Outlook and Market Review – Third Quarter 2015

The Bureau of Economic Analysis revised third quarter U.S. GDP growth to 2.1% from the flash report of only 1.5%. Most of the revised gain was due to inventory adjustments, which may constrain fourth quarter growth. On a year-over-year basis the economy continues to track along a 2.2% to 2.4% growth trend. Inflation continues to be below the Fed target of 2% for both the core and headline personal consumption expenditure (PCE) indices. Weak demand and low energy prices are expected to keep inflation below the Fed target throughout 2015 and most of 2016. The unemployment rate is 5%, close to what may be full employment given current conditions. Nevertheless, capacity utilization remains well below full employment levels with ample room for expansion before excess demand pressures and bottlenecks introduce inflation pressures.

The labor market continues to improve with monthly payroll gains averaging close to 200,000 per month. Signs of wage growth are starting to take shape but there needs to be a number of monthly gains before personal income gains translate into more robust spending. The labor participation rate remains at a thirty-year low and lower unemployment has not yet stimulated higher labor force participation.

The Fed will most likely raise the Fed fund rate in December. Recent payroll data and initial signs of higher wages are likely to tip the scales in favor of a 25 basis point increase. The sequence of higher Fed fund rates going forward are not likely to be dramatic and confirmation of higher wages will be needed before additional increases are considered. The contrast of Fed policy in the U.S. with monetary easing by the European Central Bank (ECB) and most of the rest of the world may lead to wider currency movements. When ECB easing or U.S. tightening is less than expected, the dollar value falls. While the dollar is expected to remain strong through 2016, the disparity of monetary policies and interest rate spread expectations may lead to a more volatile exchange rate.

Global debt continues to expand at both the government and private levels. The drag on global growth from mounting debt service is not going to wane anytime soon. The role that such high debt levels play in retarding growth will most likely prevent a return to full potential performance for years to come.

Forecasts – Low Growth, Low Unemployment, and Very Low Inflation

The Survey of Professional Forecasters conducted by the Philadelphia Federal Reserve Bank is one of the more popular sources for market consensus views on the economy. Quarterly estimates of GDP growth were revised downward by the 45 forecasters in the recent survey released in early November. The fourth quarter growth estimate was revised from 2.8% to 2.6%, while estimates for the first two quarters of 2016 were also lowered to 2.5% and 2.6%, respectively. Oddly enough, the consensus forecasts of the unemployment rates were also lowered through the first three quarters of 2016, even though lower growth estimates should be consistent with higher unemployment rates. Payroll expansion is expected to be slightly less than 200,000 jobs per month. Consistent with lower GDP growth estimates, forecasters revised inflation rates downward. Both the core and headline personal consumption expenditure (PCE) rates are expected to remain below the Fed target of 2% through 2016. The core and headline inflation rates are expected to converge next year. Quarterly forecasts from the Professional Forecasters survey are in the table below.

Table 1. Quarterly Forecasts for GDP, Unemployment and Payrolls

	Real GDP (%)		Unemployment Rate (%)		Payrolls (000s/month)		Headline PCE (%)		Core PCE (%)	
Quarter	**Prior**	**Revised**	**Prior**	**Revised**	**Prior**	**Revised**	**Prior**	**Revised**	**Prior**	**Revised**
IV- 2015	2.8	**2.6**	5.1	**5.0**	220.4	**201.5**	1.4	**0.9**	1.6	**1.5**
I - 2016	2.8	**2.5**	5.1	**4.9**	185.1	188.2	1.7	**1.6**	1.7	**1.5**
II - 2016	2.8	**2.6**	5.0	**4.8**	191.3	193.5	1.9	**1.8**	1.8	**1.6**
III -2016	2.7	2.9	4.9	**4.8**	189.5	192.0	1.9	**1.8**	1.8	**1.7**
IV -2016	N.A.	2.4	N.A.	4.7	N.A.	181.2	N.A.	1.9	N.A.	1.7

Source: Federal Reserve Bank of Philadelphia

With respect to longer run forecasts, the 45 forecasters in the Philadelphia survey reduced growth estimates for 2016 to 2.6% from 2.8% and estimates for 2017 were reduced from 2.6% to 2.5%. Estimates for 2018 growth were revised upward to 2.8% from the previous estimate of 2.4% three months ago. Overall, forecasters believe that a stronger recovery will be delayed beyond 2017. Even so, the economy is not expected to exceed 3% growth.

Forecasters continue to expect an unusual relationship between the job market and economic growth. While views on economic growth are dimmer, forecasters offer more optimistic forecasts on employment. The consensus projection was 5.3% average annual unemployment for 2015 followed by a 4.8% rate in 2016, 4.7% in 2017, and 4.7% in 2018. Forecasters also revised upward their estimates of job gains for the first three quarters of 2016. Annual average nonfarm payrolls are expected to grow by 197,000 per month in 2016. Such strong labor market conditions should promote higher GDP growth rates than forecasters predict if wages and consumer income also begin to reflect full employment. Table 2 offers a summary of the forecasts for longer run GDP, the unemployment rate, and job gains.

Table 2. Forecasters' Annual Forecasts for GDP, Unemployment and Payrolls

	Real GDP (%)		Unemployment Rate (%)		Payrolls (000s/month)	
Year	Prior	Revision	Prior	Revision	Prior	Revision
2015	2.3	**2.4**	5.3	5.3	244.2	**241.8**
2016	2.8	**2.6**	5.0	4.8	200.5	**197.0**
2017	2.6	**2.5**	4.8	4.7	N.A.	N.A.
2018	2.4	2.8	4.7	4.7	N.A.	N.A.

Source: Federal Reserve Bank of Philadelphia

Forecasts provided by Kiplinger are generally in line with the Survey of Professional Forecasters but fourth quarter GDP of 3% is likely to be too high and 2.8% growth for 2016 is at the high end of most forecasters. Kiplinger also expects higher inflation in 2016 than most surveys. Table 3 provides a summary of key forecasts by Kiplinger.

Table 3. Kiplinger Economic Forecasts

	IV Q 2015	2015	2016
GDP	3.0%	2.5%	2.8%
Unemployment	5.0%	NA	4.6%
10-year Treasury Note	2.3%	NA	2.7%
Inflation	NA	1.1%	2.3%

Interest Rates Will Rise Moderately in the Short Run

Federal Reserve Bank policies have depressed interest rates for over a decade. Currently, the Fed is offering forward guidance that a Fed funds rate increase is on the way and most analysts expect a 25 basis point bump in the Fed funds rate soon. Even so, Fed guidance has also suggested that the Fed funds rate will remain low even when rates go up. Quantitative easing ended in 2014 but long term rates have remained low. Currently, the long term Treasury yield remains about 3% below the long run average. The strong value of the dollar is a key factor keeping rates low. The demand for the dollar translates into strong demand for dollar-denominated Treasuries keeping prices high and yields low. Low expected inflation also helps keep rates low overall. When these conditions are matched with the view that the Fed will move slow the odds are good that rates will remain low into 2016.

