Economy in lower gear through 2008  
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According to participants in the Chicago Fed’s annual Automotive Outlook Symposium, the nation’s economic growth in 2008 is forecasted to be slower than in 2007, with inflation staying high and the unemployment rate rising. Light vehicle sales are predicted to fall sharply this year and then improve in 2009.

<table>
<thead>
<tr>
<th>1. Median forecast of GDP and related items</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
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</thead>
<tbody>
<tr>
<td>(Actual)</td>
<td>(Forecast)</td>
<td>(Forecast)</td>
<td></td>
</tr>
<tr>
<td>Real gross domestic product*</td>
<td>2.5</td>
<td>1.2</td>
<td>2.9</td>
</tr>
<tr>
<td>Real personal consumption expenditures*</td>
<td>2.6</td>
<td>1.1</td>
<td>2.2</td>
</tr>
<tr>
<td>Real business fixed investment*</td>
<td>7.1</td>
<td>–0.3</td>
<td>2.7</td>
</tr>
<tr>
<td>Real residential investment*</td>
<td>–18.6</td>
<td>–16.3</td>
<td>5.6</td>
</tr>
<tr>
<td>Change in private inventories*</td>
<td>–18.3</td>
<td>8.2</td>
<td>24.2</td>
</tr>
<tr>
<td>Net exports of goods and services*</td>
<td>–503.2</td>
<td>–462.5</td>
<td>–435.0</td>
</tr>
<tr>
<td>Real government consumption expenditures and gross investment*</td>
<td>2.3</td>
<td>1.7</td>
<td>1.6</td>
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<tr>
<td>Industrial production*</td>
<td>2.2</td>
<td>0.7</td>
<td>3.0</td>
</tr>
<tr>
<td>Car and light truck sales (millions of units)</td>
<td>16.1</td>
<td>15.2</td>
<td>15.6</td>
</tr>
<tr>
<td>Housing starts (millions of units)</td>
<td>1.34</td>
<td>0.97</td>
<td>1.06</td>
</tr>
<tr>
<td>Unemployment rate*</td>
<td>4.8</td>
<td>5.4</td>
<td>5.3</td>
</tr>
<tr>
<td>Consumer Price Index</td>
<td>4.0</td>
<td>3.9</td>
<td>2.8</td>
</tr>
<tr>
<td>One-year Treasury rate (constant maturity)*</td>
<td>3.62</td>
<td>2.03</td>
<td>2.90</td>
</tr>
<tr>
<td>Ten-year Treasury rate (constant maturity)*</td>
<td>4.26</td>
<td>3.92</td>
<td>4.50</td>
</tr>
<tr>
<td>JPMorgan trade-weighted dollar index</td>
<td>–7.1</td>
<td>–2.2</td>
<td>0.5</td>
</tr>
<tr>
<td>Oil price (dollars per barrel of West Texas Intermediate)*</td>
<td>90.85</td>
<td>106.93</td>
<td>104.62</td>
</tr>
</tbody>
</table>

*Fourth quarter over fourth quarter percent change.  
*Billions of chained (2000) dollars in the fourth quarter at a seasonally adjusted annual rate.  
*Fourth quarter average.  
Sources: Actual data from authors’ calculations and Haver Analytics; median forecast from Automotive Outlook Symposium participants.

The Federal Reserve Bank of Chicago held its fifteenth annual Automotive Outlook Symposium on June 5–6, 2008, at its Detroit Branch. More than 90 economists and analysts from business, academia, and government attended the conference. This Chicago Fed Letter reviews last year’s forecasts for 2007, analyzes the forecasts for 2008 and 2009 (see figure 1), and summarizes the presentations at this year’s conference. ¹

In 2007, the economy expanded by 2.5%—a rate that our consensus group would consider to be near potential growth for the U.S. economy. Yet much of this growth was concentrated in the second and third quarters of 2007. Since then, real gross domestic product (GDP) growth has slowed considerably: The economy expanded by just 0.6% in the fourth quarter of 2007, compared with 4.9% in the previous quarter, and just 1.0% in the first quarter of this year. Employment has fallen by 438,000 jobs in the first half of 2008; the unemployment rate rose from 4.7% in September 2007 to 5.5% in June 2008.

