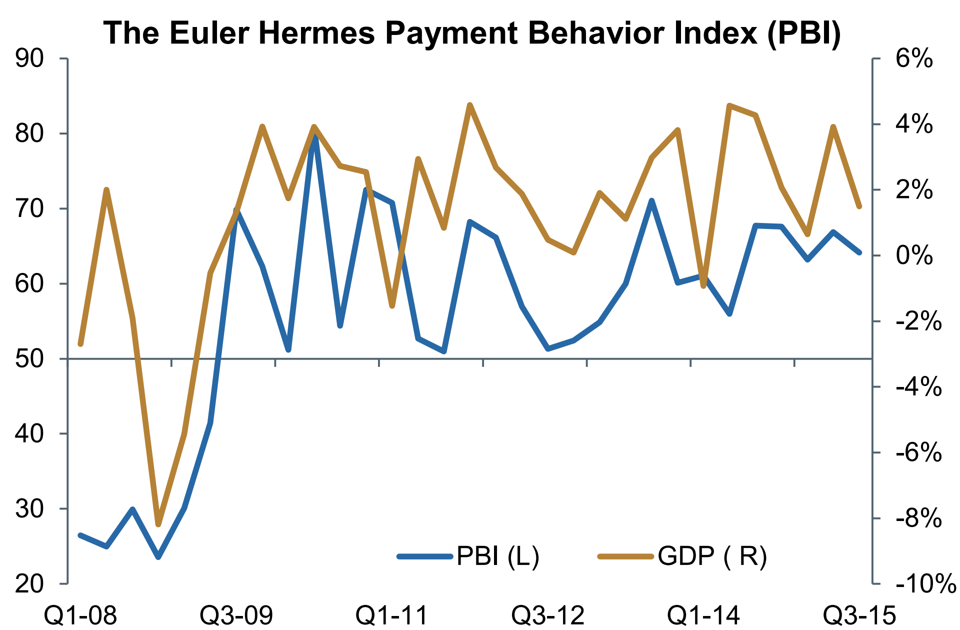
By Dan North
Euler Hermes

As 2015 fades into the rear view mirror, we can't help but wonder, plaintively, when the U.S. economy will break out of the doldrums and return to the much stronger conditions we have experienced in previous recoveries. Unfortunately, it won't be in 2016.

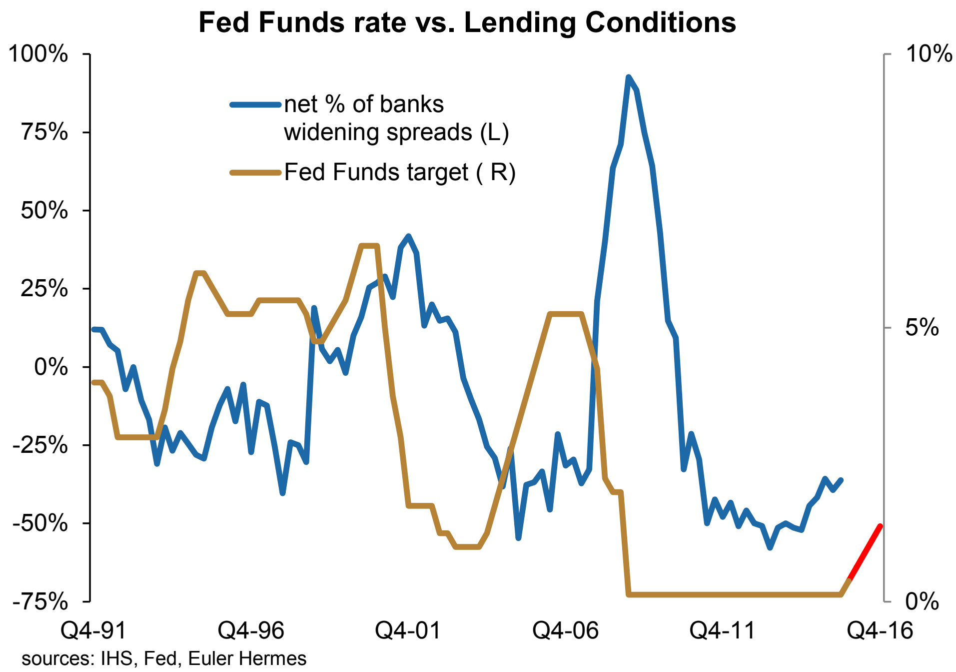
2016 will be the seventh year in a row of sickly economic performance since the end of the Great Recession, with a forecasted real GDP growth rate of only 2.5%, well below the average of 4.6% seen in a normal recovery. While consumers will lead the way as always, the economy will face headwinds from a number of sources, including an increase in slow payment and bankruptcies, tightening lending conditions, a strong U.S. dollar damping exports, continued weakness in commodity prices, a manufacturing slump, and sluggish global growth. As a result, business risks will be on the rise in 2016, and of particular concern is an increase in bankruptcies with losses to creditors.

For the economy to grow, the consumer has to have the willingness and the ability to spend. The willingness to spend can be measured by consumer confidence, which has finally crept up above the 90 level indicating a stable economy, according to the Conference Board's survey. The ability to spend is provided in part by real disposable personal income, which has been growing at a hardy 3.5% annual rate in 2015. And an additional boost to this income has been provided by the sharp drop in gasoline prices which have fallen 20% in 2015, and 45% over the past 18 months. Yet despite having the willingness to spend, and the ability to spend, the consumer is still not following through as much as we would like. There are two reasons for this behavior. First, it is not uncommon for consumers to say one thing, such as expressing confidence, and do another, such as proceeding with caution. Second, consumers are using the extra income they are earning for savings instead of spending. Since we don't expect to see an increase in confidence next year, and we also do not anticipate an acceleration of income growth, which is already above the historical average, we do not anticipate an increase in spending growth either. Consumption for all of 2015 is likely to finish at 3.1%, and we expect to see it tick down a notch to 3.0% in 2016, again well below the long term average during a recovery of 4.3%.

