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Chicago Fed Letter

Economy to move down the road at a solid pace in 2014 and accelerate slightly in 2015

by William A. Strauss, senior economist and economic advisor, and Jacob Berman, associate economist

According to participants in the Chicago Fed's annual Automotive Outlook Symposium, the nation's economic growth is forecasted to be solid this year and to strengthen somewhat in 2015. Inflation is expected to increase in 2014 and remain flat in 2015. The unemployment rate is anticipated to move lower but remain near 6% through the end of 2015. Light vehicle sales are predicted to improve moderately in 2014 and 2015.

The Federal Reserve Bank of Chicago held its 21st annual Automotive Outlook Symposium (AOS) on May 30, 2014, at its Detroit Branch. More than 80 economists and analysts from business, academia, and government attended the AOS. This *Chicago Fed Letter* reviews the forecasts from last year's AOS for 2013, and then analyzes the forecasts for 2014 and 2015 (see figure 1) and summarizes the presentations from this year's AOS.[1]

1. Median forecast of GDP and related items

	2013 (Actual)	2014 (Forecast)	2015 (Forecast)
Real gross domestic product[a]	2.6	**2.3**	**2.8**
Real personal consumption expenditures[a]	2.3	**2.8**	**2.7**
Real business fixed investment[a]	2.6	**3.4**	**4.8**
Real residential investment[a]	6.9	**5.4**	**7.5**
Change in private inventories[b]	111.7	**70.5**	**58.6**
Net exports of goods and services[b]	−382.8	**−409.5**	**−431.5**
Real government consumption expenditures and gross investment[a]	−2.4	**0.5**	**0.4**
Industrial production[a]	3.3	**3.6**	**3.2**
Car and light truck sales (millions of units)	15.5	**16.0**	**16.4**
Housing starts (millions of units)	0.93	**1.02**	**1.19**
Unemployment rate[c]	7.0	**6.3**	**5.9**
Consumer Price Index[a]	1.2	**2.0**	**2.0**
One-year Treasury rate (constant maturity)[c]	0.12	**0.15**	**0.45**
Ten-year Treasury rate (constant maturity)[c]	2.75	**2.96**	**3.50**
J. P. Morgan trade-weighted dollar index[a]	3.5	**2.8**	**0.1**
Oil price (dollars per barrel of West Texas Intermediate)[c]	97.39	**99.00**	**97.08**

[a]Percent change, fourth quarter over fourth quarter.
[b]Billions of chained (2009) dollars in the fourth quarter at a seasonally adjusted annual rate.
[c]Fourth quarter average.
Note: These values reflect forecasts made in May 2014.
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 19 quarters following the end of the "Great Recession," the annualized rate of real gross domestic product (GDP) growth was 2.2%—near what is considered the historical trend rate of growth for the U.S. economy. This GDP growth rate is very disappointing, since typically, the pace of economic recovery is quite sharp following a deep recession. The sluggish growth following the Great Recession would suggest that large output gaps in the economy remain prevalent. The labor market highlights the persistent slack in the economy. By May 2014, total employment had finally recovered all the jobs lost over the period February 2008 through February 2010 as a result of the downturn. However, this jobs recovery took 51 months (March 2010 through May 2014)—more than twice as long as any employment recovery since the Great Depression. May 2014's employment level reached a new record high—more than six years after the previous record had been set in January 2008.

The unemployment rate in May 2014 was 6.3%—roughly a percentage point above what is considered the natural rate of unemployment (i.e., the rate that would prevail in an economy making full use of its labor resources). The labor force participation rate has been declining since peaking in April 2000, at 67.3%, largely on account of the aging of the population; that said, May 2014's reading of 62.8% is approximately a percentage point lower than where one would expect to find the labor force participation rate after adjusting for the aging population. Combined, these two factors indicate that slack currently in the labor market could amount to around 5 million workers.

With such slack in production, labor markets, and other parts of the economy, inflation has remained low. Inflation, as measured by the Consumer Price Index (CPI), was extremely low at 1.2% in 2013—the lowest inflation rate since 1964; by May 2014, it had risen to 2.1%.

