Outlook and Market Review – Second Quarter 2016

The economy grew 1.2% in the second quarter according to the advanced Bureau of Economic Analysis report. On a year-over-year basis the economy grew 1.2%. The recovery since 2009 remains historically slow with no year of GDP growth above 3%. Growth in the last three quarters has been disappointing with first quarter growth of 0.8% following 0.9% growth in the fourth quarter of 2015. Consumer spending remained strong in the second quarter but other components slumped. The drop in investment was driven by a strong dollar, low energy prices, and falling corporate profits. Investment in inventories fell as part of a correction cycle. Second quarter real final sales to domestic purchasers (GDP minus inventories and net exports) rose 2.1% at an annual rate in the second quarter.

Many of the factors weighing on the economy in the first half of 2016 should improve over the next two quarters. Following the $8.1 billion annualized inventory reduction in the second quarter, the inventory to sales ratio is now low enough to make room for higher inventory investment. The dollar should stabilize and energy prices are likely to make modest gains. Preliminary estimates of corporate profits are higher and housing construction should pick up with improved demand and low interest rates. Even so, analyst estimates of GDP growth above 2% for 2016 are optimistic.

The Fed would like to raise the Fed Fund rate at least once in 2016 but dismal GDP growth with the unexpected dip in job creation in the second quarter are likely to forestall a hike in September. The unemployment rate is 4.9% and is nearing full employment benchmarks but wage growth remains slow. The inflation rate is below the 2% Fed target. Nevertheless, GDP data are backward-looking and the Fed's Open Market Committee statement in July noted that near-term risks to the economy are diminishing. The statement also revealed expectations that the 2% inflation target will be met by the end of 2016. If third quarter growth and inflation data confirm this view, the odds are in favor of a quarter point increase of the Fed fund rate in December.

Financial markets easily maneuvered through the volatility introduced by the Brexit vote to leave the European Union. Long term interest rates in the U. S. remain abnormally low due to the weakened position of the Euro and economic uncertainty in foreign markets causing U.S. bond prices to be attractive. The 10-year Treasury bond is currently offering only a 1.48% yield, which net of inflation provides a negative real rate of return. Equity market values remain near all-time highs but with relatively high volatility.

Third quarter GDP should be on track for 2% growth with a boost from inventory investing and positive government spending. Inflation should edge up but remain below the 2% Fed target until 2017 while long term yields remain below 2%. Prospects for improved long term growth depend on initiatives that reduce drags created by the almost twenty trillion-dollar national debt, sixty-four trillion-dollar unfunded liability of social security, tax code disincentives, and regulatory obstacles to small business creation and expansion.

The Fed on Jobs, Inflation, and Interest Rates

The Federal Reserve wants to raise interest rates again but arguments to stand pat go beyond the dismal GDP growth record of 2016 to this point. While headline unemployment rates look low, the overall labor market has actually deteriorated since the middle of 2015 when everything is considered. Prospects for firmer prices in 2016 due to rebounding energy demand and a cooling off of the dollar haven't materialized to this point. Historically low interest rates have not turned the tide on deflation making it necessary to be sure inflation is on the way before policies should be reversed.

Job Market – Not Nearly as Good as You Might Think

The job market looks tight with headline unemployment of 4.9% and a U-6 rate of 9.6%. Wages increased 0.6% in the second quarter and 2.6% on a year-ago basis compared with only 2% in the first quarter, suggesting that wage growth is accelerating. Even so, the labor force participation rate is only 62.6% and a record 94,708,000 Americans in the labor force are either not holding a job or not seeking one. Job gains announced in August were very strong but may be revised downward. In general, it takes job gains of 100,000 per month to keep up with population growth.

To make more sense of the mixed signals from labor market data, the Fed created a "Labor Market Conditions Index" (LCMI) that combines 19 different measures to provide a more complete view of the job market. The LCMI is a dynamic factor model offering a collapsed view of the labor market from multiple measures that do not always move in the same direction. The LMCI is gaining popularity and Fed Chair Janet Yellen uses the LCMI as her preferred measure of overall conditions on the employment front.

When the labor market is viewed using the LCMI, conditions since the start of 2016 have been weak. June's LMCI fell 1.9 points following a decline of 3.6 points in May. The index has fallen 14.9 points the past 5 months and the cumulative index peaked six months ago in December 2015. The index increased on average by 4 points per month until the end of 2015. Figure 1 shows the change in the LCMI over the past five years.

Figure 1. Change in the Labor Market Condition Index

The long run historical pattern of the LMCI shows a negative change prior to a significant economic downturn. The recent downturn in the index is the seventh time in the last 25 years that the index has been down for that long. In the prior six times the Fed responded with rate cuts and expansion, but these moves only kept three of the six periods from turning into recessions. Of course, this isn't an option today since rates are already at a bottom and the Fed is looking to raise rates. A key point is that the decline of the LMCI is a rare situation where the Fed won't be able to respond to a falling LMCI by cutting rates and raising rates at this point run counter to past practices. A more likely approach is to wait until the LMCI shows stronger signs of labor market health. December of 2016 or January of 2017 are the most likely points for considering a rate hike.

