



Outlook and Market Review – Third Quarter 2016

The U.S. economy continues to be characterized by low growth, low inflation, low interest rates and low unemployment, but the landscape is likely to change in 2017. The economy grew 3.2% in the third quarter of 2016 per the first revision from the Bureau of Economic Analysis. Third quarter growth was larger than expected and well beyond growth rates in the prior three quarters. Nevertheless, the economy grew only 1.57% on a year-ago basis. The Fed is almost certain to begin a series of incremental increases in the Fed fund rates, pushing the short-term end of the yield curve up. Long-term rates are also rising as funds flow from bonds to stocks in expectation of regulatory, tax, and fiscal policy changes with the Trump administration. Inflation remains below the Fed's 2% target for the Personal Consumption Expenditure (PCE) core index. On a year-over-year basis ending in October, the core PCE increased only 1.74%. Headline PCE inflation, which includes food and energy prices, increased only 1.41% over the same period.

While the economy looks weak based on GDP growth and inflation data, labor market data provide a slightly different picture with a 4.6% U-3 unemployment rate and monthly job growth averaging 178,000 over the past three months. Wages are slowly improving, but not to the extent that would be expected for such a low unemployment rate. Capacity utilization rates in production and manufacturing are well below the 81% rate normally associated with full employment. The 62.7% labor force participation rate, which is the lowest since the late 1970s, helps explain why the unemployment rate is so low in a weak economy. Over 90 million Americans are in the eligible workforce population (over 16 years old), but without jobs. Many of the 90 million are represented by the baby boom generation who are phasing out of active employment or are in the 16 to 22-year-old segment that is in school. Even so, fewer Americans are working and paying taxes in relation to the total population, creating an added squeeze on the relationship between public tax revenues and expenses.

The dollar remains strong with recent upward movement. Oil prices are expected to rise slightly as OPEC is working on production limits, but demand remains insufficient to spur rapidly rising prices. Global economic growth remains sluggish. China is slowly transitioning from export driven growth to more of a domestic economy focus. Reforms in India will take time to show economic improvement and the euro area is bogged down in a slow economic recovery that is hampered by political unification elections. Japan and most of the rest of the world continue to rely on easy money initiatives to promote growth, but the effectiveness of this approach is becoming more doubtful. The U.S. will be on a different path with monetary contraction and an emphasis on tax, regulation, and fiscal spending initiatives to spur growth. Key questions that will need to be answered include whether the political system will support a pro-growth agenda sufficiently and if global relations will be developed in ways that support such growth.



Post-election Market Response

Financial markets prefer predictability. An expected Hillary Clinton presidential victory represented the “no change” scenario that had been priced in financial markets prior to the election. As election night progressed it became more likely that the expected “no change” scenario could be replaced with new and less certain directions for government policies. As the path to victory for Trump became clear, financial markets tanked worldwide. Much like the unexpected Brexit vote, markets recovered quickly as new information was analyzed and valued.

Targeted Fiscal Policy – A New Approach

Equity, dollar, and bond markets are now fixated on what may be a significant shift in U.S. government policies. Markets have already priced the likelihood of Federal Reserve moves to raise the Federal Funds rate in December, followed by a series of increases in 2017. After a decade of easy money and Treasury bond yields that are currently a full 300 basis points below the long run average, expectations for Fed tightening in 2017 were likely to be the same no matter which candidate won the presidency. But, significant changes in regulation, government spending targeting real asset construction, and lower taxes targeted to stimulate growth are likely with Trump’s administration. These policies have a potential for stimulating higher growth, higher inflation, and higher interest rates.

Infrastructure Investment – Pay now or Pay Later

U. S. fiscal policy has been expansionary to the tune of a national debt in excess of 19 trillion. Over half that amount was added in just the past eight years with only modest growth to show for it. Higher fiscal deficits and additional national debt would not represent good news to financial markets unless the spending generates much stronger GDP growth. This is a key point that may work in favor of new stimulation since proposed investment in infrastructure is long overdue and will be necessary at some point in any event. Better yet, such government spending is not a permanent expansion of government bureaucracy with new programs. President-elect Trump will likely give a high priority to an infrastructure investment bill in his first 100 days in office. New investment will likely be framed as “deferred maintenance” that cannot be ignored much longer.

Interest Rates Are Moving – Is this a Blip or Trend?

Long term interest rates are moving upward. The question is whether higher long term rates are temporary or the start of a trend. The answer depends on whether new policies generate sufficient investment to both complement and supplement consumer spending and aggregate demand. Higher aggregate demand is necessary to restore more normal real rates, inflation, and growth. In the near term, Trump’s election, along with Republican control of congress, makes it likely that there will be tax cuts, increased spending on infrastructure, less regulation on small business, and new pro-growth initiatives. Growth in real assets and aggregate demand leading to expectations of higher inflation and growth encourages selling bonds (driving prices down and yields up) and buying stocks. The Congressional Budget Office recently projected that the interest rate on ten-



year Treasury securities would increase to 2.4% in the third quarter of 2017, 2.5% in the fourth quarter of 2017, and continue to gradually reach 3.6% by 2022. More recent market reactions suggest that the CBO estimates are low. Even so, a 3.6% rate is well below the long run average rate on the ten-year bond (about 5.5%), leaving plenty of room for higher rates while keeping a relatively low interest rate environment for investment.

