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Economy to keep cruising along in 2011 and 2012

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According to participants in the Chicago Fed's annual Automotive Outlook Symposium, solid economic growth is forecasted for the nation this year and in 2012. Inflation is expected to rise in 2011 and then ease in 2012, and the unemployment rate is anticipated to move lower but remain high by historical standards through the end of 2012. Light vehicle sales are forecasted to improve in 2011 and 2012.

The Federal Reserve Bank of Chicago held its eighteenth annual Automotive Outlook Symposium (AOS) on June 2–3, 2011, at its Detroit Branch. More than 90 economists and analysts from business, academia, and government attended the AOS. This *Chicago Fed Letter* reviews the forecasts from last year's AOS for 2010, and then analyzes the forecasts for 2011 and 2012 (see figure 1) and summarizes the presentations from this year's AOS.[1]

1. Median forecast of GDP and related items

	2010 (Actual)	2011 (Forecast)	2012 (Forecast)
Real gross domestic product[a]	2.8	**2.6**	**2.9**
Real personal consumption expenditures[a]	2.6	**2.8**	**2.6**
Real business fixed investment[a]	10.6	**7.7**	**6.8**
Real residential investment[a]	–4.6	**3.8**	**16.2**
Change in private inventories[b]	16.2	**50.3**	**50.0**
Net exports of goods and services[b]	–397.7	**–405.5**	**–400.0**
Real government consumption expenditures and gross investment[a]	1.1	**–1.7**	**–0.2**
Industrial production[a]	6.3	**5.4**	**4.1**
Car and light truck sales (millions of units)	11.6	**13.2**	**14.4**
Housing starts (millions of units)	0.58	**0.59**	**0.78**
Unemployment rate[c]	9.6	**8.5**	**8.2**
Consumer Price Index[a]	1.2	**2.6**	**2.2**
One-year Treasury rate (constant maturity)[c]	0.26	**0.38**	**1.36**
Ten-year Treasury rate (constant maturity)[c]	2.86	**3.70**	**4.20**
J. P. Morgan Trade-Weighted Dollar Index[a]	–2.1	**–0.3**	**0.7**
Oil price (dollars per barrel of West Texas Intermediate)[c]	85.03	**103.17**	**103.30**

[a]Percent change, fourth quarter over fourth quarter.
[b]Billions of chained (2005) dollars in the fourth quarter at a seasonally adjusted annual rate.
[c]Fourth quarter average.
Note: These values reflect forecasts made in May 2011.
Sources: Actual data from authors' calculations and Haver Analytics; median forecast from Automotive Outlook Symposium participants.

The U.S. economy is still recovering from the longest and deepest drop in economic activity since the Great Depression. The "Great Recession" lasted six quarters, beginning in the first quarter of 2008 and bottoming out in the second quarter of 2009. During the seven quarters following the end of the recession, the annualized rate of real gross domestic product (GDP) growth was 2.8%—roughly in line with what is considered the historical trend rate of growth for the U.S. economy. But this GDP growth rate is very disappointing given that real GDP fell from its peak by more than 4% during the Great Recession. Generally, the pace of economic recovery is quite sharp following a deep recession. For example, consider what happened after the deep drops in economic output experienced during the mid-1970s and early 1980s; during the first seven quarters of positive output following these two recessionary periods, the annualized rate of real GDP growth was 4.6% and 7.1%, respectively (significantly higher than that of the current recovery). That said, unlike the deep recessions of the mid-1970s and early 1980s, the Great Recession was accompanied by a major financial crisis. Recoveries both in the U.S. and in other countries that follow recessions associated with financial crises tend to be quite restrained.

Employment losses that began in February 2008 continued to mount following the end of the recession until February 2010. Since then, the economy has been adding jobs, but the number of jobs added is just under 1.8 million—around 20% of the 8.7 million jobs lost. In addition to making up for these lost jobs, the U.S. economy needs to generate jobs to accommodate all the new entrants into the labor force. During the past decade, the labor force in the U.S. economy increased by an average of 1.3 million each year, according to the U.S. Bureau of Labor Statistics. Thus, about 4 million potential workers have been added since the start of the recession. All of these factors are reflected in the very high unemployment rate, which stood at 9.1% in May 2011. The current unemployment rate illustrates the significant output gaps that persist.

With such slack in production, labor markets, and other parts of the economy, inflation has stayed low for the most part. Inflation, as measured by the Consumer Price Index (CPI), was 1.2% in 2010. However, following the unrest in the Middle East, oil prices rose more than 15%, to $94 per barrel, in the first quarter of 2011. Largely as a result of this jump in oil prices, inflation increased to an annualized rate of 5.2% during this period. Oil prices rose further in April 2011, to $110 per barrel, but then pulled back in May 2011, to $101 per barrel. Core inflation, which removes more volatile food and energy prices, is more reflective than total inflation of the underlying slack in the U.S. economy. Core inflation remained low, with a year-over-year rate of 1.5% in May 2011.

