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# Economy on cruise control in 2010 and 2011

*by William A. Strauss, senior economist and economic advisor, and Britton Lombardi, senior associate economist*

According to participants in the Chicago Fed's annual Automotive Outlook Symposium, solid economic growth is forecasted for the nation this year and in 2011. Inflation is expected to remain contained, but the unemployment rate is anticipated to remain high. Light vehicle sales are forecasted to improve moderately in 2010 and 2011.

**The** Federal Reserve Bank of Chicago held its seventeenth annual Automotive Outlook Symposium on June 3–4, 2010, at its Detroit Branch. More than 60 economists and analysts from business, academia, and government attended the conference. This *Chicago Fed Letter* reviews last year's forecasts for 2009, analyzes the forecasts for 2010 and 2011 (see figure 1), and summarizes the presentations at this year's conference.[1]

**1. Median forecast of GDP and related items**

| | 2009 (Actual) | 2010 (Forecast) | 2011 (Forecast) |
|---|---|---|---|
| Real gross domestic product[a] | 0.1 | **3.1** | **3.1** |
| Real personal consumption expenditures[a] | 1.0 | **3.2** | **2.6** |
| Real business fixed investment[a] | –14.1 | **4.6** | **6.7** |
| Real residential investment[a] | –12.6 | **2.2** | **14.3** |
| Change in private inventories[b] | –19.7 | **45.1** | **52.5** |
| Net exports of goods and services[b] | –348.0 | **–389.7** | **–391.8** |
| Real government consumption expenditures and gross investment[a] | 1.3 | **0.6** | **0.6** |
| Industrial production[a] | –4.7 | **5.7** | **4.2** |
| Car and light truck sales (millions of units) | 10.4 | **11.6** | **13.3** |
| Housing starts (millions of units) | 0.55 | **0.68** | **0.94** |
| Unemployment rate[c] | 10.0 | **9.5** | **8.8** |
| Consumer Price Index[a] | 1.5 | **1.7** | **1.9** |
| One-year Treasury rate (constant maturity)[c] | 0.35 | **0.63** | **1.60** |
| Ten-year Treasury rate (constant maturity)[c] | 3.46 | **3.85** | **4.60** |
| J. P. Morgan Trade-Weighted Dollar Index[a] | –7.5 | **2.0** | **0.3** |
| Oil price (dollars per barrel of West Texas Intermediate)[c] | 76.07 | **82.00** | **87.81** |

[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 2010.
Sources: Actual data from authors' calculations and Haver Analytics; median forecast from Automotive Outlook Symposium participants.

The U.S. economy's output peaked in December 2007, and the U.S. entered a recession in January 2008. However, for the first eight months of 2008, conditions were relatively flat; real gross domestic product (GDP) actually rose 0.5% (seasonally adjusted annual rate, or SAAR) in the first half of 2008.[2] It was not until the financial crisis began in September 2008 that real GDP began to decline, to –2.7% in the third quarter. Output fell more significantly in the next two quarters, to –5.4% in the fourth quarter of 2008 and –6.4% in the first quarter of 2009.

The decline in economic activity reached its fastest pace in the first quarter of 2009. The Chicago Fed National Activity Index[3] (a measurement of growth in the economy relative to its long-term trend) fell to its lowest reading in nearly 35 years in January 2009. However, the decline in output, as measured by real GDP, began to moderate as the year progressed; and output showed a much smaller decline, –0.7%, in the second quarter. Job losses also picked up steam following the financial crisis. Over 8.4 million workers lost their jobs in 2008 and 2009, with the most significant monthly declines occurring in early 2009.

With substantial job losses, consumer spending began to retrench—to a rate of –2.5% in the second half of 2008 and –0.7% in the first half of 2009. Vehicle sales plunged to average 9.5 million units in the first half of 2009—a selling rate this low was last seen in the 1960s.

