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Auto sales outlook: Slower traffic ahead

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It is said that a forecaster is only as good as their last forecast. If that is true, the participants in last year's consensus outlook were very, very good. For example, light vehicle sales in the first third of 2000 were running at a white-hot 18.1 million units. Yet the group forecast that light vehicle sales would moderate significantly from these levels and average a record-setting 17.3 million units, just 0.1 million units more than the actual sales. This accuracy also occurred for a large number of other key statistics. Real gross domestic product (GDP) was forecast to increase by 4.7% in 2000, just below the actual 5.0% growth rate. The unemployment rate was anticipated to average 4.0% for the year, precisely what the rate was for last year. Finally, the Consumer Price Index was expected to increase from 2.2% in 1999 to 3.0% during 2000, which was just below the 3.4% rate for the index that had been affected by energy costs.

As 2000 came to a close, the vehicle industry struggled with excess inventories as sales slowed more rapidly than production. This led the industry to pursue a very aggressive production reduction program in early 2001. At the same time the industry continued to offer large financial incentives on their products to support the vehicle market. The combination of production cuts and good selling rate brought inventories down to more desirable levels by the end of April. It was in this environment, on May 31 and June 1, 2001, that the Federal Reserve Bank of Chicago held its eighth annual Auto Outlook Symposium. This *Chicago Fed Letter* summarizes the consensus outlook from the symposium as well as the presentations from industry insiders.

1. Actual 2000 and median forecast for GDP and related items

	2000 (Actual)	2001 (Forecast)	2002 (Forecast)
Real GDP[1]	5.0	2.0	3.2
Real personal consumption expenditures[1]	5.3	2.7	3.0
Real fixed investment—nonresidential[1]	12.6	2.6	4.9
Real fixed investment—residential[1]	–0.5	–0.5	1.9
Change in private inventories[2]	60.9	9.1	38.4
Net exports of goods and services[2]	–412.4	–415.0	–440.0
Real government consumption expenditures and gross investment[1]	2.8	2.7	2.6
Industrial production[1]	5.6	0.4	3.2
Auto and light truck sales (millions of units)	17.2	16.3	16.4
Housing starts (millions of units)	1.59	1.56	1.57
Unemployment rate[3]	4.0	4.6	4.6
Inflation rate (Consumer Price Index)[1]	3.4	3.1	2.5
1-year Treasury rate (constant maturity)[3]	6.11	4.14	4.60
10-year Treasury rate (constant maturity)[3]	6.03	5.18	5.40
J. P. Morgan Trade Weighted Dollar Index[1]	4.0	3.6	–1.2
Oil price (dollars per barrel, West Texas Intermediate)	30.30	27.50	26.10

[1]Percent change from previous year.
[2]Billions of chained (1996) dollars.
[3]Percent.

Consensus outlook for the U. S. economy

The U. S. economy had a very strong first half in 2000 with growth in the first and second quarters at 4.8% and 5.6%, respectively. However the air was let out of the economic balloon in the second half of the year as growth slowed to 2.2% and 1.0% in the third and fourth quarters, respectively. Sluggish economic growth continued into the first quarter of 2001, with growth of only 1.3%. The symposium participants expect the overall economy, as reflected by real GDP, to grow by 2.0% for 2001 and then rise to 3.2% next year (see figure 1). The unemployment rate is anticipated to rise to 4.6% in 2001, then remain at this rate next year. The consensus forecast for light vehicles sales for this year, 16.3 million units, is nearly a million units less than last year's record-setting sales pace, although it would still qualify as the third strongest sales year. Sales have averaged 17.0 million units (seasonally adjusted annual rate) for the first four months of the year, implying the group was expecting sales to slow to an average of 16.0 million units for the remaining two-thirds of the year. Vehicle sales are expected to rise somewhat, to 16.4 million units in 2002, which would make the years 1999–2002 the four strongest vehicle sales years in history.

The participants expect inflation to moderate to 3.1% this year and then drop to 2.5% in 2002.

Hybrid electric vehicles

Five speakers on Thursday afternoon discussed the technology and demand outlook for hybrid electric vehicles (HEVs). These vehicles are the front runner of available technologies to improve the fuel economy of the nation's automobiles. They run with two powertrains: One is the usual internal combustion engine, and the other is a battery that draws power from the otherwise lost energy of the brakes. There is a potential fuel efficiency gain of around 20%, depending on the vehicle and driving conditions. Two cars are currently on the market on a limited basis, the Honda Insight and the Toyota Prius. Those manufacturers report a huge pent-up demand for the vehicles.

The first speaker was the vice president in charge of HEV technology at a Big Three automaker. While the speaker felt that the market for these technologies exists, the current cost structure makes the vehicles more expensive than the savings by consumers on gas payments. To bring HEV sales to a volume where economies of scale would make the vehicles cheaper, the government would have to stimulate sales with a subsidy or tax incentives. But, a researcher on consumer preferences argued that consumers are so angry about rising fuel prices that they would be willing to pay the extra cost in order to lessen their dependence on gas. The researcher also argued that fuel prices would likely rise faster than the Big Three representative assumed, increasing the possibility of a cost savings for consumers.

