

Chicago Fed Letter

Economy in slower traffic through 2008

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According to participants in the Chicago Fed's annual Automotive Outlook Symposium, the nation's economic growth in 2007 is forecasted to be slower than in 2006, with inflation rising and the unemployment rate ticking up. Light vehicle sales are predicted to remain steady this year and improve slightly in 2008.

In 2006, the weakness in housing did not appear to spill over into light vehicle sales, which totaled 16.5 million units.

The Federal Reserve Bank of Chicago held its fourteenth annual Automotive Outlook Symposium on May 31 and June 1, 2007, at its Detroit Branch. More than 70 economists and analysts from business, academia, and government attended the conference. This *Chicago Fed Letter* reviews last year's forecasts for 2006, analyzes the forecasts for 2007 and 2008, and summarizes the presentations at this year's conference.¹

In 2006, the economy expanded by 3.1%—a rate that our consensus group considers to be slightly above potential growth for the U.S. economy. This led to a decline in the unemployment rate from 5.0% in the fourth quarter of 2005 to 4.5% in the final quarter of 2006. The economy added nearly 2.3 million jobs in 2006, averaging 188,600 jobs per month.

Yet much of this growth was concentrated in the first quarter of 2006. In that period, the economy experienced substantial growth, rising 5.6%, largely because of the recovery following the suppressed growth in the previous quarter, attributed to Hurricanes Katrina and Rita. Real gross domestic product (GDP) expanded by 2.6%, 2.0%, and 2.5% in the second, third, and fourth quarters of 2006, respectively. This more sluggish pace was principally due to a sharp reduction in residential

investment in 2006: Residential investment fell by 11.1% in the second quarter, 18.6% in the third quarter, and 19.8% in the fourth quarter. Housing starts began the year at a seasonally adjusted annual rate (SAAR) of over 2.1 million units, but they fell to under 1.6 million units (SAAR) in the final quarter.

The weakness in housing did not appear to spill over into light vehicle sales, which were 16.5 million units in 2006, just a bit lower than the 17.0 million units sold in 2005.

Energy prices spiked during the middle of 2006, with West Texas Intermediate crude prices averaging nearly \$75 per barrel in July. Prices fell sharply in the second half of 2006, averaging just over \$60 per barrel in the fourth quarter, or roughly the same price as a year earlier. Consequently, this allowed inflation, as measured by the Consumer Price Index (CPI), to rise by 1.9% during 2006—quite a bit less than the 3.7% rate recorded in the previous year.

In the first quarter of 2007, the housing sector continued to be a drag on the overall economy, and GDP expanded by 0.7%—the slowest quarterly rate of growth in over four years. Residential investment fell 15.4% in the same period, with housing starts averaging less than 1.5 million units (SAAR). Between the first quarter of 2006 and

1. Median forecast of GDP and related items

	2006 (Actual)	2007 (Forecast)	2008 (Forecast)
Real gross domestic product ^a	3.1	2.3	3.0
Real personal consumption expenditures ^a	3.6	3.0	2.8
Real business fixed investment ^a	6.0	3.8	4.8
Real residential investment ^a	-12.8	-9.4	2.7
Change in private inventories ^b	22.4	28.0	38.0
Net exports of goods and services ^b	-582.6	-591.2	-579.4
Real government consumption expenditures and gross investment ^a	2.7	1.7	1.7
Industrial production ^a	3.5	2.3	2.8
Car & light truck sales (millions of units)	16.5	16.5	16.7
Housing starts (millions of units)	1.81	1.46	1.53
Unemployment rate ^c	4.5	4.7	4.7
Consumer Price Index ^a	1.9	3.0	2.4
1-year Treasury rate (constant maturity) ^c	4.99	5.01	5.02
10-year Treasury rate (constant maturity) ^c	4.63	4.90	5.20
JPMorgan trade weighted dollar index ^a	-3.6	0.2	-0.1
Oil price (dollars per barrel of West Texas Intermediate)	60.09	61.67	60.00

^aFourth quarter over fourth quarter percent change.

^bBillions of chained (2000) dollars in the fourth quarter at a seasonally adjusted annual rate.

^cFourth quarter average, percent.

SOURCE: Actual data from authors' calculations and Haver Analytics; median forecast from Automotive Outlook Symposium participants.

the first quarter of 2007, GDP expanded by 1.9%. The weakness in residential investment lowered GDP growth by 1 full percentage point.

Yet, for the most part, the struggles of the housing sector did not spill over to other parts of the economy. Monthly job growth averaged 142,000 in the first quarter of 2007, and the unemployment rate remained unchanged at 4.5%.

Light vehicle sales averaged 16.5 million units (SAAR) in the first quarter of 2007—the same selling rate as the previous year. Energy prices moved lower at the beginning of the year, averaging just over \$58 per barrel in the first quarter. The inflation rate, as measured by the change in the CPI from the previous year, in the first quarter was 2.4%, a bit higher inflation rate than experienced in 2006.

