Consensus Forecast 2005 and 2006

Twelfth Annual Automotive Outlook Symposium
Detroit, Michigan
June 3, 2005
Winners from 2004

• Real GDP:
  Kenny Vieth – A.C.T. Research Co., LLC

• Inflation:
  David Berson/Orawin Velz – Fannie Mae
  Keith Schwer – UNLV
  Evert Van Der Heide – Calvin College
Winners from 2004

- Unemployment rate:
  - David Berson/Orawin Velz – Fannie Mae
  - Jarlath Costello/Ellen Hughes-Cromwick – Ford Motor Co.
  - Dave Czechowski – Portland Cement Association
  - Rick Dziobak – Accuride Corp.
  - Peter G. Glassman – Bank One
  - Manuel Gutierrez – Kohler Co.
  - Paul Kasriel – Northern Trust
  - Bernard Lashinsky – Consulting Economist
  - Robert Schnorbus – J.D. Power and Associates
  - Paul Taylor – National Automobile Dealers Association
  - Kenny Vieth – A.C.T. Research Co., LLC
Winners from 2004

• Car and light truck sales:

  Zachery Anderson – Nissan North America
  Robert DiCianni – Mittal Steel
  Van Jolissaint – DaimlerChrysler
  Frank Kolbe – The Association for Manufacturing Technology
  Don Nichols – University of Wisconsin – Madison
  Robert Schnorbus – J.D. Power and Associates
  Carolyn Scott – McCoy Scott & Company
Winners from 2004

- Best Overall Economic Forecast: Van Jolissaint – DaimlerChrysler
Review of past performance
The median forecast for real GDP growth was quite accurate.
The unemployment rate matched the forecast.
Inflation was a bit higher than expected.
In part due to higher energy prices than forecast

Oil prices - West Texas intermediate

dollars per barrel
Car and light truck sales were nailed.
Consumer spending growth was accurately predicted.
As was business spending growth
Business inventories grew at a more rapid pace than expected.

Change in business inventories
billions of constant dollars

-40 -20 0 20 40 60 80
1990 '92 '94 '96 '98 '00 '02 '04
While industrial production increased for the first time in three years, the gain was just a bit below expectations.
Government spending was accurately predicted.
The trade deficit increased at a more rapid pace than forecast.
The dollar moved lower than forecast

J.P. Morgan trade weighted dollar
percent change

1990 '92 '94 '96 '98 '00 '02 '04
Once again, the housing market surprised participants by increasing at a higher level than forecast.
This poor housing prediction led to a large miss on residential investment
Perhaps in part due to lower long-term interest rates than predicted.
Short-term interest rates were a bit higher than forecast.
New approach for the consensus outlook

Yearly average growth: 0%

Fourth quarter over fourth quarter growth: 43%
Forecast for 2005 and 2006
<table>
<thead>
<tr>
<th></th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP, current dollars*</td>
<td>6.4%</td>
<td>5.7%</td>
<td>5.3%</td>
</tr>
<tr>
<td>GDP price index, chain-type*</td>
<td>2.4%</td>
<td>2.3%</td>
<td>2.2%</td>
</tr>
<tr>
<td>Real GDP, chained dollars*</td>
<td>4.4%</td>
<td>3.2%</td>
<td>3.3%</td>
</tr>
<tr>
<td>Personal consumption expenditures*</td>
<td>3.8%</td>
<td>3.3%</td>
<td>3.3%</td>
</tr>
<tr>
<td>Business fixed investment*</td>
<td>10.6%</td>
<td>7.1%</td>
<td>6.8%</td>
</tr>
<tr>
<td>Residential investment*</td>
<td>9.7%</td>
<td>1.0%</td>
<td>-2.1%</td>
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<tr>
<td>Change in private inventories</td>
<td>$45.7</td>
<td>$56.0</td>
<td>$55.0</td>
</tr>
<tr>
<td>Net exports of goods and services</td>
<td>-$583.7</td>
<td>-$654.7</td>
<td>-$629.4</td>
</tr>
<tr>
<td>Government consumption expenditures</td>
<td>1.9%</td>
<td>1.8%</td>
<td>1.9%</td>
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<tr>
<td>and gross investment*</td>
<td></td>
<td></td>
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* Fourth quarter over fourth quarter
** Fourth quarter value
## Median forecast of GDP and related items (page 1 of book)