Consumption does account for 70% of all economic activity, so the forecast of 3.0% consumption growth is indeed a positive for the economy. However credit professionals of course are more interested in what could go wrong for the business world. And the possibilities here are significantly greater than last year. First and foremost, business bankruptcies are likely to be on the rise. One of the early warning signs of bankruptcy is an increase in the amount of past due payments owed by businesses to other businesses. This deterioration in payments is measured by Euler Hermes'



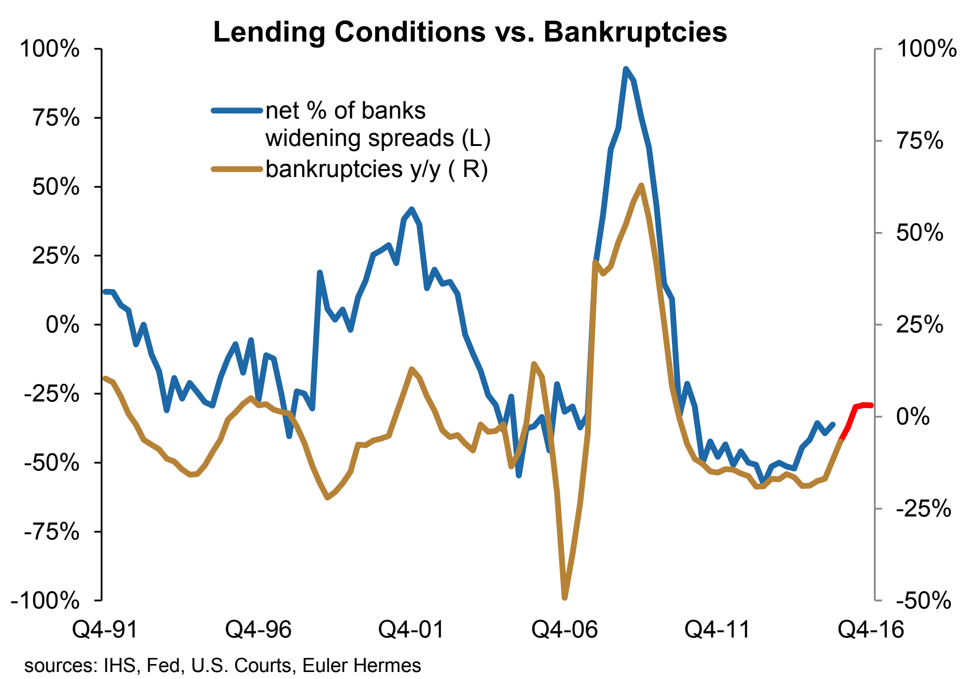
sources: IHS, BEA, Euler Hermes

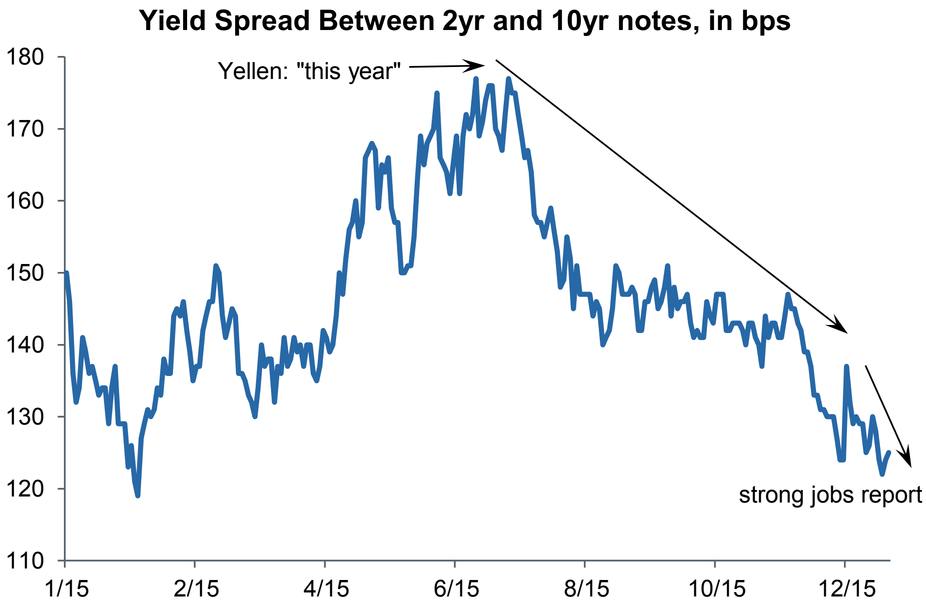


proprietary Payment Behavior Index (PBI) (Chart on previous page) derived from thousands of monthly reports of past due payments. While the PBI is currently above 50, signaling better than average payment performance, it has fallen from 67.8 in Q3-14 to 64.1 in Q3-15, indicating an increase in the amount of past due payments, and partially complete data for Q4-15 look weaker still.

The slowdown in the PBI is paralleled by national statistics which show a 2.8% increase in business bankruptcies in Q3-15 compared to Q2-15. It was the second consecutive quarter of rising bankruptcies, something not seen since the end of the recession over six years ago, and it is a trend we expect to see continuing in 2016. One of the primary reasons is that the Federal Reserve has started to raise interest rates, and it has also signaled it's likely to continue raising rates from the current 0.375% to 1.375% by the end of 2016. And when the Fed raises rates, commercial banks typically start to tighten lending conditions by widening spreads on loans to small businesses, putting pressure on those businesses, thus spurring bankruptcies. The relationship is shown clearly in the charts: the Fed raises rates, then banks widen spreads, then bankruptcies rise. For all of 2016, we forecast that business bankruptcies will rise 3%.

