Outlook and Market Review - First Quarter 2015

The U.S. economy barely moved in the First Quarter of 2015 as businesses slashed investment, exports tumbled and consumers showed signs of caution. The advanced estimate of GDP growth for the first quarter by the Bureau of Economic Analysis was a scant 0.2%, which is likely to be revised downward on May 29th. The jobs market was uneven in the first quarter but the headline U-3 unemployment rate inched down to 5.4%. The U-6 unemployment rate, which captures a much wider range of both unemployment and underemployment, is 10.8% compared to 11.8% one year ago. The labor participation rate continues to be very low but there was some improvement in the first quarter. Many economists believe 5.2% for the U-3 rate is likely to be the full employment rate given current conditions but wage growth continues to be low. Capacity utilization remains well below the long run average, suggesting that there is still a lot of room for expansion before bottlenecks lead to excess demand. The personal consumption expenditure index increased 1.4% at an annual rate in the first quarter and the consumer price index increased 2.1% on a non-seasonally adjusted basis.

While consumers had more money to work with in the first quarter they also became more cautious. Mortgage refinancing provided a boost to household budgets as interest rates remain low overall. Refinancing increased 38.1% from one year ago. The rate for a 30-year fixed mortgage is only 3.9% and is 50 basis points lower than one year ago. Real disposable income grew 6.2% in the first quarter. The personal saving rate increased to 5.5% from 4.6% in the fourth quarter as consumer confidence dipped. In early May the University of Michigan Consumer Confidence Index had the sharpest decline in two years. The Conference Board's index also declined coming out of the first quarter. Labor productivity dipped in the first quarter resulting in an increase in the cost of labor that may dampen wage improvements going forward.

As many other countries are in the midst of monetary expansion to fight deflation and stimulate growth, the Fed continues to monitor the economy with an intention of raising short term rates. Given the poor first quarter performance there is little chance of interest rate hikes in June, as many expected coming into 2015. The consensus is that small gradual increases in the Fed Funds rate will begin in the fall. Asset values remain high, largely due to low discount rates from prolonged monetary stimulation. Volatility has come off the lows in fixed income and currency markets but remains low in equity markets. Commodity prices are generally low due to slow global demand but a gradual creep in prices is underway. With the U.S. and China struggling to hit expected growth the overall global growth rate is being revised downward.

The second quarter is off to a slow start in most areas other than housing. GDP growth is likely to be less than 2% in the second quarter with better performance later in the year. Interest rates are not expected to spike. A flatter yield curve is more likely with higher short term rates and moderate increases in the longer term rates. Overall, slow growth with modest inflation should continue in the U.S.

Survey of Professional Forecasters - Not Much Change

In the most recent survey of 44 forecasters by the Federal Reserve Bank of Philadelphia the consensus GDP growth rate for the second quarter of 2015 will be 2.5% followed by 3.1% in the third quarter. On an annual average basis GDP is expected to grow 2.4% in 2015. If the forecast materializes 2015 growth will be just above the average annual growth rate in the post-recession period. Forecasters revised 2015 annual GDP growth down by 0.8% from their prior estimates in January. Looking out in the longer term, forecasters predict GDP growth trajectory below trend line growth.

A surprising aspect of the survey is that while slow growth is expected, the forecasters offered very optimistic estimates of the unemployment rate. A realistic average of 5.4% is expected for 2015 but forecasts of 4.8% in 2016 and 2017 are at odds with the generally accepted view that 5.2% is the full employment rate. Table 1 below provides a summary of key forecasts for GDP growth, unemployment rate, and payroll expansion for the remainder of 2015.

	Real GDP Growth (%)			yment Rate %)	Payrolls (000s monthly)		
Quarter	Prior	Revised	Prior	Revised	Prior	Revised	
2nd Quarter 2015	3.0	2.5	5.5	5.4	233.8	195.3	
3rd Quarter 2015	2.8	3.1	5.4	5.3	222.0	223.3	
4th Quarter 2015	2.8	2.9	5.2	5.2	229.4	223.0	

Table 1. Summary of 2015 Forecasts for GDP Growth, Unemployment, and Payrolls

Note: More pessimistic revisions are in red

Forecasters revised inflation estimates upward slightly for the second quarter. Inflation is expected to be under the Fed targets for the remainder of the year. Small differences between the expected headline and core inflation rate reflect the expectation that food and energy prices will change roughly in line with other prices in the economy. Table 2 summarizes the consensus forecasts of inflation for the remainder of 2015.

