# Chicago Fed Letter

### Economy to continue cruising along

by William A. Strauss, senior economist and economic advisor

With a generally positive outlook for the U.S. economy in 2004 and 2005, the auto sector is looking forward to modest increases in light-vehicle sales. The sector performed a tad better than expected in 2003, thanks to a stronger economy in the second half.

> **As** 2002 drew to a close and it appeared increasingly likely that the U.S. would go to war with Iraq, businesses responded by holding off on making spending decisions. The U.S. economy (measured as gross domestic product, or GDP) expanded by a meager 1.3% in the fourth

quarter of 2002 and 2.0% in the first quarter of 2003. With the announcement of the conclusion of major fighting in Iraq in April, the delayed business decisions were exercised; the economy expanded by a decent 3.1% in the second quarter and then surged to 8.2% in the third quarter, the strongest rate of growth in nearly 20 years. The U.S. economy continued its solid performance in the fourth quarter of 2003 and the first quarter of

2004, growing 4.1% and 3.9%, respectively. Real GDP in the first quarter of this year was 4.8% higher than a year earlier.

Employment suffered three straight years of declines, losing nearly 1.8 million jobs in 2001, 563,000 jobs in 2002, and

61,000 jobs in 2003. With economic growth expanding faster than potential, employment gains have been occurring since September 2003. The economy has added over 1.4 million jobs during the past nine months. Even manufacturing, which lost over three million jobs during a 42-month consecutive span beginning in August 2000, has added jobs during each of the past four months beginning in February 2004, amounting to 91,000 jobs.

Manufacturing has been extremely hardhit during the past several years. Manufacturing output declined by 3.9% in 2001 and 0.5% in 2002. It was virtually unchanged in 2003, rising just 0.1%. However, manufacturing output has risen in 11 of the 12 months since June 2003. As of May 2004, the U.S. manufacturing sector had recovered nearly 94% of its output losses and was just 0.4% away from an all-time record production level.

Against this backdrop, the Federal Reserve Bank of Chicago held its eleventh Automotive Outlook Symposium on June 3 and 4, 2004, at its Detroit Branch. More than 100 economists and analysts from business, academia, and government attended the conference. This Chicago Fed Letter reviews last year's forecasts for 2003; analyzes the forecasts for 2004 and 2005 (see figure 1); and summarizes the presentations at this year's conference.

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

	2003	2004	2005
	(actual)	(forecast)	(forecast)
Real GDP <sup>a</sup>	3.1	4.5	3.8
Real personal consumption expenditures	3.1	4.0	3.5
Real fixed investment-nonresidential <sup>a</sup>	3.0	9.5	8.6
Real fixed investment-residential <sup>a</sup>	7.5	4.0	-1.1
Change in real private inventories <sup>b</sup>	-0.8	28.2	40.0
Net real exports of goods and services <sup>b</sup>	-509.1	-520.0	-498.8
Real govt. consumption and			
gross investmenta	3.3	2.2	2.0
Industrial production <sup>a</sup>	0.3	4.9	5.2
Auto and light truck sales <sup>c</sup>	16.6	16.8	16.9
Housing starts <sup>c</sup>	1.85	1.83	1.70
Unemployment rated	6.0	5.6	5.3
Inflation rate (Consumer Price Index) <sup>a</sup>	2.3	2.4	2.3
1-year Treasury (constant maturity)d	1.24	1.64	2.75
10-year Treasury (constant maturity)d	4.02	4.60	5.20
J. P. Morgan Narrow Nominal Dollar Index	<sup>a</sup> −6.7	-3.1	-0.7
Oil price (West Texas Intermediate)	31.14	35.90	31.25

°millions of unit; and dpercent. SOURCES: Actual data from Haver Analytics; median forecasts from

<sup>a</sup>Percent change from previous year; <sup>b</sup>billions of chained (2000) dollars;

