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Economy to keep rolling along in 2012 and 2013

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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 2013. Inflation is expected to fall in 2012 and remain unchanged in 2013, and the unemployment rate is anticipated to move lower but remain high by historical standards through the end of 2013. Light vehicle sales are forecasted to improve in 2012 and 2013.

The Federal Reserve Bank of Chicago held its nineteenth annual Automotive Outlook Symposium (AOS) on May 31 and June 1, 2012, at its Detroit Branch. More than 70 economists and analysts from business, academia, and government attended the AOS. This *Chicago Fed Letter* reviews the forecasts from last year's AOS for 2011, and then analyzes the forecasts for 2012 and 2013 (see figure 1) and summarizes the presentations from this year's AOS.[1]

1. Median forecast of GDP and related items

	2011 (Actual)	2012 (Forecast)	2013 (Forecast)
Real gross domestic product[a]	1.6	**2.3**	**2.6**
Real personal consumption expenditures[a]	1.6	**2.5**	**2.5**
Real business fixed investment[a]	8.2	**4.0**	**5.3**
Real residential investment[a]	3.5	**12.2**	**13.0**
Change in private inventories[b]	52.2	**60.6**	**55.5**
Net exports of goods and services[b]	−410.8	**−412.0**	**−395.0**
Real government consumption expenditures and gross investment[a]	−2.8	**−1.3**	**−0.7**
Industrial production[a]	4.0	**3.2**	**2.4**
Car and light truck sales (millions of units)	12.7	**14.5**	**15.0**
Housing starts (millions of units)	0.61	**0.71**	**0.85**
Unemployment rate[c]	8.7	**7.9**	**7.6**
Consumer Price Index[a]	3.3	**2.1**	**2.1**
One-year Treasury rate (constant maturity)[c]	0.11	**0.20**	**0.25**
Ten-year Treasury rate (constant maturity)[c]	2.05	**2.21**	**2.52**
J. P. Morgan Trade-Weighted Dollar Index[a]	0.0	**−0.4**	**0.2**
Oil price (dollars per barrel of West Texas Intermediate)[c]	94.06	**103.57**	**104.25**

[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 2012.
Sources: Actual data from authors' calculations and Haver Analytics; median forecast from Automotive Outlook Symposium participants.

The U.S. economy continued to expand from the longest and deepest drop in economic activity since the Great Depression. During the eleven quarters following the end of what has been called the "Great Recession," the annualized rate of real gross domestic product (GDP) growth was 2.4%—near what is considered the historical trend rate of growth for the U.S. economy. This GDP growth rate is very disappointing given that real GDP fell from its peak by more than 5% 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 eleven quarters of positive output following these two recessionary periods, the annualized rate of real GDP growth was 5.3% and 6.0%, 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 United States and in other countries that follow recessions associated with financial crises tend to be quite restrained, and it appears that the current business cycle is following this pattern of tepid growth.

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 3.8 million—around 43% 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 ten years before the Great Recession, the labor force in the U.S. economy increased by an average of 1.7 million individuals each year, according to the U.S. Bureau of Labor Statistics. Thus, over 7.5 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 has been above 8% since February 2009. At 8.2% in May 2012, 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, inflation increased to 3.3% in 2011, largely because of higher oil prices associated with the Middle East uprisings during the spring. Concerns about Iran's nuclear program pushed oil prices up in early 2012. But given the recent signs of economic weakness around the world, oil prices had moderated and inflation had fallen to 1.7% by May 2012.

The weakest sector of the economy remained housing. There were 0.61 million housing starts in 2011, well below the nearly 1.4 million annual housing starts that the United States averaged during the 1990s. Residential investment normally plays a major role during an economic recovery. However, since the start of the recovery from the Great Recession, residential investment has contributed very little to the moderate growth of the overall economy.

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 downturn. From June 2009 through May 2012, manufacturing output grew at an annualized rate of 6.3%, recovering nearly three-quarters 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 through May 2012, with annualized growth rates of 30.6% and 15.5%, respectively.

Light vehicle sales (car and light truck sales) improved from 11.6 million units in 2010 to 12.7 million units in 2011—a 10% gain. This increase in light vehicle sales was much larger than the 1.6% increase in real personal consumption expenditures for 2011. Light vehicle sales continued to improve in 2012, with the annualized selling rate rising to 14.3 million units in the first five months.

Light vehicle sales are expected to rise to 14.5 million units in 2012 and then improve to 15.0 million units in 2013.

Forecasts versus results

At last year's AOS, participants forecasted the economy's real GDP growth rate to be 2.6% in 2011, a full percentage point more than the actual rate of 1.6%. The unemployment rate was predicted to average 8.5% in the final quarter of 2011—a bit lower than the actual average of 8.7%. Inflation, as measured by the CPI, was predicted to average 2.6% in 2011—0.7 percentage points lower than the actual 3.3% increase in prices that occurred during 2011. Light vehicle sales were expected to rise substantially, from 11.6 million units in 2010 to 13.2 million units in 2011, which was higher than the 12.7 million units actually sold. Housing starts were forecasted to tick up from 0.58 million units in 2010 to 0.59 million units in 2011, but they actually gained a bit more, reaching 0.61 million units.