Table 2.	Summary	of 2015	Forecasts for	CPI and	PCE	Inflation Rates
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	Headline CPI		Core CPI		Headline PCE		Core PCE	
	Prior	Revised	Prior	Revised	Prior	Revised	Prior	Revised
2 nd Quarter	1.6	1.9	1.7	1.8	1.4	1.6	1.4	1.5
3 rd Quarter	1.9	2.0	1.8	1.8	1.9	1.7	1.5	1.5
4 th Quarter	2.0	1.9	1.8	1.6	1.8	1.7	1.7	1.6

Note: More pessimistic revisions are in red

Overall, the remainder of 2015 is expected to continue the pattern of slow growth and low inflation. Unemployment is expected to remain near the current rate of 5.4% with monthly payroll gains in line with 200,000 to 230,000.

First Quarter Blues - Bad Weather or Real Problems Ahead?

Last year GDP fell 2.1% in the first quarter. Economists pinned much of the blame for bad economic performance on unusually harsh weather. This year, the first quarter was again marked with dismal economic performance and the weather was again harsh. The first quarter of 2015 was only the fourth in 60 years on record with three or more snowstorms sufficiently severe to be rated by the National Climatic Data Center's Northeast Snowfall Impact Scale (NESIS). In terms of heating degree days, the first quarter was the third coldest in twenty years. Figure 1 below illustrates the relationship between weather (measured by the Winter Weather Intensity Scale) and first quarter time periods.

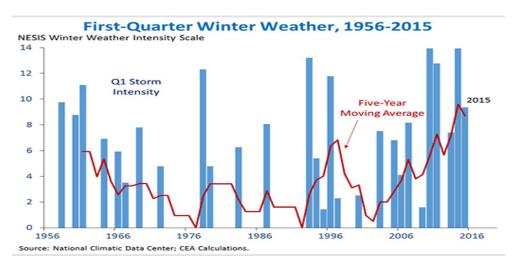
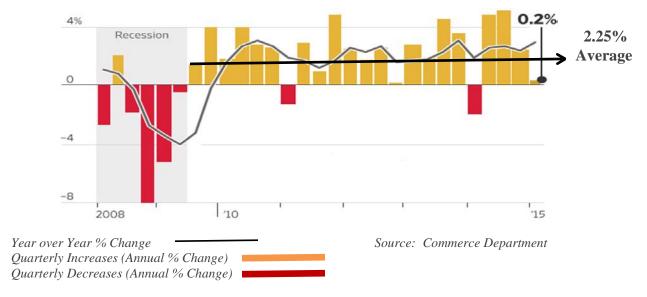


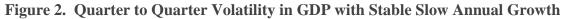
Figure 1. Weather Patterns in the First Quarter of the U.S. Economy

The trend toward more consistent severe weather in the first quarter appears to start in about 2000. An analysis of the relationship between cold weather and first quarter GDP over the past 10 years suggests that as much as 1% of GDP growth may have been lost due to the severe weather. Even with an added 1% GDP growth in the first quarter of this year the economy underperformed expectations and fell well below the average growth rate in the post-recession period of 2.25%. The economy faced headwinds beyond those provided by Mother Nature to include shipping problems that clogged the West Coast ports, a strong dollar that hurt exports, a bounce back in oil prices, sinking consumer sentiment, and falling labor productivity. While some of the factors are transitory many of them will carry forward into the second quarter.

One Quarter Doesn't Say Much about the Economy

It is difficult to infer much about the current economy from any single quarter of GDP data. Since the Great Recession, quarterly data swing wildly from quarter to quarter. Figure 2 below illustrates the time series pattern of GDP growth since the Great Recession. While quarterly data are volatile the annual GDP growth rate is much more stable with little volatility around an average of 2.25%. This is an unusual pattern for a post-recession period and may suggest a "new normal" for GDP growth. More modern inventory and supply chain methods may well make it possible to push GDP growth from one quarter to the next without dramatic adjustments to production and employment.





The common pattern for GDP growth in recent years has been for sharp slowdowns following more normal quarters of growth. For example, first-quarter GDP growth has averaged 0.6% since 2010 with an average of 2.9% for all other quarters. That has worked out to moderate overall expansion but not the growth breakout that is more common in post-recession periods. The pattern of slow growth is most likely to continue without structural reforms to improve the business environment and private investment.

