Consensus Outlook - 2018

Thirty-first Annual Economic Outlook Symposium

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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 accurately forecast

Real GDP
(percent change, annualized)

Forecasts:
EOS 2016

Actual Data

Previous EOS Forecasts

Forecasts:
EOS 2016
Oil prices remained relatively flat as predicted

Oil Prices - West Texas Intermediate
(dollars per barrel)
While a bit more volatile, inflation came-in as anticipated.
Investment was stronger than forecast

Business Fixed Investment
(percent change, annualized)
Inventories were added at a pace close to what was anticipated.
While quite volatile, the trade weighted value of the dollar was close to the forecast.

J.P. Morgan Trade Weighted Dollar
(percent change, annualized)
The expected improvement in the trade balance did not occur.
Industrial production growth surged in the second quarter, but due to the hurricanes was softer in the third quarter.
The unemployment rate once again declined at a faster pace than was predicted.
Consumer spending was slightly stronger than forecast

**Personal Consumption Expenditures**

(percent change, annualized)
Yet, light vehicle sales came in a bit below what was predicted
Housing starts were stronger earlier in the year, but eased in the last two quarters—and wound up close to what was expected.
The same pattern as housing starts occurred with residential investment

Residential Investment
(percent change, annualized)
The long anticipated increase in longer-term rates finally took place in 2017.
The increases in short term interest rates were very accurately forecast.
Forecast for 2018
Real GDP is expected to increase by 2.3% next year

Real GDP
(percent change, annualized)

Previous EOS Forecasts

Actual Data

Median Forecast: EOS 2017

High and Low Forecast: EOS 2017*

*Excludes the two highest and two lowest forecasts
Oil prices are predicted to remain low, but edge higher, averaging $53.18 per barrel by the end of 2018.
Inflation is forecast to rise 2.0% next year

CPI Inflation Rate
(percent change, annualized)
Business fixed investment is predicted to increase at a solid pace of 3.5% over the coming year.
Business inventories are anticipated to grow at a slightly faster pace in 2018.
The dollar is forecast to rise 1.0% next year
The trade balance is expected to deteriorate in 2018

Net Exports of Goods and Services
(billions of constant dollars)

2000 '01 '02 '03 '04 '05 '06 '07 '08 '09 '10 '11 '12 '13 '14 '15 '16 '17 '18
Industrial output is forecast to increase at a moderate 1.9% next year.
The unemployment rate is projected to tick lower, reaching 4.1% in the final quarter of next year.
Consumer spending growth is expected to increase by 2.3% in 2018

Personal Consumption Expenditures
(percent change, annualized)
Light vehicles sales are forecast to tick down to 17.0 million units in 2018.
Housing starts are forecast to rise to 1.26 million next year
Residential investment rebounds in 2018, gaining 3.3%
Ten-year interest rates are expected to increase by 56 basis points next year.
Short-term interest rates are predicted to rise by 58 basis points in 2018.
### Median Forecasts: Consensus Book Page 1

<table>
<thead>
<tr>
<th>Category</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP, current dollars*</td>
<td>3.4%</td>
<td>4.1%</td>
<td>4.1%</td>
</tr>
<tr>
<td>GDP Price Index, chain-type*</td>
<td>1.5%</td>
<td>1.7%</td>
<td>1.8%</td>
</tr>
<tr>
<td>Real GDP, chained dollars*</td>
<td>1.8%</td>
<td>2.5%</td>
<td>2.3%</td>
</tr>
<tr>
<td>Real Personal Consumption Expenditures*</td>
<td>2.8%</td>
<td>2.6%</td>
<td>2.3%</td>
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<tr>
<td>Real Business Fixed Investment*</td>
<td>0.7%</td>
<td>5.4%</td>
<td>3.5%</td>
</tr>
<tr>
<td>Real Residential Investment*</td>
<td>2.5%</td>
<td>-0.2%</td>
<td>3.3%</td>
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<tr>
<td>Change in Private Inventories**</td>
<td>$63.1</td>
<td>$37.9</td>
<td>$41.8</td>
</tr>
<tr>
<td>Net Exports of Goods and Services (billions of constant dollars)**</td>
<td>-$631.1</td>
<td>-$602.7</td>
<td>-$627.9</td>
</tr>
<tr>
<td>Real Government Consumption Expenditures and Gross Investment*</td>
<td>0.4%</td>
<td>-0.1%</td>
<td>0.6%</td>
</tr>
</tbody>
</table>

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

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<thead>
<tr>
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<th>2016</th>
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<th>2018</th>
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<tbody>
<tr>
<td>Industrial Production*</td>
<td>-0.1%</td>
<td>1.9%</td>
<td>1.9%</td>
</tr>
<tr>
<td>Car and Light Truck Sales</td>
<td>17.5</td>
<td>17.1</td>
<td>17.0</td>
</tr>
<tr>
<td>(millions – calendar year including imports)</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Housing Starts (millions of units)</td>
<td>1.18</td>
<td>1.19</td>
<td>1.26</td>
</tr>
<tr>
<td>Oil Price (dollars per barrel of West Texas Intermediate)**</td>
<td>$49.20</td>
<td>$52.31</td>
<td>$53.18</td>
</tr>
<tr>
<td>Unemployment Rate**</td>
<td>4.7%</td>
<td>4.2%</td>
<td>4.1%</td>
</tr>
<tr>
<td>Consumer Price Index*</td>
<td>1.8%</td>
<td>1.8%</td>
<td>2.0%</td>
</tr>
<tr>
<td>Treasury Constant Maturity One-year Rate**</td>
<td>0.76%</td>
<td>1.43%</td>
<td>2.01%</td>
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<tr>
<td>Treasury Constant Maturity Ten-year Rate**</td>
<td>2.13%</td>
<td>2.45%</td>
<td>3.01%</td>
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<tr>
<td>J.P. Morgan Trade Weighted OECD Dollar*</td>
<td>3.7%</td>
<td>-4.1%</td>
<td>1.0%</td>
</tr>
</tbody>
</table>

* Q4 over Q4  
** Q4 value
Summary

- The economy is forecast to rise at a pace just slightly above trend in 2018
- The unemployment rate is expected to tick lower next year
- Inflation is anticipated to increase to two percent next year
- Manufacturing growth is expected to increase at a pace that is below its trend
- Light vehicles sales are forecast to ease to 17.0 million units in 2018
- Housing starts are predicted to increase to 1.26 million units next year
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