Inflation - See it to Believe it?

The conventional wisdom is that rising wages, low unemployment, a tight rental market, higher healthcare prices, higher housing prices, a stable or declining dollar, and rising energy prices should all help boost inflation in 2017. Even so, it is difficult to find a consensus that sustained inflation will exceed the Fed's 2% target until later in 2017. A quick review of inflation forecasts from models and projections provided for the U. S. by the IMF, United Nations, Organization of Economic Development, Statista, Survey of Professional Economists, and the Federal Reserve Bank Board of Governors all gravitate around a below 2% inflation rate into 2017 with modest increases in late 2017 and beyond. The Fed's estimates released in December of 2015 do not call for inflation in excess of 2% until 2018, and little on the inflation front has changed since the forecasts came out. If the Fed wants to see inflation above 2%, beyond a temporary blip, it will most likely need to wait until 2017 or beyond for confirmation of above target inflation.

Will They or Won't They?

Since financial markets price expectations, the Fed can influence the economy by simply announcing intentions. Markets expect higher rates and react as if rates were actually increased. The Fed is serious about a rate hike but there is no hurry as long as threats are believable. There have been many examples of this form of intervention. For example, when the Fed announced it would suspend bond buying sooner than expected mortgage rates went up. After raising the Fed fund rate by 0.25% last December the Fed announced it would increase rates four times in 2016. The market reacted with higher borrowing rates and stricter borrowing requirements.

The view that a rate hike is more likely to be at the end of 2016 or early in 2017 doesn't mean the Fed won't raise rates in September. The Fed is still posturing for a rate hike this year and there are many cases in the past where the Fed began "undoing" its work to support the economy before the economy was strong enough to expand without help. Pressure is building to undo an exceptional policy of keeping short term rates near zero for almost seven years. The Fed has been looking to get out of this bizarre situation since mid-2013 but the data hasn't cooperated. It is not possible to totally rule out the sentiment by many Fed presidents that it is time to just get out.

Summary of Recent Economic Data

***Gross Domestic Product Growth** –The economy grew at a 1.2% rate in the second quarter of 2016 according to the advanced estimate by the Bureau of Economic Analysis. Disappointing growth in the second quarter followed revised growth rates of only 0.8% and 0.9% in the prior two quarters. Almost all of second quarter growth was due to consumer spending. Net exports made a small contribution to growth but investment fell sharply while government spending had a slight decline. Annualized quarterly GDP growth has not been above 3% since the third quarter of 2014. Year-over-year GDP growth ending in the second quarter was only 1.2%.*

- Personal consumption expenditures grew by 2.8% in the second quarter following growth of 1.1% and 1.5% in the prior two quarters.

- Fixed investment fell by 0.52% in the second quarter following declines of 0.15% and 0.03%.

- Inventory investment in the second quarter fell by 1.16%, marking the fifth consecutive quarterly decline. Declining inventory investment has been a drag on growth but low inventory levels offer room for higher investment in coming quarters.

- Net exports posted a 0.23% growth in the second quarter following a 0.01% increase in the first quarter. Net exports were negative in every quarter of 2015.

- Government spending fell 0.16% in the second quarter.

- The figure below shows quarterly GDP growth since the middle of 2012 relative to the 3.2% long run average growth rate since 1972 (black line).

Figure 2. Seasonally Adjusted Quarterly GDP Growth

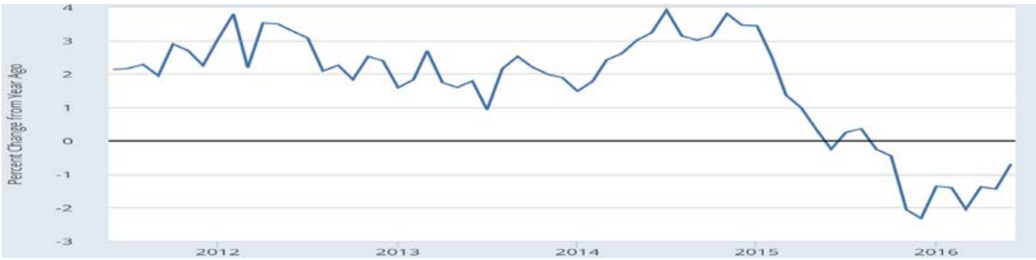
Source: Bureau of Economic Analysis

Production, Manufacturing, and Sales. *Slow global growth and a strong U.S. dollar contributed to disappointing manufacturing performance in recent months. While capacity utilization for manufacturing improved to 75.1% in June, capacity utilization remains well below full employment. Manufacturing should improve as inventories are replenished. Sales are strong in real terms as consumers use borrowing capacity and low interest rates to support spending.*

- Industrial production, which measures the output of all U. S. businesses, increased 0.6% in June after declining 0.3% in May. For the second quarter as a whole, Industrial production fell at an annual rate of 1.0%, the third consecutive quarterly decline.