Auto Outlook Symposium participants

Last year's forecasters were anticipating that the economy in 2003 would expand at a 2.3% rate, roughly in line with economic growth of the prior year. With economic growth forecasted to be below potential growth, they also expected that the unemployment rate would rise to average 6.0% and that inflation would increase to average 2.2%. This tepid outlook for the performance of the economy was expected to result in a pull-back in light-vehicle sales during 2003, with sales predicted at a 16.3 million units rate, down from 16.7 million units in 2002. However, economic growth accelerated in the second half of the year and wound up averaging 3.1%, a rate more in-line with potential growth. Still, the stronger overall performance was taking place during a period of significant slack for both labor and production, which contributed to the unemployment and inflation numbers, at 6.0% and 2.3%, respectively, being very close to the forecasts. While actual light-vehicle sales slipped in 2003, the decline was more moderate than expected, due to the stronger economy, and sales averaged 16.6 million units, 300,000 more than the forecast.

Overall, the forecast for 2004 and 2005 is very positive. Real GDP is anticipated to rise by 4.5% this year and then grow by 3.8% in 2005. This would make 2004 the strongest year since 1997. The slower pace in 2005 would still be considered above potential growth, with the unemployment rate falling to average 5.6% this year and 5.3% next year.

The strength in the forecast is being led by the long-anticipated recovery in the business sector. Nonresidential fixed investment is expected to rise by 9.5% in 2004 and 8.6% next year. Industrial production growth is forecasted to increase from 0.3% in 2003 to 4.9% in 2004 and 5.2% in 2005. Even with this strong production and spending, businesses continue to struggle to rebuild depleted inventories. Real business inventories are forecasted to rise by \$23.2 billion in 2004 and \$40.0 billion in 2005. This would still lead to a continuation in the fall of the inventory to GDP ratio.

Consumer spending is predicted to be a robust 4.0% this year and a solid 3.5%next year. This will contribute to lightvehicle sales rising to 16.8 million units in 2004 and 16.9 million units in 2005. One sector that is likely to take a step back over the next year and a half is housing. With long-term rates forecasted to increase by 58 basis points in 2004 and by an additional 63 basis point in 2005, housing starts fall slightly in 2004 to 1.83 million units and then decline to a level of 1.70 million in 2005. After rising by 7.5% in 2003, residential investment is expected to rise 4.0% this year and then decline 1.1% in 2005.

to compete without becoming part of a larger producer. He said that Daimler-Chrysler and Volkswagen will be forced to follow the global strategies of General Motors, Ford, and Toyota. He indicated that one way in which excess global production capacity may be removed is from the potential demise of large firms that make mid-market "commodity" products that sell at markdown prices, such as Fiat and Mitsubishi.

Robert Schnorbus, chief economist, J. D. Power and Associates, led off the afternoon panel discussion by pointing out that incentive activity has been fierce

## Inflation is predicted to average 2.4% this year and drop back to 2.3% in 2005.

The dollar's value has been declining over the past two years. The dollar is predicted to decline slightly, 3.1% this year and about 1% next year. The trade deficit is forecasted to increase by \$10 billion in 2004 and then decline by over \$22 billion in 2005.

Energy prices surged early this year, reaching over \$40 per barrel in May and June, yet the expectations are for oil prices to average just under \$36 per barrel this year. Since oil prices have averaged \$36.54 for the first five months of this year, this implies that oil prices will average \$35.44 in the last seven months of 2004. The consensus then expects oil prices to fall in 2005, averaging just over \$31. This pattern will lead to inflation remaining flat over the forecast horizon. After having increased 2.3% in 2003, inflation is predicted to average 2.4% this year and drop back to 2.3% in 2005.

### Auto incentive activity

The Thursday session of the conference focused on pricing and profitability in the age of incentives. The first presentation by Jay N. Woodworth, president, Woodworth Holdings, focused on global automotive strategies. Woodworth argued that niche players like BMW and Peugeot-Citroen will find it difficult

throughout the past several years. Incentives have risen steadily since 2000, from around \$500 per vehicle to \$2,000 per vehicle in early 2003. Incentives appeared to be on track to reach \$2,500 per vehicle by the end of 2003, but in fact they reached that level by the summer. Since then, it appears that incentives have plateaued at just over \$2,000 per vehicle.