The Federal Reserve increased short-term interest rates through the first half of 2006, with the federal funds rate reaching 5.25% and remaining at this level through the early part of 2007. Mortgage interest rates, which averaged 5.75% for the first three quarters of 2005, rose by 1 full percentage point by July 2006 and then fell by half a percentage point by early 2007, averaging 6.22% in the first quarter.

Manufacturing output expanded at a solid pace in the first, second, and third quarters of 2006, rising 5.2%, 6.5%, and 4.0%, respectively. However, as the overall economy's growth slowed in 2006, inventories began to build, and thus, manufacturing output was cut 1.5% in the year's final quarter and increased at a more tepid 1.0% rate in the first quarter of 2007.

Consensus outlook

At last year's Automotive Outlook Symposium, participants expected the economy to expand at a 3.5% rate in 2006, a bit more than the 3.1% growth that did occur. With a fairly accurate economic growth forecast, they also were quite close in their prediction for the unemployment rate. They expected the unemployment rate to fall to an average of 4.8% in the fourth quarter of 2006, close to the actual 4.5% rate that was seen. Inflation, as measured by the CPI, was predicted to average 2.6%, a bit higher than the actual average of 1.9%. Light vehicle sales were predicted to come in at 16.7 million units (SAAR), slightly higher than the 16.5 million units (SAAR) actually sold during 2006. While most sectors were fairly accurately forecasted, the weakness in the housing sector was more significant than expected. Housing starts were forecasted to fall to 1.97 million units in 2006; however, housing starts actually decreased to 1.81 million units. Similarly, residential investment was predicted to decline by 1.7%, but it actually fell by a more significant 12.8%. The weakness in the housing sector could not be attributed to higher interest rates. One-year and ten-year Treasury rates were predicted to rise to 5.14% and 5.29%, respectively, by the end of 2006; however, the forecasts were higher than the 4.99% and 4.63% actually experienced.

The forecast for 2007 is for economic growth to continue to be restrained by a weak housing sector (see figure 1). However, growth in 2008 is expected to improve to a rate that our consensus group considers to be near trend growth for the U.S. economy. Real GDP is anticipated to rise by 2.3% this year and by 3.0% in 2008. With economic growth below trend this year, the unemployment rate is expected to edge higher to average 4.7% in the fourth quarter of this year and remain at that rate through all of 2008. As measured by the CPI, inflation in 2007 is expected to rise by 3.0% and then ease to 2.4% next year. Oil prices are predicted to remain relatively constant, averaging just under \$62 per barrel in the final quarter of this year and \$60 per barrel at the end of 2008. Personal consumption expenditures are forecasted to expand by a solid rate of 3.0% in 2007 and then rise by 2.8% in 2008. Light vehicle sales are expected to remain steady, with sales totaling 16.5 million units this year and then edging back up to 16.7 million units next year. Business fixed investment is expected to increase 3.8% in 2007 and 4.8% in 2008. Industrial production is forecasted to increase at a rate in line with GDP growth, rising 2.3% this year and 2.8% next year.

The struggling housing sector has a bit more of an adjustment to undergo. Residential investment is predicted to fall by an additional 9.4% this year, which is less of a drag than in 2006. The quarterly pattern of the forecast helps to identify when the consensus group expects the housing market to stabilize. After falling by 17.0% in the first quarter of 2007, residential investment is predicted to decline by 12.4% and 6.0% in the second and third quarters, respectively. It is then expected to remain unchanged in the fourth quarter. Housing starts are anticipated to bottom out in the third quarter of this year at 1.45 million units (SAAR). Residential investment is then expected to rise 2.7% next year, with improving growth in each of the quarters. Housing starts are predicted to rise just a bit from 1.46 million units this year to 1.53 million in 2008.

The long-term interest rate (ten-year Treasury rate) is forecasted to increase by 27 basis points in 2007 and by an additional 30 basis points in 2008. The short-term interest rate (one-year Treasury rate) is expected to remain relatively unchanged, edging higher by 2 basis points this year and 1 basis point next year.

The U.S. dollar is predicted to remain fairly constant, with an increase of 0.2% this year and a 0.1% decline in 2008. The trade deficit is predicted to increase in 2007 and then move lower next year.

Gas prices have greater influence on consumers' choice of vehicle than in the past.

Auto sector outlook

Van Jolissaint, chief economist, Daimler-Chrysler Corporation, presented the vehicle sales outlook from the original equipment manufacturers' perspective. Jolissaint explained that the auto industry's leading indicators for consumers' ability to buy automobiles include: disposable income, household debt, the yield curve (which can be described as the maturity structure of an interest rate), and inflation. Using a traffic light analogy, Jolissaint stated that the composite of these four leading indicators showed that the automotive industry faced a "green" light, or positive conditions, in May 2006. However, by May 2007, the traffic light for the composite turned "red," largely because of unfavorable signals from the household debt and yield curve indicators.