- Total industrial production in June was 0.7% below its level one year ago. The production index in June was only 4.1% higher than the 2012 average. The figure below shows the annual percentage change in industrial production over the past five years.

Figure 3. U.S. Industrial Production Annual Percentage Change



Source: Board of Governors / St. Louis Federal Reserve Bank

- Manufacturing accounts for 78% of total production. Manufacturing output increased 0.4% in June but output of manufactured goods other than motor vehicles and parts was unchanged.

- Manufacturing is slowly improving but not enough to make a significant contribution to GDP growth in the second half of 2016. Energy prices have stabilized but the global economy remains weak and the dollar is likely to remain strong as global uncertainty remains.

- The ISM manufacturing index fell in July, dropping 0.6 point to 52.6. Even though the index fell in July the trend is improving. The index average for the first half of 2016 was 50.8.

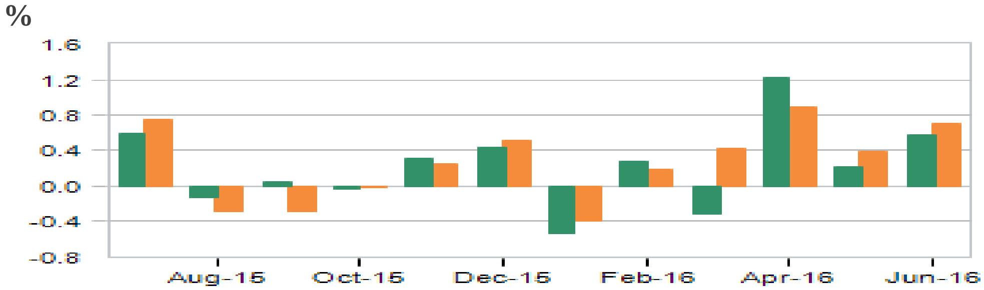
- Capacity utilization for the industrial sector increased 0.5% in June to 75.4%, a rate that is 4.6% below its long-run (1972–2015) average.

- June's orders for durable manufactured goods fell 4% and orders for May were revised downward. Auto orders were an exception with a 2.6% increase in June.

- Retail sales in June were better than expected. Sales rose 0.6% in June but May's increase was revised from 0.5% to 0.2%. June sales were 2.7% above their year-ago level. Retail prices are soft. Retail deflation lowers measured sales, making real consumer spending growth faster than nominal growth numbers suggest.

- Sales are supported with gradual improvement in credit access and historically low household debt burdens. Growth in credit card balances reached its highest level since 2008 and is rising. The figure below illustrates the monthly growth in retail sales and growth in retail sales net of autos.

Figure 4. Monthly Growth Rates in Retail Sales with and without Autos



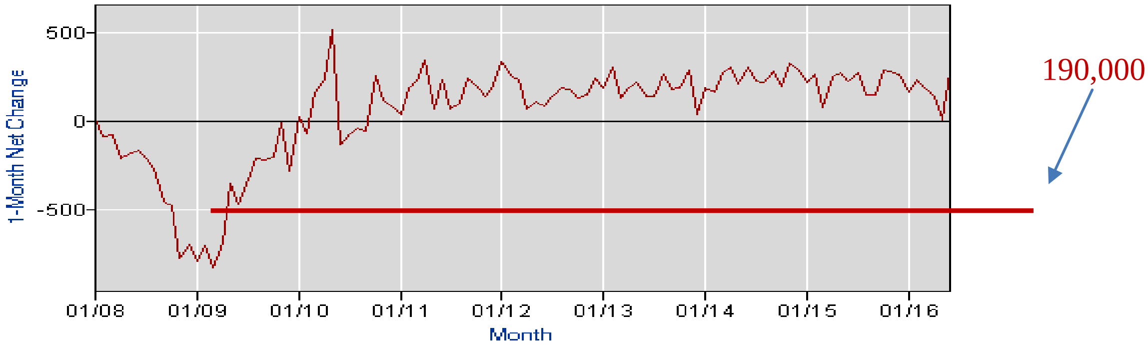
Total Retail Sales *Total Retail Sales net of Autos*

Source: Bureau of the Census / St. Louis Federal Reserve Bank

Unemployment and Labor- *The labor market recovered from its slump. Total payroll employment increased by a surprising 255,000 in July. The workweek increased and average hourly earnings rose by 2.6% year-over-year. The unemployment rate remained at 4.9% and the participation rate edged slightly higher to 62.8%. Growth in wages and benefits is improving with a 2.3% growth rate on a year-over-year basis at the end of the second quarter. The growth in compensation is picking up but it remains below the normal growth of 3% to 3.5% in a recovery.*

- Labor market growth is slowing as the economy approaches full employment. Private employers added 172,000 jobs in June following a168,000 increase in May. Going forward, job creation is likely to be less than the average of 190,000 over the past 12 months. The figure below illustrates the monthly change in jobs.

