

# Chicago Fed Letter

## Auto experts look forward amid concerns about costs

by Michael Munley, associate economist, and William A. Strauss, senior economist and economic advisor

Despite the recession, the resilient consumer sector allowed light vehicle sales to finish 2001 at 17.0 million units versus the 16.3 million units forecast, making this the second strongest year on record. In the first quarter of 2002, light vehicle sales averaged 16.4 million units, again substantially above expectations. A recent Chicago Fed conference brought auto industry experts together to analyze the sector's performance and growing concerns about costs.

**Toward** the end of August 2001 it appeared that the weak economic growth that the U.S. had experienced for over a year was about to improve. However, the events of September 11 added a

tremendous amount of uncertainty. News from auto dealers in the immediate aftermath of the terrorist attacks indicated that showroom traffic was off sharply and transactions had plunged by nearly 50%. Automakers responded quickly. Just eight days after September 11, General Motors (GM) began offering 0% financing on all GM models. This incentive program was matched by many of the other vehicle manufacturers. Despite the largest quar-

terly job loss in 20 years, the consumer sector demonstrated its resiliency by purchasing a record number of light vehicles in the fourth quarter.

Participants at the ninth annual Auto Outlook Symposium, held at the Federal

Reserve Bank of Chicago on May 30 and 31, 2002, discussed the sector's fortunes in 2001 and outlook for the coming year.<sup>1</sup>

### What was expected

Participants at last year's symposium had expected real gross domestic product (GDP) to increase by 2.0%, higher than the 1.2% growth that did occur. Last year's consensus forecast over-predicted the performance of the business sector, expecting business fixed investment to rise by 2.6%; it fell by 3.2%. While business inventories were forecast to increase by \$9.1 billion, they fell by \$61.7 billion and were the largest drag on GDP growth with a -1.1% contribution. This translated into a significant miss for industrial production growth—projected to rise by 0.4%, it actually declined 3.8%. The group did better on real net exports, with a forecast of -\$415.0 billion versus the -\$408.7 billion recorded. With economic growth more modest than forecast, it is no surprise that the unemployment rate was higher than forecast.

While the business sector performed poorly, the consumer sector proved relatively robust. Housing starts were forecast to average 1.56 million units in 2001, but finished at 1.60 million units. Light

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

	2001 (actual)	2002 (forecast)	2003 (forecast)
Real GDP <sup>a</sup>	1.2	2.8	3.5
Real personal consumption <sup>a</sup>	3.1	3.4	3.2
Real fixed investment—nonresidential <sup>a</sup>	-3.2	-4.4	6.9
Real fixed investment—residential <sup>a</sup>	1.5	1.9	0.3
Change in private inventories <sup>b</sup>	-61.7	10.4	40.0
Net exports of goods and services <sup>b</sup>	-408.7	-469.0	-499.4
Real govt. consumption and gross investment <sup>a</sup>	3.6	5.0	2.8
Industrial production <sup>a</sup>	-3.8	0.7	4.6
Auto and light truck sales <sup>c</sup>	17.0	16.5	16.6
Housing starts <sup>c</sup>	1.60	1.60	1.59
Unemployment rate <sup>d</sup>	4.8	5.8	5.4
Inflation rate (Consumer Price Index) <sup>a</sup>	2.8	1.7	2.5
1-year Treasury (constant maturity) <sup>d</sup>	3.5	2.8	4.1
10-year Treasury (constant maturity) <sup>d</sup>	5.0	5.3	5.8
J. P. Morgan trade-weighted dollar <sup>a</sup>	6.5	2.2	0.7
Oil price (West Texas Intermediate) <sup>e</sup>	25.92	25.03	25.25

<sup>a</sup>Percent change from previous year; <sup>b</sup>chained 1996 dollars, billions; <sup>c</sup>millions of units; <sup>d</sup>percent; <sup>e</sup>dollars per barrel.

SOURCES: Actual data from Haver Analytics; median forecasts from Auto Outlook Symposium participants.

vehicle sales, forecast at 16.3 million units, ended 2001 at 17.0 million units, the second strongest year on record.

