Consensus Outlook - 2017

Thirtieth Annual Economic Outlook Symposium

December 2, 2016

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The views expressed herein are those of the author and do not necessarily represent the views of the Federal Reserve System or the Federal Reserve Bank of Chicago.
Review of Past Performance
The growth in real GDP was below last year’s forecast.

Real GDP
(percent change, annualized)

Actual Data

Previous EOS Forecasts

Forecasts:
EOS 2015
Oil prices remained below what was expected during 2016.
In part, lower oil prices kept inflation somewhat below what was anticipated.
One of the bigger misses, was the much weaker performance in business fixed investment.
Inventories were added at a much slower pace than anticipated.

Change in Private Inventories
(billions of constant dollars)
While quite volatile, the trade weighted value of the dollar was close to the forecast
Even with a somewhat stronger dollar, the expected deterioration in trade balance did not occur.
Industrial production growth was softer than forecast
The unemployment rate was almost perfectly predicted
Consumer spending was close to the forecast

Personal Consumption Expenditures
(per cent change, annualized)
Yet, light vehicle sales came in a bit below what was predicted
The forecast of continued steady improvement in housing starts fell short during 2016.

Housing Starts
(millions of units)
This led to a big miss in residential investment
This housing starts miss occurred even as longer-term rates moved lower rather than the predicted increase.
Short term interest rates also fell short of what was expected.
Forecast for 2017
Real GDP is expected to increase by 2.2% next year

Real GDP
(percent change, annualized)

Actual Data

Median Forecast: EOS 2016

High and Low Forecast: EOS 2016*

Previous EOS Forecasts

*Excludes the two highest and two lowest forecasts
Oil prices are predicted to remain low, averaging $51.53 per barrel by the end of 2017.
Inflation is forecast to rise 2.0% next year
Business fixed investment is predicted to increase 3.2% over the coming year.
Business inventories are anticipated to grow at a faster pace in 2017

Change in Business Inventories
(billions of constant dollars)
The dollar is forecast to continue rising, gaining an additional 4.7% next year.

J.P. Morgan Trade Weighted Dollar
(percent change, annualized)
The trade balance is expected to deteriorate in 2017

Net Exports of Goods and Services
(billions of constant dollars)
Industrial output is forecast to increase at a moderate 1.9% next year.
The unemployment rate is projected to tick lower, reaching 4.8% in the final quarter of next year.
Consumer spending growth is expected to ease to 2.3% in 2017

Personal Consumption Expenditures
(percent change, annualized)
Light vehicles sales are forecast to tick down to 17.3 million units in 2017

Car and Light Truck Sales
(millions of units)
Housing starts are forecast to rise to 1.2 million next year.
Residential investment rebounds in 2017, gaining 4.5%
Ten-year interest rates are expected to increase by 46 basis points next year.
Short-term interest rates are predicted to rise by 62 basis points in 2017

Treasury One-year Rate (percent)
## Median Forecasts: Consensus Book Page 1

<table>
<thead>
<tr>
<th></th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP, current dollars*</td>
<td>3.0%</td>
<td>3.4%</td>
<td>4.0%</td>
</tr>
<tr>
<td>GDP Price Index, chain-type*</td>
<td>1.1%</td>
<td>1.4%</td>
<td>2.1%</td>
</tr>
<tr>
<td>Real GDP, chained dollars*</td>
<td>1.9%</td>
<td>1.8%</td>
<td>2.2%</td>
</tr>
<tr>
<td>Real Personal Consumption Expenditures*</td>
<td>2.6%</td>
<td>2.6%</td>
<td>2.3%</td>
</tr>
<tr>
<td>Real Business Fixed Investment*</td>
<td>0.8%</td>
<td>0.1%</td>
<td>3.2%</td>
</tr>
<tr>
<td>Real Residential Investment*</td>
<td>13.1%</td>
<td>-1.1%</td>
<td>4.5%</td>
</tr>
<tr>
<td>Change in Private Inventories**</td>
<td>$56.9</td>
<td>$23.4</td>
<td>$44.2</td>
</tr>
<tr>
<td>Net Exports of Goods and Services (billions of constant dollars)**</td>
<td>-$566.6</td>
<td>-$537.4</td>
<td>-$563.5</td>
</tr>
<tr>
<td>Real Government Consumption Expenditures and Gross Investment*</td>
<td>2.2%</td>
<td>0.3%</td>
<td>1.1%</td>
</tr>
</tbody>
</table>

* Q4 over Q4
** Q4 value
### Median Forecasts: Consensus Book Page 1

<table>
<thead>
<tr>
<th>Metric</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
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<tbody>
<tr>
<td>Industrial Production*</td>
<td>-1.6%</td>
<td>0.1%</td>
<td>1.9%</td>
</tr>
<tr>
<td>Car and Light Truck Sales</td>
<td>17.4</td>
<td>17.4</td>
<td>17.3</td>
</tr>
<tr>
<td>(millions – calendar year including imports)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Housing Starts (millions of units)</td>
<td>1.11</td>
<td>1.15</td>
<td>1.20</td>
</tr>
<tr>
<td>Oil Price (dollars per barrel of West Texas Intermediate)**</td>
<td>$42.02</td>
<td>$47.93</td>
<td>$51.53</td>
</tr>
<tr>
<td>Unemployment Rate**</td>
<td>5.0%</td>
<td>4.9%</td>
<td>4.8%</td>
</tr>
<tr>
<td>Consumer Price Index*</td>
<td>0.4%</td>
<td>1.4%</td>
<td>2.0%</td>
</tr>
<tr>
<td>Treasury Constant Maturity One-year Rate**</td>
<td>0.46%</td>
<td>0.71%</td>
<td>1.33%</td>
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<tr>
<td>Treasury Constant Maturity Ten-year Rate**</td>
<td>2.19%</td>
<td>1.90%</td>
<td>2.36%</td>
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<tr>
<td>J.P. Morgan Trade Weighted OECD Dollar*</td>
<td>11.6%</td>
<td>1.8%</td>
<td>4.7%</td>
</tr>
</tbody>
</table>

* Q4 over Q4
** Q4 value
Summary

- The economy is forecast to rise at a pace just slightly above trend in 2017
- The unemployment rate is expected to tick lower next year
- Inflation is anticipated to increase by two percent next year
- Manufacturing growth is expected to improve to a pace that is below its trend
- Light vehicles sales are forecast to ease to a still quite strong 17.3 million units in 2017
- Housing starts are predicted to increase to 1.2 million units next year

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