As the economy bottomed out toward the middle of 2009, the federal government introduced the Car Allowance Rebate System (CARS)—also known as the cash-for-clunkers program—at the beginning of the third quarter to help jump-start the economy. This program boosted the selling rate of light vehicles (cars and light trucks) from 9.6 million units in the second quarter to 11.5 million units in the third quarter. It also helped real GDP grow 2.2% in the third quarter.

Real GDP continued to rise—the economy grew 5.6% in the fourth quarter of 2009 and 2.7% in the first quarter of 2010; these values averaged out to a rate above what most economists consider the long-term trend for the U.S. economy's growth rate. Yet the pace of the recovery has not felt very brisk, partly because growth in real GDP is being driven by changes in private inventories. For example, the growth rate of final sales (which is real GDP minus the change in private inventories) was 1.5%, 1.7%, and 0.8% in the third quarter and fourth quarter of 2009 and the first quarter of 2010, respectively. These values are about a percentage point or more below the 2.6% growth that final sales have averaged over the past 20 years.

Most sectors of the economy have been described as either improving at a moderate pace or "bumping along the bottom." However, the manufacturing sector has experienced outsized growth, which is more in line with a strong recovery. Manufacturing output reached its all-time high in December 2007; but from that time through June 2009, it declined by over 17%. However, from the middle of 2009 through May 2010, it has increased at a 10.7% rate, recovering 45% of this loss.

**Forecasts versus results**

At last year's symposium, which took place as economic activity bottomed out, participants forecasted a decline of 1.8% for the economy in 2009, but the economy actually fell less than expected in the second quarter and grew at a more robust pace in the second half of the year. By the end of 2009, real GDP was actually slightly positive at 0.1%. The unemployment rate was predicted to average 9.9% in the final quarter of 2009—this was quite close to the actual average of 10.0%. Inflation, as measured by the Consumer Price Index (CPI), was predicted to average –0.5%, off significantly from the actual 1.5% increase in prices that occurred during 2009. In large part, the inflation forecast was wrong because of a substantial miss on energy prices: Oil prices, which had plunged to a low of just over $30 per barrel in late December of 2007, were anticipated to average $56 per barrel in the fourth quarter of 2009; however, oil prices increased to a much higher level, averaging just over $76 per barrel in the final quarter of last year. Light vehicle sales were expected to fall substantially, from 13.2 million in 2008 to 9.7 million in 2009. The actual drop was much less drastic, with light vehicle sales falling to 10.4 million units in 2009. The housing sector was very accurately predicted to be quite weak in 2009. Housing starts were forecasted to fall to 0.53 million units in 2009, and they actually fell to 0.55 million units.

Light vehicle sales are expected to rise to 11.6 million units in 2010 and then improve to 13.3 million units in 2011.

**Outlook for 2010 and 2011**

The forecast for 2010 and 2011 is for the economy to grow at a solid pace. The growth rate of real GDP is predicted to be 3.1% in both 2010 and 2011. The quarterly pattern has growth just above 3% in each quarter over the forecast horizon (2010:Q2–2011:Q4). While this slightly-above-trend rate would be the best since 2005, it would be considered relatively restrained compared with the historical performance of the economy following a sharp contraction in real GDP. Given this forecast for a moderate recovery, the unemployment rate is expected to edge lower to 9.5% by the fourth quarter of 2010 and then fall to a still quite high 8.8% by the final quarter of 2011. Inflation, as measured by the CPI, is expected to edge higher over the next two years, for an annual rate of 1.7% in 2010 and 1.9% in 2011. This pattern is being driven by economic growth that is somewhat above the long-term trend, as well as increases in oil prices, which are predicted to average $82 per barrel in the final quarter of this year and about $88 per barrel at the end of 2011. Personal consumption expenditures are forecasted to expand at a solid rate of 3.2% in 2010 and a slightly slower rate of 2.6% in 2011. Light vehicle sales are expected to rise to 11.6 million units this year and then improve to 13.3 million units next year. Business fixed investment is predicted to show strong growth of 4.6% in 2010 and 6.7% in 2011. Industrial production is forecasted to grow 5.7% this year and a still solid 4.2% next year.

