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Have cars reached the end of the road in the developed world?

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The collapse in the oil price and the resulting cut in the cost of driving have led to expectations of higher global car sales.

While the cut in fuel prices may provide short-term relief, we believe the auto market is actually in structural decline, at least in developed markets. Our research suggests that car sales in the developed world are showing signs of hitting "peak car": a plateau or peak in vehicle ownership and usage. Future growth, we believe, will come from emerging markets. But car companies will only thrive in these markets if they have strong brand equity (in other words premium brands) or can cut costs to compete with (slowly) improving local competition.

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Signs of stagnant vehicle use in the West have been evident for some time. Figure 1 shows that annual kilometres driven per capita have been in decline since the early 2000s in the US and in all major European countries except Germany. Data for Japan also suggest car use has plateaued in the last decade, levelling off at around 10,000 kilometres per capita per year.

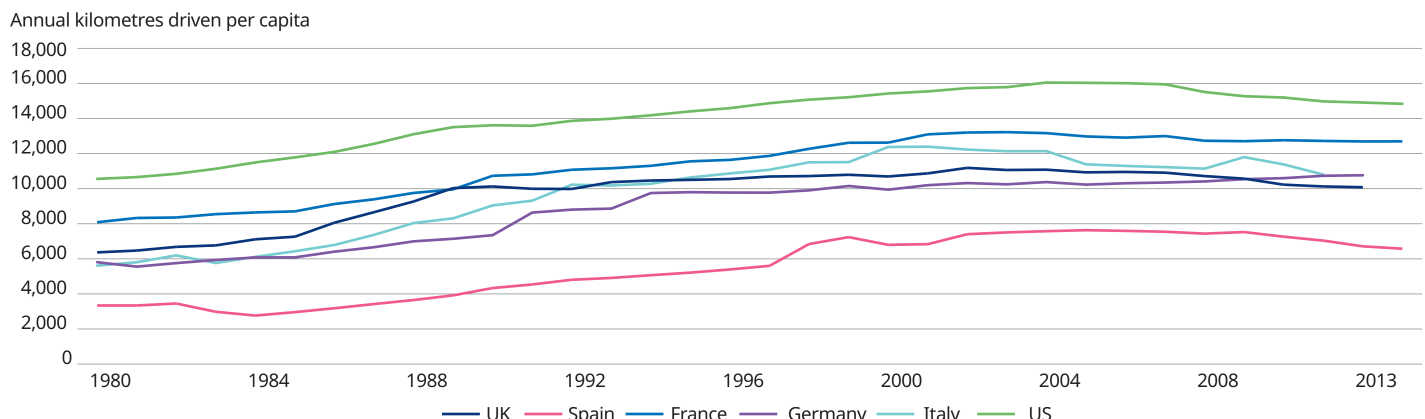
Millennials are leading the way

There are myriad possible explanations for this trend, but a good place to start is by looking at the behaviour of younger generations. Millennials – those born in the 1980s and 1990s – are leading the change in driving behaviour. Figure 2 shows the proportion of the population by age who have a driving licence in the US (although a similar pattern is evident across Western Europe). The data clearly show a declining tendency for young people to get their licence in recent decades. More detailed evidence from the UK suggests the turning point occurred in the 1990s.

Studies suggest that people who delay learning to drive are less likely ever to do so and spend less time in the car even if they do pass their test. Drivers in Britain who learn in their late 20s drive 30% less at any age than those who learn in their teens. Unsurprisingly, lower licence penetration implies lower car ownership, with data from General Motors showing propensity to buy for 16-24 year olds has been falling since 1990[1].

