## Steep Auto Sector Recovery to Continue

Summary: Both auto sales and auto production have rebounded substantially in the past year. We expect these trends to continue as a major feature of the $V$-shaped economic recovery.

## Auto Sales

In the first half of 2009, cars and light trucks were sold at a 9.5 million annual rate, the slowest pace for any sixmonth period since 1974-75, when the US population was about one-third smaller. Then, along came cash for clunkers in July/August 2009 and sales temporarily surged to a 12.6 million annual rate.


It is important to recognize that by giving many buyers $\$ 2,500$ to $\$ 4,500$ for getting a new car in July/August, the clunkers program was supposed to "steal" sales from the following year. And yet in the first three months of 2010 - even with a "clunkers hangover," record East Coast snowstorms, and Toyota recalls - cars and light trucks were sold at an 11.0 million annual pace, up $15.6 \%$ from the same three months in 2009 . At 11.8 million, the March sales pace was up $21.3 \%$ versus a year ago.

And yet sales are still well below the long-term underlying trend, which we calculate by adding:
(1) the number of autos scrapped each year (due to old age or accidents), plus
(2) the number of autos needed for population growth.

We estimate the number of autos (cars and light trucks) on the road right now is 234 million, a decline of 4 million from the peak of 238 million in 2008. The number of vehicles has declined because sales have been less than scrappage.

The scrappage rate, according to R.L. Polk \& Company, a provider of auto information, has been $5.5 \%$ in the past decade. This means Americans scrap 12.9 million vehicles a year. Meanwhile, the US driving-age population (age $16+$ ) is projected to rise $1.08 \%$ this year, which translates into additional demand of 2.5 million autos ( $1.08 \%$ of 234 million). Combined, these figures suggest the underlying trend in demand is 15.4 million autos per year.


Assuming sales continue to grow at the $21.3 \%$ annual rate of the past twelve months, we will hit a 15.4 million pace in August 2011. At that point, the number of vehicles per capita in the US will stop falling, but will not be rising either.

## Auto Production

At present, auto dealers don't have enough cars on their lots. Traditionally, dealers keep in inventory a months' supply of 2.5 , or 75 days worth of sales of US-made cars. For example, if a dealer typically sells 200 cars per month, it keeps 500 cars in inventory. In March, 356,000 USmade cars were sold (a 4.3 million annual rate), which means dealers should have had inventories of about 890,000 . Instead, they had about 750,000 . That's 2.1 months of supply, or a shortage of 140,000 US-made cars.


As a result, even if sales stagnate at March levels, auto production needs to increase just to boost inventories back to normal. US automakers produced 245,000 cars in March (seasonally-adjusted). This means that inventory levels fell in March as sales $(356,000)$ exceeded production. Or, to put this in other words, car production is below levels needed to operate the industry at anything like it has in the past.


But as sales increase, production will need to rise even more. First, more sales mean dealers need more cars to sell; second, higher sales mean dealers want to hold more cars in inventory. If we are right about the pace of sales, and dealers maintain their desire to hold a month's supply of 2.5, car production should increase $30 \%+$ this year and another 10+\% next year.

This will add significantly to GDP growth and push one more lagging industry into what looks like a V-shaped boom.

Brian S. Wesbury, Chief Economist Robert Stein, Senior Economist

