

IHS AUTOMOTIVE

The impact of New Urban Mobility on Automotive Markets and Industry

Executive Summary

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Executive Summary

It's all about the cities. More than half the world's population is now living in urban areas. By 2035 over 60% of the people will be urban dwellers. Cities of the future are expected to be far more dense (more people per square kilometer) than they are today. Tomorrow's cities just cannot fit the same number of cars per person as do the mature-market cities of today. And even today's mature market and some developing market cities are already saying "We have too many cars."¹ Should we worry about how the market will grow in the future? Past performance of the auto market is not a good indicator of the future.

Conventional wisdom is that growth in developing markets is still in its early stages. Motorization rates (the number of personal use vehicles per thousand people) will grow from the 50 to 100 range where they are now to the 500 or so levels typical of Western Europe or Japan. Such thinking yields projections of 3 billion or so light vehicles in operation globally before the beginning of the fourth decade of this century. Such robust growth in the parc leads to ever-increasing demand for new vehicles. The rationale is that the history of the motor vehicle in the Western World will repeat itself in new markets, just as it did in Japan for the first 40 or so years after World War II.

The study team foresees a number of important differences to the conclusions one might draw from conventional wisdom. Critical differences appear in 3 major areas:

- 1) **Market:** Lower market growth and mature market decline:
 - a. By 2035, trends in urban motorization could reduce global PARC by 250 million vehicles, and reduce new sales by 30 million units annually compared to base-case forecasts
 - b. China and India combined annual sales 15 million units lower than base case forecasts due to likely urban congestion and transportation infrastructure alternatives.
 - c. Compared to 2010 levels, Europe's light vehicle market will decline by 8%, Japan's by 34%, US market growth will be more or less flat compared to 2013.
 - d. There will be little to no net organic global market growth after 2020 or so. The industry has been experiencing net new organic growth over its first 100+ years. While there is some growth in selected regions (Asia, Africa) the net effect is a market in which region to region differences and how they are served must be much more closely scrutinized.

- 2) **Capacity:** No net new capacity is needed to meet future market demand. With the current installed capacity plus that already planned, there will be an excess capacity of about 25 to 30 million units a year. That is, we will have capacity equivalent to 100 plants in excess of total market demand. Plants, however, may not be in the right place or make the right products.

- 3) **Business Plans:**
 - a. Company growth will come more from conquest sales rather than organic growth. With developing market OEMs seeking export opportunities, global competition will intensify to levels previously unexpected
 - b. Revisitation of investments, product plans and business models are needed for long term revenue growth and survival. Mobility as an integrated service in urban areas will be essential. Fleet sales, sharing operations and public transit all present light vehicle and autonomous vehicle opportunities.
 - c. Urban-specific products and operating models will evolve for transport of both people and goods.

There are a number of factors behind these conclusions. Most of the market disruption centers on the cities. Increases in virtually all of the world's population and most of the wealth will be in urban areas. But with more than half of the world's people now residing in cities, these urban areas are getting very crowded. The population density of Asian cities is several times that of European and American cities. Furthermore, these cities are already heavily motorized with 2-wheeled vehicles. There is just

¹ Greenwire, *China: Government to Limit New Car Sales*, China will impose strict limits on new car sales in Beijing as it cracks down on air pollution in the city., November 5, 2013

not enough room for as many cars per person in the cities of developing markets as there are in Europe, the U.S. and even Japan. Asian and other developing market cities will not achieve the levels of motorization enjoyed in the West. A case in point: Beijing, with about 130 cars per thousand people in its urban zone, has placed an absolute cap of 6 million vehicles it will allow to be registered in the city. Already at 5.4 million vehicles of all types, under this restriction the motorization rate for personal use vehicles will increase at most by 10% - a far cry from the 400 to 500 or so cars per thousand people enjoyed in European and American cities. And are Americans and European happy with their levels of motorization? Of the 187 cities for which we could find motorization data time series, about 1/3 mostly Western cities have experienced a decline in motorization over the 10 year period ending in 2012. Clearly, patterns of motorization and vehicle ownership historically enjoyed by the West will not be universally repeated in the future.

These conclusions come from IHS and Groupe Futuribles Research in 6 areas:

- Demographic and wealth trends forecast at the country and city level by IHS Global Consumer Markets
- Examination in depth (interviews, published articles, data analysis) of 21 cities around the world representing different city sizes, stages of economic growth and cultures
- Polk and other data sources for city level information on personal vehicles in operation
- Data analysis and forecasts for over 1600 cities representing about 30% of the addressable global market (about ¾ of the addressable 2035 urban market)
- Presence (or not) of type and quantity of regulations already in place
- Understanding of cultural values at country level from World Values Survey, other published survey results, and observation
- Much reading, attending auto industry and urban planning events by all staff from IHS Automotive, IHS Global Consumer Markets and Groupe Futuribles

For more information about this study, please email automotive@ihs.com or visit www.ihs.com/futuremobility.

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