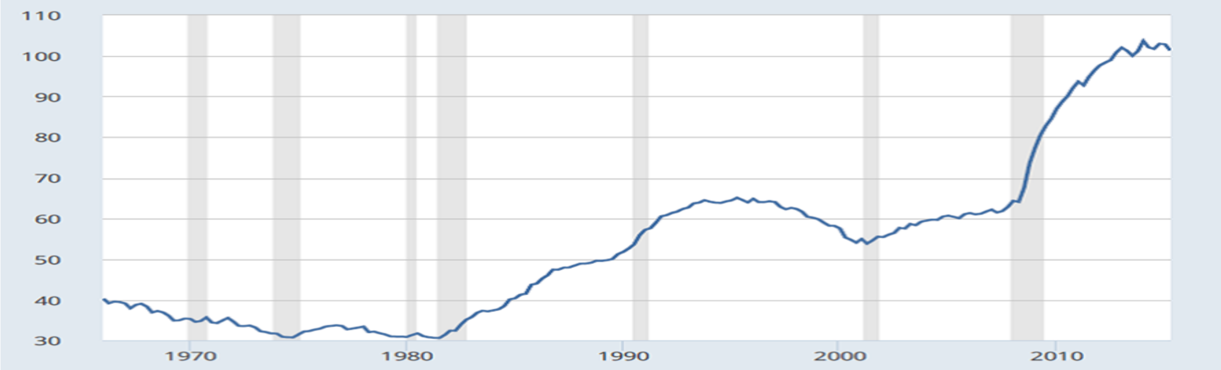
Forecasters overestimated interest rate movements in both 2014 and 2015. For example, in June of 2013 Citi wrongly forecast that the 10-year note yield would be 3.1% by the middle of 2014. The quandary over such low interest rates stems from the large deviation of rates from the "Fisher" equation that predicts a nominal rate to be equal to a real rate plus expected inflation. Even with expected inflation of only 1% and GDP growth of only 2.5% we would expect risk-free Treasury yields to be 3.5%. Currently the 10-year Treasury note yield is only 2.2%.

The factors that will bring U.S. interest rates back to a more normal relationship with inflation and GDP growth are not likely to develop soon. The massive government debt, which has doubled since the 2009 recession, will eventually weigh on investor confidence in Treasuries. China and other large holders of Treasuries will seek safe alternatives to Treasuries for investing. China also needs to reinvest in domestic infrastructure, prompting a selloff of Treasuries to gain liquidity. The strong dollar that has helped keep rates low will fade at some point as Eurozone economies improve and the euro gains strength. Finally, global uncertainty due to weak global growth and geopolitical events will likely moderate, helping ease the demand for dollar denominated Treasuries. Factors keeping interest rates low will subside eventually but there are no immediate prospects for significantly higher U.S. interest rates.

Debt is weighing on the Global Economy - What Happened to Delevering?

Excessive debt and its drag on economic growth have been well documented in prior *Outlooks* and in the academic literature. A study earlier this year by the Congressional Budget Office (*Long Term Outlook Series 2015*) shows very clearly that rising debt is detrimental to the American economy. Under current budget laws, federal government debt will grow from about three-quarters of the size of the economy today to equal the size of the economy by 2040. The CBO estimates that GNP would be about 2% smaller by 2040 due to the debt drag. Alternatively, if lawmakers continue to add to the debt as they have recently, debt will reach 156% of GDP by 2040. If debt grows to 156% of GDP, the CBO estimates that the economy would shrink by an additional 5% (7% in total). On the other hand, a $4 trillion debt reduction would increase the size of the economy by 5% compared to the CBO baseline. Figure 1 illustrates the growth in U.S. federal debt as a percent of GDP.

Figure 1. U.S. Federal Debt as a Percent of GDP



The CBO report outlines three key concerns about the rising levels of debt to GDP ratios. First, higher interest spending to service the existing debt crowds out the rest of the budget. As interest rates return to more typical levels from historically low levels and the debt grows, federal interest payments will increase rapidly, nearly tripling from 6% of the budget today to 17% by 2040. As interest takes up more of the budget, less will be available for other programs or taxes will need to be increased substantially. Both events would be a drag on growth. Second, high debt reduces flexibility to respond to future events such as recession or wars without dramatic tax increases. Finally, if debt continues to grow to unstainable levels investors will eventually lose confidence in the Treasury investments and interest rates would spike, lowering investment and spending in the private sector. The CBO report suggests that the low growth rates in the ongoing recovery period since 2009 is a byproduct of the doubling of the national debt since 2009.

The drag that debt places on economic growth has been a global phenomenon. After the 2008 financial market disaster and subsequent recession it was logical to think that economies would begin a delevering process to reduce risk exposure. This has not been the case. Deficit spending has mounted and private debt has expanded in response to low interest rates. Total debt burdens have continued to grow in nearly all countries, in both absolute terms and relative to GDP. The debt burden introduces fresh risks in some countries and limits growth prospects in many other countries. Table 4 below provides the total debt to GDP ratios for 20 countries ranked from high to low ratios.

Table 4. Ranking by Total Debt to GDP Ratio

Country	Rank	Debt/GDP (%)		Country	Rank	Debt/GDP (%)
Japan	1	400		France	11	280
Ireland	2	390		Italy	12	259
Singapore	3	382		United Kingdom	13	252
Portugal	4	358		Norway	14	244
Belgium	5	327		Finland	15	238
Netherlands	6	325		**United States**	**16**	**233**
Greece	7	317		South Korea	17	231
Spain	8	313		Hungary	18	225
Denmark	9	302		Austria	19	225
Sweden	10	290		Malaysia	20	222

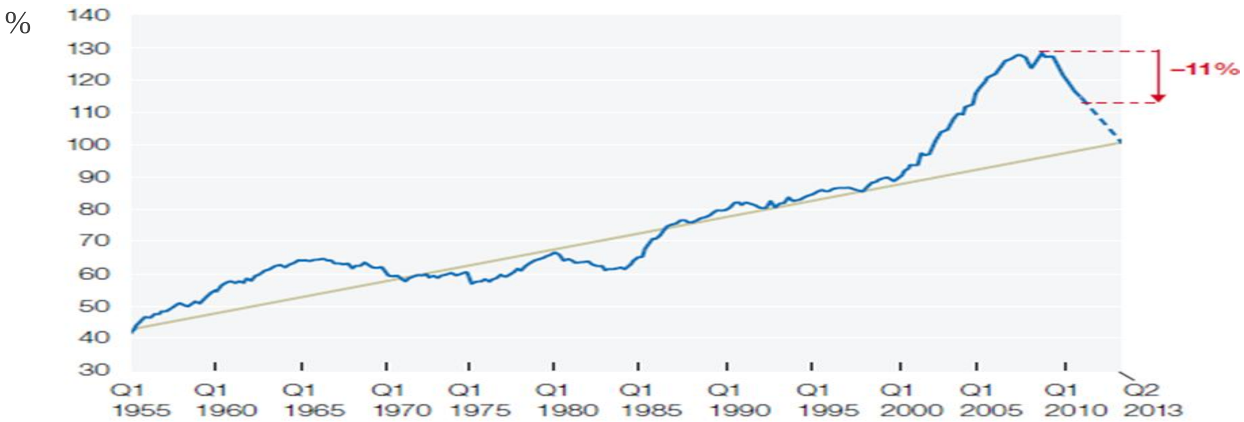
Note: Total debt equals household, non-financial, and government debt.
Source: IMF, World Economic Outlook

Since 2007, global debt has grown by $57 trillion leading to an increase in the ratio of debt to GDP by 17%. Developing economies now account for roughly half of the growth in debt. In advanced economies, government has been the primary borrower with more limited growth in the private sector. Reducing government debt is not a high priority given the current slow growth environment faced in almost every country. Of the $57 trillion in additional total debt since 2007, $25 trillion has been government debt. Delevering of this magnitude is not likely given low growth in the tax base and the inability to reduce entitlement spending enough to stop the growth of fiscal spending. Debt loads will continue to be a drag on world growth for the foreseeable future.

