OBSERVATION

TD Economics



April 10, 2012

A NEW NORM FOR U.S. AUTO SALES

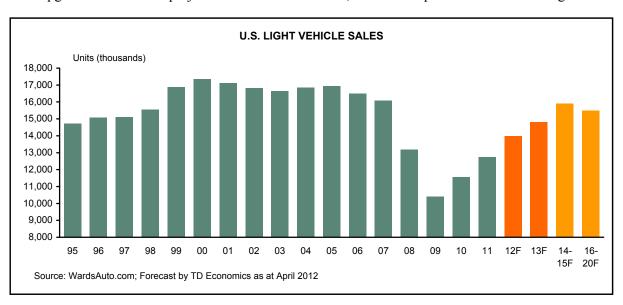
Highlights

- The recovery in U.S. auto sales appears to be in full swing, spurring a great deal of optimism in the
 industry. However, given the structural changes that have taken place over the past few years, the
 underlying, sustainable level of sales will likely be lower than the near-17 million units seen prior to
 the recession.
- Lingering effects from the Great Recession and financial crisis will likely leave a long lasting mark on both lenders and consumers, preventing both from returning to their old ways. As well, consumers are likely to hold onto their vehicles for a longer timeframe, so replacement demand is likely to be spread over a lengthy period.
- Overall, while sales may overshoot during the recovery and retest the highs seen prior to the recession, we suspect that the new norm for auto sales will be somewhere in the 15-16 million unit range.

The recovery in U.S. auto sales has picked up steam in recent months, sending a surge of optimism throughout the industry. While auto sales will no doubt continue to rebound from the extremely depressed levels witnessed during the recession, the big question is will sales return to pre-recession trend levels? During the nine years leading up to the recession, sales averaged 16.8 million units. However, there have been some structural changes in the industry over the past few years that suggest the underlying, sustainable level of U.S. auto sales will be lower over the longer term.

Auto sales on a tear in Q1

U.S. auto sales kicked this year off on such a strong note that many forecasters – ourselves included – have upgraded annual sales projections for 2012. However, the elevated pace of sales seen during the first

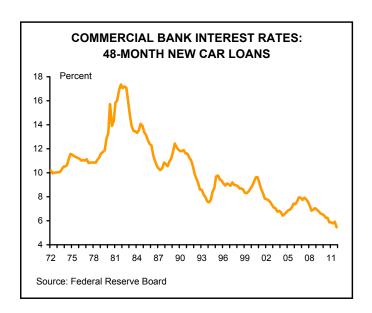




quarter is not likely to be sustained for the remainder of the year. The industry has been getting a boost from the return of Japanese-brand inventories, which is likely to subside in the coming months, and February's seasonally adjusted annualized rate of just over 15 million units was overstated because of an extra selling day due to the leap year. Having said that, we expect sales to top 14 million units this year and to hit nearly 15 million units next year, representing a gain of about 40% from the lows recorded during the recession. Given the sheer pent-up demand that has been built up over the past 4-5 years, it is quite conceivable that sales could turn in a stronger rebound, perhaps even retesting the old highs of over 17 million units. Nonetheless, with several headwinds still plaguing the U.S. recovery – notably the ongoing high rate of unemployment – we prefer to be on the cautious side. What's more, a comparison of key structural drivers underpinning auto sales between the pre-recession heydays and those likely in place going forward suggests that the longer-term sustainable rate of sales is probably closer to the 15-16 million unit range.

Times have changed

During the years when sales were well above the 16 million unit mark, the economy was characterized by strong growth, a booming housing market, easy credit, and consumers spending well beyond their means. In fact, the credit bubble was a significant contributor to the robust level of auto sales. Things are different now. The Great Recession and financial crisis of 2008-09 left an enormous dent in the U.S. economy. It has been three years since the recovery began and there is still a great deal of ground to make up. What's more, even once economic conditions – including employment, income growth, and home prices – return to more normal levels, lessons learned from the latest downturn are likely to prevent similar occurrences from happening again. So key factors that were supporting auto sales of close to 17 million units a few years ago are unlikely to be present going forward – at least not to the same extent.