Ted Chu, senior economist, General Motors Corporation, noted that incentives were not a reaction to a change in consumer spending but rather to intensified competition in the vehicle market. Chu indicated that in a survey taken in early 2001, 80% of consumers said that new cars were "overpriced." This was a higher percentage than was reported for credit card charges and doctor fees. With solid growth in median family incomes and increasing incentives, auto affordability has been improving since the early 1990s. Even with the last five years of vehicle sales being the industry's best, spending on new vehicles as a share of total personal consumption expenditures has been declining over this period. Chu also concluded that incentives have not lowered spending on vehicles, but have allowed customers to move up-market and buy more expensive vehicles.

Osman Kubilay Gursel, senior modeling consultant, Power Information Network, discussed a model-based approach to identify the most efficient programs for marketing vehicles. He spoke about the array of promotions that marketers use including: consumer rebates; subsidized financing, with different "subvented" annual percentage rates based upon the length of the loan; lease incentives, loyalty programs; and dealer incentives. He concluded that choosing the program is critical because for the same level of promotion cost per unit, an efficient program could generate three times more volume improvement in sales than an inefficient program.

Jie Cheng, vice president, Power Information Network, focused his attention on how incentives were having an impact on used vehicle values. With the higher volume of the new vehicles sold over the past few years, vehicles that are three to five years old start to compete with new vehicles in lower priced segments. This adds even more downward pressure on new vehicle prices. The pricing scenario can become a vicious cycle, with the need to add more incentives to compete against the used market, and these higher incentives lead to further erosion of used vehicle values, which then creates a need for even higher incentives. This long-term situation has to be recognized and incorporated into the manufacturers' marketing and product decision-making before we can expect to see any possible slowdown or reversal of the incentive trend.

#### Auto sector outlook

The Friday session of the symposium analyzed the outlook for the vehicle industry over the next several years. Van Jolissaint, chief economist, Daimler-Chrysler Corporation, provided the outlook for the light-vehicle industry. The ability to buy indicators—disposable income; household debt; yield curve; and inflation—could all be characterized as currently being "in-the-green," using the metaphor of a stoplight. A year ago household debt would have been "yellow." Willingness to buy indicators have improved dramatically over the past year. These include: consumer

attitudes; unemployment claims; work week; and the stock market. With the exception of consumer attitudes, which is currently "yellow," all are green. A year earlier these indicators were all "red." Jolissaint expects strong economic performance in both 2004 and 2005, with a return of hiring and investment spending leading to light-vehicle sales of over 17.0 million units during this year and next. He expects that the Fed will begin to increase rates beginning in the second half of 2004 and anticipates a gradual increase over the forecast horizon. Jolissaint estimates that a 1% increase in borrowing costs for a \$25,000 loan over 60 months will translate into an additional \$500, an amount that he believes will not be too off-putting for the consumer. The vehicle segments that are expected to do well over the next year include compact cars, sports tourers/cross-over vehicles, and to a lesser degree full-size sport utility vehicles (SUVs). The segments that he thinks will struggle include the passenger car segments, outside of compact cars, especially the standard mid-size category, and, on the truck side, midsize SUVs and large pick-ups.

Ken Vieth, principal, Americas Commercial Transportation Research Company, presented the outlook for medium- and heavy-duty trucks. Over time, there is a very strong relationship between truck demand and economic activity. With the weakness of the past several years, truck demand has been low and this has contributed to a steady increase in the age of the tractor fleet over this time. With the improving economy, carriers are reporting healthy levels of freight, and this freight needs to be moved. Truck demand has increased rapidly as the industry tries to react to the improved business condition and begins to replace its aging fleet. Backlogs for trucks have more than doubled over the past year, and the truck producers are trying not to add capacity for peak demand in order to avoid being saddled with excess capacity following the initial surge in orders. Truck production, which was around 300,000 in 2003, could reach nearly 370,000 units in 2004 and may exceed 450,000 in 2005.