Residential investment was a drag on the economy in 2007, subtracting 1 full percentage point from GDP growth—a significant number for a sector that makes up about 5% of the economy. Residential investment fell by 14.7% in the first quarter, 12.6% in the second quarter, 20.7% in the third quarter, and 25.4% in the fourth quarter. The losses continued into 2008 with residential investment falling by 26.2% in the first quarter. Housing starts began 2007 at a seasonally adjusted annual rate (SAAR) of close to 1.5 million units, but fell to just over 1.0 million units (SAAR) in the first five months of 2008.

Financial markets were also under severe stress in 2007 and into this year, as credit tightened and lenders tried to stem the tide of mortgage-related losses. The resulting loss of confidence spurred a “flight to quality” that drove down the yields of risk-free assets such as U.S. Treasury securities. Ten-year Treasury rates fell from just over 5% in the middle of 2007 to around 3.5% in March 2008. While financial markets have improved since March 2008, credit conditions are still relatively tight.

Energy prices have surged over the past year. West Texas Intermediate crude prices averaged $58 per barrel in the
first quarter of 2007 and rose 56% to average nearly $91 in the final quarter of last year. This pushed inflation, as measured by the Consumer Price Index (CPI), to rise by 4.0% during 2007—much greater than the 1.9% rate recorded in the previous year. Oil prices have continued to move higher, averaging nearly $124 in the second quarter of this year.

The weakness in housing and the increase of gasoline prices appeared to weigh heavily on light vehicle sales (car and light truck sales), which totaled 16.1 million units in 2007, lower than the 16.5 million units sold in 2006. Sales fell even further in the first half of 2008, dropping to 14.6 million units (SAAR), with an especially large decline in the light truck segment. While passenger car sales decreased 1.1% from the first half of 2007 to the first half of 2008, light truck sales dropped 17.6%.

The pattern for industrial output was similar to that of GDP. Industrial output growth averaged 3.4% in the second and third quarters of 2007, but slowed to 0.2% in the final quarter of 2007 before declining by 0.4% in the first quarter of 2008. Export-oriented manufacturing benefited from the improving trade deficit. Net exports contributed 0.7 percentage points to GDP growth during 2007. The trade deficit as a share of GDP, which reached over 6% in the middle of 2006, fell to about 5% in the first quarter of 2008.

In order to combat the slowing economy, the Federal Reserve began lowering short-term interest rates in September 2007. Since then, the federal funds rate has been reduced from 5.25% to 2%.

**Forecasts versus results**

At last year’s symposium, participants forecasted a 2.5% rate of growth for the economy in 2007, just a bit less than the 2.5% growth that did occur. They also were quite close in their forecast for the unemployment rate, predicting 4.7% in the fourth quarter of 2007, very close to the actual 4.8% rate that was recorded. Inflation, as measured by the CPI, was predicted to average 3.0%, 1 full percentage point lower than the actual average of 4.0%. In large part, the projection on inflation was off because last year’s participants greatly underestimated oil prices. Oil prices were expected to average $62 per barrel in the fourth quarter of 2007, 32% lower than the $91 that they actually averaged.

Light vehicle sales were predicted to come in at 16.5 million units, somewhat higher than the 16.1 million units actually sold during 2007. The weakness in the housing sector was also more significant than expected. Housing starts were forecasted to fall to 1.46 million units in 2007, but actually fell to 1.34 million units. Similarly, residential investment was predicted to decline by 9.4%, but it actually fell by 18.6%. The downward pressure on Treasury rates was also greater than expected: One-year and ten-year Treasury rates were predicted to rise to 5.01% and 4.90%, respectively, by the end of 2007; the actual rates were 3.62% and 4.26%.