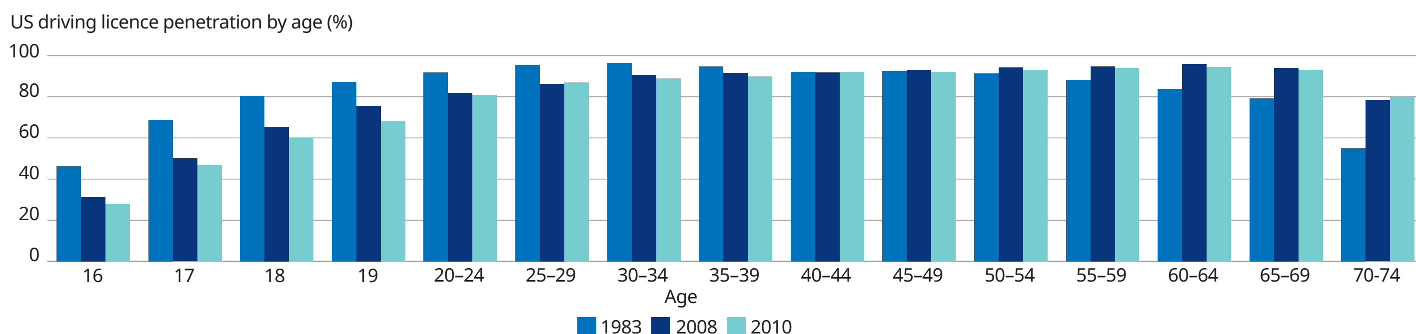
1 "The dubious future of the American car business – in 14 charts", The Atlantic, 2013.

Figure 1: The West is driving less



Source: The UK Department of Transport and OECD. Schroders as at December 2014.

Figure 2: Young Americans have fallen out of love the car



Source: University of Michigan, Transportation Research Institute, as at 2012.

What explains young people's lower enthusiasm for driving and vehicle ownership? The most straightforward explanation is rising urbanisation. Even in the developed world, the OECD expects urbanisation to rise from 77% in 2010 to 86% by 2050. As one would expect, there is a correlation between the percentage of a country's population that lives in megacities and vehicle density. Young people in particular are opting to stay in city centres for longer. Aided by better public transport, this simply makes car ownership less necessary. In a survey by the American Automobile Association (AAA), 45% of respondents who did not get a learner's permit before their 18th birthday said they could get around without driving[2].

Technological advances

However, the most important reasons for changes in driving behaviour appear to be related to changes in culture and society, in many cases precipitated by technology. An increasing body of data suggests that young people have a fundamentally different relationship with the car than their parents. For millennials, cars are not such a status symbol, and getting a licence is no longer a "rite of passage" in the way it once was. One global survey of teen attitudes found that young people increasingly view cars as "appliances not aspirations"[3].

In large part, this is because the car has been supplanted in the affections of young people by more affordable technology. The rise of smartphones and social media has made it easier to connect digitally, and reduced the need to see people personally. One study found that internet penetration had a statistically significant negative relationship with driving licence penetration among young people (although this research has since been challenged)[4]. There is also some evidence that e-commerce has reduced distances driven: in Britain, shopping has been the type of car use that has declined most since 1995[5].

A related technological factor is the rise of the so-called "sharing" economy. Millennials have shown a remarkable willingness to rent or share rather than own assets – using websites like Airbnb and Couchsurfing (for accommodation) or Zipcar and BlablaCar (for car use) – aided by technological improvements. A study commissioned by Transport for London suggests that one shared car results in 11-17 fewer cars on the road (either through the sale of existing cars or new cars not purchased), though it need not be negative for overall distances driven[6].

Our base case is that these trends will continue, leading to a structural stagnation in the developed world auto industry. With no further gains in vehicle density (cars per capita), all future vehicle sales will therefore be driven by replacement demand.

Counting the cost of car ownership

The obvious counter to the "peak car" argument is that the recent fall-off in demand has been driven by the financial crisis. However, a closer examination of the data suggests that this is not necessarily the whole story. While the flattening in vehicle density as a result of lower car sales does indeed coincide with the crisis, Figure 1 shows that the start of the plateau in driving preceded it by several years. So, while the crisis certainly seems to have caused a cyclical fall in auto demand, we would contend that the longer-term trend looks structural. If we are right, we can expect, at best, a more muted recovery, or, worse, stabilisation at persistently lower levels.

This is not to say that economic factors may not be part of the structural trend. About a third of respondents in both the AAA survey and a University of Michigan survey cited cost as a key reason for not having a licence. While the affordability of a new car has significantly improved since the 1990s, the total cost of ownership has risen as a result of higher fuel prices, road tax, congestion and parking charges etc. For young people in particular, spiralling insurance costs represent a major deterrent. Combined with better public transport and the falling cost of air travel, this reduces demand for cars versus other modes of transport, even if the recent decline in oil prices temporarily reduces the cost of fuel.

2 "Timing of driver's license acquisition and reasons for delay among young people in the United States, 2012", AAA, 2013.