Figure 5 Monthly Change in Total Nonfarm Employees (thousands seasonally adjusted)



- Initial unemployment claims have remained well below 300,000 in the second quarter, signaling that the overall job market remains healthy.

- The headline unemployment rate ticked up to 4.9% in June from 4.7% in May. The U-6 rate, which includes total unemployed, marginally attached workers, and part time workers, fell to 9.6% in June from 9.7% in both April and May.

- The employment cost index for private wages rose 0.6% in the second quarter and 2.6% on a year-ago basis. Worker benefits rose 0.5% in the second quarter. The total employment cost index, wages and benefits included, is 2.3% higher on a year-ago basis.

- Productivity continues to be slowing in the U.S. economy. Output per hour in the nonfarm sector fell 0.6% after revisions for the first quarter of 2016. On a year-ago basis, nonfarm output per hour is up only 0.7%.

***Consumption, Income, and Savings** – Growth in real disposable income slowed to 1.2% from a downwardly revised 2.2% in the first quarter. The saving rate fell to 5.5%. Household spending remained strong largely due to the use of debt. Income is slowly growing as the economy moves toward full employment.*

- Median weekly earnings for full-time workers increased 2.9% in June, on a year-ago basis. This follows a 2.7% gain in the first quarter and remains at the high end of the range seen over the past few years.

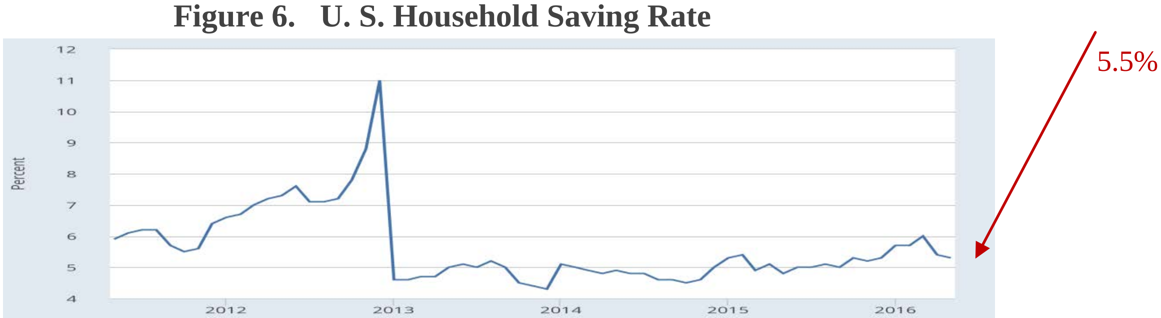
- The economy has not hit full employment yet but stronger wage growth suggests that full employment is near. Many analysts believe the U-6 unemployment rate of 9% would be consistent with full employment while the current U-6 rate is 9.6%. A stronger second half of 2016 could well push the labor market to full employment.

- Total U.S. household borrowing increased 3.97% in June on a year-over-year basis, up from 3.72% in May. Lenders remain cautious but rates are very favorable.

- Total household borrowing in June jumped to $11.7 trillion, the highest total since April 2010. Lower interest rates will most likely drive continued borrowing and refinancing over the next quarter. Households are capable of handling this increased debt due to delevering over the past years. Delinquencies and defaults are well below historical averages.

- Household saving fell to 5.5% of disposable income in June from 6% in the first quarter of 2016. Lower savings are linked to stronger consumer spending patterns that provided the only real driver of growth in the second quarter. Figure 6 below illustrates the pattern in the saving rate since 2011.

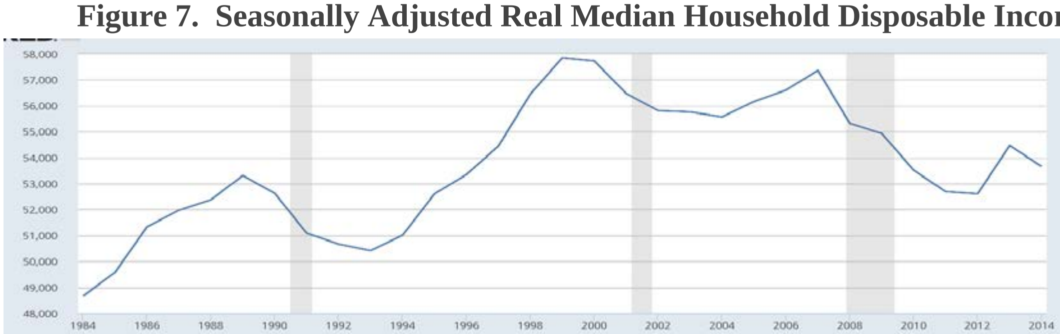
Figure 6. U. S. Household Saving Rate



Source: Bureau of Economic Analysis / St. Louis Federal Reserve Bank

- Real median family household income reached its twenty-year high of almost $58,000 in 1999 and has declined to a little less than $54,000 in the first half of 2016. Dollars are all in 2009 prices based on the consumer price index. The typical post-recession bounce in household income has not taken place in the post-2009 period, as the figure below illustrates.