Fiscal spending on real assets at a time when financing costs are low could offer a window for spurring growth if government spending is targeted to building real assets that promote growth. History shows that spending on projects that are not “shovel ready” with little tangible capital creation adds to the debt without much economic stimulation. Ultimately, long-term improvement hinges on business investment and job creation linked to creation of real assets and aggregate demand. Corporations are flush with cash both in domestic and foreign holdings that can be directed to investment once demand picks up and the investment environment improves. Sustained improvement in equity markets requires confidence in a long-term plan offering stability with fewer impediments to small business creation, stability in regulatory policies, and creation of competitive business conditions in the U.S. relative to other countries. All of this is not without controversy and it is not yet clear whether the political environment will allow the pro-growth agenda to take place.

The Changing Economy

Figure 1. below illustrates the long run pattern of adjustment for the inventory-to-sales ratio in the U.S. Prior to the 2009 recession, the ratio exhibited a steady declining pattern as “just in time” inventory management practices minimized unproductive investment in inventories. Even as cost-reducing practices became more common in the wake of the 2009 recession, there is now a steady trend of rising inventories relative to sales.

Figure 1. Long Run History of the Inventory to Sales Ratio



Prior to 2009, firms emphasized efficiency and new inventory management techniques that economized on the investment in inventories needed to support sales. The reversal in the ratio is difficult to understand since efficient inventory management techniques are well known by now. There are two competing explanations for why the inventory-to-sales ratio has been rising since the recession. On the pessimistic side, a rising inventory-to-sales ratio is observed when firms



stockpile unsold goods because sales fail to meet projections, eventually leading to cutbacks in orders and production. This view suggests that a rising ratio signals a pending economic slowdown on the back of slower sales and lower inventory investment. Firms scramble to sell off excess inventory at lower prices until the inventory-to-sales ratio reverts to more efficient and sustainable levels. This correction is normally linked to business cycles with four to five-year intervals. It is becoming more likely that traditional business cycle explanations are not relevant to the changing U.S. economy and the inventory-to-sales ratio.

A new and more optimistic explanation for the rising inventory-to-sales ratio builds on a changing business model for e-commerce. Higher inventories-to-sales could be linked to expectations of higher sales in the future, along with the need to have sufficient supplies to meet orders quickly. Inventory accumulation could be based on a view that consumer spending will improve due to lower energy prices, higher wages, and more upbeat consumer sentiment. In this case the inventory buildup will precede sales and the ratio rises. E-commerce trends could also support higher inventory-to-sales ratios as more goods must be kept on hand for online orders to allow more choice and to offer alternative choices if a given product is out of stock. E-commerce also tends to offer short delivery times, making it important to have goods on hand in warehouses for shipment. Amazon is a good example of the new e-commerce model based on low prices, low delivery costs, wide variety, short waiting times, and higher inventory.

The changing economy poses a new challenge for business investment. Delivery of goods through brick and mortar shopping malls and outlets is likely to be transformed with technology and new delivery systems that require less labor. Creation of new manufacturing jobs would be welcomed but may be difficult to achieve. U.S. manufacturing growth requires new technological advantages that make U.S. labor much more productive to bring the ratio of marginal productivity to wages in line with foreign manufacturing. Short run protection of U.S. manufacturing is likely but either superior quality or more competitive “real wages” must ultimately be brought into play to spur more U.S. manufacturing; this will not be easy.

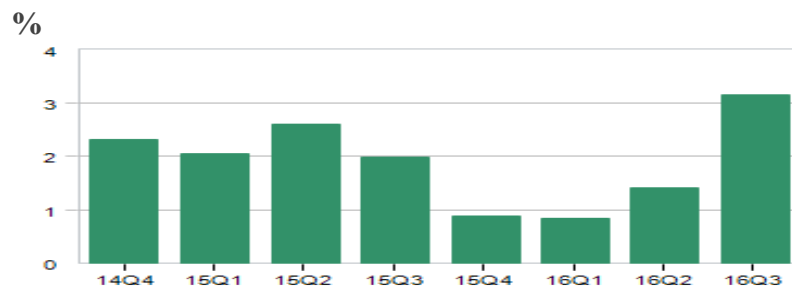


Summary of Recent Economic Data

Gross Domestic Product – Third-quarter GDP growth was revised to 3.2% from 2.9%. Growth in the prior three quarters was only 1.4%, 0.8%, and 0.9%. Even though third-quarter growth was the highest in two years, the economy is not likely to exceed 2% on the year. Consumer spending and net exports were the key drivers of third-quarter growth.

