Economic Outlook

Detroit Association for Business Economics
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The “Great Recession” ended in June 2009 and GDP expanded by 2.5% last year.
The “Midwest” economy has performed well over the past year.
Real existing home prices fell by 40%, but have begun to rise.
The forecast calls for a very gradual recovery in housing
The stock market has improved since March 2009, and has surpassed its previous peak.

Real S&P 500 stock index

Index: 1990 = 100
Blue-Chip is expecting GDP to grow somewhat above trend over the next two years.
The Federal Open Market Committee (FOMC) expects GDP to grow somewhat above trend over the next three years.
The path of the current recovery is restrained compared with past deep recession recovery cycles.
Employment grew by over 3.2 million jobs over the past 12 months.
After peaking in October 2009, the unemployment rate has fallen by 4.3 percentage points.
However, the labor force participation rate fell to a level last seen in 1977.
## Civilian Labor Force Participation Rate and Population Share 16 and Older by Age Category, United States, 2007 and 2014

<table>
<thead>
<tr>
<th>Age Category</th>
<th>Labor Force Participation Rate (%)</th>
<th>Population Share (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16 and older</td>
<td>62.9</td>
<td>66.1</td>
</tr>
<tr>
<td>16 to 24</td>
<td>55.0</td>
<td>59.4</td>
</tr>
<tr>
<td>25 to 34</td>
<td>81.2</td>
<td>83.3</td>
</tr>
<tr>
<td>35 to 44</td>
<td>82.2</td>
<td>83.8</td>
</tr>
<tr>
<td>45 to 54</td>
<td>79.6</td>
<td>82.0</td>
</tr>
<tr>
<td>55 to 64</td>
<td>64.1</td>
<td>63.8</td>
</tr>
<tr>
<td>65 plus</td>
<td>18.6</td>
<td>16.0</td>
</tr>
</tbody>
</table>
The share of those unemployed more than 6 months remains significantly high.

Unemployed for 27 weeks or more

percent

1950 '55 '60 '65 '70 '75 '80 '85 '90 '95 '00 '05 '10 '15
Employees working part time for economic reasons remains elevated.
Wages and benefit costs have increased over the past year, but still remains relatively low.
The unemployment rate is forecast to edge lower with an additional 2.7 million jobs projected for 2015.
The FOMC forecasts that the unemployment rate will be at the natural rate at the end of this year.

Unemployment rate

|         | 1990 | '91 | '92 | '93 | '94 | '95 | '96 | '97 | '98 | '99 | '00 | '01 | '02 | '03 | '04 | '05 | '06 | '07 | '08 | '09 | '10 | '11 | '12 | '13 | '14 | '15 | '16 | '17 |
|---------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| FOMC    | 3    | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  | 13  | 14  | 15  | 16  | 17  | 18  | 19  | 20  | 21  | 22  | 23  | 24  | 25  | 26  | 27  | 28  | 29  | 30  | 31  |

Unemployment rate percent

FOMC Central Tendency (December 2014)

- 2015: 5.2 – 5.3
- 2016: 5.0 – 5.2
- 2017: 4.9 – 5.3

Longer run: 5.2 – 5.5
Inflation is declining

Personal consumption expenditure - chain price index

percent change from a year earlier
In large part due to the collapse of energy prices
Natural gas prices have also declined and remains low
Expenditures on energy are below the historical average.

Energy goods and services expenditures as a share of total consumption.
Low oil prices benefit most states
(Effect of a 50% decline in oil prices on employment)
Removing the volatile food and energy components from the PCE, “core” inflation remains low.
Inflation is forecast to rise 1.1 percent in 2015 and 2.3 percent in 2016.
The FOMC anticipates that PCE inflation will remain below two percent through 2017.

**Personal consumption expenditure - chain price index**

percent change from a year earlier

<table>
<thead>
<tr>
<th>Year</th>
<th>Central Tendency</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>1.2 – 1.3</td>
</tr>
<tr>
<td>2015</td>
<td>1.0 – 1.6</td>
</tr>
<tr>
<td>2016</td>
<td>1.7 – 2.0</td>
</tr>
<tr>
<td>2017</td>
<td>1.8 – 2.0</td>
</tr>
<tr>
<td>Longer run</td>
<td>2.0</td>
</tr>
</tbody>
</table>
The FOMC anticipates that “core” PCE inflation will also remain below two percent through 2017.
Blue Chip International Consensus Forecasts