Federal Reserve policy will also have other far reaching effects, both known and unknown. The unknown effects stem from the fact that a significant portion of participants in the global financial markets have never experienced a rate hike, because there hasn't been one in a record 11+ years, and have never seen anything but the unprecedented 0% Fed Funds rate, because that's all there's been for an extraordinary seven years. How these participants will act in the intermediate and long terms is unknown. Furthermore, no





sources: IHS, Fed, Euler Hermes

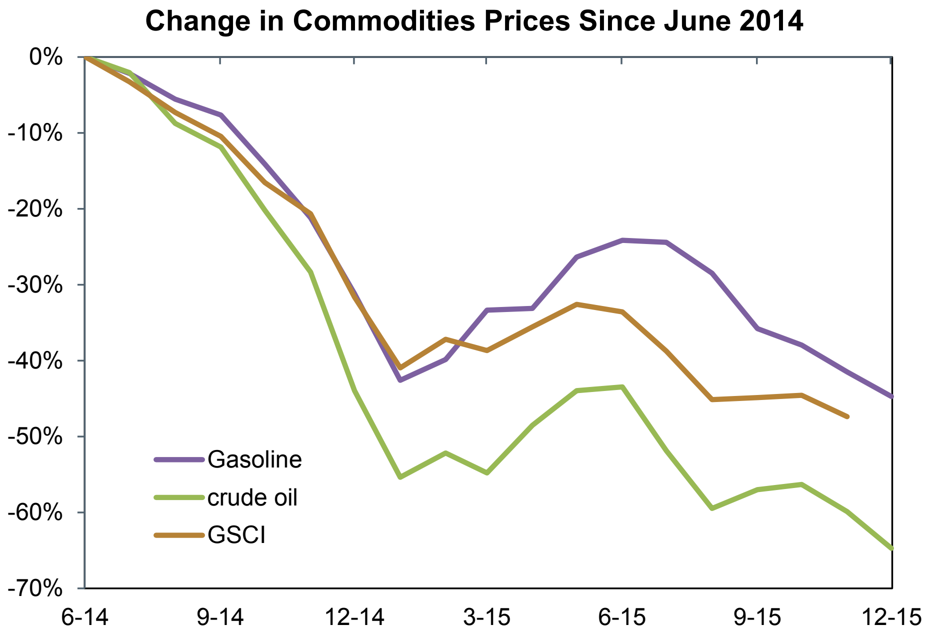
one in the Federal Reserve has ever had to unwind such an unprecedented, extraordinarily loose monetary policy, and no one knows if they will be able to do it without causing a major disturbance in global financial markets or the global economy.

The known effects of a "normal" Fed tightening take some time to manifest. Changes in monetary policy can take a year or more to have an effect on the economy, so a very gradual increase in rates is unlikely to put a significant brake on the economy right away. However it is the beginning of a tightening cycle, and it is reasonable to expect that in a few years, the Fed will have been effective in its mission to slow the economy. The effects of a rate hike can be forecasted somewhat by an indicator known as the yield spread, which is the difference between long term interest rates (the 10 year Treasury note) and short term interest rates (the 2 year Treasury note). Long term rates are usually higher than short term rates, making the spread positive, a condition that forecasts a continued recovery. The positive spread we have now suggests that the recovery is likely to last for at least another year. However as the Fed raises short term rates, they can go higher than long term rates, which makes the spread negative, a strong indicator of a coming recession. And despite the fact that the spread is currently positive, it is deteriorating. When Fed Chair Yellen signaled that the Fed Funds rate would be raised sometime in 2015, the spread started to narrow. And when the strong November jobs report was released, it became even more certain that the first hike would be in December of 2015, and the spread started deteriorating even more rapidly.

At the same time that the Fed is starting to tighten monetary policy by raising interest rates, many other central banks are starting to loosen monetary policy, either by engaging in more quantitative easing, or by lowering interest rates. These banks include the Bank of China, the European Central Bank, the Bank of Japan, the Bank of Canada, and several others, in total representing about half of the world's GDP. This divergence in policies makes U.S. interest rates higher than foreign interest rates, and this difference is likely to continue to spread, making investments in U.S. dollars more attractive. In the past 18 months, the U.S. dollar has been bid up 25% against the euro, 20% against the Japanese Yen, 27% against the Canadian dollar, and 20% against a trade-weighted basket of currencies.

A strengthening currency has both positive and negative effects. During 2015 the positive ones have been dominated by the negative ones, including a fall in exports, a sharp drop in commodity prices which have damaged producers, and an accompanying weakness in manufacturing. As of October 2015, on a y/y basis the dollar drove total U.S. exports down 6.9%, including a 10.4% fall in merchandise exports. Commodity prices as represented by the Goldman Sachs Commodity Index (GSCI) (Chart on next page) fell on a y/y basis by 34% as of November and have fallen 47% in the past 18 months. The price of crude oil, arguably the world's most important commodity, fell 37% in 2015, and has fallen 65% since the middle of 2014. As a result, orders from the oil industry for machinery and pipe dried up to a small fraction of what they were, and combined with weak global demand, manufacturing has suffered. For example, the closely watched ISM manufacturing index dropped below the 50 level, signaling contraction in December for the first time in three years. In November, on a y/y basis, real durable goods orders fell -0.8% and industrial production fell -1.2%. Since we expect the value of the dollar to remain strong in 2016, we also expect to see the weakness in exports, commodities, and manufacturing continue for at least the first half of the year.

Anemic global demand will also be a drag. In fact, some countries are showing conditions worse than previously expected. Growth in Japan for instance has slipped into technical recession as Q2 and Q3 growth were both negative. Russia is in a deep recession. Growth in China is slowing from a blistering pace to a target of 6.5% in 2016, the slowest in 26 years. Less visible examples include Mexico, which has pockets of significant weakness. Emerging market countries with slow growth and high current account deficits are particularly at risk from Fed tightening, including Nigeria, Turkey, and South Africa.



sources: IHS, Goldman Sachs, EIA, Euler Hermes

Brazil however is surely the country with the most rapidly decaying economic conditions and the most dramatically rising commercial risks. Q3 GDP was even worse than expected, shrinking at a dizzying -6.7% annualized rate (Q2 was -8%, Q1 was -3.3%) sending the economy into a deep, widespread recession. The country is suffering from an ugly combination of a gaping budget deficit, plunging investment, sky-high interest rates (the central bank rate is 14.25%), spiraling inflation of 9.9% y/y, a currency which has lost 40% of its value against the U.S. dollar over the past year, and a six-year high unemployment rate of 7.9%, all of which lead to expectations of the recession lasting through 2016. A widespread corruption scandal, which has helped create the situation, has led to impeachment proceedings against President Dilma Rousseff.