- The revised annual real GDP growth rate was 3.2% in the third quarter of 2016, according to the Bureau of Economic Analysis. While third-quarter growth was the best in two years, it follows three quarters of dismal growth. Annual GDP growth for 2016 is likely to be in the low 2% ballpark. The figure below illustrates the annualized real GDP growth rates by quarter since the fourth quarter of 2014.

Figure 2. Annualized Real GDP (IV Quarter 2014 through III Quarter 2016)



Source: Bureau of Economic Analysis

- Table 1. below shows growth in the components of GDP over the past seven quarters. Growth in consumer spending continues to be the key driver of GDP, but gains from consumption slowed in the third quarter compared to the second quarter. Net exports and inventories provided surprisingly large contributions to growth in the third quarter while fixed investment, especially residential investment, was a drag. Government spending growth remains modest, reflecting the sequestration constraints.

Table 1. Gross Domestic Product and Components (% Annual Growth Rates)

| | III Q 2016 | II Q 2016 | I Q 2016 | IV Q 2015 | III Q 2015 | II Q 2015 | I Q 2015 |
|-------------------------|---------------|--------------|-------------|--------------|---------------|--------------|-------------|
| Real GDP Growth | 3.2 | 1.41 | 0.83 | 0.87 | 1.99 | 2.61 | 2.05 |
| Implicit Price Deflator | 1.38 | 2.29 | 0.46 | 0.91 | 1.22 | 2.25 | 0.04 |
| Consumption | 1.89 | 2.88 | 1.11 | 1.53 | 1.81 | 1.94 | 1.63 |
| Fixed Investment | -0.15 | -0.18 | -0.15 | -0.03 | 0.92 | 0.70 | 0.61 |
| Residential | -0.17 | -0.31 | 0.29 | 0.40 | 0.43 | 0.49 | 0.43 |
| Nonresidential | 0.02 | 0.12 | -0.44 | -0.43 | 0.49 | 0.21 | 0.18 |
| Inventories | 0.49 | 0.18 | 0.01 | -0.45 | -0.52 | -0.08 | -1.65 |
| Net Exports | 0.87 | 0.18 | 0.01 | -0.45 | -0.52 | -0.08 | -1.65 |
| Government | 0.05 | -0.30 | 0.28 | 0.18 | 0.34 | 0.57 | 0.45 |

Bureau of Economic Analysis (First Revision)



Production, Manufacturing and Sales – Sales were strong going into the fourth quarter with prospects for a good holiday season. The trend of stronger, non-manufacturing than manufacturing, data continue with production lingering below its pre-recession level. Capacity utilization remains well below full employment levels.

- The ISM non-manufacturing index rose to 57.2 in November from 54.8 in October. The six-month average is 55.4. The business activity index eased above 60 while the employment component rose from 53.1 to 58.2. An index above 50 suggests expansion.
- The ISM manufacturing index increased from 51.9 in October to 53.2 in November. Overall, manufacturing should improve as energy prices stabilize and domestic demand improves. The key drag on manufacturing going forward is the strong dollar that holds back exports.
- Industrial production was unchanged in October from September, and September's growth in production was revised downward from 0.1% to -0.2%. Production has nearly plateaued in the last two years and remains about 4% below its pre-recession peak.
- Utilities were the main source of weakness in the production numbers, largely due to warmer than normal weather. Table 2. below shows the monthly annual percent change in industrial production along with the manufacturing, mining, and utility components.

Table 2. Monthly Percentage Change in Production

| | Oct. '16 | Sept. '16 | Aug. '16 | July '16 | June '16 | May '16 |
|-----------------------|----------|-----------|----------|----------|----------|---------|
| Industrial Production | 0.0 | -0.2 | -0.1 | 0.3 | 0.5 | -0.1 |
| Manufacturing | 0.2 | 0.2 | -0.5 | 0.3 | 0.3 | -0.2 |
| Mining | 2.1 | -0.4 | 0.0 | 0.7 | -0.1 | 0.8 |
| Utilities | -2.6 | -3.0 | 2.8 | 0.3 | 2.9 | -0.5 |

Source: *Federal Reserve*

- Manufacturing data are more upbeat with 0.2% gains in the last two months. The strongest manufacturing segment is motor vehicles and parts production, which rose 0.9% in October and 0.3% in September. The segment is now 18% above its post-recession peak. In contrast, non-auto manufacturing production is nearly 8% below its pre-recession peak.
- Capacity utilization data show slack in both production and manufacturing. Table 3. shows the monthly capacity utilization rates over the last six months. Full employment in the production and manufacturing sectors generally occur when the ratios are over 81%.

