Analysis: Market Disconnect: The Next Big Issue Facing American OEMs

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The US automotive industry appears to be on the road to recovery. After a year of historically bad sales, a massive economic recession and government bailouts of former OEM titans, profits are now improving. The outlook is much brighter with Chrysler and General Motors reemerging from bankruptcy much faster than expected, the economy showing growth once again and US vehicle sales expected to rise 15% in 2010. So, one would think everything is rosy in Detroit. However, there may be a major problem on the horizon and another government intervention needed to solve it.

The National Highway Transportation Safety Administration (NHTSA) and the United States Environmental Protection Agency (EPA) have mandated that over the next decade automotive manufacturers significantly increase the fuel economy of vehicles sold in the US and decrease their carbon dioxide emissions. By 2016, the fleet average miles per gallon (mpg) for the country's vehicle sales must be at least 34.1, a figure well above the current 25mpg to 32mpg fleet average that major OEMs have today. Each manufacturer has their own target, but significant changes in the vehicle sales mix must happen to reach their objectives. In general, the auto companies are confident that they can build smaller vehicles with high fuel economy to offset less efficient vehicles to meet this standard. They are fairly confident that investments in new technologies will significantly improve carbon emissions among the majority of vehicles in their portfolios. However, a big question remains unanswered: Will American consumers demand and pay for the smaller vehicles and fuel-efficient powertrains needed to meet NHTSA/EPA mandates?

Recent consumer vehicle purchasing behavior suggests that they will not. In 2008, gasoline prices reached historic highs in the United States as crude oil traded above $140 per barrel in world markets. As a result, sales of larger gas-guzzling vehicles quickly fell as consumers shifted purchases towards smaller, higher fuel economy vehicles. The passenger car market share increased from 47% of sales in August 2007 to a peak of 57% in June 2008 as gasoline crossed the $4.00 mark. However, within a matter of months, the crude oil price bubble burst and gas prices quickly fell across the US. Just as quickly, American consumers began buying SUVs and trucks again, and the passenger car market share fell back down below 50%.

This gas shock reawakened the industry to two well-known but rarely tested facts: 1) American consumers will buy smaller, fuel-efficient vehicles if gas prices are high enough; and 2) given a choice, Americans still prefer larger, less fuel-efficient vehicles. If US gas prices remain relatively low (as they have since the summer of 2008), these two facts could mean trouble for the industry as it tries to meet the 2016 NHTSA and EPA mandates.

There are technologies available today, or that will be available within the next few years, that consumers could purchase to improve fuel economy and carbon emissions. However, with low gas prices, their adoption seems unlikely. The financial savings from the initial purchase of better fuel technology takes too long to be realized for a typical driver. For example, dual mode hybrid technology (like the Toyota Prius offers) provides a 25% gain in fuel economy and costs about $3,000 more than a similar-sized, gasoline-powered vehicle. For a 15,000-mile-per-year driver, it will take well over five years to break even on the initial investment. For other technologies, like electric motor with range extender (like a Chevy Volt) or a pure electric vehicle, the initial investment is significantly higher. If gas prices remain at current levels, the consumer's return on investment can range between six and 15 years - far too long for most potential buyers.

This could mean trouble for the American automotive market. If gas prices remain modest in the coming years, consumers prefer larger vehicles and OEMs must sell smaller, more fuel-efficient vehicles to meet NHTSA/EPA requirements, then a huge disconnect will hit the market. This situation may force manufacturers to significantly increase the price of larger vehicles, forcing consumers to buy smaller vehicles to avoid the proposed fines for not being EPA-compliant, which would exceed $37,000 per vehicle. Assuming that the NHTSA and the EPA will not back down, the only solution is to get American consumers to want smaller, more fuel-efficient vehicles.

There are a number of options available to address this market disconnect. First would be to impose a tax on poor mpg, high carbon emission vehicles. This tax would be very unpopular and unfair to certain need-based buyers and a hot political debate could erupt over which vehicles are affected. The second option would be to subsidize smaller vehicles and compliant technologies, as was done for hybrids a few years ago. This is an expensive option and requires the government to choose winners and losers. To preserve consumer choice and keep government involvement at a minimum, the third option would be to implement a per-gallon gasoline

tax of at least $1.00-$2.00. This increase in fuel cost would immediately change consumers' return on investment equations, resulting in smaller vehicles and fuel-efficient technologies becoming a preferred choice for many buyers.

The industry needs a solution to the coming market disconnect and soon. Manufacturers need to know that there will be a market for the products in which they are heavily investing, while consumers and businesses will need time to adjust financial budgets and vehicle preferences. Although tax increases of any kind are politically unpopular and the auto industry has never advocated higher gasoline prices, the time for this controversial (yet necessary) action may finally be upon us.

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