The weakest sector of the economy remained housing. There were 0.58 million housing starts in 2010, well below the nearly 1.4 million annual housing starts that the U.S. averaged during the 1990s. The change in real residential investment was –4.6% in 2010, following an average annual change of –24.2% over the previous three years.

The manufacturing sector, whose level of production fell by more than 20% during the Great Recession, has been increasing its pace of production rapidly since the end of the recession. From June 2009 through May 2011, manufacturing output grew at an annualized rate of 6.6%, recovering just over half of the loss experienced during the downturn. The two industries that fell by the largest percentage—automotive manufacturing and primary metals—are the two industries that have shown the strongest growth since the end of the recession, with annualized growth rates of 29.2% and 21.2%, respectively.

Light vehicle sales (car and light truck sales) improved from 10.4 million in 2009 to 11.6 million in 2010—a nearly 12% gain. This increase in light vehicle sales was much larger than the 2.6% increase in real personal consumption expenditures for 2010. The annualized selling rate for light vehicles rose to 13 million units in the first quarter of 2011 from 12.3 million units in the previous quarter. However, the March 11, 2011, Japanese earthquake and tsunami and the subsequent nuclear disaster affected production facilities—especially those for automotive manufacturing—not just in Japan, but around the world. The change in manufacturing output in the United States was –0.5% in April, with motor vehicles and parts experiencing a change of –8.9%. But excluding motor vehicles and parts, factory production was actually up in April, recording a change of 0.2%.

> Light vehicle sales are expected to rise to 13.2 million units in 2011 and then improve to 14.4 million units in 2012.

Forecasts versus results

At last year's AOS, which took place a year after the end of the Great Recession, participants forecasted the economy's real GDP growth rate to be 3.1% in 2010, slightly more than the actual rate of 2.8%. The unemployment rate was predicted to average 9.5% in the final quarter of 2010—this was quite close to the actual average of 9.6%. Inflation, as measured by the CPI, was predicted to average 1.7% in 2010—0.5 percentage points higher than the actual 1.2% increase in prices that occurred during 2010. Light vehicle sales were expected to rise substantially, from 10.4 million in 2009 to 11.6 million in 2010, which matched the actual total. Housing starts were forecasted to rise from 0.55 million units in 2009 to 0.68 million units in 2010, but they actually only edged higher to 0.58 million units.

Outlook for 2011 and 2012

The economy is forecasted to grow at a solid pace in 2011 and 2012. The growth rate of real GDP is predicted to be 2.6% in 2011 and 2.9% in 2012. The quarterly pattern shows the annualized rate of real GDP growth to be between 2.6% and 3.2% over the forecast horizon (2011:Q2–2012:Q4). This rate of growth is considered to be right around the historical trend. The unemployment rate is predicted to edge lower through the end of 2012: It is expected to fall to 8.5% by the fourth quarter of 2011 and then ease to a still very high 8.2% by the final quarter of 2012. Inflation, as measured by the CPI, is expected to rise quite a bit in 2011, to an annual rate of 2.6%, but this anticipated rise is largely due to increases in energy prices in the early part of 2011. Oil prices are predicted to peak in the second quarter of 2011, at $104 per barrel, and then remain relatively flat. Inflation is then anticipated to fall slightly to 2.2% in 2012. Real personal consumption expenditures are forecasted to expand at a solid rate of 2.8% in 2011 and at a slightly lower rate of 2.6% in 2012. Light vehicle sales are expected to rise to 13.2 million units this year and then improve to 14.4 million units next year. Real business fixed investment is predicted to record strong growth rates of 7.7% in 2011 and 6.8% in 2012. Industrial production is forecasted to grow at a rate of 5.4% this year and at a still solid rate of 4.1% next year.

The housing sector is predicted to improve over the forecast horizon. Real residential investment is anticipated to grow in 2011, at a rate of 3.8%, and surge in 2012, at a rate of 16.2%. Housing starts are expected to increase to 0.59 million units in 2011 and 0.78 million units in 2012.

The long-term interest rate (ten-year Treasury rate) is forecasted to increase 84 basis points in 2011, to 3.70%, and 50 basis points in 2012, to 4.20%. The short-term interest rate (one-year Treasury rate) is expected to rise 12 basis points this year, to 0.38%, and 98 basis points next year, to 1.36%. The trade-weighted U.S. dollar is predicted to edge down this year, at a rate of –0.3%, and then increase in 2012, at a rate of 0.7%. The trade deficit (net exports of goods and services) is predicted to remain unchanged this year and next.

Auto sector outlook

Jeff Schuster, executive director, J. D. Power and Associates, presented the light vehicle sales outlook. He said that 2011 began with strong global sales for light vehicles, which he anticipated to continue in the coming years. Though the global selling rate did pull back in recent months because of the Japanese disaster and a slowing Chinese economy, Schuster expected global sales to reach 76 million this year, up 6% from 2010, and to eventually cross 100 million by 2015. Most of this growth will come from emerging markets, such as China. In 2010, emerging markets' share of global light vehicle sales surpassed 50% for the first time (51%); by 2015, this share is expected to account for 60%. In North America, sales are climbing back toward pre-crisis levels. According to Schuster, U.S. total light vehicle sales are expected to reach 13.0 million in 2011, up from 11.6 million in 2010, and continue rising to 16.5 million by 2015.