China's debt situation is a special cause of concern. China's total debt grew from $7 trillion in 2007 to $28 trillion by mid-2014, representing 282% of GDP. The growth of debt in China presents some special problems. Approximately half of the debt is directly or indirectly tied to real estate with approximately half of the new lending from unregulated shadow banking accounts. Growth from such debt expansion is fragile and the pause in China's growth is largely due to the need to retrench and base growth on a stronger financial foundation.

One bright spot has been the delevering of the financial sector and improved stress test capabilities of banks. Households have delevered in the United States, United Kingdom, Spain, and Ireland but in most other countries the household debt-to-income ratios have grown. Figure 2 illustrates the delevering of U.S. households since 2009. Household debt as a percentage of gross disposable income (blue line) has declined 11% since 2009 and is rapidly approaching the long term trend line (grey line).

Figure 2. Quarterly U. S. Household Debt as a Percent of Gross Disposable Income



Summary of Recent Economic Data

Gross Domestic Product – *The revised estimate of third quarter 2015 growth was 2.1%, compared to the preliminary estimate of only 1.5%. Second quarter GDP growth was 3.9% after revisions. Overall, positive contributions to growth came from consumer spending, fixed investment, exports, and state and local spending. Imports and inventory reduction were drags on growth. The economy is on a path for 2.2% to 2.4% growth for the calendar year of 2015.*

- Real GDP growth remains volatile from quarter to quarter while continuing to track a low annual rate barely above 2%.
- Consumer spending was a main driver of growth, contributing 2.05%. Fixed investment contributed only 0.54% to growth while government spending had a modest positive contribution. Inventory accumulation slowed dramatically and trade was a small contributor to growth with the lift from rising exports offset almost entirely by the drag from rising imports. Table 5 below shows the growth in the components of GDP over the last seven quarters. Drags on growth are shown in red.

Table 5. Quarterly Growth in Components of GDP

	I Q 2014	II Q 2014	III Q 2014	IV Q 2014	I Q 2015	II Q 2015	III Q 2015
Consumption	0.85	2.60	2.34	2.86	1.19	2.42	2.05
Residential Fixed Inv.	**-0.26**	0.31	0.11	0.31	0.32	0.30	0.54
Nonresidential Fixed Inv.	1.05	0.56	1.12	0.09	0.20	0.53	0.31
Net Inventories	**- 0.08**	1.12	**-0.01**	**- 0.03**	0.87	0.02	**- 0.59**
Government	**- 1.26**	**-0.24**	0.39	**- 0.89**	**-1.92**	0.18	0.29
Net Exports	**-0.51**	0.21	0.33	**- 0.26**	**-0.01**	0.46	**- 0.22**
Real GDP Growth	**-0.93**	**4.57**	**4.28**	**2.07**	**0.64**	**3.92**	**2.01**

Source: Bureau of Economic Analysis

- Final sales, which exclude the impact on GDP from inventories, rose 3%, after rising 3.9% in the second quarter. On a year-over-year basis, real GDP was up a little over 2% from the third quarter of 2014.

Production, Manufacturing, and Sales - *Industrial production grew at a lackluster rate in October but manufacturing data were more promising. A combination of weak foreign demand and a sharp inventory correction dampened manufacturing earlier in the year but the improved September export volumes and slower inventory accumulation are more promising. Capacity utilization continues to be well below full employment and sluggish sales have kept the inventory to sales ratios high.*

- For the third quarter of 2015, industrial production increased 2.6% at an annual rate following the second quarter 1.8% annual increase.

- Both utilities and mining were drags on industrial production. Utilities production fell 2.5% due to warm weather that reduced the need for electric utilities. Mining output, meanwhile, fell 1.5% due primarily to persistent weakness in the energy sector.

- Manufacturing output increased 0.4% in October. Within manufacturing, motor vehicle production rose for a second straight month, and the 0.7% increase leaves output at its highest level since July.

- Outside of autos, manufacturing production rose 0.4% in October, the largest increase this year. Durable goods production rose 0.5%, while production of nondurable goods increased 0.3%. Non-auto manufacturing output advanced 2.1% at an annual rate over the three months through October.

- Business inventories increased 0.3% in September and the overall business inventory-to-sales ratio (I/S) climbed to 1.38. The I/S ratio is well above its year-ago level of 1.31 due to sluggish sales growth. The I/S ratio is currently in a mid-range between the cyclical low of 1.25 and recession high of 1.49. Table 6 provides the monthly I/S ratio since April of 2015.

Table 6. Inventory to Sales Ratios

Inventory to Sales Ratio	Apr 2015	May 2015	Jun 2015	July 2015	Aug 2015	Sept 2015
Manufacturing	1.35	1.35	1.35	1.34	1.35	1.35
Retail	1.46	1.45	1.46	1.46	1.47	1.48
Wholesale	1.29	1.29	1.30	1.30	1.31	1.31
Overall Business	1.36	1.36	1.36	1.36	1.37	1.38

- Industrial capacity utilization fell 0.2% to 77.5% in October, the lowest since June and about 2.5% below its long-term average. Manufacturing capacity utilization jumped 0.2 percentage point to 76.4%. Overall, there is still plenty of slack with respect to production capacity even as the labor market tightens. Monthly Capacity Utilization data are provided in Table 7.