Not so easy credit, but not so much demand

One factor that will remain supportive for auto sales is growth in the driving age population (16 years and over). However, the impact on auto demand from this age group will be less pronounced going forward. Growth in the 16 years and over population is expected to grow at a decelerating rate over the next few decades, and a recent study shows that licensure rates among younger people is declining: in 2008 only 84% of Americans in their 20s had a driver's license, compared to 94% in 1983¹.

As well, the depth of the credit crisis in the U.S. is likely to have long-lasting effects on the behavior of both lenders and consumers. The considerable losses suffered by lenders will likely lead to more prudent lending practices, suggesting credit won't be as easy to come by as in the past. In the aftermath of the credit crisis, financial reforms led to tighter borrowing conditions. While credit availability has since improved, we suspect that new regulations in the U.S. – both current and those in the pipeline – will prevent lenders from engaging in irresponsible loan transactions. Either way, given the losses that some lenders have had

| DRIVERS OF AUTO SALES | | | | | |
|---|---------|---------|---------|------------|------------|
| | 1990-99 | 2000-07 | 2008-09 | 2010-2015F | 2016-2020F |
| Population growth (16+), % | 1.23 | 1.14 | 1.14 | 1.00 | .99 |
| Registered vehicles per licensed driver | 1.09 | 1.14 | 1.13 | 1.12 | 1.05 |
| Interest rate on 48-month loan, % | 9.32 | 7.69 | 6.87 | 6.46 | 8.00-9.00 |
| Average age of vehicles on the roads, Yrs | 8.41 | 9.29 | 10.10 | 10.58 | 11.0-12.0 |
| New car price index, 1982-84 = 100 | 136 | 139 | 135 | 143 | 150-160 |
| Sales (millions) | 14.5 | 16.8 | 11.8 | 14.0 | 15.5 |

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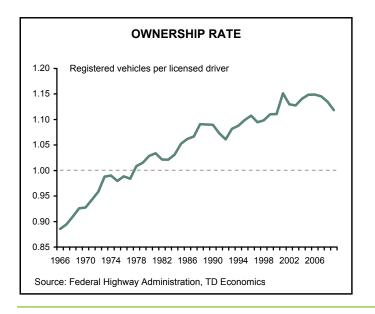
to endure, most will ensure that they are pricing risk appropriately and that they are comfortable with the level of risk that each borrower brings. As such, credit approvals for those with poor credit history will probably be harder to attain, while borrowing costs are likely to be higher than during the days of the credit bubble.

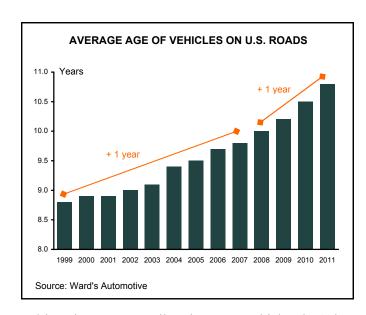
For consumers, the plunge in home prices took a huge toll on household wealth and several were forced to default on their mortgages and/or other loans, which ultimately has hurt their credit scores. The bursting of the housing – and credit – bubble likely brought about a change in psychology for may consumers: credit is not free money and the 'buy now pay later' mentality doesn't always work. Consumers have since been deleveraging as they try to shore up their balance sheets. Going forward, many consumers will exhibit ongoing cautiousness in their spending, and are not likely to overindulge and run up debt levels the way they did prior to the recession. For auto sales, that means that consumers will be buying more out of necessity rather than for luxury.

Accordingly, the ratio of registered light vehicles to licensed drivers is likely to decline in the coming years. Over the past few decades, the ratio has been on an upward trend, rising from an average of 0.9 in the 1960s to 1.14 in the 2000s. Relative to other comparable countries, this ratio is quite high. For example, in Canada, it averaged 0.83 in the 2000s – a sizable 27% below the U.S. figure. Given a new era of constraint, we suspect that this ratio will edge back down towards 1.00 by the latter half of the decade.