Industrial output continued to rise at a solid pace; its growth rate was 3.3% in 2013, and its annualized growth rate accelerated to 4.7% over the first five months of 2014. Light vehicle sales (car and light truck sales) improved from 14.4 million units in 2012 to 15.5 million units in 2013—a 7% gain. This increase in light vehicle sales was much larger than the 2.3% increase in real personal consumption expenditures for 2013. Light vehicle sales continued to improve in 2014: The annualized selling rate of light vehicles was 15.9 million units in the first five months of this year.

The housing sector began to collapse in 2006, bottomed out in 2009, remained relatively flat in 2010, and eventually began a very slow recovery in 2011. Housing starts went up from 0.78 million units in 2012 to 0.93 million units in 2013—a gain of 19%. Housing starts rose further in 2014, to an annualized rate of 0.97 million units over the first five months of the year. This pace is still 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 in mid-2009, residential investment has contributed just 0.1 percentage points toward the overall economy's annualized growth rate of 2.2%.

Results versus forecasts

For 2013, the actual growth rate of real GDP was 2.6%—slightly above the 2.3% forecasted by participants at last year's AOS. The unemployment rate actually averaged 7.0% in the final quarter of 2013—slightly lower than the predicted average of 7.3%. Inflation, as measured by the CPI, was in fact 1.2% in 2013—0.6 percentage points lower than the projected 1.8% increase in prices for the previous year. Light vehicle sales actually rose to 15.5 million units in 2013 from 14.4 million units in 2012, surpassing the forecast of 15.3 million units. Housing starts increased to 0.93 million units in 2013 from 0.78 million units in 2012; so, the actual number of starts fell short of the 1.02 million units expected for last year.

Outlook for 2014 and 2015

The economy is forecasted to grow at a solid pace in 2014 and at a somewhat faster pace in 2015: The growth rate of real GDP is predicted to be 2.3% in 2014 and 2.8% in 2015. In part, 2014's annual economic performance is being held down by the decline in real GDP that occurred during the first quarter on account of adverse weather conditions. The quarterly forecast (over the period 2014:Q2–2015:Q4) shows the annualized rate of real GDP growth averaging 3.2% for the rest of this year (growth is expected to be boosted in part by the pent-up demand for goods and services created during the first quarter) and then ticking lower to 2.8% at the beginning of 2015 and remaining fairly flat through the end of next year. The unemployment rate is predicted to edge lower through the end of 2015: It is expected to fall to 6.3% by the fourth quarter of 2014 and then ease to 5.9% by the final quarter of 2015. Inflation, as measured by the CPI, is expected to increase from a very low 1.2% in 2013 to 2.0% in 2014 and 2015. Real personal consumption expenditures are forecasted to expand at a solid rate of 2.8% this year and 2.7% in 2015. Light vehicle sales are expected to rise to 16.0 million units this year and then improve to 16.4 million units next year. Real business fixed investment is predicted to record solid growth rates of 3.4% in 2014 and 4.8% in 2015. Industrial production is forecasted to grow this year at a rate of 3.6% and next year at a slower rate of 3.2%—close to its historical long-term growth rate.

The housing sector is predicted to continue to improve over the forecast horizon. Real residential investment is anticipated to expand at a rate of 5.4% in 2014 and at a rate of 7.5% in 2015. Housing starts are expected to increase to 1.02 million units in 2014 and 1.19 million units in 2015. The long-term interest rate (ten-year Treasury rate) is forecasted to increase 21 basis points in 2014, to 2.96%, and 54 basis points in 2015, to 3.50%. The short-term interest rate (one-year Treasury rate) is expected to tick up this year, to 0.15%, and increase 30 basis points next year, to 0.45%. The trade-weighted U.S. dollar is predicted to strengthen this year by 2.8% and then remain relatively unchanged in 2015. The trade deficit (net exports of goods and services) is predicted to increase slightly this year and next.