Figure 7. Seasonally Adjusted Real Median Household Disposable Income



Source: Bureau of the Census / St. Louis Federal Reserve Bank

***Inflation** – Inflation remains below the Fed's 2% target. Both the headline and core PCE deflators increased 0.1% in June. On a year-ago basis, the core PCE, which excludes food and energy, moved up 1.6% and the headline PCE increased .9%. The CPI shows higher inflation with year-ago increases of 2.2% for the core and 1.1% for the headline measure. The Fed is clearly anxious to raise rates but there may be a bias to see inflation firmly above the 2% target.*

- The Personal Consumption Expenditure (PCE), the Fed's preferred measure of inflation, increased .1% in June following increases of .2% and .3% in May and April. The core rate also increased .1%. On a year-ago basis in June, the PCE inflation rate was only .9% but the core rate was 1.6%. Table 1 below provides recent data on the core and headline PCE.

Table 1. Monthly Personal Consumption Expenditure Inflation Rates

	June '16	May '16	Apr.'16	Mar. '16	Feb. '16	Jan. '16
PCE % Change	0.1	0.2	0.3	0.1	- 0.1	0.1
Core PCE % Change	0.1	0.2	0.2	0.1	0.2	0.3
PCE % Change Year- Ago	0.9	0.9	1.1	0.8	1.0	1.2
Core PCE % Change Year-ago	1.6	1.6	1.6	1.6	1.7	1.7

Source: Bureau of Economic Analysis

- The core Consumer Price Index (CPI), excluding food and energy, rose 0.2% in June following a 0.2% gain in the prior two months. On a year-ago basis, the annual rate of core inflation for June was 2.2%, consistent with the annualized change in prior months.

- The all items CPI increased 0.2% in June following increases of 0.2% in May and 0.4% in April. On a year-ago basis the headline CPI inflation rate is only 1.1% in June. The headline inflation rate on a year-ago basis is much lower than the core rate, due to weak energy prices. Table 2 shows the monthly and year-ago changes in the headline and core rates.

Table 2. Monthly Consumer Price Index and Core Index Inflation Rates

	June '16	May '16	April '16	March '16	Feb. '16	Jan. '16
CPI % Change	0.2	0.2	0.4	0.1	-0.2	0.0
Core CPI % Change	0.2	0.2	0.2	0.1	0.3	0.3
CPI % Change Year- Ago	1.1	1.1	1.1	0.9	1.0	1.3
Core CPI % Change Year-ago	2.2	2.2	2.1	2.2	2.3	2.2

Source: Bureau of Labor Statistics

- The GDP deflator is a broad measure of inflation constructed by dividing nominal GDP by real GDP and multiplying that ratio by 100. Real GDP is calculated by multiplying current output by base year prices, making the deflator a measure of price increases since the base year. The deflator is a quarterly measure of annualized price changes. Table 3 below illustrates the GDP deflator over the past six quarters.

Table 3. Quarterly Annualized Implicit Price Deflator

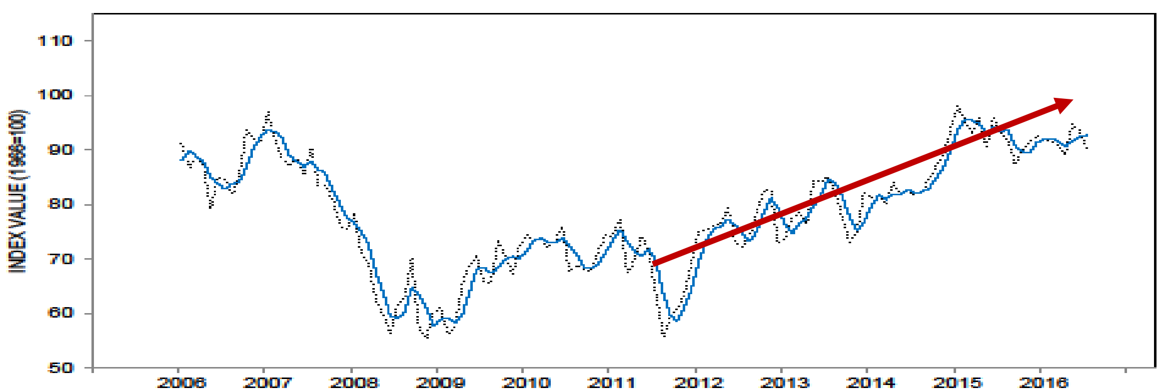
	II Q '16	I Q '16	IV Q '15	III Q '15	II Q '15	
Implicit Deflator	2.21	0.46	0.91	1.22	2.25	0.04