According to Jolissaint, although consumers' ability to buy automobiles deteriorated from May 2006 to May 2007, their willingness to buy did not change. He argued that consumers remain willing to buy vehicles based on positive economic signals in the labor and stock markets, in particular. With this in mind, Jolissaint said that, while vehicle sales were unimpressive in the first half of this year, they should increase in 2008. His forecast for total vehicle sales,

including medium-duty and heavy-duty trucks, is 17.0 million units in 2007 and 17.2 million units in 2008.

Gas prices have greater influence on consumers' choice of vehicle than in the past. In 2001, fuel economy ranked twenty-second on a list of top reasons given for consumers' choice of vehicle; in 2006, fuel economy ranked fourth on the list. However, with less upward movement in gas prices anticipated for the coming year, the preliminary response from this year's survey ranks fuel efficiency in ninth place.²

Kenny Vieth, partner, Americas Commercial Transportation Research Company, delivered the industry outlook for medium-duty and heavy-duty trucks. He noted that there are "too many trucks chasing too little freight" and argued that this may be due in part to the Environmental Protection Agency's (EPA) new engine standards, which officially took effect on January 1, 2007. The looming 2007 EPA regulations had sped up the normal life cycle for trucking equipment. That is, they had prompted trucking companies in 2006 (and earlier) to overbuy trucks meeting the old EPA standards, thereby avoiding the new standards, which make the trucks much more expensive to operate. In 2010, there will be another EPA mandate, which is expected to prompt significant prepurchases of trucks in 2009. Market indicators for class 8 trucks (tractor trailers) are weak: Orders are at a 55-month low, backlog is at a 40-month low, build is at a 48-month low, retail sales are at a 38-month low, and inventory is at a nine-month low.

Bob Schulz, managing director of corporate and government ratings, Standard & Poor's, explained that the high level of sales for light vehicles is distorting the challenges within the market, such as high gas prices, the likelihood of higher interest rates, and the uncertainty

surrounding the future of the housing market. Sales of sport utility vehicles (SUVs) were down 11.7% year-over-year for 2006, while sales of crossover utility vehicles (CUVs), or utility vehicles built on passenger car platforms, grew 9.1% over the same period. Schulz argued that the more fuel-efficient CUVs are currently favored because of higher gas prices. Also, since there are more new CUV models than SUV ones, consumers prefer CUVs these days. Schulz predicted overall U.S. light vehicle sales to fall in 2007, which was a bit more downbeat than the consensus outlook; however, he stated that they should still be above 16 million units in 2007.

The auto dealers' perspective came from Paul Taylor, chief economist, National Automobile Dealers Association. He explained that increasing gas prices and rising interest rates posed the two greatest challenges to dealerships. Also, since the end of 2005 to the present, the total number of U.S. licensed drivers has grown more slowly than in the past. April year-to-date data show only two vehicle segments that have had sales growth: namely, the more fuel-efficient CUV and small car segments. Even with such challenges, Taylor argued that U.S. light vehicle sales in 2007 should stay in line

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with the 2006 numbers; he predicted sales of 16.5 million units in 2007.

David Andrea, vice president, Original Equipment Suppliers Association, presented the outlook from the auto parts suppliers' perspective. He explained his near-term, midterm, and long-term outlooks for the suppliers industry. In the near term, Andrea sees turmoil for the auto suppliers. During the first half of 2007, the suppliers saw rising material costs in many metals (e.g., steel and copper). However, looking ahead into the second part of the year, material market pricing should stabilize as supply becomes aligned with demand. In the midterm, Andrea anticipated

further consolidation among suppliers, both inside and outside North America. If the rates of motor vehicle parts utilization increase to the levels seen during the 1990s, suppliers will be able to gain more cost efficiency and pricing power than they have at present. According to Andrea, prospects for the auto parts suppliers look positive over the long term; for example, supplier content in vehicles is expected to grow 40% over the next ten years.

Conclusion

Weighed down by a continuing weakness in the housing sector, the economy is expected to expand at a rate

below trend in 2007, accompanied by a slight rise in the unemployment rate. In 2008, GDP growth is expected to be near trend, and the unemployment rate is expected to remain unchanged. Inflation is expected to rise this year, and with no additional pricing pressures predicted from energy, inflation should moderate in 2008. Light vehicle sales are forecasted to remain relatively flat in 2007 and improve in 2008.

¹ Some materials presented at the symposium are available at www.chicagofed.org/news_and_conferences/conferences_and_events/2007_aos.cfm.

² DaimlerChrysler Economic & Market Intelligence.