Returning to the domestic view, there are at least two other concerns worth scrutiny. First, during this recovery, five out of six years have had very weak first quarters, including two negative ones. On average, the first quarters of this recovery have grown at a 0.8% annualized rate, whereas the second through fourth quarters on average have grown at a 2.7% annualized rate. The weak first quarters have been associated with severe winter weather, spikes in oil prices, or government financial problems. It is possible that any of these three could re-emerge in the first quarter of 2016. A second concern is the still very low labor force participation rate. Part of the problem is the “silver tsunami”, the demographic phenomenon wherein 10,000 Baby Boomers retire every day. This surge of retirees can’t be replaced fast enough, and the resulting drop in the labor force participation rate is a true impediment to more rapid growth.

On a slightly more positive note, while the presidential elections may cause some uncertainty, we don’t think it will have a significant impact on the economy right away. Regardless of who wins, however, we would like to see more pro-growth policies come to fruition. First, the U.S. is one of the few developed countries in the world with a dual corporate tax system where profits are taxed both abroad and in the U.S., and the U.S. has the highest corporate tax rate in the world. There couldn’t be a more effective combination for minimizing both government revenue and economic growth. This arrangement incentivizes U.S. multinationals to domicile in other countries, keep profits there, pay taxes there instead of here, and keep massive amounts of profits overseas to be invested there and not here. Corporate profits should be taxed once and at a globally competitive rate to provide a strong incentive to invest here. Even greater investment and job creation could result from a tax holiday on corporations to incentivize them to bring their profits home. Other items on our wish list include income tax reform with lower rates, a broader base, and an elimination of subsidies and deductions; reduction of government debt; entitlement reform; reduction of red tape and regulations which hinder business formation, and finally; passage of major trade agreements.

The upcoming year unfortunately looks like more of the same sluggish 2.5% GDP growth, but with increased business risk. While we expect the single most important component of the economy, consumption, to grow at 3%, it will be countered by a number of headwinds, including tightening lending conditions, a strong U.S. dollar dampening exports, continued weakness in commodity prices, a manufacturing slump, and sluggish global growth. As a result, business risks will be significantly greater in 2016 than 2015. Perhaps the biggest risk of all to most businesses will be an increase in slow payment, and losses caused by the increasing incidence of customer bankruptcy.

Dan North *is an Economist with Euler Hermes, North America. Mr. North has been with Euler Hermes North America since 1996.He has appeared on CNBC, Fox Business News, France 24, and Bloomberg Radio and Television. He has been quoted by Barron’s, Business Week, Paris Le Monde, Tokyo Nikkei, the New York Times and the Wall Street Journal. After having predicted the 2008/2009 recession and its implications accurately, he was ranked 4th on Bloomberg’s list of the 65 top economic forecasters in 2010.*

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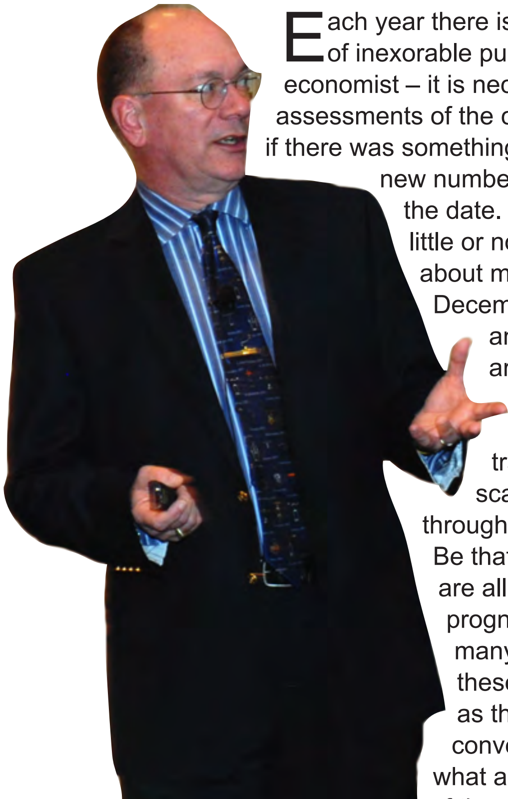
2016 – The Year of…. Who Knows?

By Chris Kuehl
Managing Diretor, Armada Coroprate Intelligence



Each year there is a kind of inexorable pull for the economist – it is necessary to make assessments of the coming year as if there was something magical about new numbers at the end of the date. In truth there is little or nothing significant about moving from December to January, and in fact there are far more significant economic transitions scattered throughout the year. Be that as it may, we are all compelled to prognosticate and many dutifully read these scribblings as they seem to conveniently forget what a hash we made of those forecasts last year. Go back and read what we said about 2015 at the end of 2014. It wasn't supposed to be like this.

So now we are facing another year and we have another set of expectations. Will this be the breakout year for the economy we thought we would see in 2015, or will it be another draggy year that has us looking forward to 2017 already. In classic econo-speak I can assure you it will be both.

Right now there are two positive developments to look forward to and two that will not be so positive. The most threatening aspect of the coming year will be the strength of the dollar. This has been a major issue in 2015 but stands to get much worse in 2016 as the Federal Reserve has finally started to raise rates. The dollar had been gaining strength even without the help of higher interest rates and now the investors will have even more incentive to acquire greenbacks. In truth, it is almost a misnomer to assert the dollar has gained strength – it is really a case of the other currencies losing strength. It is also a mistake to assert the dollar strength is bad or good – it all depends on which side of the equation one is on. Those that are trying to export or are competing with companies in countries with a weaker currency are negatively affected, but those that are importing are well pleased, and consumers are pretty happy with the lower price of imports.

Before getting too engaged in the dollar strength argument it is important to note that US exports would likely be down even without the greenback's gain as the countries the US traditionally sells to are not in good financial shape, and there is not much purchasing of anything these days. As the US Fed has raised rates, the other countries are raising theirs so the currencies will not lose value – this also slows the recovery in these nations and makes it even harder for the US to sell there. Anyway one slices it the strength of the dollar is a problem that will vex through the course of next year.