Source: Bureau of Economic Analysis

Sentiment and Confidence - *Overall consumer sentiment fell at the end of the second quarter even though the current condition component ticked up. The difference in current conditions and the overall index reflects declining expectations for future conditions. This pattern is consistent in both the University of Michigan and Conference Board index. Economic indicators suggest that the long, but slow recovery is not yet over but special attention will be given to the next few months of the leading indicator data.*

- Consumer sentiment as measured by the University of Michigan Sentiment Index fell sharply to a three-month low of 90 in July from 93.5 in June. Sentiment has been on a trend of improvement since 2012 but it has been a bumpy ride. Sentiment leveled off in 2015 and has not rebounded. The figure below illustrates the pattern of the sentiment index over the past ten years.

Figure 8. University of Michigan Sentiment Index



Three month moving average — *Source: University of Michigan*

- The current economic conditions component of the sentiment index fell 1.8 points but the expectations component fell by 4.6 points. Respondents in the survey are more pessimistic about the future while present conditions are viewed more favorably. Table 4 below shows the recent changes in the sentiment index as well as the year-over-year change.

Table 4. University of Michigan Sentiment Index and Component Changes

	July 2016 Index	June 2016 Index	Month to Month Change	Year-over Year Change
U. of Michigan Sentiment Index	90.0	93.50	-3.3%	-3.3%
Current Economic Conditions	109.0	110.8	1.7%	-1.6%
Consumer Expectations	77.8	82.4	-5.6%	-7.5%

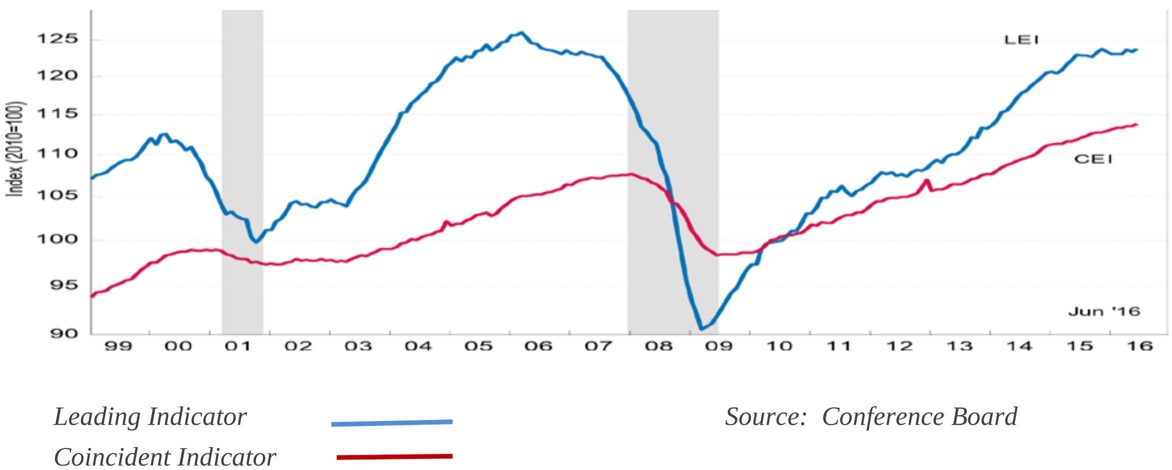
Source: University of Michigan Sentiment Index

- The Conference Board's Confidence Index fell 0.1 point to 97.3 following a 0.5-point downward revision in the June index. Nevertheless, the three-month moving average gained .9 point. The present situation index improved to 118.3, its highest level since September. But, like the Michigan Consumer Sentiment Index, the expectations component fell by 1.3 points to 83.3. The Conference Board expectations reading has trended downward over the past 18 months, even as conditions have continued to improve.

- The Conference Board index of leading indicators rose 0.3% in June, above consensus expectations of a 0.2% increase. Average weekly claims for unemployment insurance, financial components and building permits contributed the most to the increase in the index.

- Figure 9 below illustrates the movement of the leading indicator index and the coincident index since 1999. The leading indicators have been trending up since the last recession consistent with a recovery as has the coincident index. Month-to-month movements are less important than sustained trends. The leading indicators turndown well before the coincident index (linked to actual economic activity at that point in time). The next few months will be interesting as the leading indicator series has flattened somewhat and may return to trend or signal a reversal.

Figure 9. Leading and Coincident Economic Indicators



Source: Conference Board

- The coincident index is designed to identify the peaks and troughs in a business cycle. Figure 9 suggests the recovery has not yet peaked.