A strong increase in economic activity occurred in the first quarter of 2002, with real GDP surging by 6.1%. However, a large part of the gain was the moderation of inventory cuts. While inventories were down a record \$119.3 billion in the fourth quarter of 2001, largely due to the record vehicle sales, they were only reduced by \$27.7 billion in the first quarter. Final sales of domestic product, which removes the inventory change from real GDP, rose by only 2.0% in the first quarter.

Toward the end of 2001, light vehicle sales were expected to fall sharply as the record fourth-quarter pulled ahead sales anticipated in early 2002. However, light vehicle sales averaged 16.4 million units, substantially above expectations.

### **Consensus outlook for U.S. economy**

Symposium participants expect real GDP to grow by 2.8% for 2002 and 3.5% next year (figure 1). The unemployment rate is anticipated to rise to 5.8% in 2002, then ease to 5.4% next year. The consensus forecast for light vehicle sales for this year, 16.5 million units, and next year's 16.6 million units would qualify as the fourth and fifth strongest sales years, respectively. If this forecast holds, it would make the years 1999–2003 the five strongest sales years in history. The participants expect inflation to moderate to 1.7% this year and then rise to 2.5% in 2003.

### **Concerns about costs**

A finance director for one of the Big Three automakers pointed out that, at times like this, when revenues are threatened and companies are pressed for cash, costs matter most. The cost structures that were fine under the record sales of 1999 and 2000 are not appropriate for the current environment. Vehicle manufacturers are facing record high fixed costs: one-third of a vehicle's costs are fixed or quasi-fixed, compared with one-sixth in the past. Automakers have been trying to maintain cash flow by keeping volume up through increased incentives; the cut in price has a smaller

impact on revenue than a loss in sales volume would. But, in the quest to lower costs, manufacturers have pressed suppliers for lower prices, and the suppliers are more affected by the lower prices than they would be by reduced volume.

The largest portion of manufacturing costs is labor costs. The president of the Michigan branch of a large union addressed the question of whether increased labor–management cooperation could make U.S. manufacturing more competitive globally. There is some evidence that productivity does increase when labor and management increase their collaboration. However, the labor cost differences between the U.S. and other countries are difficult to overcome. Legacy health care costs in the U.S. are growing rapidly.

Sean McAlinden, director of the Economics and Business Group in the Altarum Institute's Center for Automotive Research, looked at current relations between the Big Three and the United Auto Workers (UAW), as well as what each side might try to get out of the labor negotiations next year. GM was the clear winner in the 1999 labor agreements, since their large worker attrition rate allowed them to enjoy bigger productivity gains than Ford and Chrysler. But those gains have come at a cost: GM is facing a \$47.5 billion liability for retirees' future medical expenses, as well as a \$9.1 billion pension liability. Since the aging UAW work force at GM is unlikely to ratify any agreement that would have them bear some of the medical care costs, GM may push for further productivity improvements to pay those bills. Ford faces similar problems, but it will probably offer an employment floor, or perhaps some increases, in exchange for lower medical liabilities.

Pia Orrenius, senior economist at the Federal Reserve Bank of Dallas, discussed the growing role that Mexican manufacturing plays in the U.S. auto industry. Mexico appeals to many U.S. manufacturers because it is geographically close to the U.S., it has a rapidly growing and low-cost labor force, its Maquiladora program offers tax incentives, and its barriers to foreign investment have

declined. The role of Maquiladoras has increased such that a new Maquiladora has moved beyond just production to also conduct research and development. But, they face some challenges today: there were staggering layoffs in 2001, the peso has been one of the few currencies to appreciate against the dollar, labor costs are rising, and the upcoming expiration of electricity subsidies could double or triple many factories' electricity bills. Additionally, with stalled domestic reform and an uncertain Mexican government budget, companies face a risky tax environment. However, relative advantages to doing business in Mexico remain: labor costs remain competitive and there is rising impetus for adoption of more efficient production methods and increasing pressure for domestic reform.