A New Macroeconomic Term: The Quit Rate

Economists are somewhat puzzled by the inability of declining unemployment and healthy job creation to lead to higher wages. A traditional labor economist would expect that an improving labor market with shrinking slack in labor talent would put upward pressure on wages. Simple supply and demand forces should be at work to drive the market clearing wage up. Yes, lags occur and wages often lag behind improved hiring and lower unemployment. But as the economy approaches what many think to be full employment at a 5.2% unemployment rate there is little evidence of healthy market induced wage increases.

Last quarter the Employment Cost Index notched its largest gain since the fourth quarter of 2008. But the 2.6% gain was well below the 3% to 4% pace of wage growth consistent with a healthy labor market. In a recent study the San Francisco Fed data show that the percentage of workers who received no pay raises in the past year has been stuck near 15.5% in recent years. The scramble to explain low wage growth has led to introduction of a new term – the quit rate – as an important link to wage growth. The argument starts with the fact that the U.S. population is aging. Research by the Chicago Fed finds that older people are less likely to change jobs in general and less likely to relocate for a new job. Wage gains are larger from taking a new job than from staying on the job. Presumably a worker often quits one job for another job if a higher wage is offered. Data from the study show that job-switching is closely tied to higher pay.

The "quit rate" has declined in tandem with the aging population, making it more difficult to see rising wages in the macroeconomic data. In recent announcements Fed Chair Janet Yellen linked wage growth to preconditions for raising interest rates. She specifically singled out the quit rate as one of her gauges. A higher quit rate should occur as the economy gets stronger but demographics do not change quickly. It will be difficult to get the quit rate back to pre-recession levels, making it more difficult to see the wage gains that are more typical of a recovery.

Underpriced Risk?

Many investors are debating whether the long stock market rally can be sustained. An important feature of this debate is a view that investors are not fully accounting for risk. Recently, Fed Chairwoman Yellen suggested that the market may well be underpricing risk and pointed to low differentials between yields on riskier corporate bonds and safer Treasury bonds as well as the high levels of debt in the levered-loan market. Data presented below in Figure 3 is consistent with Yellen's theme. The Figure illustrates the pattern of "below average" pricing of default risk in the U. S. high-yield corporate bond market. The red line represents the average pricing in basis points of credit default swaps since 2005 compared to the time series of pricing. There is a clear trend of below average pricing of credit risk over the past two years.

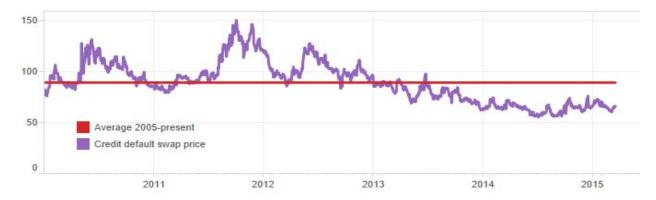


Figure 3. U.S. High-Yield Corporate Credit Default Swap Prices Relative to the Average

Note: Markit CDX North America High Yield Index is composed of 100 non-investment grade entities distributed among 2 sub-indices: B, BB. All entities are domiciled in North America. Market CDX indices roll every 6 months in March and September. Source: OECD

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Summary of Recent Economic Data

GDP - The U.S. economy stalled out in the first quarter of 2015 and the start to the second quarter has been slow. The economy expanded at a dismal 0.2% pace based on the advanced announcement by the Bureau of Economic Analysis, which is likely to be revised downward on May 29th. Much like the pattern last year, first quarter growth was disappointing. Businesses slashed investment, exports tumbled and consumers showed signs of caution. The new normal is for volatile growth from quarter to quarter but with slow trend growth in the 2% to 2.5% range on an annual basis.

• Figure 4 below illustrates the volatile quarter to quarter GDP growth in recent years while Figure 5 illustrates the stable annual growth rate between 2% to 2.5% growth. The relationship between quarterly and annual real GDP growth suggests that it is difficult to make inferences from quarterly growth data.

