Consensus Forecast 2015 and 2016

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Detroit, Michigan
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William Strauss
Senior Economist and Economic Advisor
Federal Reserve Bank of Chicago
Winners from last year’s Automotive Outlook Symposium forecast

Real GDP:  
Sue Yingzi Su – General Motor

Inflation:  
Daniil Manaenkov and Robert G. Hall – RSQE
University of Michigan

Unemployment rate:  
Ken Mayland – ClearView Economics

Car and light truck sales:  
Ken Mayland – ClearView Economics
Winners from last year’s Automotive Outlook Symposium forecast

Best Overall Economic Forecast:
Daniil Manaenkov and Robert G. Hall – RSQE University of Michigan
Review of past performance
Even with a bit of volatility, GDP growth was close to the consensus.
The unemployment rate declined more than predicted
Inflation was lower than forecast
Of course in large part due to the collapse in oil prices
Car and light truck sales came in a bit higher than predicted.
Consumer spending was close to forecast
While initially stronger than predicted, business investment growth was weaker in latter part of the forecast.
Inventories were very accurately forecast, with the exception of the build in the most recent quarter.
Industrial production growth was close to what was expected, with exception of the first quarter of 2015.
While quite volatile government spending over the past year was close to what was predicted.
The trade deficit was larger than predicted
Perhaps in part due to the dollar’s unanticipated strong gains since last summer
Housing starts improved close to the slow pace forecast
Yet, residential investment growth was below what was predicted.
Even with long-term interest rates that fell compared with the forecast of rising rates
Short-term interest rates were expected to remain very low, and they did.
Forecast for 2015 and 2016
<table>
<thead>
<tr>
<th></th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP, current dollars*</td>
<td>3.7%</td>
<td>3.4%</td>
<td>4.5%</td>
</tr>
<tr>
<td>GDP price index, chain-type*</td>
<td>1.2%</td>
<td>1.2%</td>
<td>1.9%</td>
</tr>
<tr>
<td>Real GDP, chained dollars*</td>
<td>2.4%</td>
<td>2.1%</td>
<td>2.7%</td>
</tr>
<tr>
<td>Personal consumption expenditures*</td>
<td>2.9%</td>
<td>2.6%</td>
<td>2.7%</td>
</tr>
<tr>
<td>Business fixed investment*</td>
<td>6.2%</td>
<td>2.5%</td>
<td>4.1%</td>
</tr>
<tr>
<td>Residential investment*</td>
<td>2.5%</td>
<td>6.1%</td>
<td>8.5%</td>
</tr>
<tr>
<td>Change in private inventories (billions of constant dollars)**</td>
<td>$80.0</td>
<td>$71.7</td>
<td>$53.3</td>
</tr>
<tr>
<td>Net exports of goods and services (billions of constant dollars)**</td>
<td>-$471.4</td>
<td>-$546.4</td>
<td>-$569.7</td>
</tr>
<tr>
<td>Government consumption expenditures and gross investment*</td>
<td>0.8%</td>
<td>0.8%</td>
<td>1.3%</td>
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</tbody>
</table>

* Q4 over Q4
** Q4 value
## Median forecast of GDP and related items

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<tr>
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<th>2014</th>
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<th>2016</th>
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<tbody>
<tr>
<td>Industrial production*</td>
<td>4.5%</td>
<td>1.5%</td>
<td>2.9%</td>
</tr>
<tr>
<td>Car &amp; light truck sales (millions - calendar year including imports)</td>
<td>16.4</td>
<td>16.8</td>
<td>17.1</td>
</tr>
<tr>
<td>Housing starts (millions)</td>
<td>1.00</td>
<td>1.09</td>
<td>1.23</td>
</tr>
<tr>
<td>Oil price (dollars per barrel of West Texas Intermediate)**</td>
<td>$73.16</td>
<td>$62.32</td>
<td>$68.55</td>
</tr>
<tr>
<td>Unemployment rate**</td>
<td>5.7%</td>
<td>5.2%</td>
<td>5.0%</td>
</tr>
<tr>
<td>Inflation rate (consumer price index)*</td>
<td>1.2%</td>
<td>0.7%</td>
<td>2.2%</td>
</tr>
<tr>
<td>Treasury constant maturity 1-year rate**</td>
<td>0.15%</td>
<td>0.65%</td>
<td>1.60%</td>
</tr>
<tr>
<td>Treasury constant maturity 10-year rate**</td>
<td>2.28%</td>
<td>2.46%</td>
<td>3.10%</td>
</tr>
<tr>
<td>J.P. Morgan trade weighted OECD dollar*</td>
<td>7.4%</td>
<td>7.0%</td>
<td>0.0%</td>
</tr>
</tbody>
</table>

* Q4 over Q4  
** Q4 value
Real GDP growth is forecast to bounce back in the current quarter and rise at a rate that is above trend through the end of 2016.
The unemployment rate is forecast to edge down to 5.2% at the end of this year and to 5.0% by the end of next year.
Inflation is anticipated to average under 1% this year and around 2% in 2016.
Oil prices are expected to increase but remain below $70 per barrel through next year.
Short-term interest rates are forecast to finally begin to rise in the second half of this year, increasing 50 basis points by the end of 2015 and rising an additional 95 basis points in 2016.
Light vehicle sales are forecast to continue improving, coming in at 16.8 million units this year and 17.1 million units in 2016.
Consumption growth is expected to rise at a moderate pace
Housing starts are expected to continue to rise at a very moderate pace.
Residential investment is forecast to rise at a faster pace than the past year.
Long-term interest rates are forecast to rise by 18 basis points in 2015 and then rise by 64 basis points in 2015.
Business spending is anticipated to rise 2.5% in 2015 and then rise 4.1% next year.
Inventories gains are expected to slow over the forecast horizon.
Industrial output growth is forecast to recover from the weakness of the first half of this year and increase at a pace close to its historical rate for the remainder of outlook.
Government purchases is forecast to increase 0.8% this year and 1.3% in 2016
The trade deficit is expected to continue increasing over the forecast horizon.
The strong gains of the dollar are predicted to slow significantly, but not reverse.
Summary

- The economy is forecast to rise at a pace around potential in 2015 and somewhat above trend in 2016

- The unemployment rate is expected to edge lower falling to 5.2% at the end of this year and 5.0% at the end of next year

- Inflation is expected to come in at 0.7% in 2015 and 2.2% in 2016

- Light vehicle sales are forecast to be 16.8 million units this year and then improve to 17.1 million in 2016

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