Auto sector outlook

David Teolis, senior manager, General Motors Co. (GM), presented the outlook for North American vehicle sales. Discussing the international backdrop first, he said economic and political conditions around the world were consistent with modest growth in global demand for new vehicles over the next few years. Despite political turmoil in Thailand, Egypt, and Russia, real GDP has been growing in nearly every major economy. The fastest growth is expected to remain concentrated in emerging market economies, such as Indonesia (where new vehicle sales have tripled since 2007). Developed economies are also expected to grow, albeit at a slower, steadier rate. Turning his focus on North America, Teolis noted that in the United States, growth prospects for auto sales are positive, but the outlook is not without risks. Interest rates on new car loans may increase if the Federal Reserve raises the federal funds rate (its short-term policy rate). He argued that the increase in short-term inflation expectations over recent months was a sign that monetary policy tightening may occur sooner than anticipated. Higher interest rates would also be a drag on real estate activity, which would lead to fewer vehicle purchases. To better explain the dynamics affecting vehicle sales, Teolis decomposed consumer auto spending into four underlying components: the ability to spend, the willingness to spend, the need to spend, and the opportunity to spend. Households' ability to spend is strongly supported by favorable credit conditions and rising household wealth, though it is restrained somewhat by

modest income gains. Households' willingness to spend is determined by consumer confidence; Teolis argued that indexes of consumer confidence have significant room to grow and if they move higher, more new vehicle purchases would be made. The need to spend is driven by new demand and replacement demand. Despite anecdotal evidence that young people are less interested in cars, new demand is expected to increase as the working-age population—along with the number of licensed drivers—rises (in particular, Mexico has favorable demographics that will likely lead to robust new auto sales). Replacement demand, however, is likely to be a smaller contribution to growth as vehicles become increasingly durable. Finally, in the short term, consumers will have a greater window of opportunity to buy vehicles compared with the harsh winter of 2013–14, which had depressed auto sales, said Teolis. Overall, Teolis contended, vehicle demand fundamentals are favorable; most indicators point toward modest growth in new vehicle sales in North America in 2014–15.

Kenny Vieth, president, Americas Commercial Transportation (ACT) Research Co. LLC, delivered the outlook on commercial vehicles (medium- and heavy-duty trucks). Vieth noted that heavy-duty trucking productivity has surged in recent years as the growth rate of heavy-duty trucks has lagged behind the growth rate of the overall economy: Over the period 2003–13, real GDP grew 22%, but the total number of heavy-duty trucks was up only 8%. Productivity growth in heavy-duty trucking was due primarily to new technologies (e.g., new packaging methods), which allowed consumer goods to be delivered at a higher shipment density (i.e., more tons of freight could be carried per shipment). Software improvements also allowed truckers to take more-direct routes, and third-party logistics firms stepped in to provide services such as auditing, tracking, and warehousing, which made the hauling process more efficient. Vieth argued that many of these improvements were one-time phenomena and that productivity growth was likely to slow. He also observed that the average age of the commercial fleet had risen as truckers had put off buying new vehicles. The average age of a truck on the road today is 10.6 years; Vieth stated this figure would hold steady over the next several years. He also said he expected rising trucker wages would put a squeeze on profits. Even so, Vieth's overall outlook on commercial vehicles was positive, largely because there is no substitute for the heavy tractor-trailer. Despite the attention that rail transport has received, trucking remains the dominant mode of transportation for U.S. freight. In 2012, trucking accounted for 67% of all freight tonnage, and this share is expected to grow to 71% by 2024. According to Vieth, heavy-duty truck sales in North America are forecasted to increase from 245,500 units in 2013 to 293,000 units in 2014 and then to 295,600 units in 2015; medium-duty trucks sales are expected to increase from 188,200 units in 2013 to 213,800 units in 2014 and then to 222,000 units in 2015.

Light vehicle sales are expected to rise to 16.0 million units in 2014 and then improve to 16.4 million units in 2015.