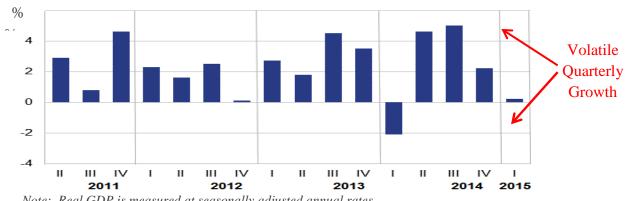


Figure 4. Quarter-to-Quarter Gross Domestic Product (GDP) Graph

Note: Real GDP is measured at seasonally adjusted annual rates. Source: Bureau of Economic Analysis





Source: Federal Reserve Bank of St. Louis

• Private inventory investment, federal government spending, and declining imports provided the only significant contributions to real GDP growth. Personal consumption

expenditures and residential fixed investment decelerated along with downturns in exports, nonresidential fixed investment, and state and local government spending.

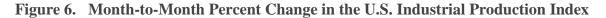
- Real personal consumption expenditures increased only 1.9% in the first quarter following a more robust 4.4% increase in the fourth quarter. Durable goods increased 1.1% in the first quarter compared to a 6.2% percent increase in the fourth quarter. Nondurable goods fell 0.3% in the first quarter in contrast to an increase of 4.1%.
- For the first quarter, real nonresidential fixed investment fell 3.4% in contrast to an increase of 4.7% in the fourth quarter. Real residential fixed investment increased 1.3% in the first quarter but following an increase of 3.8% in the fourth quarter.
- Real exports of goods and services decreased 7.2% in the first quarter following an increase of 4.5% in the fourth quarter. Real imports of goods and services increased 1.8% in the first quarter compared with an increase of 10.4% percent.
- Real federal government consumption expenditures and gross investment increased 0.3% in the first quarter following a decrease of 7.3% in the fourth.
- The change in real private inventories added 0.74 percentage point to the first-quarter change in real GDP after subtracting 0.10 percentage point from the fourth-quarter change. Private businesses increased inventories \$110.3 billion in the first quarter, following increases of \$80.0 billion in the fourth quarter and of \$82.2 billion in the third.
- Real final sales of domestic product (GDP less change in private inventories) declined 0.5% in the first quarter, in contrast to an increase of 2.3% in the fourth.
- Rising inventories contributed 0.74% to GDP in the first quarter, keeping the growth rate out of negative territory. The second quarter will likely see lower inventory investment, detracting from growth.

Production – U.S. production and manufacturing softened in the first quarter of 2015 and entered the second quarter on a down note. While the unemployment rate appears to be inching toward full employment there is a widening gap between full employment and current capacity utilization.

• Industrial production fell 0.3% in April while manufacturing output remained flat. There are a few signs of a turnaround in the factory sector but the second quarter is off to a slow

start. In the other details of the report, utilities production fell 1.3%, while mining output fell 0.8%, its fourth straight decline.

- At 105.2 percent of its 2007 average, total industrial production in March was only 2.0 percent above its level of a year earlier.
- New factory orders increased 2.1% in March, which was the strongest in more than six months. Much of the gain is due to a sharp jump in transportation orders. Core capital goods inched higher by 0.1%, marking the first such increase since August. Nondurable goods data were less upbeat as orders returned to negative territory after a brief hiatus in February and are 0.3% below year-ago averages. Total shipments grew by 0.5% despite a drop in core capital shipments of 0.4%.
- Figure 6 below shows the monthly percent change in the Industrial Production Index. The index is an economic indicator measuring real output for all facilities located in the United States manufacturing, mining, electric, and gas utilities. The index was 100 in 2007 and 105.2 in March.





- Manufacturing output was flat in April, but there was an upward revision to March that added 0.3 percentage point to the index and helped the trajectory for growth entering into the current quarter.
- The capacity utilization rate fell to 78.2% in April, the lowest in more than a year, due to less utility and mining output. Table xxx below shows the month-to-month capacity utilization in both industry and in manufacturing.

	Average	Nov.	Dec.	Jan.	Feb.	March	April
	1972-2014	2014	2014	2015	2015	2015	2015
Industry Utilization	80.1	79.8	79.5	79.2	78.9	78.6	78.2
Manufacturing Utilization	78.6	78.1	78.0	77.4	77.2	77.3	77.2

Table 3. Industry and Manufacturing Capacity Utiliz	ation
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Source: Bureau of Economic Analysis

Personal Income, Savings, and Retail Sales – Consumer income improved in the first quarter but consumers became more cautious about spending. Real disposable income grew 6.2% in the first quarter while the personal saving rate increased to 5.5% from 4.6% in the fourth quarter.