The housing sector is predicted to improve over the forecast horizon. Residential investment is anticipated to grow 2.2% this year and 14.3% in 2011. Housing starts are expected to rise to 0.68 million units in 2010 and 0.94 million units in 2011. This would still leave housing starts well below the roughly 1.4 million units that they have averaged in the past 20 years.

The long-term interest rate (ten-year Treasury rate) is forecasted to increase 39 basis points in 2010 and 75 basis points in 2011. The short-term interest rate (one-year Treasury rate) is expected to rise 28 basis points this year and 97 basis points next year. The trade-weighted U.S. dollar is predicted to rise 2.0% this year and 0.3% in 2011. The trade deficit (net exports of goods and services) is predicted to deteriorate slightly this year and next.

**Auto sector outlook**

Ellen Hughes-Cromwick, chief economist, Ford Motor Co., provided the vehicle sales outlook from an auto manufacturer's perspective. She said that light vehicle sales to businesses had increased by about 40% in the first half of 2010. She noted that leaner vehicle inventories suggest continued production gains in the near term. She mentioned both auto parts suppliers' capacity and auto financing as two potential constraints on sales growth. She explained that Ford has been studying whether the supplier base as currently configured has enough production capacity to accommodate a rise in annual auto sales to either 13 million or 14 million units. Although suppliers have been reinvesting to add capacity, 5% to 10% of them are projected to be unable to meet the rising demand for parts. She also indicated that the limited availability of auto financing and continuing tight credit conditions in the wake of the financial crisis could dampen auto sales.

Over the period 2008–20, the driving-age population in China and India will go up by 15%, whereas this population in the U.S. and other mature markets will rise by only 7%, according to Hughes-Cromwick's projections. Income levels are also rising in China, India, Turkey, Brazil, and other developing countries, enticing Ford and other automakers to increase their market presence in those countries. As the demand for light vehicles expands overseas, Ford will change its global portfolio mix to match this growing demand.

Kenny Vieth, partner, Americas Commercial Transportation (ACT) Research Co., delivered the outlook on commercial vehicles (medium- and heavy-duty trucks). Vieth showed that currently the commercial fleet has an average age higher than at any time since 1979; given this fact, there is pent-up demand to purchase new vehicles, he contended. Over the next few years, about 225,000 units will be purchased annually to replace existing trucks in use, according to Vieth's projections. During the recession, there was excess trucking capacity—too many trucks for too little freight. But by the end of 2010 and into 2011, a shortage of trucks is expected. That said, the higher 2010 Environmental Protection Agency emissions standards may put a damper on new truck purchases. These higher standards have driven up new truck prices while lowering the trade-in value of older trucks, thereby increasing trucking companies' replacement costs. Lastly, Vieth explained that medium-duty truck sales are correlated with housing construction, so as the housing sector recovers at a moderate pace, slow but steady growth in medium-duty truck sales is expected through 2015.

Paul Taylor, chief economist, National Automobile Dealers Association, presented the light vehicle sales outlook from the dealers' perspective. According to Taylor, the trade-in value of light vehicles—in particular sport utility vehicles—has increased because there have been fewer trade-ins over the past few years. Therefore, the difference in cost between a new vehicle and a used one has narrowed, leading some to buy new vehicles. During the recent recession, gas prices remained low; and because gas prices are negatively correlated with the value of used light vehicles, these low gas prices have helped to bolster used vehicles' prices as well. Taylor also discussed the success of the federal government's cash-for-clunkers program in stimulating new demand for light vehicles. The program gave incentives to individuals to purchase new, more fuel-efficient vehicles, and stimulated auto manufacturers to rebuild their inventories through most of the final quarter of 2009. He said that home prices would need to improve further before car purchases would drastically increase because homeowners tend not to purchase cars when they are concerned about their home equity value.