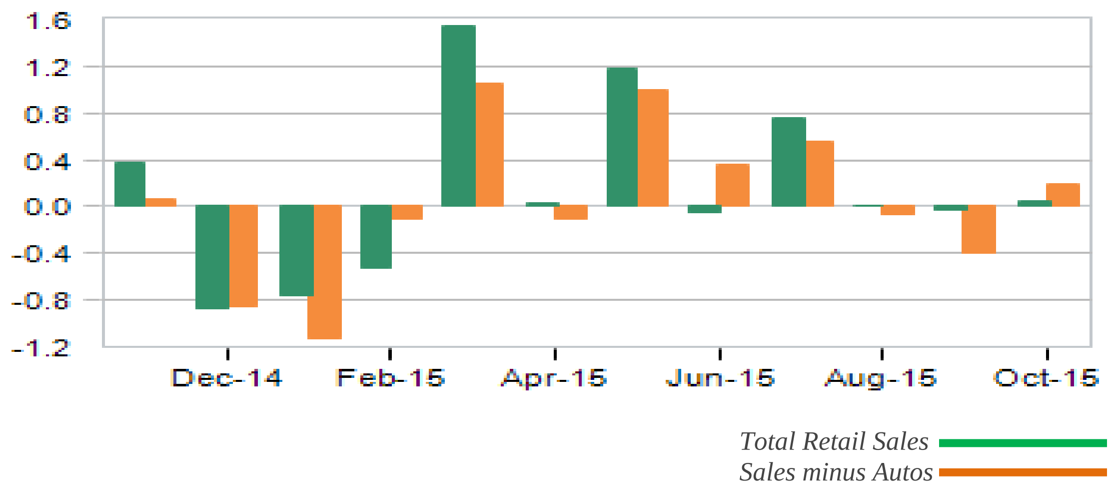
Table 7. Capacity Utilization (Percent of Full Capacity)

	June 2015	July 2015	Aug 2015	Sept 2015	Oct 2015
Overall	77.5	78.0	78.0	77.7	77.5
Manufacturing	75.8	76.5	76.3	76.2	76.4

Source: Federal Reserve Bank of St. Louis (FRED)

- Retail sales remained weak in October, rising only 0.1% after two months of minimal increases. Falling gasoline and energy prices played a key role in the decline of dollar sales. Core sales, excluding energy and autos, rose 0.3%. October sales were 1.7% above their year-ago level, the weakest growth since April. Figure 3 shows the monthly retail sales pattern since March of 2014.

Figure 3. Percentage Change in Retail Sales



Unemployment – *October data suggests that full employment in the labor market may be near. The U-3 unemployment rate edged down to 5% while the U-6 rate fell to 9.8%. Payroll gains jumped to 271,000 in October and the three-month average payroll gain for the third quarter was 187,000. Wage gains picked up in October but it will take several more months of healthy gains to suggest an emerging trend. The only negative aspect of October's labor market report was a low 62.4% labor force participation rate. The stronger-than-expected labor market in October will most likely spur the Fed to finally increase the Fed funds rate in December.*

- The October unemployment rate edged down to 5%. The number of workers employed part time involuntarily declined by 269,000 to push the broader U-6 measure from 10% to 9.8%. Table 8 shows the monthly U-3 and U-6 unemployment rate since May 2015.

Table 8. U-3 and U-6 Unemployment Rates

Unemployment Measure	**May '15**	**June '15**	**July '15**	**Aug '15**	**Sept '15**	**Oct. '15**
U-3: Total unemployed, as a % of the civilian labor force (official unemployment rate)	5.5	5.3	5.3	5.1	5.1	5.0
U-6: Total unemployed, plus all persons marginally attached to the labor force, plus total employed part time for economic reasons, as a percent of the civilian labor force plus all persons marginally attached to the labor force	10.8	10.5	10.4	10.3	10.0	9.8

Source: Bureau of Labor Statistics

- Job creation was robust in October following less stellar payroll increases in August and September of 2015. Average hourly earnings also posted a .4% increase in October signaling what may be the long awaited trend of higher wages that has been so elusive. The workweek was unchanged at 34.5 hours.

- Even with job creation and higher hourly earnings the labor force participation rate remains steady at 62.4%. Workers who stepped out of the labor force are not coming back. The employment-population ratio has shown little movement this year and has been stuck at 59.3% since July. If wage growth strengthens the participation rate should rebound. Table 9 provides the monthly payroll, earnings, and participation rate data since May of 2015.

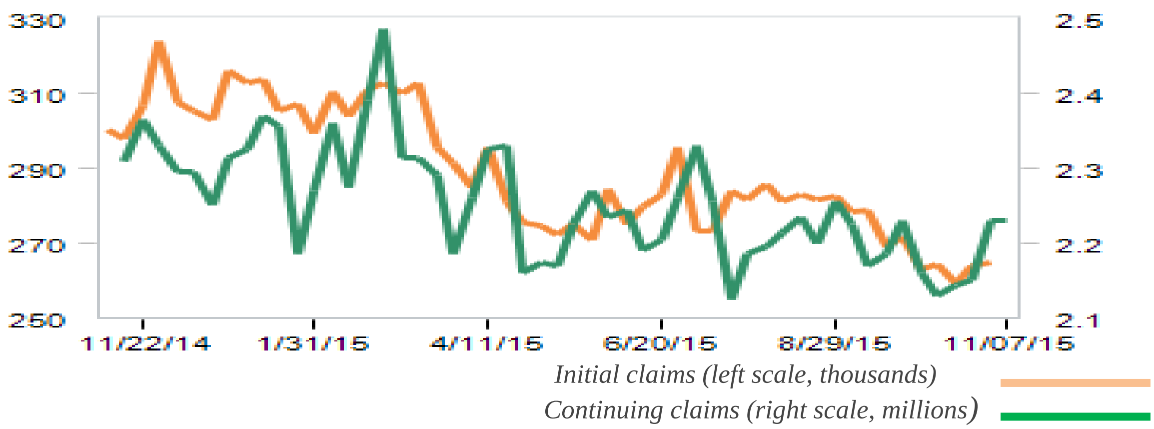
Table 9. Payrolls, Earnings, and Participation Rates

	May '15	June '15	July '15	Aug '15	Sept '15	Oct. '15
Non-farm Payroll Increase (thousands)	260	245	223	153	137	271
Average Hourly Earnings All Employees (% Change)	0.2	0.0	0.2	0.4	0.0	0.4
Average Hourly Workweek All Employees (hours)	34.5	34.5	34.5	34.6	34.5	34.5
Labor Force Participation Rate (%)	62.9	62.6	62.6	62.6	62.4	62.4

Source: Bureau of Labor Statistics

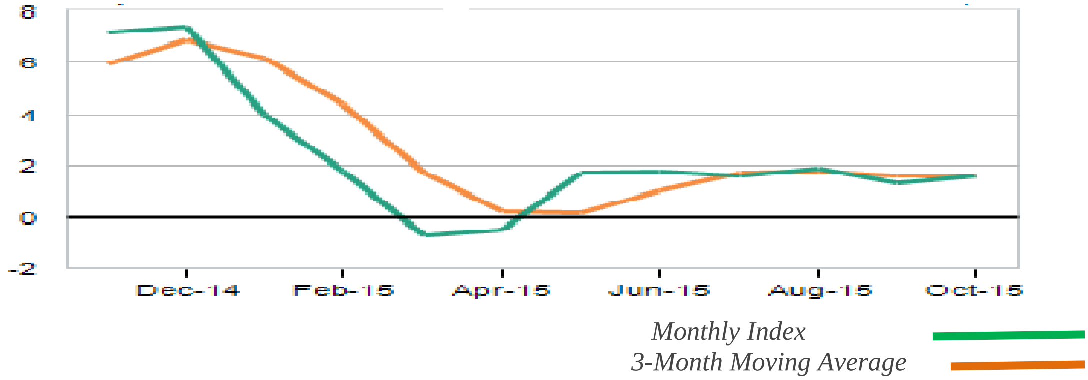
- Initial unemployment claims and continuing claims have both been trending down in 2015. Initial claims have been seesawing back and forth since the start of the year but volatility has been dampened somewhat. Continuing claims have demonstrated a more consistent pattern of decline. Figure 4 shows the continuing and jobless claim data since the end of 2014.