Table 3. Capacity Utilization Rates (Production and Manufacturing)

| | Oct. '16 | Sept. '16 | Aug. '16 | July '16 | June '16 | May '16 |
|--|----------|-----------|----------|----------|----------|---------|
| Production Capacity Utilization (%) | 75.3 | 75.4 | 75.6 | 75.7 | 75.4 | 75.1 |
| Manufacturing Capacity Utilization (%) | 74.9 | 74.8 | 74.7 | 75.2 | 75.0 | 74.8 |

Source: *Federal Reserve (FRED)*

(Red represents a decline in utilization)



- New orders for durable goods rose 4.8% in October, while durable goods inventories remained flat. The inventory-to-sales ratio for durable goods has been 1.6 since June.
- Capital goods orders grew 0.4% in October and capital goods shipments rose 0.2%. Orders for aircraft expanded to 94.1%, but this segment is highly volatile. Defense orders fell 3.7%.
- Retail inventories declined 0.4% in October. On a year-ago basis total retail inventories increased 3.2% in October.
- On a year-ago basis, wholesale inventories were down 0.5% in October. Durable goods inventories fell 1.9% on a year-ago basis while nondurable goods rose 1.6%.
- Consumer spending, reflected by retail sales, gained strength in September and October. Sales rose 0.8% in October following a revised 1% gain in September. Table 4. below summarizes sales data over the last six months.

Table 4. Annual Percentage Change in Retail Sales

| | Oct. '16 | Sept. '16 | Aug. '16 | July '16 | June '16 | May '16 |
|-------------------------------------|----------|-----------|----------|----------|----------|---------|
| Retail and Food (% Change) | 0.8 | 1.0 | 0.0 | 0.1 | 0.7 | 0.2 |
| Retail and Food (Year Ago % Change) | 4.3 | 3.2 | 2.2 | 2.4 | 2.8 | 2.2 |

- Auto dealers and gas stations were the top sales segments. Excluding auto dealers and gas stations, core sales were up 0.6% in October following a 0.5% increase in September. On a year-ago basis in October, sales were up 4.3%, which is the strongest increase since 2014.
- The inventory-to-sales ratio has been slowly rising to a level of 1.38 in September 2016 from 1.25 in 2012. Excessive inventory normally presents a drag on subsequent monthly production and growth data.

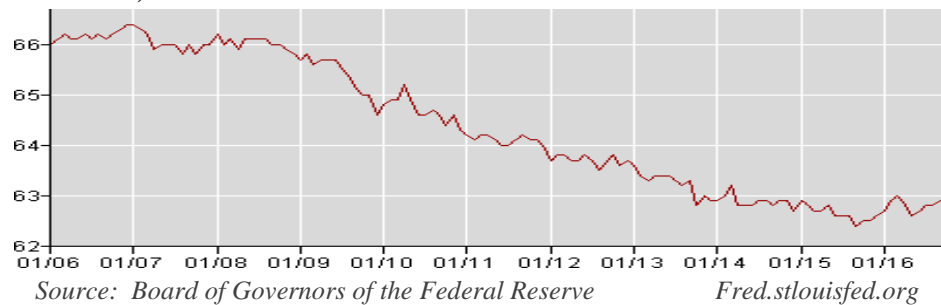
Unemployment and Labor – The U-3 unemployment rate fell to 4.6%. Job creation remains strong with approximately 6.7 million more jobs than at the start of 2008. Nevertheless, the labor force participation rate remains 3% lower than at the beginning of the recession. Real wage gains, a signal of a tight labor market, have been modest.

- The U-3 unemployment rate declined to 4.6% and nonfarm payrolls rose 178,000 in November. Job growth averaged 176,000 over the past three months, while average hours worked increased at a 2.7% annualized rate. The U-6 unemployment rate declined to 9.3%.
- Manufacturing payrolls fell 4,000 in November. The factory sector continues to be weighed down by a strong dollar and sluggish growth abroad.



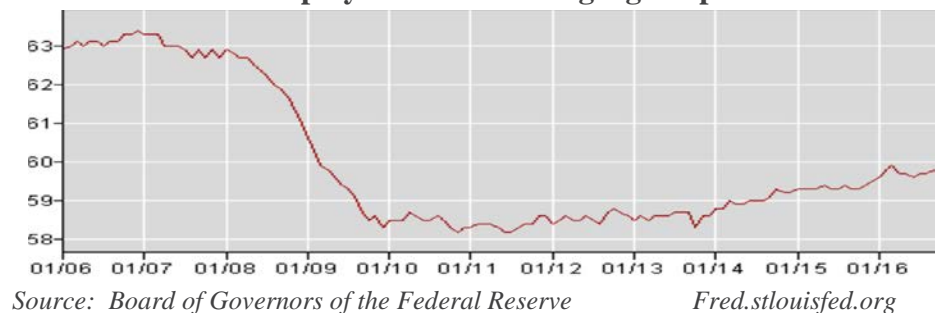
- The Federal Reserve's Labor Market Conditions Index, a broad measure based on 19 components, improved 1.5 points in November and 1.4 points in October. An index above 0.0 signals an improving labor market.
- The U.S. labor force participation rate fell to 62.7% in September, which is the lowest since the late 1970s “malaise.” The figure below shows the labor force participation rate over the past decade. The unemployment rate would be significantly higher if the labor force participation rate were near its pre-recession level of 66%.