Housing *- U. S. housing prices are rising at a relatively steady rate, largely due to insufficient supply. Single-family home construction is well below pre-recession levels and total listings are lower than in any year since 2001. The inventory-to-sales ratio is also at a post-recession low.* The *percentage of homes owned by the occupants is the lowest since the third quarter of 1965. Multiple factors underpin the downward trend in homeownership rates. Higher down payments are required on conventional loans since 2009 and potential homeowners are faced with tighter down payment requirements. Low interest rates and improving wages and salaries should help stimulate housing demand going forward.*

- Home prices continue to trend upward in various measures. The FHFA-purchase only Index was up 5.6% over the year in May and the U.S. CoreLogic Home Price Index rose 1.1% in June following a 1.3% increase in May. The CoreLogic Home Price Index grew 5.7% from a year earlier. The index has advanced on a year-over-year basis for 53 consecutive months, including 45 straight months of growth at or above 5%.

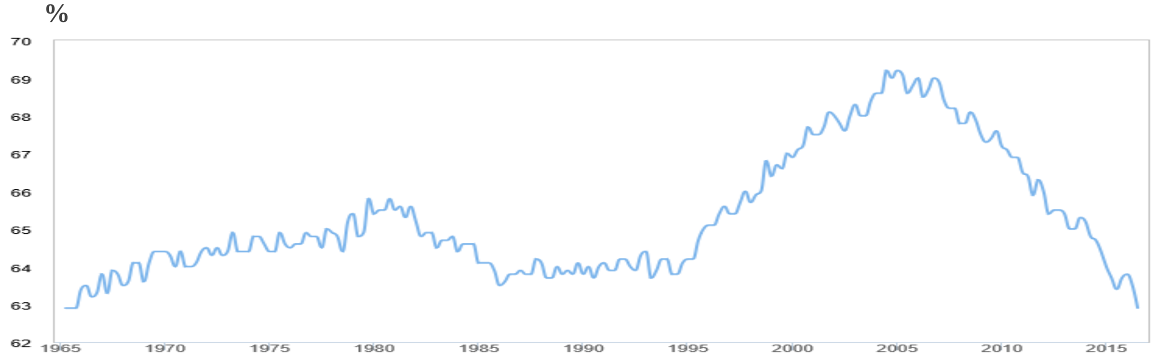
- The S&P / Case Shiller home price Index fell slightly in the three months ending in May compared to the three-month period ending in April. The national index increased 5% over the 12- month period ending in May. The 20-city composite index increased 5.2% from the previous year.

- The homeownership rate declined by 0.5% to 62.9% in the second quarter of 2016 compared with the same quarter in the previous year and declined 0.6% from the previous quarter.

- The homeowner vacancy rate fell to 1.7% from 1.8% in the same quarter of the previous year and was unchanged from the first quarter. The rental vacancy rate edged down 0.1 percentage point from the same quarter in the previous year and declined 0.3 percentage point from the previous quarter.

- The figure below shows the pattern for the homeownership rate since 1965. The rate represents the percent of homes owned by their occupants. The rate of homeownership has trended downward steadily since the Great Recession.

Figure 10. Homeownership Rate



Source: U.S. Census Bureau

- Homeownership rates for households headed by individuals younger than 35 declined by 0.1% to 34.1%, the lowest among age groups. Slow job creation and student loan debt burdens are holding back normal household creation in this age group.

- The pending home sales index rebounded in June after a decline in May. An upward long-term trend remains in place. Higher mortgage purchase applications over the past several quarters suggest home sales will increase.

- Existing home sales reached the highest level in more than nine years in June.

U.S. Trade *– While many were concerned over the Brexit vote, the impact on the U. S. has been minimal to this point. To put the trade issue in perspective, net exports account for only 13% of the U.S. GDP and trade with the U.K. represents only 4% of U. S. exports. The pound depreciation makes U.S. goods more expensive in the U.K. but even if U.S. exports to the U.K. were cut in half the impact on GDP would be about 0.1%. Overall, trade is a drag on GDP and will continue to be as long as the U. S. runs fiscal deficits (G > T) and investment exceeds domestic saving (I > S).*

- The nominal goods deficit widened by $2.2 billion from May's final to June's advance estimates. The goods deficit totaled $63.32 billion in June. On a year-ago basis, nominal exports were down 5.2% and imports were down 3.7%.

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- Trend growth in non-fuel import prices is weak with an average growth of 0.1% over the past three months. Appreciation in the U.S. dollar doesn't appear to have had an enormous impact on import prices. Sustained increases in import prices is needed to put some upward pressure on U.S. domestic inflation.

- Declines in Chinese producer prices continues to moderate, which should ease some of the downward pressure on nonfuel U.S. import prices.

- The U.S. current-account deficit increased to $124.7 billion (preliminary) in the first quarter of 2016 from $113.4 billion (revised) in the fourth quarter of 2015. As a percentage of U.S. GDP, the deficit increased to 2.7% from 2.5%.