Kenny Vieth, partner, Americas Commercial Transportation (ACT) Research Co., provided the outlook on commercial vehicles (medium- and heavy-duty trucks). Vieth explained why commercial vehicle demand has recently rebounded. Truckers' profits have increased because the demand for hauling freight by truck has risen, tightening trucking capacity—there's now too much freight for too few trucks. With greater profits, truckers have improved their creditworthiness, increasing their ability to borrow funds. Many truckers put off buying new vehicles during the past two years because of the poor economy, increasing the average age of the commercial fleet and generating pent-up demand for new trucks. Given these factors, heavy-duty truck orders have risen to five-plus-year highs in March and April of 2011. According to Vieth's projections, heavy-duty truck sales are expected to reach 256,000 units in 2011 and 330,000 units in 2012—up from 118,000 units in 2009. Vieth said that medium-duty truck sales are not experiencing the same strong growth, since they are correlated with housing construction, which remains weak; but he expected steady, albeit slow, growth through 2016.

Paul Taylor, chief economist, National Automobile Dealers Association, presented the light vehicle sales outlook from the dealers' perspective. Taylor said that dealerships have improved their performance in recent years. For instance, dealerships' net pretax profits edged higher from 2007 to 2010. Dealerships that survived the recession face less competition, so their performance may improve even further. Taylor remarked that the drop in new car sales during the recession meant that more consumers held on to their old cars—vehicles that would have been in the used car market. All told, the marketplace lost about 5 million used cars during the recession. The decline in the supply of used cars increased used cars' value and reduced the difference in cost between new and used cars. Moreover, credit availability has improved: Approval rates are back to 2007 levels for consumers with good credit scores, and U.S. auto loans outstanding are projected to increase from \$699.8 billion in the fourth quarter of 2010 to \$716.5 billion in the final quarter of this year. Taylor noted that all of these factors bode well for stronger future light vehicle sales. However, Taylor cautioned that new car sales may be hurt by a potential further decline in housing prices.

In North America, light vehicle sales are climbing back toward pre-crisis levels.

David Andrea, vice president, Original Equipment Suppliers Association (OESA), presented the outlook on the auto parts supplier industry. Starting out strong in 2011, supplier confidence fell following the March 11 Japanese crisis. The uncertainty over what raw materials will cost and how production will be affected in the wake of the crisis has taken a toll on the industry. Andrea expected parts production capacity to be restored by the end of the third quarter of 2011, with the fourth quarter spent recouping lost units from the rest of the year. Andrea outlined numerous challenges that lie ahead for the industry. Chief among them will be the recruitment and retention of high-quality personnel, as well as the high cost and limited availability of raw materials and components, in particular rubber, electronics, specialty alloy steels, and rare earth materials. Despite such challenges, Andrea explained that opportunities for industry growth are abundant. Credit availability is no longer an issue. New vehicle content and technologies, such as those for electric cars, will require new supply bases, and the difficulties stemming from the Japanese crisis for foreign suppliers may lead to opportunities for U.S. regional suppliers.

Gary Vasilash, editorial director, *Automotive Design and Production*, presented the outlook for automotive technology. Vasilash said that environmental vehicles are becoming legitimate alternatives to internal combustion engine vehicles in the automotive market, rather than niche vehicles that require consumers to sacrifice performance or aesthetics for fuel economy. Their sales reflect that reality. For instance, during

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the first four months of 2011, Toyota's hybrid Prius outsold General Motors' entire Cadillac division—55,256 units versus 53,639 units. Vasilash noted that one of the biggest hurdles for the widespread usage of environmental vehicles is the lack of infrastructure to support it. Vasilash argued, however, that the first automobiles in the early 1900s faced far more daunting challenges, including no gas stations, no paved roads, and no traffic signs; yet the auto industry was able to grow into what it is today. Environmental vehicle sales are expected to increase in the coming years, as emerging markets like China drive up the demand for, and hence the price of, oil. Vasilash noted that China overtook the U.S. as the world's largest auto market in 2009, even though China has an extremely low car ownership rate. That said, Vasilash also argued that internal combustion engine vehicles will still have a place in the market. Too much knowledge, infrastructure, and technology have been invested in them. Vasilash expected the market to move toward a combination of less expensive electric vehicles and more fuel-efficient internal combustion engine vehicles.

Conclusion

The participants at this year's AOS predicted the economy to grow at a solid pace in 2011 and 2012. However, because economic growth is still being restrained following a recession accompanied by a financial crisis, the unemployment rate is expected to remain high by historical standards through 2012. Inflation is anticipated to rise but remain contained through 2012. Light vehicle sales are forecasted to improve this year and in 2012.

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[1] Some materials presented at the symposium are available at www.chicagofed.org/webpages/events/2011/automotive_outlook_symposium/index.cfm. The panel on the growing role of electronics in automobiles will be covered in an upcoming *Chicago Fed Letter* by Thomas H. Klier.