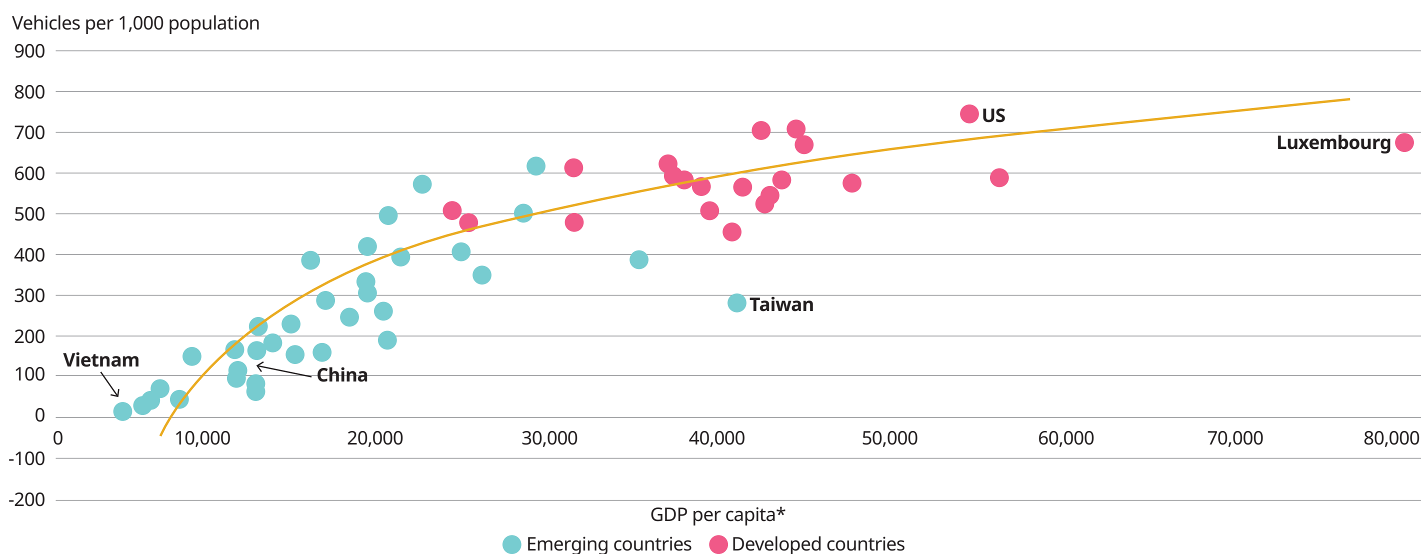
3 TNS market research survey cited in "The future of driving", The Economist, 2012.

4 Recent changes in the age composition of drivers in 15 countries", Michael Sivak and Brandon Schoettle, University of Michigan, 2011.

5 "The future of driving", as above.

6 Cited in "How disruptive is 'car-on-demand' for autos?", UBS, 2014.

Figure 3: Emerging car markets are in a growth 'sweet spot'



*Purchasing power parity.
Source: IHS Global Insight, IMF and Schroders, as at 2013.

Will emerging markets drive to the rescue?

If growth is grinding to a halt in developed markets, the fate of the auto industry will depend increasingly on emerging markets where, fortunately, the prospects for growth are good. The levels of vehicle penetration are much lower than in the developed world – around 10% in China and as low as 2% in India, versus 50-60% in Europe and 80% in the US – and should rise with growth in GDP per capita. Most emerging countries are on the steep part of the "S-curve" for vehicle ownership (see Figure 3).

It is probably fair to assume that emerging markets can continue to support decent industry growth – albeit with cyclical fluctuations – for at least the next 5-10 years. But a shift in demand from the developed to the developing world will necessitate continued restructuring at auto manufacturers, primarily to enable them to sell cars at lower prices in poorer countries. This implies that:

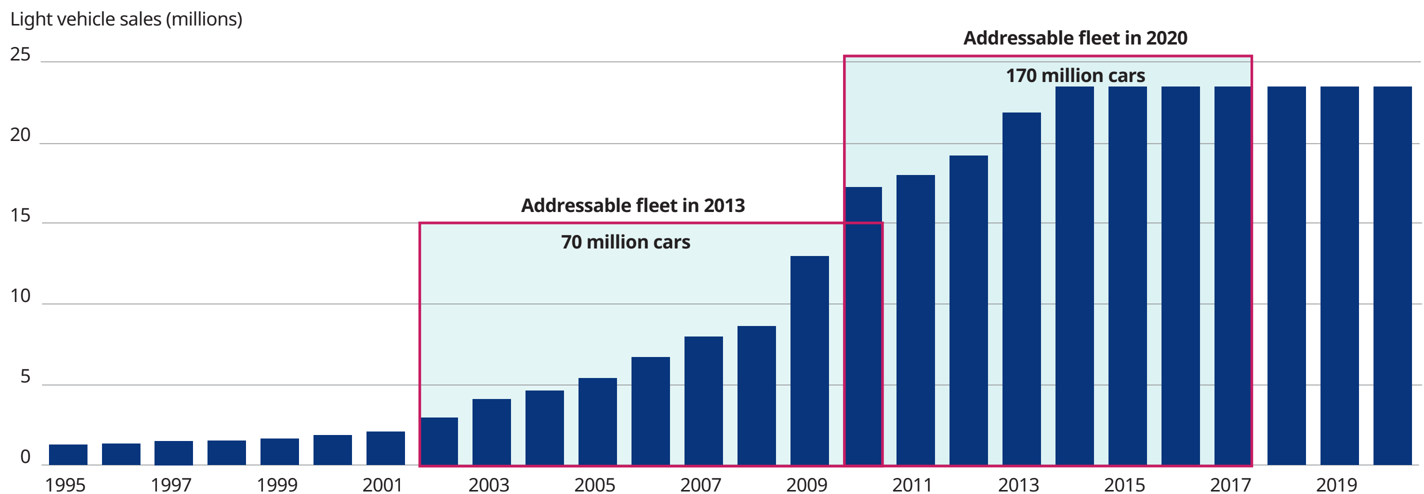
- Further capacity needs to be closed in high-cost European and Japanese car plants
- Companies will have to refine their model line-ups to suit the tastes of their new customers
- More consolidation in the industry is likely as growth slows and profitability is pressured.

With respect to the third point, we believe emerging market car makers are most likely to act as consolidators. Indeed, from China we have already seen Geely buy Sweden's Volvo and Dongfeng Motor buy part of joint-venture partner Peugeot-Citroen of France. Separately, India's Tata Motors has taken over the UK's Jaguar Land Rover, where it has executed an impressive turnaround.

The outlook for parts suppliers depends on their individual geographic footprint and product profile. The most important (tier 1) suppliers with strong intellectual property and barriers to entry should benefit from both rising vehicle production and content per vehicle in emerging markets, allowing them to outgrow the industry. However, producers of commoditised parts will continue to struggle as they come up against domestic competition in emerging markets. Meanwhile, automakers will increasingly look to source locally to cut their own costs, and will be less willing to shield legacy suppliers or group companies from competition.

The outlook for tyres is more positive. Even assuming distances driven hardly rise in the developed world, tyre demand will still benefit from an expanding global vehicle fleet. Tyres are generally replaced after 3-4 years of driving, so tyre companies have not yet benefited from the strong growth of the industry in recent years and should therefore have a full pipeline of sales for many years. Analysts at Redburn, the broker, find that even if there is zero annual growth in car sales in China, the momentum from previous growth and longer vehicle life means the total fleet will still expand by 150% by 2020 (Figure 4). Tyre makers will also benefit from the rising share of premium cars and sports utility vehicles, as larger tyres are harder to make and more profitable.

Figure 4: Even if new car sales are flat, the replacement tyre market should continue to grow



Addressable fleet is defined as cars 3-10 years old, which will need replacement tyres.

Conclusion

Ultimately, car companies will only thrive in emerging markets if they have strong brand equity (i.e. premium marques) or can cut costs to compete with (slowly) improving local competition and serve poorer customers. While auto investors are generally concerned with the shorter-term business cycle, there are also structural trends that cannot be ignored. When investing in the sector we believe it is important to be cognisant of these trends, choosing companies with a competitive advantage in terms of cost or brand, and with management teams that have a coherent long-term vision. We tend to prefer premium automakers, select emerging market automakers, tier 1 suppliers and tyre companies as long-term holdings, steering clear of mass market automakers with high cost structures and a high dependence on their home markets.

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