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<th>2006</th>
</tr>
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<tr>
<td><strong>Industrial production</strong>*</td>
<td>4.1%</td>
<td>3.5%</td>
<td>3.7%</td>
</tr>
<tr>
<td><strong>Car &amp; light truck sales (millions - calendar year including imports)</strong>*</td>
<td>16.8</td>
<td>16.7</td>
<td>16.8</td>
</tr>
<tr>
<td><strong>Housing starts (millions)</strong>*</td>
<td>1.95</td>
<td>2.00</td>
<td>1.84</td>
</tr>
<tr>
<td><strong>Oil price (dollars per barrel of West Texas Intermediate)</strong></td>
<td>$41.44</td>
<td>$49.00</td>
<td>$47.22</td>
</tr>
<tr>
<td><strong>Unemployment rate</strong></td>
<td>5.5%</td>
<td>5.2%</td>
<td>5.2%</td>
</tr>
<tr>
<td><strong>Inflation rate (consumer price index)</strong></td>
<td>2.7%</td>
<td>2.7%</td>
<td>2.7%</td>
</tr>
<tr>
<td><strong>Treasury constant maturity 1-year rate</strong></td>
<td>1.89%</td>
<td>3.80%</td>
<td>4.45%</td>
</tr>
<tr>
<td><strong>Treasury constant maturity 10-year rate</strong></td>
<td>4.27%</td>
<td>4.90%</td>
<td>5.21%</td>
</tr>
<tr>
<td><strong>J.P. Morgan trade weighted OECD dollar</strong></td>
<td>-5.0%</td>
<td>-0.7%</td>
<td>-0.1%</td>
</tr>
</tbody>
</table>

* Fourth quarter over fourth quarter  
** Fourth quarter value  
*** Yearly average
Real GDP growth is expected to slow to 3.2% this year and then edge up to 3.3% next year, within the bounds of potential growth for the economy.
The unemployment rate should average 5.2% at the end of this year and remain at that level next year.
The inflation rate is expected to remain fairly flat over this year and next.
Short-term interest rates are forecast to rise by 191 basis points in 2005 and then an additional 65 basis points in 2006.
Light vehicle sales are forecast to average 16.7 million units in 2005 and rise to 16.8 million units in 2006.

**Car and light truck sales**

millions of units

1994 '95 '96 '97 '98 '99 '00 '01 '02 '03 '04 '05 '06
Consumption growth is expected to ease to 3.3% both in 2005 and 2006

Personal consumption expenditures
percent change, annual rate
Long-term interest rates are forecast to rise by 63 basis points in 2005 and then by 31 basis points in 2006.
Housing starts are expected to decline over the forecast horizon.
Residential investment growth is also forecast to decline.
Business spending growth is anticipated to slow to 7.1% this year and 6.8% in 2006.

**Business fixed investment**

percent change, annual rate
A rebuilding of inventories is expected to take place over the forecast horizon.

Change in business inventories
billions of constant dollars

-100  -75  -50  -25   0   25   50   75   100   125

1994 '95 '96 '97 '98 '99 '00 '01 '02 '03 '04 '05 '06
Industrial output growth in 2004 is forecast to have solid years both this year and next.
Government purchases growth is forecast to average around 2% over the next two years.
Net exports are expected to improve slightly in 2006.

Net exports of goods and services
billions of constant dollars

-800 -700 -600 -500 -400 -300 -200 -100 0
1994 '95 '96 '97 '98 '99 '00 '01 '02 '03 '04 '05 '06
The dollar is forecast to fall by 0.7% this year and by 0.1% in 2006.

J.P. Morgan trade weighted OECD dollar
percent change, annual rate
Oil prices are expected to average $49 per barrel at the end of this year and then fall to around $47 per barrel in 2006.
Summary

• The economy is forecast to have a solid year with growth around potential in 2005 and 2006

• Unemployment is expected to remain flat over the next two years

• Inflation is expected to average 2.7% over the next two years

• Light vehicle sales are forecast to edge down to 16.7 in 2005 and then edge up to 16.8 in 2006

• www.chicagofed.org