The first positive development revolves around jobs. There have been some steady gains in the last couple of years and the economy will begin the year with an official unemployment rate of 5% - and even a U-6 rate that is under 10%. The number of job openings has not been this high since the start of the recession. Even the quit rate is trending back towards normal. There are some caveats though. The first is that too many of the new jobs created in the last year or so are not very good or steady – many are in the service sector and the low paid part at that. The other issue is one that has been very familiar to those in manufacturing or construction or transportation. The skills needed in a new employee are not generally available and there is a shortage of qualified workers. There are many people looking for work but they are not generally hirable.

The growth noted in many of the counties in the US (and 93% are growing) is a little perplexing. The growth in these communities has not been accompanied by wage growth in the majority of locations – in fact in many there have been declines in wages and salaries even as growth has been over 4%. The problem is that growth has been in the low wage sector – expanded opportunities in the health care sector has meant lots of people working in the hospitals and assisted living centers. There have also been more distribution and logistics centers opening up and these draw low wage workers as well. It is nice that unemployment is down, but not as helpful when the jobs added don't contribute much to the consumer side of things.

Back to the negative – the second concern. There are always ups and downs in any given economic year and we will have our share in 2016. There will be adjustments to the new rates and there will be some market swoons. All this is to be expected and most of it will be anticipated. The part that will not be as predictable is the political season. This has been an intensely partisan campaign already - and vicious. The business community is as worried as it can be as they have no idea what to expect. The economy has barely been talked up thus far and few policies seem to be in place. The uncertainty factor will loom large this year and that will stall decision-making. This will result in a very slow start to the year.

The Federal Reserve has been toting the load of the stimulus all by itself for the bulk of the recovery and that has slowed the pace of rebound. The usual contributions from Congress have not been there. The desire to trim the debt has been a factor, but for the most part the issue has been an intense partisan rift that stalls everything as neither side wants to do anything that would make the other look good. The recent success at passing a five-year transportation bill is a case in point. This was once the most automatic thing Congress did as everyone wanted some road work in their district. This version took years to work out despite the universal agreement regarding the state of the US infrastructure. It is going to be even harder to get anything out of the government now that the campaigning has started in earnest.

Now for the closing reference and one that is more positive than not. There is clear untapped potential in the economy and there are reasons to think this will unlock sooner than later. Corporations have been hanging onto their cash and banks have been holding onto their money because the corporations are not in the mood to spend. Consumers have a lot of cash as well and they have larger balances on their credit cards than in the past. There is money to spend when and if there is a desire to do so. The catch is that nobody quite knows how to dislodge it. Most of the motivations for consumer spending are now in the past (and Christmas was not great). The corporate community is doing more merger and acquisition, but thus far it has been for tactical reasons rather to boost growth. The point is there is potential for a good 2016 if spending starts to unlock.

The big question is what it will take to get that money moving again, and the answer is likely to be different for each group. The banks are inhibited by a couple of issues. The first is they are just not seeing the kind of borrowers they would prefer as the best corporate customers are still not interested in getting leveraged as they have in the past. Banks are also still adjusting to the new world of the bank Reform Act and some are hoping that a new Congress and President might be persuaded to alter some of these provisions. The corporate community is not expressing a lot of confidence in regard to the coming year, and that means less hiring and less investment in capital equipment. It is something of a Catch-22 as the companies need consumer demand to support their growth ambitions but the consumer isn't going to do any additional spending as long as there are no wage gains and no additional job openings.

The consumer is the key to all of this – as is usually the case. They have not been in a spending mood for a long time and many have speculated that the Great Recession may have changed people as much as the Great Depression of the 1930s did. If the consumer has become more frugal and more averse to credit, the retailer is going to be in trouble. The consumer has seen many developments that usually provoke them to spend more and yet they really have maintained that caution. Gas prices are down, employment is stable and most have seen the value of their homes improve. That used to be enough and now it may not be. The millennial generation is saddled with debt and has been slow to enter the usual adult life of home buying and child rearing. The Baby Boomer is starting to retire and end their wild spending days and the Gen-X generation was the one that took the biggest employment hits in the recession.

What does 2016 look like? More than a little like 2015. It will likely be another year of growth around 2.5% and with the same kind of roller coaster action seen last year. The first quarter will not get hit with weather issues as the last two have and that should keep growth at around 1.5%. The second quarter will probably be the strongest of the year again and Q3 should be ok as well. The big question will be the Q4 growth data. It will all depend on the willingness of the consumer to shake off the mediocrity and spend.

Chris Kuehl *is the co-founder (with Keith Prather) and Managing Director of Armada Corporate Intelligence, a company created in 1999 to provide strategy foundation, competitive intelligence, business analysis and economic forecasting for corporate clients.*

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The Economic Minefield of Accumulated Debt: Part 2 and The Outlook for the Economy in 2016 (and Beyond)

By Steven C. Isberg, Ph.D
Senior Research Fellow
Credit Research Foundation

*In Part One (**CLICK HERE**) of this two-part series, we explored trends in the uses of various forms of consumer credit. Analysis showed that total consumer credit outstanding had grown to a level of over 48% of the median household income by the end of 2014, which growth continued throughout 2015. As of the end of the third quarter, total consumer credit reached a level of over $3.47 trillion with no signs of slowing down. Part One concluded with the thought that accumulation of debt at this rate would be unsustainable, and have significant negative impacts on the U.S. economy in the longer run. This part will explore some of those impacts and discuss other issues affecting the economic outlook for 2016 and beyond.*

Accumulated Consumer Debt will Slow Prospects for Growth

The U.S. economy is heavily dependent on consumer spending. These expenditures, which represented 69% of GDP in the third quarter of 2015, are by far the largest of the four components of GDP, which also include gross private domestic investment, government consumption and investment, and net exports (exports less imports).

Examination of the ten-year average annualized growth rates in real GDP and real personal consumption expenditures show how closely U.S. economic growth is driven by consumption and how that growth has been experiencing a slowdown dating back to the turn of the current century. As can be seen in Exhibit 1, the ten-year average annualized growth rate has steadily fallen since the first quarter of 2006, prior to the credit market collapse and great recession events of 2007-2009. While that growth rate showed signs of recovering between 2010 and 2011, it has since continued to fall, currently sitting at a level of 1.39%. As can also be seen, real personal consumption growth demonstrates the same trend, now running at 1.63%. Both of these indicate that the decline in the U.S. economy has been more of a long term than a cyclical phenomenon, and that the economy is not engaged in a substantial recovery.