David Andrea, vice president, Original Equipment Suppliers Association, presented the outlook on the auto parts supplier industry. The suppliers acknowledged their "shared destiny" with their two major customers—General Motors (GM) and Ford. Andrea said that original equipment suppliers in North America will ramp up production to meet the expected demand from these and other automakers over the next year and a half. As suppliers recover through 2010, Andrea said, they expect both hourly employment and compensation levels to rebound from their repressed levels in 2009. During the recession, suppliers restructured their business operations to remain viable as the number of car sales plummeted, e.g., by consolidating plants and reducing their work force. As the economy improves and auto sales increase, suppliers are expected to utilize both labor and capital productivity gains to produce more out of fewer plants, said Andrea. However, suppliers did note concerns over higher material and freight costs, lower credit availability, and shortages of electronic chips, all of which could inhibit production.

### The view from Wall Street

John Murphy, Chartered Financial Analyst, Bank of America Merrill Lynch, gave an outlook on the automotive industry from a Wall Street perspective. For 2010, Murphy had originally forecasted sales of 13.3 million units, but given the auto sector's poor performance in the first quarter, he recently lowered his forecast to 12.5 million units. However, he said the longer-term trend for light vehicle sales is closer to 15 million units per year. Even though auto sales have been down recently, he argued that the true underlying demand for light and commercial vehicles, as measured in miles driven, has not changed significantly over the past decade. The number of miles driven dipped slightly during the recession but is now rising in 2010. Therefore, Murphy said he is optimistic about the automotive industry: He said he had buy ratings on 16 of the 22 auto company stocks he analyzes.

Next, Murphy presented his firm's research on the competitive landscape of the auto industry. His firm found that the "replacement rate" (the percentage of a manufacturer's products that are entirely new or new versions of an existing model) affects all other metrics for evaluating an automaker's performance, including showroom age, market share, profitability, and stock price. Given the major automakers' respective replacement rates, Murphy said his firm expects Honda and Ford to gain 2 percentage points of market share in the U.S. by 2013 (the largest gain) and Chrysler to lose 2 percentage points. By 2013, he

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estimated GM should have a domestic market share of 18.8%, followed by Ford with 17.3% and Toyota with 16.5%. Murphy argued that large auto industry restructurings, such as GM's and Chrysler's in 2009, will not occur in the future; in the wake of the recent auto downturn, a more stable marketplace has been established, and subsequently, only smaller market share shifts should occur.

### Government perspective

Ron Bloom, the Obama administration's senior counselor for manufacturing policy, shed further light on the federal government's role in GM's and Chrysler's restructuring. He said the government had to step in to help redesign the two automakers' businesses in a substantial way, but without handing over blank checks. The government challenged them to rethink how they did business—leading to GM shrinking its number of brands and Chrysler no longer being a standalone company, among other changes. Bloom stated that the government intervention, while kept to a minimum, was necessary last year, especially since GM and Chrysler are central to the nation's manufacturing economy. However, he recognized that the government's role was to allow the firms' boards of directors, which were selected by the Obama administration's auto task force, to take the lead and run day-to-day management of the companies. GM and Chrysler now operate as independent enterprises, with government oversight limited to voting once per year on the members of their boards of directors. In addition, Bloom gave his insight into how the auto industry will reinvent itself. First, he argued that the way cars work will change as the internal combustion engine gives way to other fundamentally different and more-efficient technologies. Then, he said that automobiles in the future will become "smarter" as manufacturers incorporate more advanced technologies.

### Conclusion

The participants at this year's Automotive Outlook Symposium predicted the economy to grow at a solid pace in 2010 and 2011. However, because economic growth is relatively restrained compared with its historical performance following a sharp contraction in real GDP, the unemployment rate is expected to remain high. Inflation is anticipated to remain contained. Light vehicle sales are forecasted to improve moderately this year and in 2011.

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[1] Some materials presented at the symposium are available at www.chicagofed.org/webpages/events/2010/automotive_outlook_symposium/index.cfm.

[2] All partial year growth rates in this article are SAAR.

[3] For more details, see www.chicagofed.org/cfnai.