Figure 3. Labor Force Participation Rate (Employed and Active Unemployed to Labor Force)



- Changes in U.S. demographics and structural unemployment due to the prolonged slump in the labor market have both lowered the labor force participation rate. Members of the baby boom generation are included in the working age population but are now retiring. Structural unemployment due to “drop outs” is increasing as many workers are frustrated from long and unsuccessful job searches. The figure below illustrates the trend of a decreasing ratio of employed workers to the working age population since the recession.

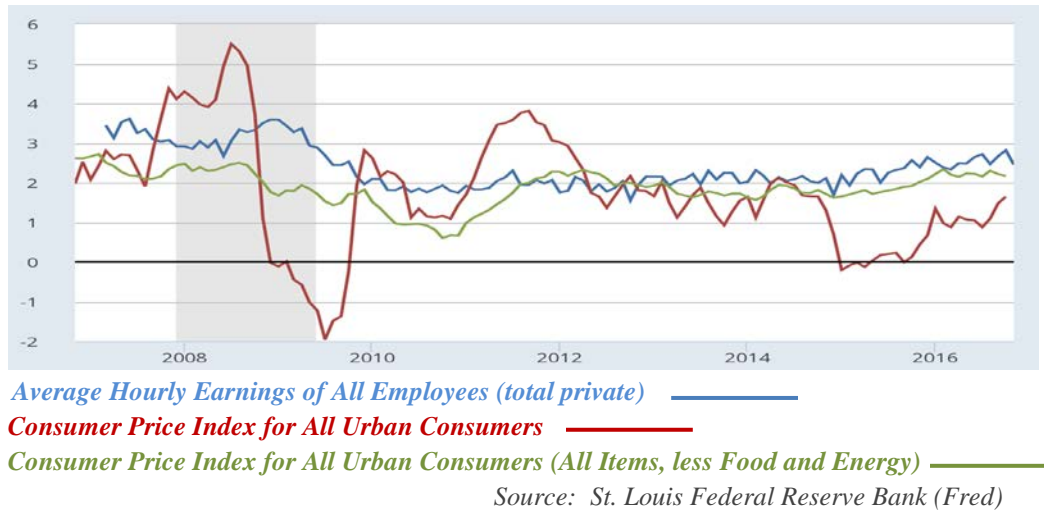
Figure 4. Ratio of U.S. Employment to Working Age Population



- Aggregate hours worked are up a healthy 2.7% annualized rate over the past three months. Average hourly earnings fell 0.1% in November, but over the past year earnings were up 2.5%. Real wage gains, nominal wages minus inflation, were modest but positive. The figure below illustrates the relationship between average hourly earnings and both the all items CPI and the core CPI inflation rates. Wages tend to track core inflation with a modest, positive real wage growth (distance between the blue and green lines). Real wage growth has been modest since the end of 2012.



Figure 5. Average Hourly Wage Growth and Inflation (Year-ago Percentage Change)
%



- Despite positive revisions to wages and salaries in the past two quarters, growth is weak from a historical perspective. Year-over-year growth in nominal wage income is tracking at about 4.3%, relative to its historical average of 6.3%, and it has struggled to string together more than a handful of months above 5% since the recession, unlike other recoveries.
- Unit labor costs will rise as higher real wages and slower labor productivity gains occur in tight labor markets. The wage component of the employment cost index is growing at more than 2% after hovering at least 0.5% lower since 2010; such a development should introduce the first inflation pressures since the recession as businesses will either accept lower profit margins or increase prices. The inflation scenario need not occur if the economy can pick up the pace of growth with more capital expenditure and productivity.
- Productivity growth in October broke a streak of three consecutive declines. Nevertheless, the trend of productivity growth remains poor. Table 5. illustrates the quarterly productivity, wage and unit labor cost change.

Table 5. Nonfarm Business Productivity (Annual Percentage Change)

| Annual % Change | III Q 2016 | II Q 2016 | I Q 2016 | IV Q 2015 | III Q 2015 | II Q 2015 |
|-----------------------|------------|-----------|----------|-----------|------------|-----------|
| Output per Hour | 3.1 | -0.2 | -0.6 | -2.4 | 2.0 | 1.2 |
| Compensation per Hour | 3.8 | 6.1 | -0.9 | 3.1 | 2.9 | 4.8 |
| Unit Labor Costs | 0.7 | 6.3 | -0.3 | 5.5 | 0.9 | 3.6 |

Source: Bureau of Labor Statistics

- Weak formation of new businesses, regulation, and an aging population all depress productivity growth while raising unit labor costs, making U.S. firms less globally competitive. Expansionary monetary policy can't directly influence productivity, but lawmakers, businesses, and individuals can. Recently the Fed has given subtle hints that effective fiscal