Outlook for 2012 and 2013

The economy is forecasted to grow at a solid pace in 2012 and 2013. The growth rate of real GDP is predicted to be 2.3% in 2012 and 2.6% in 2013. The quarterly pattern shows the annualized rate of real GDP growth to be between 2.1% and 2.8% over the forecast horizon (2012:Q2–2013:Q4). The projected rates of growth for 2012 and 2013 are considered to be near the historical trend. The unemployment rate is predicted to edge lower through the end of 2013: It is expected to fall to 7.9% by the fourth quarter of 2012 and then ease to a still very high 7.6% by the final quarter of 2013. Inflation, as measured by the CPI, is expected to remain contained at 2.1% in both 2012 and 2013. Real personal consumption expenditures are forecasted to expand at a solid rate of 2.5% this year and in 2013. Light vehicle sales are expected to rise to 14.5 million units this year and then improve to 15.0 million units next year. Real business fixed investment is predicted to record solid growth rates of 4.0% in 2012 and 5.3% in 2013. Industrial production is forecasted to grow at a rate of 3.2% this year and at a slower pace of 2.4% next year.

The housing sector is predicted to improve over the forecast horizon. Real residential investment is anticipated to surge at a rate of 12.2% in 2012 and at a rate of 13.0% in 2013. Housing starts are expected to increase to 0.71 million units in 2012 and 0.85 million units in 2013.

The long-term interest rate (ten-year Treasury rate) is forecasted to increase 16 basis points in 2012, to 2.21%, and 31 basis points in 2013, to 2.52%. The short-term interest rate (one-year Treasury rate) is expected to rise 9 basis points this year, to 0.20%, and 5 basis points next year, to 0.25%. The trade-weighted U.S. dollar is predicted to edge down this year, at a rate of –0.4%, and then tick up in 2013, at a rate of 0.2%. The trade deficit (net exports of goods and services) is predicted to remain virtually unchanged this year and next.

Auto sector outlook

Mustafa Mohatarem, chief economist, General Motors (GM), presented the light vehicle sales outlook. He said that light vehicle sales have been one of the few bright spots during the lackluster recovery from the Great Recession; auto production accounted for approximately one-half of the United States' annualized GDP growth rate in the first quarter of 2012. Mohatarem said he expected the automotive industry to remain a source of strength for the U.S. economy and noted several trends that bode well for light vehicle sales in the future. Vehicle age has risen dramatically as consumers have held on to their cars and delayed purchases of new cars during the downturn. The decline in the supply of used cars has also increased used cars' value by nearly 30% since the end of the recession, providing consumers with more equity when they trade in their vehicles. He also noted that consumer, business, and government spending on new vehicles are all well below their historical trends. Given such patterns, Mohatarem contended that in the United States, there is now a lot of pent-up demand for new vehicles. Outside of the United States, however, the outlook for light vehicle sales is far less rosy, Mohatarem noted. For instance, light vehicle sales growth has been slowing in the rapidly developing countries of Brazil, Russia, India, and China over the past one to two years. Mohatarem said he is skeptical about this trend reversing quickly. The declining economic performance of these four nations will constrain their governments from being able to provide any significant stimulus to vehicle sales, stated Mohatarem.

Kenny Vieth, partner, Americas Commercial Transportation (ACT) Research Co., delivered the outlook on commercial vehicles (medium- and heavy-duty trucks). Vieth said that despite the recent decrease in orders for heavy-duty trucks, many factors point to higher truck sales on the horizon. The underlying demand for commercial vehicles indicates that the market for heavy-duty trucks will be healthy for several years to come. Freight tonnage in the United States has been growing steadily since the end of the recession, and there is now too much freight for too few trucks. Indeed, the demand for trucks to haul freight was 3% higher than the supply of trucks in 2011; and according to Vieth, this shortfall is projected to reach 6% by 2013. Because of the rising demand for trucks to haul freight, truckers have reaped greater profits, which have improved their creditworthiness and thus increased their ability to borrow funds. Many truckers have also put off buying new vehicles in recent years because of the poor economy, raising the average age of the commercial fleet and generating pent-up demand for new heavy-duty trucks. To close, Vieth explained that medium-duty truck sales are not expected to experience the same strong growth because they are highly dependent on the government and construction sectors. Sales of medium-duty trucks will remain disappointing until spending in these two sectors comes back from depressed levels.

Light vehicle sales have been one of the few bright spots during the lackluster recovery from the Great Recession.