Lawrence Achram, vice president of Advanced Vehicle Engineering at DaimlerChrysler, noted that material costs have been rising because of the increasing number of vehicle features; and staying on the cutting edge keeps research and development costs high. Absorption of fixed costs depends largely on the efficiency of asset utilization. In the current environment, Achram said, there are opportunities to manage costs by producing more products on fewer platforms, potentially leading to producing more small-run vehicles that have buzz appeal to consumers. Companies can succeed with smarter utilization of flexible manufacturing techniques and by implementing rolling launches to reduce downtime.

John Rogers, senior analyst of automotive at Wachovia Securities, addressed the production costs of vehicles focused on opportunities for suppliers. He noted that manufacturers expect reduced costs, more product differentiation, and focus on other revenue streams from suppliers. What the suppliers can deliver is lower labor costs, advanced technology from specialization, and program management/systems integration expertise. The result is increased outsourcing and modularity, an increased portion of the vehicle's value originating at the suppliers, and market penetration and gains independent of the vehicle cycle.

Rogers remained bullish on auto supplier stocks, because market pricing pressures are triggering accelerating market change, and there are more revenue opportunities, less cyclical earnings, better returns on capital employed, and better financial characteristics for suppliers.

### **2002–03 light vehicle sales outlook**

According to Ellen Hughes-Cromwick, chief economist of the Ford Motor Company, the key points of the global industry outlook are a moderate U.S. economic recovery underpinning a high plateau in U.S. light vehicle sales and flat sales in other major markets.

The fundamentals for sales in the U.S. are solid. Job losses are expected to ease in coming months, incomes are rising and consumers have started to save more, inflationary pressures are contained, and real vehicle prices are falling. On the downside, interest rates are rising, net wealth has been falling with stock market prices, and there is little pent-up vehicle demand to spark a sales surge. For 2002, assuming a 3.0% growth rate in U.S. GDP and a 1.5% inflation rate, Hughes-Cromwick forecast vehicle sales of 16.5 million units.

Across the globe, sales in all major vehicle markets are forecast to slow moderately. In Japan, there are good leading indicators for the future, but they are largely due to unsustainable factors: an inventory rebuild and an export rebound. Hughes-Cromwick forecast a recession for Japan (GDP down 1.0% year-over-year) with vehicle sales moderating from 5.92 to 5.88 million units. In the world's second largest market, the Euro Area, a slight moderation in GDP growth is forecast and vehicle sales are forecast to fall by 0.7 million units, to 12.7 million. In another major market, Brazil, sales are forecast to fall from 1.60 to 1.50 million units, but Hughes-Cromwick noted that the economic environment there is very uncertain.

### **Commercial vehicle outlook**

In the face of new EPA regulations and a tenuous economic recovery, there is an uncertain outlook for the commercial vehicle industry, according to Ken Vieth, partner and general manager at

America's Commercial Transport Research Company. Following a big dropoff in shipping activity in 2001, further declines are expected in 2002 before a solid rebound in 2003. Despite some moderation in diesel prices, prices remain relatively high and have taken a toll on truckers' profit margins. The 15 largest publicly traded carriers saw their profit margins squeezed to 1.4% in 2001, the lowest since at least 1996. There have been a large number of business failures among truckers in recent years, but this year the number of failures is expected to return to a more "normal" rate.

The big news for the industry, however, is new EPA regulations, scheduled to take effect in October, which will require cleaner burning engines in new class 8 trucks. Vieth estimates that the new regulations will add \$0.10 per mile to truckers' current \$1.40 per mile costs.

These factors all contribute to an uncertain outlook for truck makers. Currently, they are enjoying the highest volume of net orders for class 8 trucks since 1999:Q2 and the highest net orders for class 5–7 trucks since 2000:Q3. Order backlogs for class 8 trucks are at their highest level since July 2000, up 25% from March 2001. However, first-quarter retail sales are down for both heavy- and medium-duty trucks as well as trailers.

The outlook for 2002 calls for a continued decline in class 5–7 and class 8 retail sales, but they should rebound in 2003. Build rates, however, for class 5–7 and class 8 trucks are forecast to increase in both 2002 and 2003. Trailer fleet sales should bottom out in 2002 before recovering in 2003, to the highest level since 2000.