<table>
<thead>
<tr>
<th>Country</th>
<th>Real GDP % change Annual</th>
<th>Inflation % change Annual Consumer Prices</th>
<th>Exchange Rate Against US Dollar End of Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>2.4</td>
<td>3.2</td>
<td>2.9</td>
</tr>
<tr>
<td>Canada</td>
<td>2.4</td>
<td>2.3</td>
<td>2.3</td>
</tr>
<tr>
<td>Mexico</td>
<td>2.3</td>
<td>3.3</td>
<td>3.8</td>
</tr>
<tr>
<td>Japan</td>
<td>0.6</td>
<td>1.0</td>
<td>1.4</td>
</tr>
<tr>
<td>South Korea</td>
<td>3.4</td>
<td>3.5</td>
<td>3.6</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>2.6</td>
<td>2.6</td>
<td>2.5</td>
</tr>
<tr>
<td>Germany</td>
<td>1.5</td>
<td>1.4</td>
<td>1.8</td>
</tr>
<tr>
<td>France</td>
<td>0.4</td>
<td>0.9</td>
<td>1.3</td>
</tr>
<tr>
<td>Euro Zone</td>
<td>0.8</td>
<td>1.2</td>
<td>1.6</td>
</tr>
<tr>
<td>Brazil</td>
<td>0.2</td>
<td>0.3</td>
<td>1.7</td>
</tr>
<tr>
<td>Russia</td>
<td>0.2</td>
<td>-3.4</td>
<td>0.3</td>
</tr>
<tr>
<td>China</td>
<td>7.3</td>
<td>6.9</td>
<td>6.7</td>
</tr>
<tr>
<td>India</td>
<td>5.8</td>
<td>6.1</td>
<td>6.6</td>
</tr>
</tbody>
</table>

Blue Chip Economic Indicators Forecast February 10, 2015
The real trade-weighted dollar has increased 8.9% over the past six months.
Since the beginning of the expansion manufacturing output has been increasing at a 4.8% annualized rate and has recovered 115% of the output during the recession.
While manufacturing jobs have been rising, they have only recovered 38.2% of the jobs lost during the downturn.
Capacity utilization is getting very close to full utilization.
Average weekly hours for private workers has recently moved higher.
However, average weekly hours for manufacturing are at extremely high levels: the highest working week since World War II.
The recovery has also been broad-based with vehicle and primary metals manufacturing leading the way.
Light vehicles sales have reached pre-recession levels
The New 2015 F-150

500 pounds lighter by using aluminum

EcoBoost 2.7 liter V-6

Fuel economy increases by 5-20%

Prices range from $26K-$60K+

Will this new design be accepted by the consumer?

“High-strength, military grade, aluminum-alloy body”
“When redesigning the GMC Sierra, engineers relied on roll-formed steel, the same material found in the hulls of submarines. Big ones.”
Vehicle sales are forecast to rise around 3% this year and 1% next year.
The purchasing managers’ index has moderated over the past few months.
The industrial sector has performed very well over the past 5 years.
Industrial production is forecast to rise at a pace above trend in 2015 and 2016.
Credit spreads between Corporate High Yield securities and Corporate Aaa securities have remained low, but has been inching higher since the middle of 2014.
Monetary policy has been very aggressive, keeping the Fed Funds near zero since December 2008.
The Federal Funds Rate is anticipated to return to the neutral rate by the end of 2017.

Target Federal Funds Rate

percent

1990'91 '92 '93 '94 '95 '96 '97 '98 '99 '00 '01 '02 '03 '04 '05 '06 '07 '08 '09 '10 '11 '12 '13 '14 '15 '16 '17

FOMC Midpoint Values (December 2014)

Longer run 3.75
The asset side of the Fed’s balance sheet has expanded in size and in composition.

Assets of the Federal Reserve
Billions of dollars

2007 2008 2009 2010 2011 2012 2013 2014

Maiden Lane II & III
Term Asset-Backed Securities
Loan Facility
AIG Support
Central Bank Swaps
Commercial Paper Facility
Maiden Lane
Securities Held Outright

Term Auction Credit

2007 2008 2009 2010 2011 2012 2013 2014
The money supply (M2) is nearly 3 times bigger than the monetary base.
The Fed’s expansion of the monetary base has allowed the money supply to continue rising, compared with what took place during the 1930s.
The outlook is for the U.S. economy to expand at a pace somewhat above trend in 2015 and 2016. Employment is expected to rise moderately with the unemployment rate edging lower. Slackness in the economy will lead to a relatively contained inflation rate. Growth in manufacturing output should be above trend over the next two years.
www.chicagofed.org
www.federalreserve.gov