Figure 4. Initial and Continuing Jobless Claims



- The Federal Reserve's Labor Market Conditions Index improved (fell) from the end of 2014 to March of 2015 before bouncing up to 1.9 in July. The index has leveled off since then. The October value still slightly lags the six-month average of 1.7. Of the 19 labor market indicators in the Fed's index, nine improved, four were unchanged, and six weakened. Figure 5 shows the Fed's Labor Market Conditions Index since the end of 2014.

Figure 5. Federal Reserve Board Labor Market Conditions Index



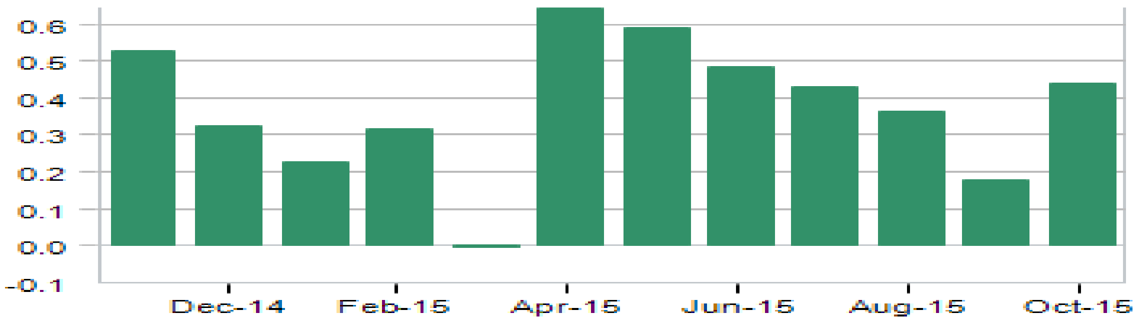
> ***Consumer Income, Savings, and Wages*** *– While wages and income in the third quarter showed signs of a rebound, it will take several more quarters of improvement to suggest a positive trend. The consumer savings rate is improving and reached 5.6% in October. The overall debt burden of households is also improving.*

- Real disposable income increased at a 3.5% annual rate in the third quarter after rising only 1.2% in the second quarter.

- Personal income rose by 0.4% in October, which exceeded the 0.3% average over the prior three months. Disposable income also picked up the pace, increasing by 0.4%, up from the prior month's upwardly revised rate of 0.2%. Wages and salaries improved by $45 billion compared with an increase of only $2.5 billion in September. The saving rate edged up to 5.6% from 5.3% in September.

- Figure 6 below illustrates the uneven monthly increase in personal income over the past calendar year.

Figure 6. Total Personal Income Monthly Percent Change



- Wage growth is currently just over 2% on an annual year-over-year basis and is improving in more recent months.

- Consumer debt burden, measured by the share of income used to make interest and principal payments to remain current on debt, is lower than it has been over the last 35 years. Persistent low interest rates have created room in consumer budgets. Credit card and auto loan delinquencies are also at record lows.

- Consumer credit advanced 7.5% on an annual basis in the third quarter and 10% in September. The revolving segment rose 6.5% during the quarter, while the non-revolving segment increased 7.9%, all on an annual percent basis. The quarterly increase was slower than the previous quarter, but above average for the last five years.

- Nonfarm business productivity increased 1.6% in the third quarter on a seasonally adjusted annualized basis. Productivity growth in the second quarter was revised up slightly to an annual rate of 3.5%. Still, nonfarm output per hour is only up a meager 0.4% from the third quarter of last year.

- Compensation per hour for nonfarm business increased at a 3% annual rate and unit labor costs increased 1.4% in the third quarter. Table 10 presents the quarterly data on compensation and labor costs.

Table 10. Quarterly Productivity, Compensation and Unit Labor Cost

	II Q 2014	III Q 2014	IV Q 2014	I Q 2015	II Q 2015	III Q 2015
Nonfarm Business						
Output per Hour	2.8	3.1	**-2.2**	**-1.1**	3.5	1.6
Compensation per Hour	**-0.8**	3.2	3.4	1.5	1.7	3.0
Unit Labor Cost	**-3.5**	0.1	5.7	2.6	**-1.8**	1.4

Source: Bureau of Labor Statistics

Inflation *– Inflation remains well below the Fed target of 2% for all measures. The personal consumption expenditure index (PCE) increased at a modest 1.2% annual rate for the third quarter of 2015 following a 2.2% increase in the second quarter. The core PCE, excluding food and energy, increased at an annual rate of only 1.3% following a 1.9% increase in the second quarter. The consumer price index (CPI) increased a miniscule .1% on a year ago basis in October while the core index, excluding food and energy, increased 1.9%. Weakness in global oil prices and the strong U.S. dollar are key drivers of disinflation pressures in the U.S. These pressures are likely to continue well into2016.*

- The GDP deflator used to adjust real GDP increased at an annual rate of only 1.31% in the third quarter following a 2.12% rate in the second quarter. Table 11 below illustrates the quarterly movement of the deflator over the last four quarters.

Table 11. Quarterly GDP Deflator (Annual Percentage Change)

	IV Q 2014	**I Q 2015**	**II Q 2015**	**IIIQ 2015**
GDP Implicit Price Deflator	0.08	0.12	2.12	1.31

Source: Bureau of Economic Analysis

- The personal consumption expenditures index showed inflation of 1.2% in the third quarter. This compares to inflation of 2.2% in the second quarter and deflation in the prior two quarters driven by plunging energy prices. Excluding food and energy, inflation was 1.3% in the third quarter, down from 1.9% the prior quarter.

- The PCE deflator rose 0.1% in October, reversing September's decline. The core index, which excludes food and energy, was unchanged after advancing 0.2% in September. On a year-ago basis in October, the headline and core deflators were up 0.2% and 1.3%, respectively. Table 12 shows the monthly and year-ago percentage changes in the PCE and core PCE inflation index measures. The core rates are higher than the headline rates due to declining oil prices.

Table 12. Personal Consumption Expenditure (Monthly and Year ago % Change)

	May 2015	**June 2015**	**July 2015**	**August 2015**	**Sept. 2015**	**Oct. 2015**
PCE (Monthly % Change)	0.3	0.2	0.1	0.0	-0.1	0.1
Core PCE (Monthly % Change)	0.1	0.1	0.1	0.1	0.2	0.0
PCE (% Change Yr. Ago)	0.3	0.3	0.3	0.3	0.2	0.2
Core PCE (% Change Yr. Ago)	1.3	1.3	1.3	1.3	1.3	1.3

Source: Bureau of Economic Analysis

- The consumer price index rose 0.2% in October after falling in the prior two months. Excluding food and energy, the CPI increased 0.2% for the second consecutive month. On a year ago basis the core CPI was up 1.9% in both October and September. Table 13 shows the monthly and year-ago percentage changes in the consumer price index.