Paul Taylor, chief economist, National Automobile Dealers Association, pointed out that their measures of dealer optimism remain at relatively strong levels. Even with high fuel prices, the less fuel-efficient truck category continued to gain in sales versus passenger cars. The truck segment experiencing the greatest increase in sales during the first four months of 2004 has been crossover utility vehicles (utility vehicles built on a passenger car platform), with volume 17% higher than a year earlier. Van/minivan and truck-based SUVs have grown by more than 5% and growth in pickup truck sales was just under 5%. Passenger car segments experienced declines in sales during the first four months of 2004, with small cars having the largest percentage loss. While over 70% of dealer profits during the 1980s were derived from new car sales (inclusive of finance and insurance), that share has fallen to around 25%. Service and parts has become the most significant share of profits, rising to nearly half of dealer profits since the 1980s. Used vehicles have also become a larger share of dealer profits, rivaling new cars. Over 90% of dealerships now have a web presence, compared with less than half six years ago; most are interactive, providing the ability to view stock and prices,

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Rudolph Schlais, chairman, I. T. United, discussed the auto industry in China. He indicated that the hottest region in the global automotive sector is Asia and, specifically, the People's Republic of China. Doing business in China today meets or exceeds doing business in other industrialized countries in the world. The Chinese population of 1.3 billion represents tremendous markets for growth in the auto industry. While still a poor country, China has raised more people out of poverty than any other country; between 1978 and 1984 close to 120 million people were raised above the poverty line. In spite of the SARS epidemic, Chinese GDP growth last year was over 8.5%. In 2002, disposable per capita income was \$1,556 in urban areas and \$1,339 in rural areas. This is still below the \$3,000 level when automotive sales typically begin to take off in a country, but because of China's socialist economy, this number may be lower. China presents great opportunities for growth in vehicles. In the U.S. there is one vehicle for every two people, in China there is one vehicle

for every 70 people, and China has four and a half times the population of the U.S. In 2003 China became the third largest vehicle market in the world. The Chinese market is anticipated to grow 10% to 15% per year for the next five years. It may surpass the second largest vehicle market, Japan, by 2005, and the largest market, the U.S., by 2025. Schlais argued that successful partnering with Chinese firms is essential for U.S. firms to be profitable in China. Shanghai GM, which was formed in 1997, has been profitable since its third month of operation. It generated \$437 million in profits in 2003, a 207% increase from 2002.

David Andrea, vice president, Business Development, Original Equipment Suppliers Association, presented the suppliers' perspective on the industry outlook. Andrea pointed out that it appears that profitable production rates for the motor vehicle industry have increased in recent years. This will drive the industry to continue to operate at a high rate, with continuing aggressive incentive activity. Restoring industry profitability will require ongoing consolidation to achieve economies of scale. There is a significant increase in the

number of new vehicle launches scheduled over the next three years. While new vehicle prices have been falling for years, the average selling price of a vehicle has been rising, as consumers buy more options or shift to more expensive models. This provides an opportunity for suppliers to increase vehicle content in the near future. The expectation is that changes in interior and exterior trim (primarily electronics) as well as engine and drivetrain design improvements will drive spending on vehicles in the future. The supplier base needs more support for innovation from the Big 3 to meet the challenges of the market.

### Conclusion

The outlook for 2004 is for the economy to have its best growth in seven years, growing at a rate above potential, leading to a fall in the unemployment rate. Inflation is expected to be just a bit higher than it was in 2003. Economic growth in 2005 will be slower but still above potential, with unemployment falling and the inflation rate easing. In this economic environment, light-vehicle sales are expected to increase moderately this year and in 2005.