- While economic growth was absent, disposable personal income increased 4.1% at an annual rate (\$132.2 billion) in the first quarter compared with an increase of 3.2% (\$102.5 billion) in the fourth. Real disposable personal income increased at an annualized 6.2% compared with an increase of 3.6% in the fourth quarter. Table xxx shows the month-by-month increase in real disposable income and real personal consumption expenditures in the first quarter.
- For the first quarter of 2015 real personal consumption expenditures increased 1.9% compared with a 4.4% increase in the fourth quarter of 2014. The table below shows the month-to-month change in both real disposable income and real personal consumption expenditures for the first quarter.

Table4. Month-to-Month Percentage Change in Real Disposable Income and RealPersonal Consumption Expenditures.

	January	February	March
Real Disposable Income	0.8	0.3	-0.2
Real Personal Consumption Expenditures	0.2	0.0	0.3

Note: Monthly percent changes are not annualized. Real estimates are in 2009 dollars.

- The personal savings rate (savings as a percentage of disposable income) was 5.5% in the first quarter compared with 4.6% in the fourth quarter.
- Retail sales have been weak largely due to lower gas prices and thrifty consumers. Figure 7 below illustrates the monthly percentage change in retail sales.

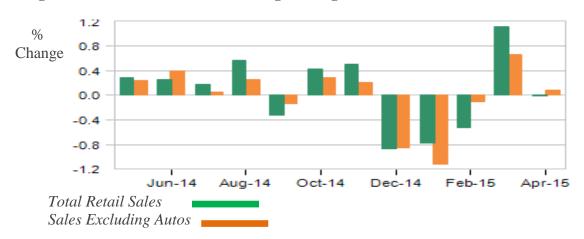


Figure 7. Month-to-Month Percentage Change in U. S. Retail Sales

• For April, total sales were up only 0.9% from a year earlier. April sales were the weakest since October 2009 when the economy was emerging from recession. The only major segments posting year-over-year declines other than gasoline stations were department stores and electronics and appliance stores, although sales at other general merchandise stores barely grew compared with last year.

Labor Market and Wages – Job creation slumped in March but picked back up in April. The U-3 headline unemployment rate reached a post-recession low of 5.4% even as the labor force participation rate picked up slightly. Many economists believe full employment in the current market corresponds to a 5.2% unemployment rate. Wages continue to be slow to recover but falling productivity is beginning to put upward pressure on unit labor costs, making it more difficult to add jobs going forward.

- Average hourly earnings for all workers advanced by only 0.1% in April and the March increase was revised downward from 0.28% to 0.2%. The workweek was unchanged at 34.5 and weekly earnings edged higher by 0.1% after no advance previously.
- Payrolls increased by 223,000 in April and March job creation was revised down from 126,000 to only 85,000. As expected, energy-related industries are creating a drag on goods-producing payrolls, while services are more resilient. Figure 8 shows the monthly change in payrolls.

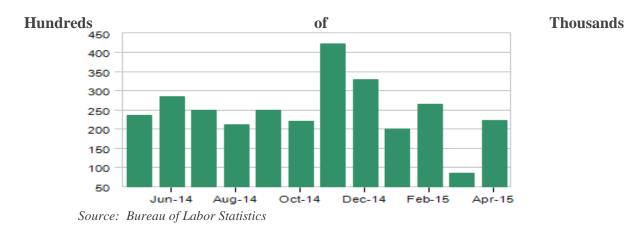


Figure 8. Monthly Net Change in U.S. Nonfarm Payrolls

• The U-3 unemployment rate declined to a post-recession low of 5.4% compared to 5.9% one year ago. The U-6 unemployment rate (the ratio of total unemployed plus all persons marginally attached to the labor force plus total employed part time for economic reasons to the civilian labor force plus all persons marginally attached to the labor force plus all persons marginally attached to the labor force) fell to 10.8% in April compared to 11.8% one year ago.

• The labor force participation ticked up slightly to 62.8% in April. Figure 9 below illustrates the declining trend in the labor force participation rate since the Great Recession. As the participation rate improves it will be more difficult to reduce the unemployment rate.