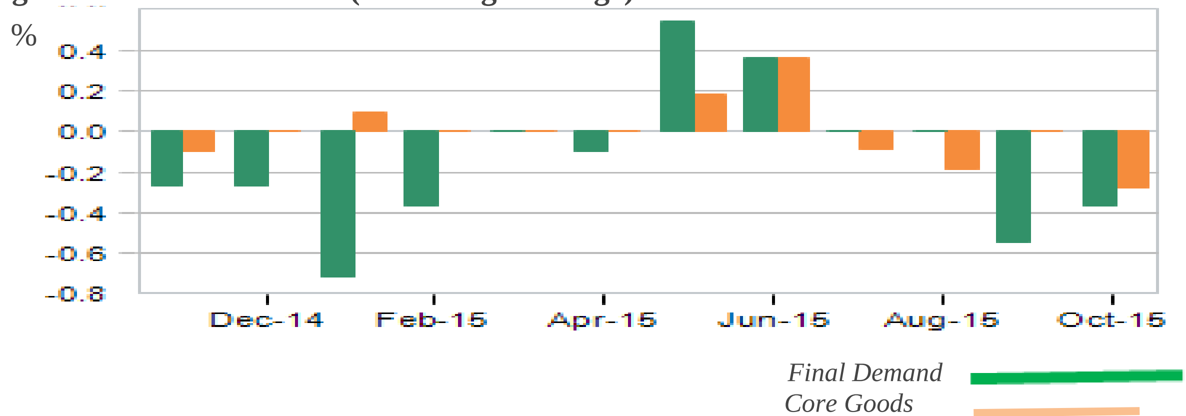
Table 13. CPI Monthly and Year Ago Percentage Change

	May 2015	**June 2015**	**July 2015**	**August 2015**	**Sept. 2015**	**Oct. 2015**
CPI (Monthly % Change)	0.4	0.3	0.1	-0.1	-0.2	0.2
Core CPI (Monthly % Change)	0.1	0.2	0.1	0.1	0.2	0.2
CPI (% Change Yr. Ago)	0.0	0.2	0.2	0.2	0.0	0.1
Core CPI (% Change Yr. Ago)	1.7	1.8	1.8	1.8	1.9	1.9

Source: Bureau of Economic Analysis

- The producer price index for final demand fell in October by 0.4%. October is the second consecutive monthly decline in the PPI. Figure 6 below shows the monthly percentage changes in the producer price index for both the final demand and core goods components.

Figure 6. Producer Prices (Percentage Change)



- The price of oil should remain low in 2015 as global oil markets continue to adjust to low global demand and ample supply. West Texas Intermediate crude oil is likely to average about $50 per barrel in 2015.

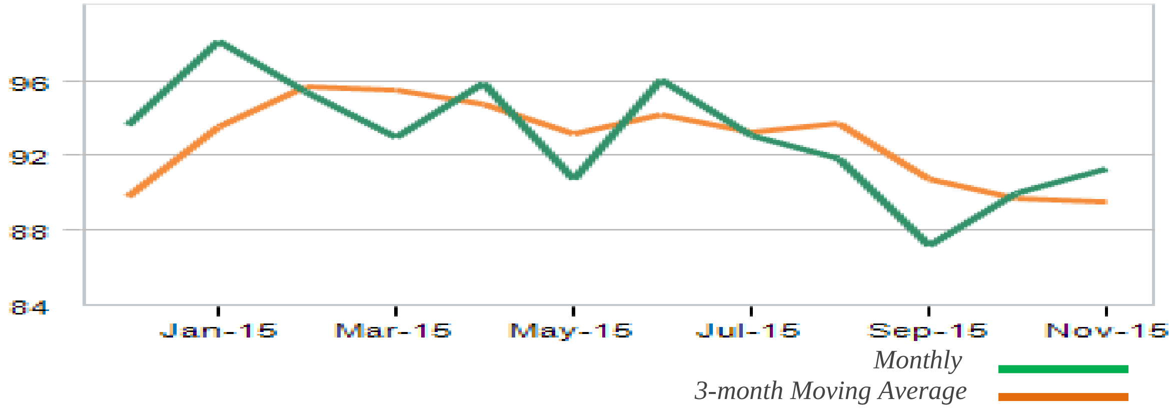
- The disinflationary effect from the appreciation in the U.S. dollar is likely to persist for some time. A strong dollar is likely to be fueled by U.S. policy moves to raise interest rates in the U.S. while other major central banks are either sitting tight or easing. The dollar is most likely to continue its rise into next year.

***Sentiment and Confidence** – Measures of consumer confidence and sentiment provide a mixed picture for the economy going forward. The University of Michigan Consumer Sentiment Index has been on a gradual decline since the first of the year. The Conference Board's Consumer Confidence index has fared better but is ending the year on a down note. The Index of Leading Economic Indicators had a positive 3.1% gain over the last six months but the path has not been consistent. Overall, households are in better shape and the labor market is improving but consumers remain guarded.*

- The Conference Board index of leading indicators rebounded to a healthy 0.6% in October, after declining by 0.1% in August and September. In the six months ended in October, the leading economic index increased by 3.1% at an annualized rate. The coincident index rose 0.2% in October. Recent movements of the leading indicators index are encouraging but a more sustained trend is necessary to support a forecast of faster economic growth.

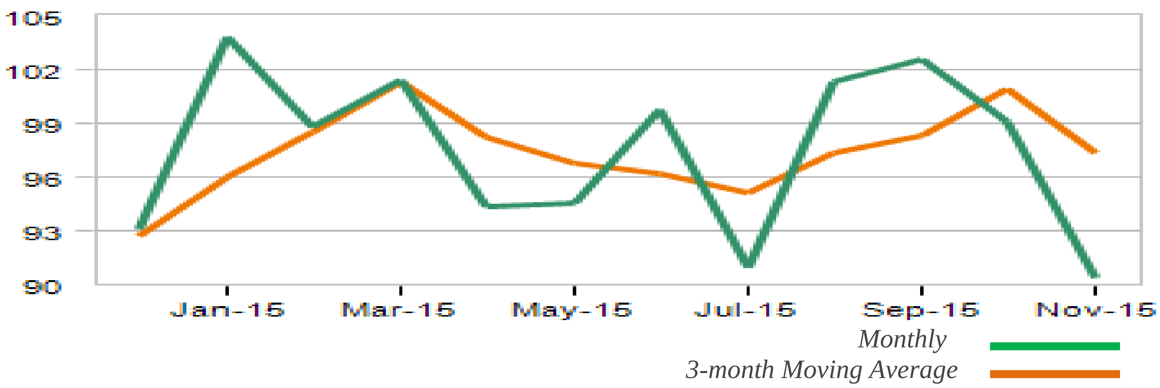
- The November University of Michigan consumer sentiment index rose to 91.3, gaining 1.3 points from the October. Overall, the consumers have the same views about household financial conditions and are slightly more favorable business expectations than in October. For the year, sentiment has been on a gradual decline since February. Figure 7 shows the pattern of the University of Michigan's index since the end of 2014.