Paul Taylor, chief economist, National Automobile Dealers Association, presented the light vehicle sales outlook from the dealers' perspective. Taylor said that auto dealerships have continued to improve their performance this past year as light vehicle sales recover from the recession; e.g., in the first quarter of 2012, average net pretax profit for dealerships grew 8% relative to its year-ago value. Part of this improvement is attributable to dealerships doing more with less: Even though sales volumes have climbed significantly since 2009, a typical dealership today only has 53 employees, not much higher than the 49 employees dealerships averaged during the recession. Taylor also highlighted several indicators affecting the light vehicle industry. The value of houses (a key source of wealth for the middle class) has stabilized, with a year-over-year increase of 0.5% in the first quarter of 2012, according to the Federal Housing Finance Agency's House Price Index. The employment situation has also improved. Taylor said that while the unemployment rate remains high, individuals who are still employed are less uncertain about their economic future. Additionally, Taylor argued that low interest rates, moderate gasoline prices, and high used car values generally support higher new car sales ahead. Given such factors, Taylor predicted light vehicle sales to reach 14.4 million units by the end of 2012.

David Andrea, vice president, Original Equipment Suppliers Association (OESA), presented the outlook on the auto parts supplier industry. Andrea explained that suppliers have faced many challenges in the past year. In addition to growing concerns about Europe's economic slowdown, both natural and industrial disasters—such as the 2011 earthquake in Japan and the 2012 explosion at a plant in Germany that produces a key input for plastics manufacturing[2]—have caused major supply chain disruptions. Through all of these challenges, the industry has proven itself to be flexible and adaptable, meeting all the increases in production that their customers have required while maintaining cost discipline and improving productivity. To illustrate this, Andrea noted that North American production of light vehicles has increased from an annualized rate of 8 million units in September 2009 to 14 million units in January 2012, while U.S. auto parts manufacturing employment has only increased from around

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400,000 to around 450,000 over the same period. More recently, however, the recovery in sales volume and a record number of vehicle launches have increased suppliers' willingness to spend, with many suppliers reporting accelerated capital expenditures and plans to hire. According to Andrea, global vehicle sales are projected to continue to grow, reaching 104.5 million units in 2018, up from 76.9 million units in 2011. Such an increase in global sales should provide robust growth opportunities for the supplier industry.

Kristin Dziczek, director, Center for Automotive Research (CAR), provided an analysis of past and future labor negotiations between the United Auto Workers (UAW) and the Detroit Three (Chrysler, Ford, and GM). Dziczek said that the landmark 2007 UAW–Detroit Three contracts accomplished a great deal, lowering average hourly labor costs from $72–$78 per hour to $52–$58 per hour. Most of the savings came from transferring retiree health care liabilities from the auto companies to a voluntary employees' beneficiary association (VEBA)[3] affiliated with the UAW. By 2011, the average hourly labor costs for Ford ($58 per hour), GM ($56 per hour), and Chrysler ($52 per hour) had become much more competitive with those for foreign companies, such as Toyota ($55 per hour), Honda ($50 per hour), and Nissan ($47 per hour). In contrast, the 2011 UAW–Detroit Three contracts were more evolutionary than revolutionary, holding the line on fixed labor costs while increasing variable pay. According to Dziczek, labor costs for the Detroit Three are expected to grow by less than 1% annually through 2015, with Ford reaching $60 per hour, GM $59 per hour, and Chrysler $53 per hour. Looking ahead to the 2015 labor contract negotiations, Dziczek said the UAW will seek to raise entry-level pay, increase benefits for retirees, and restore the cost-of-living adjustments to compensation. The Detroit Three's major goals for the 2015 labor negotiations will be to avoid any further pension liabilities and pay raises (including cost-of-living adjustments) and to increase employees' cost-sharing responsibilities for their health care benefits.

Conclusion

The participants at this year's AOS predicted the economy to grow at a solid pace in 2012 and 2013. However, because U.S. economic growth is still being restrained following a recession accompanied by a financial crisis and because economic growth overseas is weakening, the unemployment rate is expected to remain high by historical standards through 2013. Inflation is anticipated to fall this year and remain unchanged in 2013. Light vehicle sales are forecasted to improve this year and in 2013.

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1 Some materials presented at the symposium are available at www.chicagofed.org/webpages/events/2012/automotive_outlook_symposium.cfm.

2 The plant is owned by Evonik Industries AG and provides a significant portion of the world's supply of the chemical CDT (cyclododecatriene), which is used to make a nylon resin called PA12 (or nylon 12), critical for the manufacture of brake and fuel system components. For details on the plant explosion's effects on the auto industry, see Craig Trudell and Mark Clothier, 2012, "Auto output threatened by resin shortage after explosion," *Bloomberg*, April 17, available at www.bloomberg.com/news/2012-04-17/auto-output-threatened-by-resin-shortage-after-explosion.html.

3 A VEBA is an independently administered trust whose purpose is to provide employee benefits. Under the 2007 UAW–Detroit Three contracts, a VEBA to administer retiree health care benefits was established with funds from the Detroit Three automakers; for details, see www.uawtrust.org/Home/about/history/history/sb.cn.