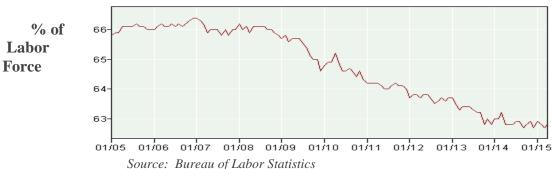


Figure 9. Labor Force Participation Rate (January 2005 to April 2015)

- The number of workers unemployed longer than six months continued to decline steadily. Fewer workers were employed part time involuntarily driven by a decline in slack work. However, the number of workers who were only able to find part-time work increased.
- The ratio of unemployed workers to job openings continued to fall in March to 1.72 compared to a pre-recession low of 1.5.
- Productivity fell at a 1.9% annual rate in the first quarter due to both more hours worked and a modest dip in output. Productivity fell for two consecutive quarters after a 2.1% decline in the fourth quarter. The last time productivity dropped in back-to-back quarters was in 2006. The 1.9% slide in productivity coincided with a 3.1% annualized rise in average hourly wages, pushing unit labor costs 5% higher at an annualized rate.

Inflation – Oil price declines in 2014 introduced deflationary pressures that are just now beginning to subside. The "core" index remains higher than the "all items" index due to relatively low oil prices. As the economy approaches full employment we should expect more price pressure but this can be a very slow process. If the labor participation rate moves back to its normal range it will be very difficult to achieve lower unemployment rates going forward Capacity utilization rates also remain low allowing room for more growth without bottlenecks that tend to be inflationary.

• The price index for gross domestic purchases, which measures prices paid by U.S. residents, fell 1.5% in the first quarter following a decrease of 0.1% in the fourth. Excluding food and energy prices, the price index for gross domestic purchases increased 0.3%, compared with an increase of 0.7%.

The Figure below shows the month-to-month movement of the consumer price index for the all items and core components. The Fed's 2% annual inflation target is consistent with a 0.16% monthly average change in the index. Inflation was below the .16% monthly rate at the end of 2014.

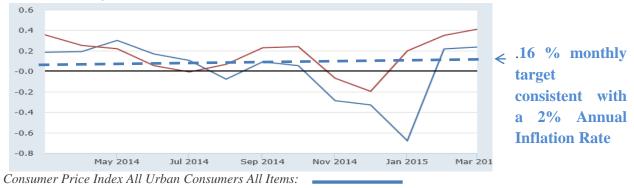


Figure 10. Monthly Consumer Price Index over the Last Year

Consumer Price Index All Urban Consumers All Items Less Food and Energy:

The quarterly movement of the CPI and the PCE expressed as an annual percentage change are shown in the Table below. Deflation continues to occur for the broader PCE index. The Fed may need more time to evaluate inflation pressure before interest rate hikes are implemented.

Table 4. Quarter-to-Quarter PCE and CPI Annualized Percentage Change

	I 2014	II 2014	III 2014	IV 2014	I 2015
PCE (percent change)	1.37	2.33	1.23	42	-1.97
CPI (percent change)	5.75	3.24	-0.4	-5.5	2.0

Figure 11 below illustrates the monthly pattern of price pressures at the wholesale level. • The figure shows deflationary pressures overall since October of 2014 even for the core goods index without food and energy.

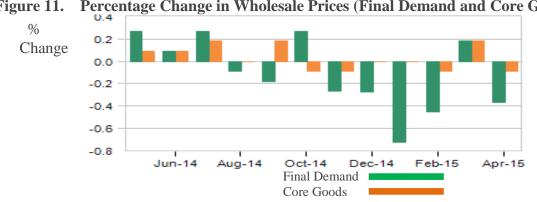


Figure 11. **Percentage Change in Wholesale Prices (Final Demand and Core Goods)**

• The producer price index fell 0.4% in April cancelling out the 0.2% increase in March. The data suggests that even with increases in oil prices and normalization of the dollar from the March highs, inflationary pressures are still moderate going into the second quarter.