**Outlook for 2008 and 2009**

The forecast for 2008 is for economic growth to continue to be restrained by the struggling housing sector. However, growth in 2009 is expected to improve to a rate that our consensus group would consider to be above trend growth for the U.S. economy. Real GDP is anticipated to rise by 1.2% this year and by 2.9% in 2009. With economic growth well below trend this year, the unemployment rate is expected to move higher to average 5.4% in the fourth quarter of this year and then edge just a bit lower in the second half of 2009. Inflation, as measured by the CPI in 2008 is expected to remain relatively high at 3.9% and then ease next year to 2.8%. Oil prices are predicted to average about $107 per barrel in the final quarter of this year and about $105 per barrel at the end of 2009. Personal consumption expenditures are forecasted to expand by a tepid rate of 1.1% in 2008 and then rise by a slow 2.2% in 2009. Light vehicle sales are expected to fall to 15.2 million units this year and then improve to 15.6 million units next year. Business fixed investment is expected to edge down 0.5% in 2008 and then rise by 2.7% in 2009. Industrial production is forecasted to increase by a slow 0.7% this year and then rise to a healthy 3.0% next year.

The housing sector has a bit more of an adjustment to undergo. Residential investment is predicted to fall by an additional 16.3% this year, a little less of a drag than in 2007. The quarterly pattern of the forecast implies that the consensus group expects the housing market to stabilize in the second half of this year. After falling by 26.2% in the first quarter of 2008, residential investment is predicted to decline by 21.0%, 14.5%, and 3.9% in the second, third, and fourth quarters, respectively. Housing starts are anticipated to reach the bottom in the third quarter of this year at 0.95 million starts (SAAR). Residential investment is then expected to rise 5.6% next year, with improving growth throughout 2009. Housing starts are predicted to rise from 0.97 million units this year to 1.06 million units in 2009.

The long-term interest rate (ten-year Treasury rate) is forecasted to decrease by 34 basis points in 2008 and then rise by 58 basis points in 2009. The short-term interest rate (one-year Treasury rate) is expected to decline sharply this year, falling 159 basis points, and then rise 87 basis points next year.

The U.S. dollar is predicted to decline 2.2% this year and then rise 0.5% in 2009. The trade deficit (net exports of goods and services) is predicted to continue to improve both this year and next.

**Auto sector outlook**

Emily Kolinski Morris, senior economist for the Americas, Ford Motor Co., delivered the vehicle sales outlook from an original equipment manufacturer’s perspective. Kolinski Morris noted that, as

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of May 2008, consumer sentiment was at its lowest since 1980 (based on the University of Michigan’s Index of Consumer Sentiment). The Bush Administration’s economic stimulus package was intended to change consumers’ negative feelings about the economy, but its effects have been dampened by high gas prices.

One of the reasons for weak vehicle buying conditions in the U.S. has been the interest rates for auto financing. Auto loan rates for the Detroit Three’s finance companies rose from 3.03% in the fourth quarter of 2001 to 5.17% the first quarter of 2008.\(^2\)

There has been an accelerated shift among consumers to smaller vehicles partly because of higher gas prices. Kolinski Morris predicted this consumer shift to smaller vehicles to continue in the coming months. This change among consumers is likely to adversely affect automakers that were counting on SUVs (sport utility vehicles) and other more fuel-intensive auto segments for their future revenue growth.

Kolinski Morris expected the median age of the automobile to continue increasing (because people are keeping their cars longer), and she predicted the actual prices for some automobiles to keep decreasing. Under these circumstances and others, Kolinski Morris forecasted light vehicles sales to be in the range of 14.7 million to 15.1 million units in 2008.

Ken Vieth, senior partner and general manager, Americas Commercial Transportation Research Company, presented the commercial vehicle outlook. Vieth said his forecast for commercial vehicles (medium-duty and heavy-duty trucks) is not strong for the immediate future; however, by the fourth quarter of 2008, he expected the commercial vehicle industry to improve. Vieth cited freight rates being set by shippers rather than truckers as a drag on the sector in the short term; between 2003 and 2006, truckers set the freight rates, and their rates were higher than the ones currently set by shippers. Vieth also cautioned that fuel surcharges, along with these lower freight rates, are likely to hamper growth. Still, truckers will continue to be needed, Vieth said, since alternative modes of transporting freight—i.e., by boat, rail, or airplane—do not provide door-to-door solutions.