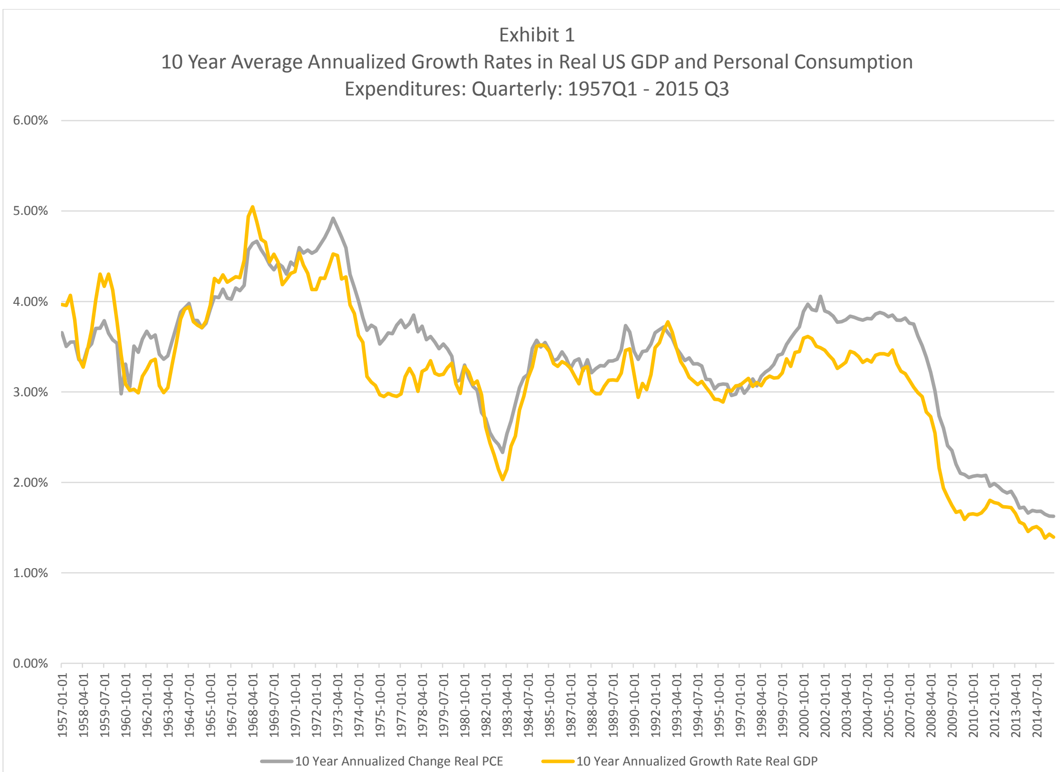


Exhibit 1
10 Year Average Annualized Growth Rates in Real US GDP and Personal Consumption Expenditures: Quarterly: 1957Q1 - 2015 Q3

Increasing consumer debt burdens will only serve to accentuate this downward trend. As consumers devote more of their income to making interest and principal payments on consumer and mortgage debt, less of that income will be available for consumption expenditures. This will put a significant drag on the ability of the U.S. economy to engage in sustainable long term recovery and growth. Indeed, the rising level of consumer indebtedness has most likely been a key factor in suppressing U.S. economic growth.

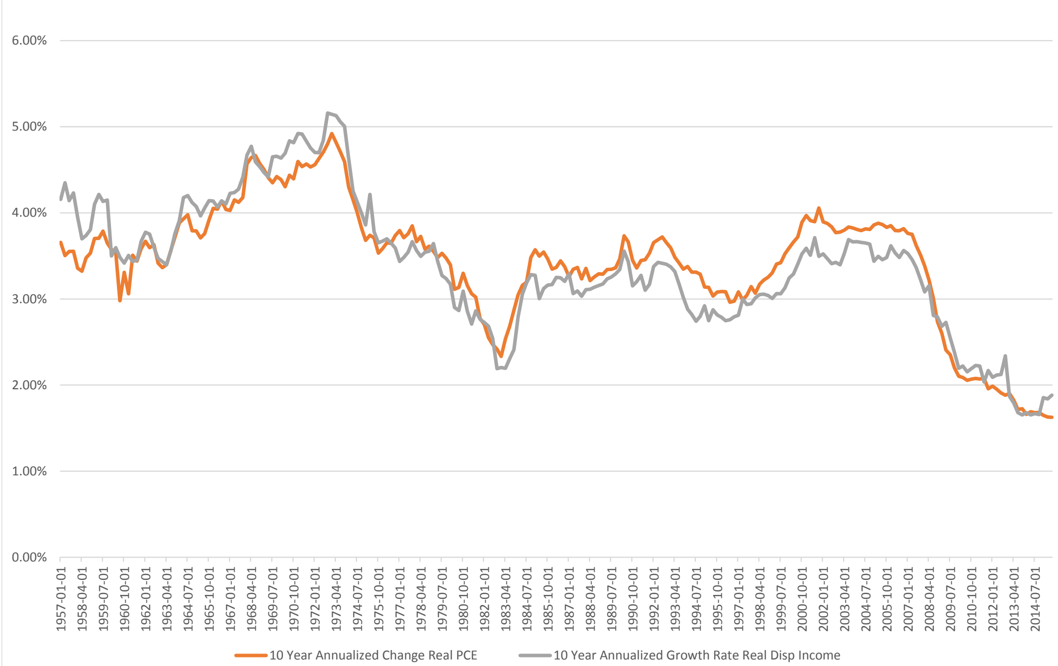
Jobs and Wages Growing yet Income Isn't Following?

The problem of rising indebtedness can be, at least to a degree, offset by healthy growth in wages and income. Many experts cite increasing employment and rising wage growth as positive signs for the U.S. economy. Long term income growth, however, has not followed, as job and wage growth have not been evenly distributed across all sectors of the economy. As can be seen in Exhibit 2, the ten year annual growth rates in real disposable income tracks with real GDP and real personal consumption expenditures (also shown). The rate for the past ten years is currently at 1.88%. It doesn't seem, therefore, that consumers will be able to earn their way out of indebtedness anytime soon.