The final speaker, an equities research analyst, presented Wall Street's view on these new technologies. The analyst argued that if automakers and suppliers were trying to seek a stronger stock performance by introducing these products, they would best look to do so by other methods. Given the low price–earnings ratios of auto stocks, Wall Street prefers that manufacturers focus on cutting costs through more efficient manufacturing processes.

Big Three perspective

According to the corporate economist from one of the Big Three automakers, the domestic auto industry is in its toughest business environment in a decade. Intense competition, mostly from foreign OEMs (original equipment manufacturers, i.e. automakers) selling new products and benefiting from a strong dollar, has forced many domestic OEMs to offer higher incentives to consumers, pushing the domestic industry into a "margin recession." However, unit sales remain at healthy levels, despite moderating from the records of last year.

While overall consumer ability to buy new vehicles has not changed from last year, their willingness to buy has declined sharply. Three indicators contribute to a mixed picture of consumer ability to buy. Real disposable income per household growth has moderated, but remains healthy; consumer debt burden has climbed to record levels; and, inflation remains elevated. The yield curve (risk-adjusted corporate bonds relative to short-term Treasuries) indicates easing credit conditions, leading the overall assessment of ability to buy to be unchanged. However, three out of four indicators of willingness to buy have eroded significantly. Surveys of consumer attitudes remain at healthy levels but have had large declines in the past few months, unemployment claims are up sharply, and the average work week has fallen, leading to weaker income gains. The stock market has been relatively flat since last year, but the lack of growth is an unsettling sign.

These weak indicators contributed to this economist giving one of the most conservative forecasts for total vehicle sales: 16.3 million units. Excluding about 0.4 million units for heavy trucks, light vehicle sales would be the fourth strongest ever, and slightly below the estimated trend sales rate. Sales during the third quarter will likely be very weak, well below 16.0 million units, but should recover in the fourth quarter.

Other troubling signs for the industry include rising gas prices leading to declines of sales in some segments and a strong dollar giving an advantage to foreign automakers. Real gas prices for consumers are roughly where they were in the late 1980s and the current run-up in prices reflects regulatory issues leading up to the summer driving season and overestimation of prices by speculators. Barring calamity, the prices could fall throughout the peak driving season. The continued undervaluation of the yen has contributed to a significant erosion in Big Three market share and a decline in new vehicle prices.

The heavy truck outlook

Overall, there appears to be a bleak outlook for the heavy truck industry, but the severity varies by truck segment. According to the co-principal and general manager of a truck research firm, the class 5–7 truck market will moderate while the class 8 truck market will continue to face lean times in the coming years.

Several factors are driving the glut in the class 8 truck market. There is an enormous excess supply of used trucks on the market, which came from owner operators whose businesses suddenly failed and from trucks that were returned to the manufacturer; the used truck problem will continue to be a problem for several years. Creditors, who had been very generous to shippers in the recent past, have tightened standards significantly to this segment, and show no signs of loosening. Fuel price volatility squeezed the margins of many trucking firms: for the 15 publicly traded shippers, profit margins have sunk from a near-term high of 4.1% in 1998 to 2.6% in 2000. Many shippers are reluctant to order new trucks with profit margins falling.

As a result of these factors, every major indicator of the class 8 truck market is down significantly from last year. In March, backlogs were down 49%, build was off 54%, inventory had slumped 26%, net orders declined 9%, and retail sales were down 44%. Assuming conditions do not change much this year, build should fall to 155,000 units, but should recover to 200,000 in 2002.

The class 5–7 truck market has moderated in the past year, but in general is much healthier than the class 8 market. The declining stock market has contributed to sharp fall in recreational vehicle (RV) sales, but the demographics for RV sales make the long-term outlook strong, and sales should recover soon after the stock market does. For the total market, backlog has leveled off after declining since late 1998, which means that no more significant cuts in build are likely. The class 5–7 market should recover as consumer spending returns to stronger growth rates, something lower interest rates could help stimulate. For 2001, build is forecast to fall from 215,000 to 185,000 units, but likely recover to 210,000 units in 2002.

The suppliers perspective

The chief economist from one automotive supplier offered an outlook that was very close to the consensus. The key macroeconomic indicators do not suggest that the economy is in a recession, and it is unlikely the economy will enter one this year. Though short-term conditions look okay, Wall Street has shown signs of dwindling long-term confidence in the industry.

The light vehicle market has been remarkably resilient in its strength, but the driving force behind that resiliency has been the high incentive activity by the domestic OEMs. The future of the market will be shaped by how aggressive the Big Three continue to be with their incentives. An answer to that question will become clear when Wall Street and other industry analysts digest how the incentives have affected profits, though this economist suspected that incentives will continue to be aggressive going forward this year. Couple that with a healthier overall economy in the second half of 2001, and U. S. light vehicle sales should average 16.0 million units (seasonally adjusted annual rate) from June to December, to finish at 16.5 million units on the year.