Consumers holding onto vehicles longer

In the need versus want debate among consumers, the





need is going to eventually win out as vehicles don't last forever. In fact, much of the demand seen going forward is likely to be replacement demand, given that incremental demand – made up of population growth and ownership rates – is not expected to be as supportive for sales as in the past. But even then, demand is likely to be weaker, as drivers are holding onto their vehicles for longer.

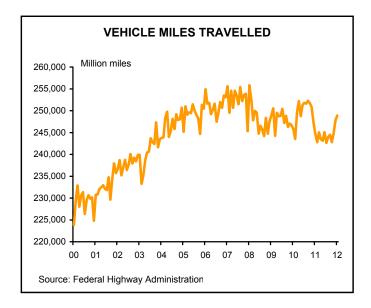
There has been much chatter recently about the average age of vehicles on U.S. roads, which was sitting at 10.8 years in 2011. This was up from 9.8 years in 2007 and 8.8 years in 1999, suggesting that while the acceleration in the increase can be attributed (in part) to the recession, the underlying trend is that consumers are driving their vehicles for longer. So although the average age may edge down over the next couple of years as pent-up demand is fulfilled, there are several factors that will help keep this overall trend intact over the long run.

First, the quality of vehicles has improved over the years, as cars are continuously being made to last longer. This is evidenced by the fact that the average age of vehicles on the roads has been on a steady uptrend since the data began in the 1980s. As well, as quality improves, automakers are offering longer warranty periods, providing more incentive for consumers to extend ownership lengths.

Second, an era of higher gasoline prices will lead to fewer miles driven. While the recent surge may be temporary, gas prices have been trending up since the middle of the last decade. And since the spike in 2008, miles travelled in the U.S. have been lower than pre-recession levels – despite the sharp correction in prices which followed. Hence, it appears as though consumers are changing their habits and

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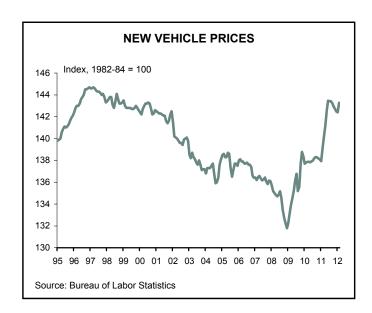




driving less. Fewer miles racked up on a vehicle means that vehicle can live longer.

Another reason that ownership lengths are likely to increase is that financing terms are longer. Some automakers are offering financing for as long a 72 or 84 months in order to reduce monthly payments. This means that vehicles won't be paid off for 6-7 years, and drivers are less likely to purchase a new vehicle before their old one is paid off.

Lastly, the cost of new vehicles is likely to rise. The rise in sales toward the 17 million unit mark coincided with falling prices (inflation-adjusted). But after trending down for 11 years, prices have been increasing for the past three. What's more, the price index for new vehicles in 2011 was at the highest level seen since 2001, suggesting that prices are rising faster than they fell. This trend is likely to continue. The government has proposed certain fuel efficiency standards that are to be in place by 2016. Most automakers have agreed to meet these standards. However, analysts estimate that in order to meet these regulations the cost of a vehicle will increase by an average of \$3,000 per vehicle. Higher prices not only take a larger portion of consumer



income, but they could also make it more difficult to qualify for financing. If new vehicles do become more expensive, it will provide yet another reason for consumers to drive their current vehicles longer.

A new norm

All told, the recent resurgence of new vehicle sales will have staying power, as several key drivers of auto sales will be positive over the next few years. While sales may overshoot during the recovery and could temporarily hit 16-17 million units, it is unlikely that they will be sustained at those levels over the longer term. Indeed, there have been some structural shifts in key fundamental drivers of auto sales. Lingering effects from the credit crisis should lead to a more sustainable way of living, preventing both consumers and lenders from returning to their old ways. Moreover, consumers are likely to hold on to their vehicles for longer, so replacement demand will be spread over a longer period. We estimate that once the dust settles following the recovery, the new norm for new vehicle sales will be in the 15-16 million unit range.

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References

1 Ellen Mitchell, Automotive News. "Young adults are less interested in driving". http://www.autonews.com/apps/pbcs.dll/article?AID=/20120329/RETAIL03/120329881/1018/young-adults-are-less-interested-in-driving-study-says

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