A strengthening dollar has reduced the attractiveness of goods exported from the U.S. and at the same time made imported goods less expensive to American consumers. While the U.S. remains the world's largest exporter, its annual trade deficit persists, running at an annual rate of about $500 billion for this year. This deficit has persisted since the mid-1990's, reaching its deepest point in 2006. It was cut almost in half by 2009, but has deepened once again. The combination of a strong dollar and economic weakness on the part of some of our major trading partners, such as China and the E.U., indicates prospects for increased exports and a trade surplus are minimal at best.

Real private domestic investment has significantly slowed down since 2001, at which point the ten-year annualized growth rate reached its most recent high level of 7.23%. As can be seen in Exhibit 3 (shown with government spending, to be discussed further below), the ten-year annualized rate began to fall after 2001, bottoming out at negative 2.15% in the third quarter of 2009. It then showed signs of recovery through mid-2012, but has since slipped back down to a level of 0.73%.

Exhibit 2
Ten Year Annualized Growth Rate in Real U.S. Disposable Income and Real Personal Consumption Expenditures: Quarterly: 1957Q1-2015Q3



Will Investment Spending and Exports Create Growth?

Private domestic (business and real estate) investment is generally a strong indicator of potential economic growth. Business investment leads to job growth and rising output levels. Rising commercial and residential real estate investment can also create significant economic growth opportunities. Increasing export activity can also be a key to healthy economic growth for the U.S. economy. Unfortunately, these elements of the economy appear to be somewhat stagnant.

It is interesting to take note of the behavior of the ten-year annualized growth rate between the first quarter of 2006 and now. The rate had risen slightly in the two years before 2006, at which point it began to fall. The decrease accelerated through the recession and credit market collapse on the way to its low point in 2009Q3. From there, the rate appeared to recover through the third quarter of 2011, at which point it began to slow down once again. As can be seen in Exhibit 4, extending a line between the third quarter of 2007 and the third quarter of 2011 creates a more even trend line in the ten-year annualized growth rate in real private domestic investment. The sharp decline and recovery that took place during those four years appears to be an interruption in the trend, and it may be that a trend forming prior to 2007Q3 may be now continuing. Such a declining long term growth rate in real private domestic investment does not bode well for strong economic growth in the future.

Debt-Financed Government Spending is Unsustainable

The U.S. federal government has operated at a deficit for all but four years since 1969. Over that time period, the level of federal indebtedness has accumulated to almost $15 trillion. Adding state and local government debt puts the total at almost $19 trillion. The only way in which this debt can be reduced is for the government to begin running substantial surpluses, which would involve increasing tax revenues, reduced spending, or some combination of the two. The Congressional Budget Office, however, predicts deficits persisting well into the next decade.

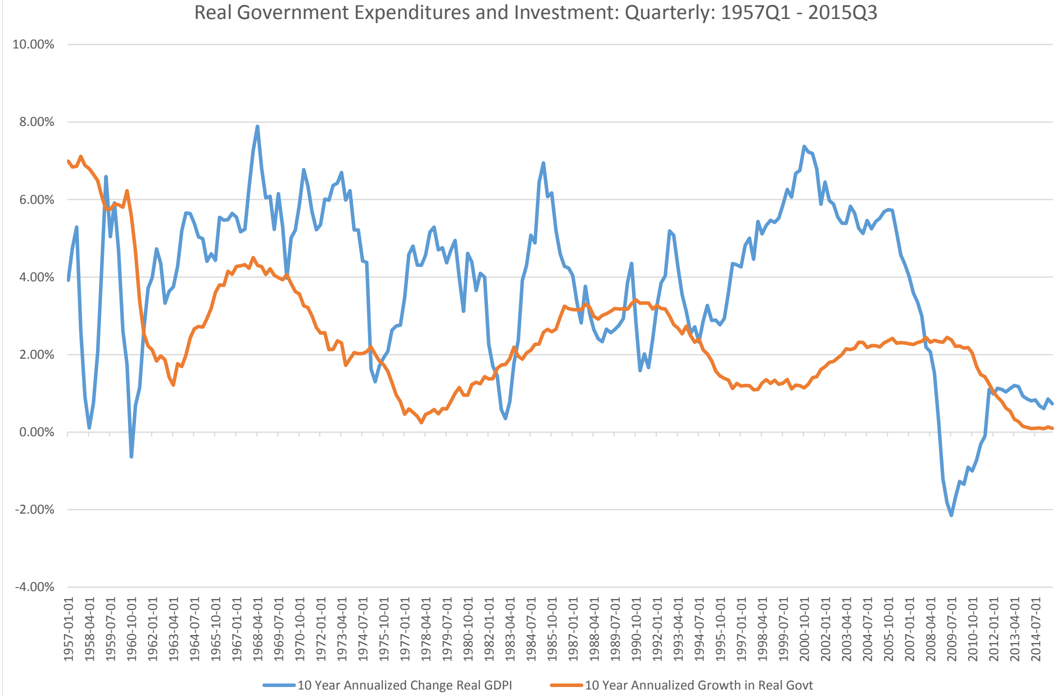


Exhibit 3
10 Year Average Annualized Growth Rates in Real US Gross Private Domestic Investment and Real Government Expenditures and Investment: Quarterly: 1957Q1 - 2015Q3