Sentiment and Confidence – *Confidence is weakening but remains above a level consistent with a moderate expansion.*

- The Conference Board *Consumer Confidence Index*[®] declined from 101.4 in March to 95.2 in April. The index was 100 in 1985. The Present Situation Index fell from 109.5 last month to 106.8 in April. The Expectations Index declined from 96.0 last month to 87.5 in April.
- The University of Michigan consumer confidence index fell 7.3 points to 88.6 in May. The decline is the largest in two years. Rising prices of gasoline along with expectations of higher inflation appear to be the key factors for consumers. The figure below illustrates the monthly movement of the index over the past year. The index has been trending down in the most recent months, coinciding with weak overall GDP data.



Figure 12. University of Michigan Consumer Confidence Index

• The Conference Board Leading Economic Index® for the U.S. released on April 17 increased 0.2% in March to 121.4 (2010 = 100), following a 0.1% increase in February, and a 0.2% increase in January. The leading index is consistent with a moderate expansion but the declining rate of change suggests weaker growth ahead.

Housing - The housing market was hit hard by extreme weather in the early part of the year and is now recovering some of the lost ground. Expectations are high for a rebound in the second quarter. Mortgage rates remain low on an historical basis and mortgage applications are well ahead of where they were one year ago.

• The NAHB composite index fell 2 points in April, falling to 54. The "present sales" and "prospective buyers traffic" subcomponents of the index fell while the "future sales" subcomponent gained slightly. Figure 13 below illustrates the movement of the index over the past year. The NAHB index is ahead of the measure achieved one year ago.



Figure 13. NAHB Index over the Past 12 Months

- The six-month average of the NAHB index is 55, slightly ahead of the most recent monthly reading. Even so, the index is hovering near its highest level in nine years and is well ahead of the neutral measure of 50. The present sales subcomponent of the index fell by 2 points to 59.
- On a four-week moving average basis, refinance activity is down 3% over the past month but is 38.1% higher from a year ago. Meanwhile, purchase applications increased 10% over the past month and are also 13.6% above their year-ago level.
- The contract rate for 30-year fixed-rate conforming mortgages is about 3.9%, which is 50 basis points below where it was a year ago. The rate for the five-year adjustable-rate mortgage is currently 2.87%. The adjustable rate is 34 basis points lower than a year ago.
- The pending home sales index rose 1.1% to 108.6 in March, adding to the recent positive trend and reaching its highest level since mid-2013. Potential home sales are now up around 11.1% over the year. The pending home sales index is now 11.1% above its March 2014 level. The pending home sales index is a leading indicator of the housing market and leads changes in existing-home sales by one to two months.

- Residential construction is approximately 50% below its 2005 peak and 25% below the pre-housing boom historical average. Construction improved in April as projects delayed by bad weather came back on line. Housing starts were 20.2% above the revised March numbers and 9.2% above their total in April 2014.
- The House Price Index published by the Federal Housing Finance Agency reached 220.49 in February compared to 210.45 one year ago, representing an increase of 4.77%. The HPI is a broad measure of the movement of single-family house prices that controls types of properties by using a weighted repeat-sales index.
- Figure 14 below shows the S&P/Case-Shiller 20-City composite home price index from its inception. The index reached a high of 206.49 during the housing bubble and sank to 141.29 by the end of the Great Recession. The most recent reading in February of 2015 is 177.38. The recovery in housing prices is likely to continue, but at a slow rate.

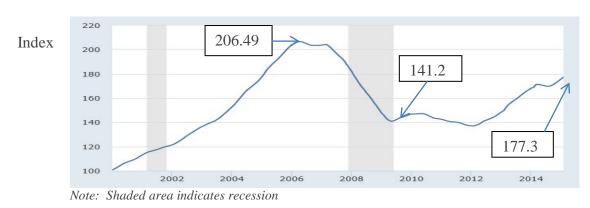
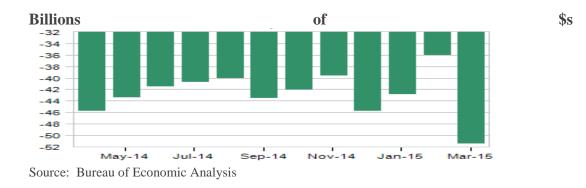


Figure 14. S&P/Case-Shiller 20-City Composite Home Price Index

U. S. Trade – *U. S. trade relationships for the U.S. have been made worse by the stronger dollar, west coast port disruptions, and weak demand abroad.*

• The U.S. trade deficit widened in March from \$35.9 billion to \$51.4 billion. The West Coast port disruptions and a strong dollar led to the widest deficit since 2008. Exports bounced back modestly, but low global growth continues to weigh on demand for U.S. products and exports. Figure 15 shows the monthly trade deficit over the past year.