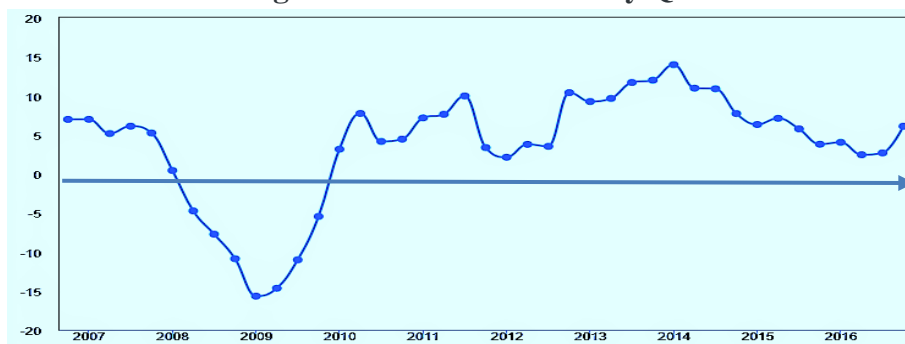


and regulatory policies could boost productivity, signaling approval of infrastructure investment plans.

Consumption and Savings – Consumer spending has been the key driver of GDP growth, but much of that spending has been supported by increased wealth rather than income. The saving rate has been stable at 5.7%.

- Disposable personal income increased 3.6% in the third quarter, compared with an increase of 4.1% in the second. Real disposable personal income increased 2.2% in the third quarter compared with a 2.1% increase in the second quarter.
- The personal saving rate, personal saving as a percent of disposable personal income, held steady at 5.7%.
- Household wealth grew more rapidly in the third quarter than in the prior two quarters and should be providing modest support to consumer spending. Wealth increased \$1.6 trillion to \$90.2 trillion, following an upwardly revised \$840 billion gain in the second quarter. Year-over-year growth accelerated to 6.1%, the strongest gain in a year and a half. Housing wealth continued to rise steadily, as did growth in components of wealth tied to the stock market. Household liability growth is accelerating modestly.

Figure 6. Percent Change in Household Wealth by Quarter



Source: Federal Reserve

Inflation – Inflation remains below the Fed’s 2% target. The core PCE, the key measure followed by the Fed, increased 1.74% on a year-over-year basis. Other measures were consistent with the PCE data. Going forward, expectations are firming around higher inflation from anticipated fiscal stimulus in 2017 to rebuild the U.S. infrastructure.

- The BEA’s headline PCE price index rose 0.24% month-over-month in October with a 1.41% year-over-year increase. The Core PCE index (less Food and Energy) increased 0.11% month-



over-month and 1.74% year-over-year. Inflation remains well below the Fed's 2% target but prospects for increased government spending in 2017 and tight labor markets may well lead to higher inflation going forward.

- Figure 7. below provides a 16-year history of inflation measured by the PCE Headline and the less volatile PCE Core measures. The green line is the 2% long-run average rate of inflation over the past fifteen years, which also happens to be the Fed's targeted rate. As noted in previous Outlooks, the economy has been in a deflationary period with core inflation below the 2% target since the 2008-2009 recession.

Figure 7. Long Run Time Series of PCE Headline and Core Inflation



Source: Bureau of Labor Statistics

- The Consumer Price Index increased in October as energy prices rebounded. On a year-ago basis, headline CPI climbed 1.6% and core CPI, which excludes food and energy, rose 2.2%. On a seasonally-adjusted basis, the Consumer Price Index for All Urban Consumers increased 0.4% in October after rising 0.3% in September. The index for all items less food and energy rose 0.1 in October, the same increase as in September.
- The GDP deflator was only 1.38% in the third quarter, consistent with other measures signaling low inflation.
- Producer prices were unchanged in October after increasing by 0.3% in September. Rising gasoline prices contributed to an increase in goods prices. Year-over-year growth in the core PPI, which excludes food and energy, also accelerated. On a year-ago basis, the PPI was up 0.9% in October, its strongest gain since December 2014.
- The continued rise in the ECRI Future Inflation Gauge suggests that inflation will pick up in 2017. The gauge is up by 11.1% on a year-ago basis and moved upward by 0.4 point to 113.8 in October. The index has a mean lead of 11 months, making the sharp increase over the past year suggestive of a near-term rise in inflation. Core services remain the major contributor to inflation, although energy is beginning to play a larger role. Rising energy prices have led to

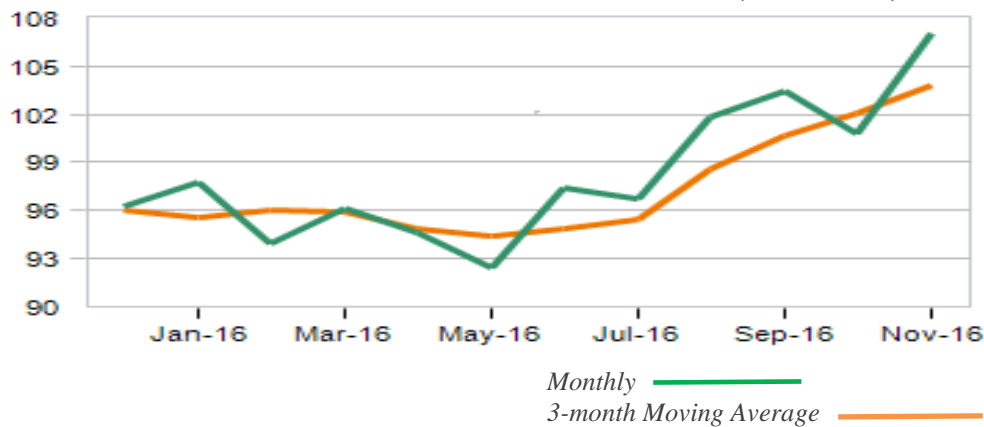


the fastest increase in headline CPI since April and the largest year-over-year increase in the PPI since December 2014.