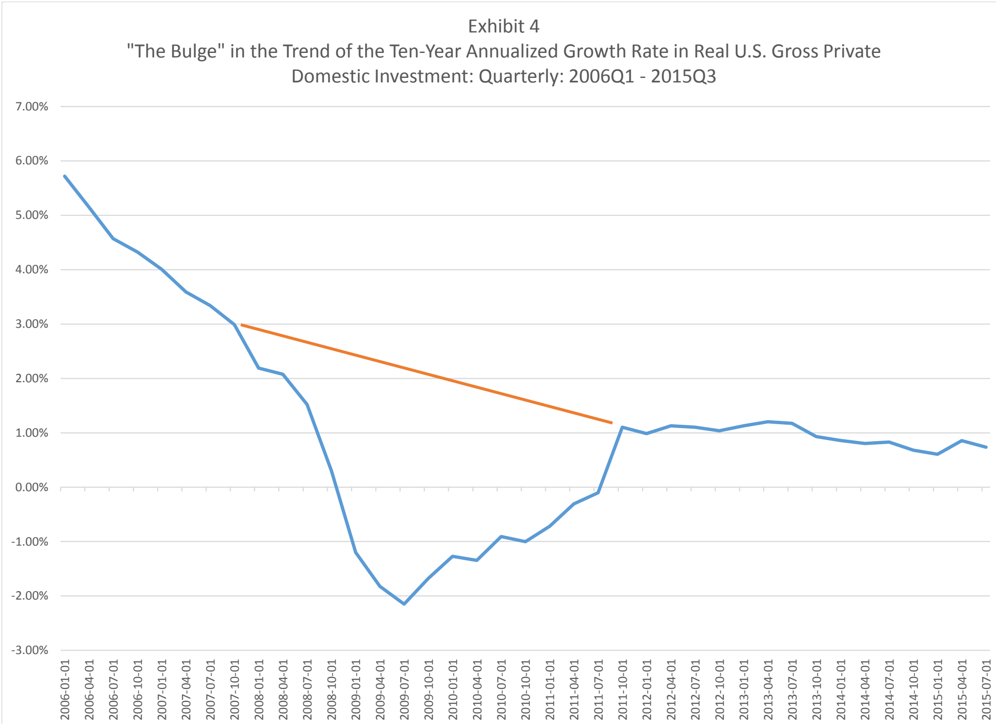
Growth in real government spending has slowed substantially in recent years. Referring back to Exhibit 3, the ten-year annualized growth rate has fallen to a mere 0.10%. Tax revenues will not grow without substantial growth in the economy. Increasing tax rates to compensate would slow things down, as would cuts in expenditures. At this point in time, neither are easy solutions to the problem of deficit-financed government spending.

The U.S. economy is feeling the downside of its reliance on government spending as an engine of economic output since the great depression of the 1930's. Simply put, that behavior is unsustainable. Persistent debt-financed government spending will eventually create a weight under which the economy will be unable to function. In spite of this reality, Congress continues to pass legislation that expands spending and authorizes even higher federal debt levels, and such news is barely on the economic radar screen. The next major debt crisis may very well occur at the government level. We have been seeing substantial problems at the state and local level for years (e.g., the state of Illinois is still operating without a budget, we had a bankruptcy in Detroit, etc.). There is little reason to believe that these situations will improve in the future.

Industry Consolidation Continues; Commodity Prices Languish

Consolidation due to overinvestment in major manufacturing and service industries has been occurring continuously since the 1980's. The recent announcement of the plan to merge the two largest chemical companies in the nation, Dow and DuPont, is yet another example of the consolidation of the entire U.S. economy. Job cuts related to this merger, should it be approved by the anti-trust regulators, will reach far into skilled labor pools such as those including research and development scientists. These types of jobs have been touted as the hope for the U.S. economic future, and now we are beginning to experience deep cuts in these sectors.

Two of the key factors pushing these companies to merge are stagnant commodity price levels and international overinvestment in the industry. Long term commodity prices have been driven by monetary expansion since the early 1970's. Slowing down the growth in the money supply may end up having a double-edged impact on commodity-based industrial performance. First, commodity prices may stabilize at current levels, and second, the stronger dollar will make offshore-produced commodities less expensive. We can already see the impact that this has had on activity in the oil industry, and we can expect similar experiences in the chemical industry in the near term and possibly longer term future.



While lower gasoline prices at the pump have always been touted as a benefit for American consumers, freeing up additional increments of income for spending in other areas, recent trends show this not to be materializing. As consumer debt levels continue to increase, more of those funds will be devoted to debt service, as opposed to other forms of consumer spending.

The Long Term Impacts of Income and Wealth Redistribution

Economic and other historians are sometimes amazed by the degree to which income and wealth has been redistributed within a stable republican democracy such as the United States over the past fifty years. Rising use of consumer debt has undoubtedly contributed to this redistribution. Consumers purchasing on credit are paying premia in the form of interest payments out of their future income. Over the long term, this has shifted income and wealth from the net borrower to the net lenders in the U.S. economy. It is not surprising, therefore, to see that such a shift in income and wealth demographics has taken place since the 1970's, when removal of the gold standard enabled virtually uninhibited money creation, which has funded the credit-driven behavior of consumers ever since.

The presence of a negative real interest rate on savings has made it virtually impossible for consumers to save their way into a higher standard of living. Wages have barely kept pace with inflation, and the accompanying need to service debt has and will continue to decrease the standard of living for many consumer/borrowers. This does not bode well for the future of the economy or American society. If the trend is not reversed, what we could expect to see is increasing division within our developing two-class society rather than healthy growth in middle class opportunities.

Concluding Thoughts

Both the U.S. and global economies are in trouble. The U.S. economy is being pressed by the burden of almost 50 years of uninhibited monetary expansion and debt-driven consumer and government spending. The availability of cheap debt has also accelerated the pace of consolidation in the U.S. and global economies. Without a major wave of innovation and economic growth, that current situation is unsustainable. It is questionable as to whether there is an adequate political, operating, and financial infrastructure in which such innovation and growth could occur.

The trend in consumer and government indebtedness needs to be reversed. In the absence of substantial economic innovation and growth, this could be very painful. When the defaults begin to occur, and they will, the key question will be how to handle the redistributive impact of those defaults—to wit: who will be the winners and losers in the massive debt restructuring that will need to take place. If we use the response to the credit crisis of 2008 as our benchmark example, consumer/taxpayers will undoubtedly not turn out to be the winners, and the long term economy will be locked into a new normal in which global society is divided into two distinct classes, and the benefits of any economic growth will not be evenly distributed.

About the author:

Steven C. Isberg is Associate Professor of Finance. He teaches graduate and undergraduate courses in corporate finance, financial analysis and valuation, and financial economic history. As Sr Research Fellow at the Credit Research Foundation he conducts various research studies and delivers online financial analysis courses as part of the CRF Online Classroom™ program. He has over 25 publications in academic and professional journals and has served as a professional business consultant to a variety of firms. He frequently appears or is quoted in television, radio, and print media on financial and economic issues.

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