Figure 7. University of Michigan Consumer Sentiment Index



- The Conference Board's Consumer Confidence index fell 8.7 points to 90.4 in November. November was the second decline in a row and the index is moving back to its overall downward trend for 2015. The slumping index is linked to less optimism about the labor market and the 40-year low of the labor force participation rate. Figure 8 shows the Conference Board's Consumer Confidence Index monthly data and 3-month moving average over 2015.

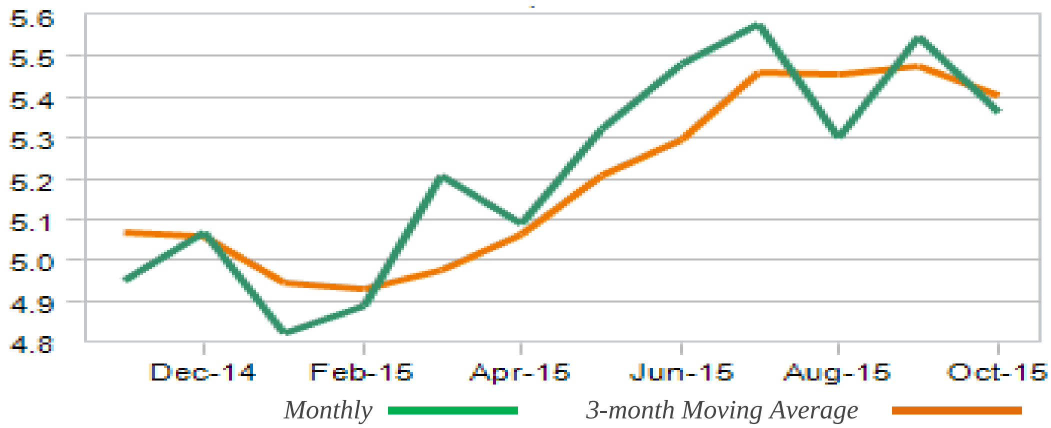
Figure 8. Conference Board's Consumer Confidence Index



Housing – *While the year-over-year data are good the recent housing slowdown suggests a pause in demand. The inventory to sales ratio is now at 5.5 months of sales. Housing starts for October were down by 11% from September and 1.8% below the October 2014 total. Housing prices are about 5% higher from one year ago but higher interest rates in 2016 are expected to dampen price pressures.*

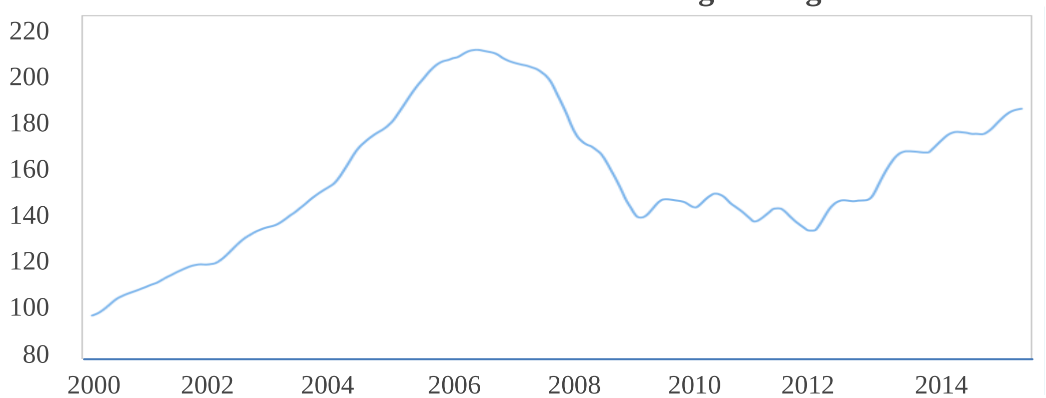
- Existing-home sales have lost some ground since the middle of this year, as have total home purchase transactions when new-home sales and manufactured home shipments are added in. Figure 9 below shows the monthly and 3-month moving average for existing home sales over the last year.

Figure 9. Existing Home Sales (Millions of Seasonally Annually Adjusted Units)



- Existing-home price increases accelerated in the three months ending in September. The 20-city composite index increased 5.5% from the previous year. The national index increased 4.9% over the 12 months ending in September. Nevertheless, the median new home price was $284,000 in October, down by 5.9% from October 2014. The Case-Shiller home price index since 2000 is plotted in Figure 10.

Figure 10. Case-Shiller Home Price Index 3 Month Moving Average



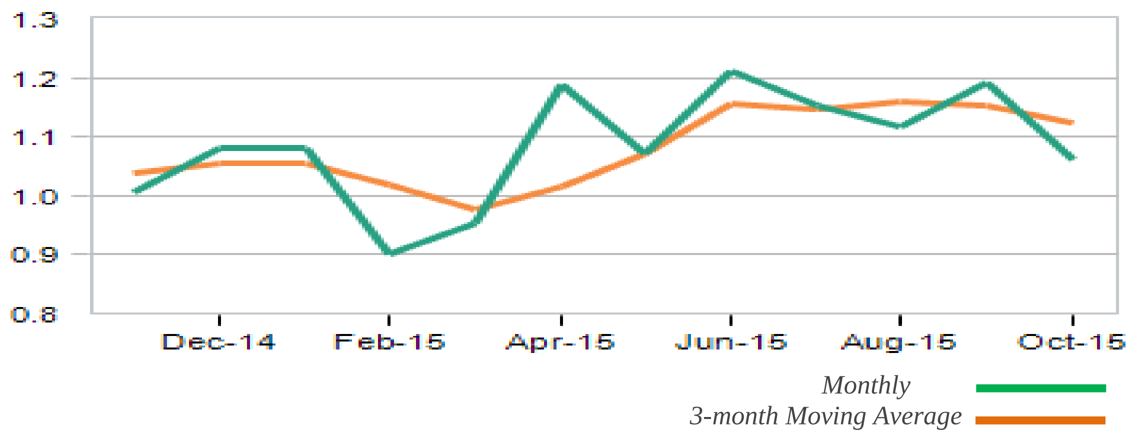
Index = 100 on January 2000 *Source: S&P Dow Jones*

- Sales of new single-family homes improved in October, regaining lost ground from previous months. New-home sales in October increased 10.7% from September and were 4.9% higher than in October 2014.

- New-home inventory is increasing steadily and is at last starting to keep pace with demand. The inventory-to-sales ratio was 5.5 months of sales at the end of October.

- Housing starts for October were 1.06 million, down by 11% from September and 1.8% below the October 2014 total of 1.079 million. Figure 11 shows the monthly and 3-month moving average of housing starts from the end of 2014.

Figure 11. Housing Starts Privately Owned (Millions of Units, Seasonally Adjusted)



- Housing permits were up by 4.1% from September and by 2.7% from October 2014, suggesting a continued build up in inventory.