Sentiment and Confidence – The Conference Board’s consumer confidence index has gained momentum since mid-year and the University of Michigan’s consumer Sentiment Index rebounded sharply in November.

- The Conference Board Consumer Confidence Index increased sharply in November to 107.1 from October’s 100.8. The index has been trending upward since May. Higher income expectations played a key role in boosting confidence. The November index is the highest since July 2007. Consumer’s views of the present economic situation and their economic expectations improved while the present conditions component reached the highest post-recession level.

Figure 8. Conference Board’s Consumer Confidence Index (1985 = 100)



- The University of Michigan’s consumer sentiment index increased to 93.8 in November following 87.2 in October. Consumer expectations and assessment of present conditions both improved. Improved consumer confidence does not always signal higher consumer spending in the short run but a continued trend would suggest stronger consumer demand into 2017. Some of the short-term sentiment improvement may simply be due to relief that the election is over. Improvement will need to carry over into the first part of 2017 to support real spending decisions.
- While the Conference Board Confidence Index has been trending upward, the University of Michigan sentiment index is now only slightly above the midpoint of the range seen since early 2015. The November survey does suggest that the election has not had a negative effect on sentiment. This is encouraging since the surprising outcome of the election could have upset the fragile economic recovery by adversely affecting sentiment. The figure below illustrates the movement of the University of Michigan sentiment index since the start of the year.



Figure 9. University of Michigan Consumer Sentiment Index (1966 = 100) Index



- The Conference Board's Index of Leading Economic Indicator increased but slowed from prior months. The diffusion index rose to 60% from 50% in September, indicating that the increase was more broad-based in October. The index movement suggests that the economy will expand in 2017.

Housing – Prices in the U.S. housing market continue to grow at a steady pace. As the economy moves toward full employment, it is likely that faster average hourly earnings growth and stronger household balance sheets will keep the housing market moving. While interest rates are likely to rise, the level of borrowing rates remains relatively low.

- The CoreLogic Home Price Index climbed 6.7% on a year-over-year basis in October. The sustained upward trend over the past 57 months leaves home prices only 4.7% below April 2006 values.
- The Black Knight Home Price Index rose 5.4% in September on a year-ago basis. September's gain pushed the national aggregate index to \$266,100, just 0.6% below its June 2006 peak and up more than 33% from its trough in January 2012.
- The S&P/Case-Shiller home price index increased in the three months ending in September. The 20-city composite index grew 5.1% over the year moving from August to September and the national home price index rose 5.5%. Growth in the 10-city composite index also picked up to 4.3% over the year ending in September.
- Although the level remains relatively low, the third quarter recorded a slight uptick in homeownership. Stronger house price gains should induce greater residential construction needed to overcome capacity constraints.



***Balance of Trade** – The balance of trade continues its chronic deficit position, but increased exports helped boost the GDP growth rate in the third quarter. Potential new trade deals and cancellations of old deals may tilt the trade balance in one direction of the other. Some concerns about potential tariffs and protectionism may lead to trade disruptions but these adjustments remain to be seen.*

- The U.S. trade deficit widened to \$42.6 billion in October, a significant increase from the previous month and slightly ahead of our above-consensus forecast. Record soybean exports had pushed down the trade deficit over the previous three months, but that trend is quickly unwinding. Although agricultural exports remained slightly elevated, nonagricultural exports were generally weak.
- Goods imports were also unusually high in October, hitting their highest level in just more than a year. Although trade added significantly to third-quarter GDP growth, it will likely be a weight this quarter.

***Global Issues** – The global economy has limped through six years of stagnation and 2016 was not the year of a turnaround. A transition may begin in 2017 if the U.S. rebounds, but there remains a lot of uncertainty. Energy and commodity prices need to stabilize, but weak investment and labor supply must improve. Ongoing political and economic uncertainties will not be resolved easily. A key drag on global recovery is the “wait and see” attitude of both governments and corporations in creating real assets linked to high debt overhang. The IMF lowered its global growth forecast for 2016 to 3.1%.*

- The OECD recently revised global growth upward based on prospects for a U.S. expansion from tax cuts, public spending, and growth focus. In its twice-yearly Economic Outlook, the Organization for Economic Cooperation and Development estimated global growth would accelerate from 2.9% this year to 3.3% in 2017 and reach 3.6% in 2018.
- **China-** The OECD recently increased growth projections in China to 6.7% in 2016 and 6.4% in 2017. China’s economy is slowly going through a transition to increase the country’s domestic consumption and reduce dependence on exports. This balance was distorted by a pro-growth stimulus to promote investment and exports to avoid fallout from the global financial crisis in 2009. Still, the economy is comfortably on track to achieve the government’s annual growth target of between 6.5% and 7.0%.