Steven Szakaly, chief economist, National Automobile Dealers Association (NADA), presented the light vehicle sales outlook from the dealers' perspective. Szakaly showed that although dealerships' profits have recovered since the recession, margins remain tight. The average net profit margin for dealers is 2.2%—a mere $69 per vehicle and well below the margins of other retailers. He argued this was a sign that, contrary to popular perception, auto dealers give consumers a fair deal. Consumers have also benefited from the proliferation of free and transparent pricing through the Internet. Since customers are more knowledgeable about cars than ever before, dealers must be experts on every detail of their products. In the past, dealers have competed with auto manufacturers as these firms have experimented with selling directly to the consumers. Szakaly said that auto manufacturers' attempts at direct sales were largely unsuccessful and that vehicle sales would be dominated by dealers for the foreseeable future. He contended that a more serious challenge for dealers in the future would be the growing burden of student loan debt. While auto loans and credit card debt have declined from their record highs, the total value of student loans has steadily increased. Szakaly said he worried that if student loan debt continues to grow, customers would be reluctant to take on additional auto debt. This trend, combined with reduced enthusiasm for cars among young consumers, is likely to lead to delayed purchases, but he said he was confident that most consumers would buy cars eventually. A final source of concern for Szakaly was new emission regulations from the U.S. Environmental Protection Agency and the U.S. Department of Transportation, which he contended had the potential to raise prices and reduce demand for vehicles. Notwithstanding

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these challenges, sales of light vehicles are expected to stay above 16.0 million units for at least the next three years, according to Szakaly.

David Andrea, senior vice president, Original Equipment Suppliers Association (OESA), presented the outlook on the auto parts supplier industry. He noted several reasons why the industry should be optimistic about the near future. Sustainable year-over-year production increases in North America and a record number of collaborative production programs helped buoy sales across the supply chain. Indexes of supplier sentiment were positive because of macroeconomic tailwinds, such as low inflation, rising employment, moderate gasoline prices, and favorable credit terms. According to Andrea, the supplier industry has moved aggressively to reduce idle resources, meaning there is less room for error in forecasting future demand than ever before. Suppliers have responded to the tighter conditions by increasing inventories or buffer stocks, investing in information technology, and shifting away from single-sourced materials. The tooling industry is predicted by Andrea to grow 35% by 2018; he said suppliers will have to meet the new demand fueling this growth without creating excess capacity as they have in the past. Andrea said he expected domestic suppliers to remain the primary source of tooling, with offshore suppliers only stepping in to make up for temporary shortages. One challenge facing suppliers is declining satisfaction among their customers—the major auto companies. Rising product recalls and expenses on warranties are additional risks. Nevertheless, the overall outlook is bright. According to the composite forecast presented by Andrea, North American car and light truck production is anticipated to reach 16.8 million units in 2014 and grow to 17.7 million units by 2016.[2]

Randy Miller, global automotive advisory leader, Ernst & Young LLP (EY), reported results from his firm's new survey of auto executives. The survey consisted of nearly 100 executives from across the auto supply chain and asked respondents to describe the risks and opportunities facing the industry. According to Miller, many executives identified higher uncertainty and volatility in emerging markets as major challenges. For example, sales growth forecasts for Thailand over the coming years ranged from +85% to –6% relative to 2013. The expanding role of digital technology and data to drive operational efficiencies was an important trend for the survey's respondents. Many executives indicated they were confident in their firms' ability to improve business intelligence and data analytics to attract new customers, but they were less prepared for technological changes involving the consolidation of vehicle platforms (which would reduce costs by lowering the number of design, engineering, and production efforts). A final concern for many executives in the survey was product recalls; 22 million vehicles were recalled in the United States in 2013, and the auto sector spent $45 billion on recalls and warranty claims, said Miller.

Conclusion

The participants at this year's AOS predicted the economy to grow at a solid pace in 2014 and accelerate slightly in 2015. However, even after almost five years of recovery and expansion for the U.S. economy, slack remains in many of its sectors. Hence, the unemployment rate is expected to remain above what is considered its natural rate through 2015. Inflation is anticipated to average 2.0% in 2014 and 2015—below what inflation has averaged since 2000. Light vehicle sales are forecasted to improve moderately this year and in 2015.

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[1] Some materials presented at this year's AOS are available at www.chicagofed.org/webpages/events/2014/automotive_outlook_symposium.cfm.

[2] This composite forecast's light vehicle production volumes represent those for cars, as well as trucks in classes 1–5. The AOS median forecast's light vehicle sales volumes represent those for cars, as well as trucks in classes 1–3.