Many factors might affect the future of the trucking industry, including the number of drivers, the quality and quantity of infrastructure (roads), the pricing power of the truckers, the rising cost of diesel, and new environmental standards. Vieth spoke at length about the Environmental Protection Agency’s (EPA) emissions mandate in 2010. The new EPA regulations are expected to speed up the normal cyclical process of buying trucks. With the 2010 EPA mandate looming, strong “prepurchases” of trucks that meet the current EPA standards are expected in the near term. (Similar patterns of prepurchases of trucks occurred shortly before the 2002 and 2007 EPA emissions mandates.) However, Vieth said that the prepurchases of trucks ahead of the 2010 EPA mandate have not yet started because of the weak economy. That said, 2009 should be a strong year for commercial vehicle sales, according to his forecast. Demand for trucks is expected to drop in 2010 because of the EPA emissions mandate, with a rebound predicted in 2011.

Paul Taylor, chief economist, National Automobile Dealers Association, presented the light vehicle sales outlook from the dealers’ perspective. With fuel prices rising, the sales of new SUVs had negative growth in 2006 and 2007. In contrast, sales of new small cars and CUVs (crossover utility vehicles, or utility vehicles built on passenger car platforms) increased; these were the only two segments that showed sales gains during those years. Year to date, as of April 2008, the sales of small cars and CUVs are up, while the sales of SUVs are again down over the same time period.

Rising fuel costs appear to be having an impact in the used car market as well. Taylor noted that prices of used pickups and used SUVs are falling, while prices of used cars, particularly smaller cars, are doing better.

Kristin Dziczek, program director of automotive labor and education, Center for Automotive Research, discussed the Detroit Three and United Auto Workers (UAW) labor negotiations. The 2007 negotiations between the UAW and the Detroit Three brought about five contract changes: Retiree health liabilities will end on January 1, 2010; different wages and benefits will be paid to the new hires that do jobs that the suppliers are capable of doing; the retiree health benefits will be eliminated for all future new hires; the defined pension benefit will not be available to new hires; and eventually each plant will have competitive operating agreements with local unions.

The resulting cost savings will mean a difference in the North American UAW cost per vehicle for General Motors Corp. (GM) of over $900. GM will realize greater cost savings than the rest of the Detroit Three partly because approximately 80% of GM’s workforce is over the age of 42. This means that about 63% of GM’s workforce will be eligible to retire in the next five years, compared with approximately 31% of Ford’s and about 30% of Chrysler’s. With more of its current workers eligible to retire over the next few years, GM is expected to have a greater share of its workforce being new hires, who receive lower wages and benefits, allowing the automaker to lower its costs further.
David Andrea, vice president, Original Equipment Suppliers Association, presented the outlook for the auto parts suppliers. In the near term, the suppliers are concerned about declining production volume levels and volatility; rising raw material and energy prices; and the possibility of an economic recession. The suppliers’ fortunes will not get better until their major customers’ financial picture improves. Given the challenges facing the auto industry as a whole, Andrea predicted that bankruptcies will continue among the auto parts suppliers in the near term.

Yet, looking past 2009, Andrea said he was more optimistic for several reasons. The auto parts suppliers that survive the short-term challenges will pick up work from those that go out of business; also, some suppliers are starting to take on nonautomotive work. Another positive factor for suppliers is globalization: In 2007, 68.6 million automobiles were sold across the world, and Andrea predicted the volume to increase to 87.3 million by 2014. For the U.S. alone he forecasted sales to be between 14.9 million and 15.8 million units in 2008.

Conclusion
Because of a weak housing sector, high unemployment, and lower automotive sales, the economy is expected to expand at a rate below trend this year. Gross domestic product growth is predicted to pick up in 2009. The unemployment rate is expected to move higher this year and then edge down next year. Light vehicle sales are forecasted to drop this year and then increase from this year’s level in 2009.

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1 Some materials presented at the symposium are available at www.chicagofed.org/news_and_conferences/conferences_and_events/2008_aos.cfm.
2 The Detroit Three are Chrysler LLC, Ford Motor Co., and General Motors Corp. Kolinski Morris reported the first quarter of 2008 as the average of January and February 2008.