China’s managed economy achieves surpluses in both the current and the capital accounts that put upward pressure on the yuan. To promote pro-growth, the Central Bank of China has used



sterilization and a “managed float” to keep the yuan value low and boost exports. As the pro-growth policies are slowly relaxed, the yuan will appreciate and surpluses in trade will likely decline. This appears to be underway as China’s current account surplus is narrowing.

As the construction boom fades in China, fewer natural resources are demanded. This has pulled down global prices for base metals, energy products, as well as other resources.

- **Japan** – Weak economic performance persists in Japan. OECD analysts believe strong demand from the U.S. will offset weak trade with Asia. Growth was revised up to 0.8% for 2016 from prior 0.6% estimates. Growth is expected to be 1.0% in 2017 compared to a 0.7% estimate in September.
- **Britain** - The OECD outlook for Britain improved from September and the initial aftermath of the Brexit vote. Optimism is largely linked to central bank initiatives designed to ease the economic impact of the country's decision to leave the European Union. Britain's economy is expected to achieve 2.0% growth this year, revised upward from 1.8%. A lower 1% growth rate is projected for 2017. Uncertainty surrounds the Brexit issue after the UK’s High Court ruled that the government needs parliamentary approval to negotiate with the European Union.
- **Euro** – The European Central Bank extended its quantitative easing program by nine months at its 8 December meeting. Easing will continue as inflation remains below 1% and growth remains very low with fragile momentum. Growth is expected to be 1.7% for the euro-area for 2016 and 1.6% growth in 2017. Both estimates are higher than the September forecasts. The third-quarter GDP growth for the euro-area remained steady at 0.3% and was unchanged from the second quarter. The euro-area's outlook is improving despite uncertainties about Britain's future relationship with the continent and a host of political elections. In 2017, general elections are scheduled in France, Germany and the Netherlands, with anti-establishment parties threatening to unseat mainstream leaders. Brexit negotiations will probably raise uncertainties and test strength of the Eurozone’s recovery. Within the euro-area, France’s economy picked up, Italy’s economy gained momentum, and Greece’s growth surged in the third quarter. Germany’s growth fell as exports fell and Belgium lost momentum. Spain’s GDP expansion also lost pace, although the country remains among the top performers in the Eurozone.
- **Italy** –Italy’s prime minister resigned on December 7th after voters rejected his proposals to overhaul the constitution. The election also derails a planned, private-sector recapitalization of the country’s third largest bank, Monte dei Paschi. The bank failed stress tests and has a long history of bail-outs. It is now under a mandate to provide more capital. Even with political turmoil and a bank crisis the OECD expect Italy to maintain slow growth of 0.8% for 2016 and 0.8% again in 2017.



- **Germany** – Germany’s economy slowed in the third quarter more abruptly than analysts had expected. GDP growth averaged 0.2% from the previous quarter, below the 0.4% registered in Q2. Estimated growth for all of 2016 is 1.8% and 1.4% for 2017.
- **France** – In the third quarter the French economy recovered from the second quarter contraction, but growth for 2016 will likely be 1.3%, below official expectations.
- **Spain** - The preliminary estimate for third-quarter growth is 0.7%, which is just below second-quarter growth of 0.8%. Growth estimates for 2017 are 2.2%.
- **Emerging Markets** – The disaster that many analysts feared for emerging markets in 2016 did not materialize as commodity prices improved and the dollar stabilized. China is performing better than expected and both Brazil and Russia are gaining ground. As a whole, analysts see emerging economies growing 3.9% for 2016, after expanding 4.0% in 2015.
- **Latin America** – The region is likely to contract 0.6% in 2016, but a stronger 1.9% growth is expected in 2017. Argentina and Brazil will help boost growth in the region as they recover from recession. The improvement is linked to expectations of improved trade relations. Inflation appears to be moderating in many regions and structural reforms to boost productivity may take hold. There are risk factors that cast a shadow on the outlook for Latin America to include tighter U.S. monetary policy that restricts capital flows, a soft U.S. expansion, and potential spillover effects from Brexit.
- **India** – Ongoing reforms in India will help boost growth in the region overall. The East and South Asia region is expected to expand at a 6% rate in 2017.
- **Middle East and North Africa (MENA)** – The biggest issue for this part of the world is the tentative OPEC agreement to cut oil production. Higher oil prices would likely accelerate growth to 2.3% for all of 2016 and 2.8% in 2017. Islamic State jihadist groups represent a clear threat to any forecast as does the Iran and Saudi Arabia squabble.

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