***U.S. Trade** – The U.S. trade deficit declined in September largely due to lower prices of imports from a stronger dollar. In the short run, demand for imported goods tend to be price inelastic. Lower import prices more than offset the increase in quantity imported leading to lower nominal import totals. However, over time, the strong dollar is expected to lead to increasing overall trade deficits.*

- Both U.S. import and export prices declined over the past year. Import prices fell 0.5% in October following declines of .6%, 1.8%, and .9% in the prior months. On a year-over-year basis import prices are 10.5% lower. At the same time, U.S. export prices declined 0.2% in October following declines of 0.6%, 1.4%, .4%, and .3% in the prior months. On a year over year basis, export prices have declined by 6.7%.

- The U.S. foreign trade deficit narrowed in September to $40.8 billion from a revised $48 billion in August. Goods exports rose in all categories except industrial supplies, while the U.S. decreased imports of all categories except food, feed and beverages. Monthly U.S trade balance data are provided in Table 14.

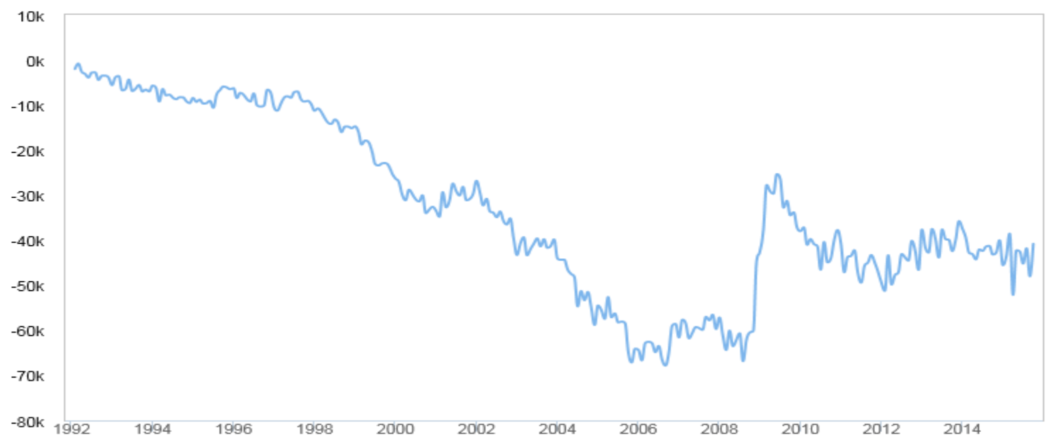
Table 14. U. S. Balance of Trade by Month since April 2015

	April 2015	May 2015	June 2015	July 2015	Aug. 2015	Sept. 2015
Exports	189.1	187.9	187.7	188.8	184.9	187.9
Imports	231.4	230.4	232.9	230.6	233.0	228.7
Balance	**-42.3**	**-42.5**	**-45.2**	**-41.8**	**-48.0**	**-40.8**

Source: *Bureau of Economic Analysis/Census Bureau*

- Figure 12 below shows the U.S. Trade Account time series since 1992. The deficit has been relatively flat at about $45 billion since 2010. The significant appreciation of the dollar will limit U.S. exports and will weigh on national GDP growth.

Figure 12. U. S. Trade Balance (Millions of Dollars Seasonally Adjusted)



- The trade deficit with China fell 6.7%, from $32.9 billion in August to $30.7 in September. The trade deficit with the European Union fell by $1.4 billion, a decrease of 9.7%.

Selected Global Economy Highlights - *Important shifts are under way in the global economy. Falling oil and commodity prices are redistributing income from commodity-exporting countries to commodity-importing countries. The tight Fed policy in the U.S. is out of sync with other advanced economies creating large adjustments in exchange rates. Factors that boosted global trade in the early 2000s are weakening. Geopolitical risks remain high and prospects of terrorist disruptions are likely to continue to be a drag on global economic activity.*

Overall Debt Concern - Global debt continues to grow following the worst financial crisis since the Great Depression. Rather than deleveraging, all major economies today have higher levels of borrowing relative to GDP than they did in 2007. Global debt has grown by $57 trillion since 2007, raising the ratio of debt to GDP by 17%.

Japan- Inflation in Japan remains well below the Bank of Japan's 2% target. The consumer price index, excluding fresh food, was down 0.1% on a year-over-year basis while the "core" rate, excluding energy and fresh food, rose 0.8% on a year-over-year basis. Japan faces structural labor market issues to include a declining workforce, low female participation and high youth unemployment. The headline unemployment rate is declining but much of that decline is due to falling worker participation. Japan's yield curve continues to drift into negative territory. Both one-year and two-year bonds are yielding negative interest rates.

Eurozone - Growth in private consumption has been the only positive component of economic performance in Europe for the past two years. Investment continues to be weak. Low expected returns from investment are linked to declining productivity and monetary accommodation. Headline inflation has declined on the back of lower energy prices. Most analysts believe that low growth, low investment, and low inflation are long run trends for Europe. Eurozone sentiment is improving though concerns for a Greek exit still poses risks. Italy is now experiencing strong export performance and France is having a modest recovery aided by low oil prices.

Asia- Asian stocks have been broadly down over lower growth prospects in China and Asian currencies have slumped against the dollar. World Bank reports maintain that structural reforms are necessary to solidify Asian financial markets and future growth. Regulatory improvements with added transparency and accountability are needed to promote stable growth and capital flows. East Asia remains one of the main growth drivers of the world economy, accounting for nearly two-fifths of global economic growth, according to a new World Bank report. Overall, the region is expected to grow 6.5% in 2015. China's economy is expected to grow at about 7% this year and gradually move to slower growth as it shifts toward more domestic consumption. Growth for the rest of developing East Asia is expected to be 4.6% for all of 2015. Commodity exporters such as Indonesia, Malaysia and Mongolia will see slower growth and lower public revenues reflecting weaker global commodity prices.

Latin America - The outlook for Latin America has changed dramatically in the past months owing mainly to worsening economic dynamics in Brazil and Venezuela. For the region as a whole, the LatinFocus Consensus Forecast calls for a contraction of 0.1% for the region when all 2015 data are in. GDP decelerated from a 0.6% year-on-year increase in Q1 to a miniscule 0.1% expansion in Q2. Recent data suggest that the region's economy contracted 0.3% in Q3. Low commodity prices have been a key cause of some of the region's problems and a lack of political unity will make it difficult to structure policy responses. Mexico has performed better than other Latin America economies with stronger growth in the second half of 2015. GDP growth was estimated to be 2.2% in the second quarter followed by 2.4% in the third quarter. The Venezuelan economy is rapidly declining with serous liquidity problems. Venezuela has resorted to sell its gold reserves in an effort to raise cash to pay $3.5 billion in bond payments and to fund import purchases. The country's dwindling reserves raises questions as to how it will be able to meet its debt obligations in the following years. Inflation remains high in Latin America. The inflation estimate for October by FocusEconomics was 17.9%, following a 17.1% rate in September.

Russia - Low oil and gas prices, geopolitical tensions and ongoing international sanctions deepened Russia's recession in the first half of 2015. Russia is experiencing a significant increase in the poverty rate, decreased consumer demand and sharp contraction in real wages. Country growth perspectives remain negative. The outlook hinges not only on the evolution of external factors, but also on Russia's internal capacity to adapt to an increasingly difficult macro-fiscal context. Overall, Russia is constrained by an aging population and few marketable exports other than natural resources.