- The deficit on international trade in goods decreased to $186.4 billion from $188.4 billion as goods imports decreased more than goods exports.

Global Issues* – *The Brexit vote and continued troubles in Japan have prompted lower estimates for global growth.* *Concerns are easing over the potential hard landing of China's economy while very slow but positive growth continues in the U. S. and Europe. Longer term demographic changes are beginning to shape slower global growth and low real interest rates patterns.

- **Brexit** - Output growth was moving slightly upward before the U.K.'s referendum vote to leave the European Union (Brexit). Global growth outlook has been revised marginally downward, and the Dallas Fed's G-40 global economy aggregate index (excluding the U.S.) forecasts marginally slower growth than previously expected. Overall, Brexit increased downside risks for the global economy.

- **Euro Zone** - The euro zone's recovery slowed in the second quarter as real GDP increased 0.3% following a 0.6% increase in the first quarter. The slow European recovery may have lost momentum even before the Brexit vote by the U.K. to leave the EEU. Second quarter growth was the slowest since the end of 2014. The U.K. departure will likely slow the euro zone recovery over the next few quarters.

- **European Banking** – The Brexit vote triggered a wave of banking share selloffs in the euro area, raising concerns for European banks to handle the buildup of nonperforming loans. The need for tighter credit conditions may slow much-needed growth recovery in the euro area. The problem is acute in Italy, where banks face an estimated €360 billion in problem loans.

- **France** - France had flat GDP growth in the second quarter following 0.7% growth in the first quarter. Government spending and net exports grew in the second quarter but household consumption was unchanged and investments contracted.

- **Germany** - The advanced estimate of GDP growth in Germany was 0.7% in the first quarter of 2016, following a 0.3% increase in the previous quarter. Germany remains in better shape than other Euro countries, but 2016 growth is likely to be around 1.6%.

- **United Kingdom** - Economic growth in the U.K. ticked up in the second quarter of 2016, with real GDP growing 0.6% compared with the 0.4% increase in the first quarter. On a year-ago basis, growth accelerated to 2.2%. The U.K. unemployment rate was unchanged at 10.1% but consumer confidence fell by 11 points in July, the largest one-month drop in more than 25 years. Britain's decision to break from the European Union may have hurt the collective confidence more than expected. The International Monetary Fund's World Economic Outlook for July revised 2016 and 2017 U.K. growth downward by 0.2 and 0.9%, respectively, from April's projections. Finally, the devaluation of the pound is likely to trigger higher inflation.

- **Italy** - Italy continued a slow recovery with 0.3% growth in the first quarter following 0.2% growth in the fourth quarter of 2015. Italian banks are struggling with bad debt risks and are now very vulnerable based on recent stress tests.

- **Japan** - The Japanese economy expanded 0.5% in the first quarter of 2016. Growth in the prior three quarters bounced from -0.4% to 0.4% to -0.4%. Japan is still experiencing deflation, with year-over-year inflation at −0.4% in May. The Bank of Japan is expected to be under its target rate of inflation for the foreseeable future.

- **India –** India's growth was revised downward slightly in July but it is still expected to have 7.4% growth in both 2016 and 2017.

- **China** - China's economy grew 6.7% on a year-over-year basis in June following a 6.7% year-over-year rate in March. The economy is on a path to reach the government's 6.5% to 7% GDP target for 2016. Programs of fiscal stimulus and monetary easing earlier in the year appear to be easing the economy back on target while longer term structural reforms are put in place. Retail sales, production, and housing prices all turned up to support the scenario of higher growth.

- **Canada** - Canada's GDP grew at an annual rate of 2.4% in the first quarter following a 0.8% rate in the last quarter of 2015.

- **Latin America** - Latin American economies continue to struggle with Brazil and Venezuela facing the most difficult economic conditions. Even well managed economies like Chile, Peru, and Columbia have suffered from the rapid decline in oil and commodity prices.

- **Demographic Challenge to Growth -** Dallas Fed economist Mark Wynne studied shifts in population growth from advanced and developing economies. He concludes that total population in Eastern Europe, Japan and Western Europe will shortly pass the tipping point from growth to decline. Since 2012, the number of potential workers has fallen as a share of the global population and this trend is most likely to continue. With the exception of Africa, every major geographic area of the world is projected to see a declining working-age population relative to the total. At the same time, the dependency ratio—people age 15 and under plus those 64 and older—is expected to rise. Each worker will need to support a larger number of dependents going forward, putting potentially significant strains on the public finances of many countries. In addition, slower growth in the working-age population is associated with lower real interest rates. Japan is currently an example of the relationship between slowing population growth and economic growth. Overall, demographics will likely place significant downward pressure on global interest rates and growth in the future.

- The figure below shows growth relationships in the world economy relative to emerging, developed, and U. S. growth. As bad as the U. S. economy has been growing, it better than other advanced economies. Overall, growth is trending downward.

Figure 11. Global Growth Trends through July 2016