The economist's analysis of the medium and heavy truck market was similar to the negative outlook of the previous speaker, but did differ on several points. One was the drop off in truck freight, which according to a company measure, was down 1.0% from a year earlier in the first quarter and flat from the previous quarter. Another was that order flow for new trucks has stagnated for the past few months and build rates have been chopped to get inventories down; the inventory correction on new trucks is likely 3–4 months from its end. To get a recovery in this sector, there will need to be a rebound in freight, lower interest rates to trigger a credit extension, and easing in energy prices.

The 1990s revealed some interesting long-term issues for the auto industry and its relationship with Wall Street. Between the 1980s and 1990s, market growth was slightly stronger, but more importantly was significantly less volatile—seemingly ideal conditions for strong shareholder returns. However, using the S&P 500 as a benchmark, Wall Street ignored this development and auto stock prices grew well below average. The economist interpreted this as a challenge from Wall Street to the industry: Determine what your customers really want, improve your relationships with your suppliers, and show us how shareholders can make money in your business.

The quality revolution

Increased capacity, increased model proliferation, and decreased cycle time have led to a surge in the competitive intensity of the U. S. auto market. Such increased competition threatens OEMs with a decreased potential for monopoly products and declining customer retention. In order to adjust to this new environment of growing emphasis on brand reputation, the director for automotive analysis and planning at a market research firm suggested OEMs and suppliers stress the importance of vehicle durability, rather than vehicle initial quality.

There have been two phases of the automotive quality revolution so far. In the first phase, a flood of high quality, low cost Japanese imports forced domestic OEMs to improve initial quality of new vehicles. In the second phase, OEMs focused on improving the features, design, and performance of a vehicle, and they also tried to improve customer service. There is, however, evidence to suggest that consumers place more emphasis on long-term quality. A strong relationship exists between owner satisfaction and the number of problems an owner has with his vehicle. While 70% of all customers expect to own their vehicles for longer than four years, the number of problems with a vehicle raises significantly over time.

The OEMs have not completely ignored the issue of vehicle durability. However, they probably have not made more significant improvements because they use engineering durability metrics rather than customer-based metrics, reward employees based on short-term vehicle sales and quality, and lack a solid quantification of the financial costs of poor long-term quality. A lack

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of long-term quality can be expensive for OEMs. They can lose customers, brand reputation, resale and residual value, as well have increased warrantee expenses, and an increased need for incentives. Additionally, consumers who look for durability pay more for vehicles on average, not as much as consumers who are brand loyal. However, brand loyalty can increase with durability.

Increased durability would have mixed implications for sales, pricing, and profitability. For example, new vehicle sales would likely moderate with the increased ownership life cycle. The OEMs with higher long-term quality could enjoy a cost advantage over poorer performers, and the transaction price of new vehicles could increase. The cost of vehicle ownership would decline, making vehicles more affordable. But, dealers would lose some service business and the profits that come with it.

The dealers' perspective

The chief economist from a dealers' association discussed the light vehicle market outlook from the dealers' perspective. Dealers remain upbeat about new vehicle sales, but are concerned about used vehicle inventories and profit margins.

There are several sources for relatively high dealer optimism about sales. One source is history: typically sales do not fall off a cliff after a record sales year. Another is the Fed's interest rate cuts over the first five months of the year, and the boost they will likely provide for sales going into the fourth quarter of 2001. Another positive is that many new products in the market—especially the cross-over utility vehicles like the P.T. Cruiser—have been selling well. Bearing those three facts in mind, in addition to other factors in the macroeconomic environment, the economist expects sales to be 16.3 million to 16.5 million units for the year. But, sales will vary significantly by region. Through March, sales in the East North Central region (which includes most of the Seventh District) have declined less than in most other regions, though sales in the Pacific region have waned during California's energy crisis.

The used car market has become soft in recent years, as declining new vehicle prices have resulted in residual values which were relatively too high. In 1995, about 25% of all lessees retained their vehicle, compared to about 17% in 2000. The majority of the vehicles were left for the finance companies—there was also a huge drop-off in the number of vehicles retained by dealerships—and then put up for auction, which increased the supply of used vehicles and the softness of their prices. Managing the inventories of used cars is becoming a significant concern for dealers.

As used car prices have fallen, so has dealer optimism about profits. Used vehicle gross profit margins at franchised dealerships has fallen from about 13% in 1990 to 11% in 2000. But dealers are also worried about the high carrying costs related to excess inventories of new vehicles. The latest measure of dealer optimism was in the first quarter of 2001, and was at its lowest point since the recession of the early nineties. However, now that new vehicle inventories are significantly more in-line with desired levels, dealer optimism should rebound somewhat.

Looking down the road

The conference offered two days of wide-ranging discussion on the outlook for the motor vehicle industry. In the near-term, lower interest rates should provide a cushion for light vehicle sales, but ultimately consumer behavior and the OEMs' continued willingness to offer incentives will direct sales. Lower interest rates certainly should not damage the heavy truck industry, but mostly it will take a change in creditors' attitudes to spark this segment. Further down the road, hybrid electric vehicles are an exciting new product, but with an uncertain future.

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