### **Dealers' perspective**

Paul Taylor, chief economist of the National Automobile Dealers' Association, forecast that both new and used light vehicle sales will slow in 2002 from last year. The moderation will not be so bad, because consumer confidence remains high, despite recent declines. But, given the high unemployment rate and potential for rising interest rates, there is some downside risk to the forecast.

The economics for the dealers are largely favorable. Low interest rates have kept the dealers' costs of financing their inventories low, and net profit margins are up in every region of the country. Moreover, gross profit margins on used vehicle sales have stabilized and even increased slightly in the past two years. As a result, dealer optimism is higher than in any previous period around a recession.

### **What does Wall Street want?**

Throughout the 1990s, the shares of publicly traded auto companies—both original equipment makers (OEMs) and parts suppliers—have greatly underperformed other shares, despite many of the companies' healthy cash flows. David Andrea, director of forecasting at the Altarum Group, summarized the results of a recent survey by the Altarum Group and Accenture of 53 buy-side investment analysts. The survey results reveal that 44% of these firms use auto company stocks as a trading instrument, only 14% buy and hold auto stocks for extended periods, and the remaining 42% use them as some combination of the two. Comparing auto companies with other firms, investors cite future liabilities (pension, health care, and warranty legacy costs) as the highest concern, followed by earnings per share growth, capital structure flexibility, valuation model accuracy, special charge information, and trading liquidity. They also worry about

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the negative pricing environment for both suppliers and manufacturers.

The survey respondents recommended strategies for auto companies to make their stocks more appealing. For OEMs, the most popular strategies were capacity reductions, increased control over cost structure, capital expenditure reductions, and increased innovation. The most popular recommended strategies for supplier firms were increased control over cost structure, increased share of vehicle content, plant closures, and further consolidation.

### Used vehicles

Tom Webb, chief economist for Manheim Auctions, discussed the used vehicle market. The used vehicle market is important to dealerships and OEMs, among other reasons, because used car prices determine the residual value of a vehicle (which, in turn, determines the lease payments that customers make each month). Additionally, selling used cars allows the auto industry to reach a broader customer base—despite an influx of lower-priced Korean models and a high level of vehicle affordability, only 15% of all households

purchase a new vehicle, down from around 19% in the mid-1960s.

Used vehicle prices depend on several factors. On the demand side, the overall economy, labor markets, and credit conditions drive what consumers can pay for vehicles. On the supply side, the overall used vehicle price level affects the value of individual cars, and new car prices—including what a vehicle originally sold for and current incentives on new vehicles—can affect used car prices. The Manheim Used Vehicle Value Index shows that used vehicle prices were largely flat for 1999 and 2000, but then began to decline in 2001 when the economy weakened. The index dropped off somewhat more following September 11, partly because there were a large number of no-sales at the auctions, a sign of a disconnect between buyer- and seller-perceived value. But, there was soon a rapid recovery in prices, which Webb attributes to the fast flow of price information in the auction process; now, prices are back around the 1999–2000 plateau. The near-term outlook for used vehicle prices is somewhat uncertain given the high level of initial jobless claims, but the recent downward

movement in claims is a positive sign. In the long term, the increasing popularity of certified used vehicle programs should offset the decline in the market's key demographic group, 18–34 year olds; however, the recent deflation in new vehicle prices is a cause for concern.

### Conclusion

With an outlook calling for moderating sales, OEMs and suppliers will have to keep a closer eye on their costs. The productivity gains of the past few years have allowed auto companies to enjoy some savings. There is need for more improvement, and further implementation of strategies discussed at the Symposium, like flexible manufacturing, should provide opportunities for such improvement. However, given the mixed economic outlook for the next two years, it is uncertain how much the auto sector will be able to invest in these new strategies.

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<sup>1</sup> The May 30, 2002 session was co-sponsored by J. D. Power and Associates. Many of the presentations are available online at [www.chicagofed.org/newsandevents/conferences/auto\\_outlook02/index.cfm/](http://www.chicagofed.org/newsandevents/conferences/auto_outlook02/index.cfm/).