Key Issues in the Global Economy - Data on first quarter 2015 global GDP are still coming in but weaknesses in the U.S. and China suggest that global growth will underperform the expected 2.4% rate. A growth rate closer to 2% is now more likely. Problems abound in the global economy with multiple cases of monetary expansion to combat deflation and spur growth. Almost all countries are either at one end of the inflation-deflation spectrum or the other. A combination of low oil and commodity prices, currency fluctuations, low aggregate demand, high credit risks, and needed structural reforms have all served to disrupt stable expansion.

• Real global GDP has risen by an average of 2.8% per year since 2010. This is nearly a full percentage point less than that during the last post-recession recovery. Consequently, the output gap between trend "potential" and realized growth is a sizable -1% of global GDP. For perspective, the output gap was this bad at the worst of the 2001 downturn. Figure 16 illustrates the global GDP growth path.

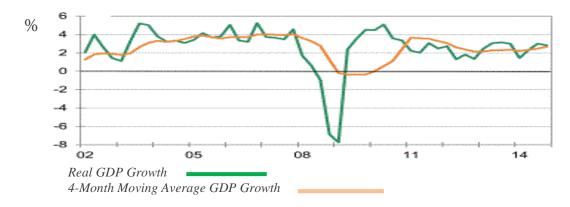


Figure 16. Global Economic Real Growth (Annualized Percentage Change)

- European Central Bank President Mario Draghi recently said that monetary policy will remain accommodative as long as needed to achieve the central bank's objectives of low and stable prices along with sustainable economic recovery. Macroeconomic policy is dedicated to bringing the inflation rate to about 2%, while structural reforms are designed to improve the business environment, strengthen the financial markets and build confidence in the Euro zone.
- In the last quarter of 2014 the Eurozone GDP rose 0.3%. Going forward, growth will be aided by low oil prices, weak value of the Euro, and a strong commitment to accommodating macroeconomic policies.
- Euro zone consumer prices were unchanged in April from a year earlier, following a 0.1% drop in the prior month. While the weakening euro should drive up import prices, inflation will not pick up in the coming months without stronger growth. Quantitative easing has improved credit availability and generated low real interest rates. Even so it will take time for aggregate demand pressure and inflation expectations to take hold.
- The Euro zone's trade surplus expanded in March to €23.4 billion from an upwardly revised €21.4 billion in the previous month.
- German output advanced 0.3% in the first quarter of 2015 after increasing 0.7% in the prior quarter. Inflation was 0.4% for April following a 0.3% inflation rate in March.
- The U.K. annual headline inflation rate fell -0.1% in April for the first time in more than 50 years. The deflation was expected and should not prompt added reaction in macroeconomic policy at this point. Producer prices, a forward indicator of inflation pressures, suggest consumer prices should start to pick up in the next month or so. The U.K. headline unemployment rate fell in March to 5.5%, the lowest in six years.
- Greek bond yields are rising in the wake of a near miss by Greece to make its recent payment to the International Monetary Fund. Compromises are ongoing but the drama with the Greek debt is far from over. Greece intends to reach a loan deal by the end of this month and needs to make the next payment of €1.5 billion to the International Monetary Fund on June 5. The yield on Greek 10-year sovereign debt is now 11.34%.
- The Chinese government recently stepped up infrastructure spending and provided further support to cash-strapped local governments. Chinese fiscal policy is working alongside monetary policy in China to reach the government's 7% GDP growth target in 2015. Major infrastructure investments are taking place to revitalize the economy.

- China cut interest rates for the third time in six months amid a worse-than-expected economic slowdown. Chinese authorities are trying to ease the heavy debt burdens of companies and governments. The People's Bank of China is shaving a quarter of a percentage point off benchmark lending and deposit rates. The move is in response to fears that the mountain of debt from the rapid expansion of credit over the past few years is weighing on efforts to pick up the world's second-largest economy.
- Japan's first quarter GDP growth held steady at 0.4%.
- Foreign investors are shying away from Indian assets due to growing uncertainty about domestic policies and the slumping rupee.
- Russia has now officially entered a technical recession. The preliminary data on firstquarter GDP indicate a 1.9% decline on a year-ago basis.