



Demand and profit up – for now

BTG Global Advisory considers the impact of rapid change in the global car market as it enjoys spectacular sales and healthy bottom lines. However, despite this, there are concerns about fading prospects for growth and the rising cost of development and technology.

Car companies continue to ride a wave of generally favourable market conditions and their financial results have been reassuringly positive. Ford, for example, posted a record quarterly pre-tax profit of US\$3.8bn for the first quarter of 2016. It was a similar story at General Motors and Fiat Chrysler Automobiles. The US vehicle market continues to be highly profitable, but even Western Europe's market – for so long a recovery laggard hampered by anaemic economic growth in much of the eurozone – has turned positive and is finally close to where it was before the sharp collapse of 2009. Formerly depressed national car markets such as Italy and Spain have bounced back strongly over the past year. That is certainly good news for car companies that have been struggling to make money due to stubborn losses in Europe.

One such company is PSA Peugeot Citroën, which has presented a new five-year business plan – 'Push to Pass' – that includes a raft of new products and the aim to "transform the company in order to unleash its full potential". The latest plan follows the 'Back in the Race' plan to return the group to profitability. Having posted a whopping €5bn loss in 2012, in 2015 it was €1.2bn in profit.

However, there are signs of short-term and long-term threats to profitability in the automotive sector. When BMW reported its first quarter profits it warned of a volatile global political and economic environment. Companies will have to be smart and agile to maintain profits in the more challenging environment that is emerging, with volume and margin growth prospects decidedly mixed in regions around the world.

Short-term concerns are dominated by worries over the health of the global economy alongside the likelihood that automotive markets are starting to run out of steam. The US vehicle market has been progressing very well to grow to an annualised running rate of over 17.5m units a year. A growing American economy, favourable replacement cycle, low oil prices and a very positive

consumer finance environment have combined to propel the US vehicle market to historical highs.

Maintaining market growth, however, is likely to be increasingly difficult in the second half of 2016 and into 2017. Some commentators have suggested that hefty manufacturer incentives to move the metal could result as demand slows, while interest rates and fuel prices also creep up. The replacement cycle, which has fed the forecourts with plenty of buyers keen to consider new models alongside very attractive finance deals, is now turning less favourable. The US car market is peaking at close to 18m units in 2016. It will struggle to grow in 2017 and that's when carmaker margins in the US – which has been hugely profitable lately on the back of strong sales of high-margin trucks (also helped by low oil prices) – will come under increasing pressure.

China – the world's largest car market – is another vehicle market that appears to be running out of demand momentum as China's economy struggles to maintain GDP growth at nearer 10% a year than 5%. The slowdown is of concern to Beijing and the government has taken measures to boost growth – including the cut in car purchase tax that is keeping the car market in growth territory this year – but increasing signs of slowdown have also worried China's volatile and nervous stock markets.

As far as the car market goes, a purchase tax cut of 10% on small engine vehicles and New Energy Vehicles (EVs and plug-in hybrids) this year threatens to exhaust market demand further and bring the market down more heavily in 2017 when the incentive ends. Much will depend on the extent to which underlying confidence can recover, as well as the general mood in the country (Beijing may introduce other measures to support the economy or boost car demand), but a crunch for vehicle manufacturers could come in 2017 if supply outruns demand.

As we have seen before, under-pressure margins can quickly come under attack in China if inventory climbs and dealers start to complain (and they will likely publicly campaign for financial support from vehicle makers).

And there is another point about China which won't be lost on the premium players, in particular. It's a market where margins tend to be higher than elsewhere because the customers demand high specification and like their cars fully loaded with extras. It's not just about the gross units shifted, so the impact on bottom lines could be even more serious if demand there turns down in 2017.

Other parts of the world experiencing slow or decidedly mixed vehicle market growth prospects include South America, Southeast Asia, Eastern Europe (especially Russia) and much of Africa (South Africa's economy is dented by regular bouts of industrial unrest). India is growing again, but it's a tentative growth that follows a nervous few years when economic crisis led to capital flight. The bold talk a few years ago of the next wave of high-growth emerging markets is a more subdued affair now. Generally depressed global commodity prices are also hitting many developing market economies that have a high degree of reliance on their export.

So, while the global automotive pie is edging up – the world light vehicle market running at an annualised 92m units a year – it's a decidedly mixed market landscape and risks to the outlook seem considerable, just as the positive performing markets lose some momentum. Market geography for companies' global sales could be more critical than ever over the next 12 months.

Environmental Concerns

Besides these macro demand concerns, vehicle manufacturers' bottom lines are also being squeezed by the need to spend more on new product development and on meeting tougher environmental standards. This was one of the contributory factors behind the Volkswagen 'dieselgate' affair. The technological solutions required to meet US emission standards for harmful NOx are very expensive. Volkswagen's 'cheat' facilitated the avoidance of fitting costly exhaust emissions equipment (selective catalytic reduction – SCR) to its vehicles that other makers selling diesels in the US did fit. Powertrain technologies and associated emission control solutions are a costly business.

Looking ahead, the average fleet CO2 targets in Europe (95g/km in EU by 2021 – we are currently at an average of around 119g/km, so there's still some way to go) and fuel economy targets set for the US are placing a considerable strain on vehicle makers in terms of the investment resources necessary to eke out further powertrain efficiencies and reduce harmful-to-health exhaust emissions as well as CO2. It's one of the major reasons for the considerable – and costly – development of electrified vehicles, especially plug-in hybrids. So-called 'mild hybrids' with relatively inexpensive 48-volt systems are set to see a big boost, perhaps accounting for as much as 20% of the new car market by 2025, according to some forecasts. It's not just powertrain that is sucking up resources, but increasing research and development spend extends also to transmissions, advanced active safety and driver assistance systems, extending to vehicle chassis and platform

engineering. Innovations to lower weight and enhanced energy efficiency must also deliver a better experience for the customer.

Automation and Connectivity

The automotive customer is relentlessly demanding. Besides rising demand for enhanced fuel economy (with no degradation in performance) vehicle makers have to meet rising customer expectations in areas such as safety, comfort and, increasingly, personal connectivity. The vehicle cockpit will be a growing battleground for car companies as they seek to better optimise the driver experience – especially as automated driving becomes more widespread. Systems for greater automation – in controlled environments to begin with – are beginning to be fitted to vehicles. One implication of less time spent on driving is that more time will be spent inside the cabin on other activities. Personal connectivity is one area attracting considerable interest with vehicle makers focusing on changing attitudes among a new generation of drivers.

The so-called 'millennials' (definitions vary, but think of them as born in the 1990s) are still interested in buying cars, but they are buying them later and are seeking a different user experience to that of previous generations. The human-machine-interface (HMI) is an area of intense interest as drivers manage driving information and also stay digitally connected. The latest BMW 7 Series comes with gesture control capability. Vehicle makers and suppliers alike are concentrating on connectivity as a key element in the user experience inside the cockpit. A touchless interface can, in some circumstances, be less distracting with a reduced requirement for the driver to take their eyes off the road or hands off the wheel. Look for such systems to filter down to mass segments over the next ten years.

The emerging 'always-on' digital lifestyle is something that people will increasingly demand is fully integrated with time spent inside the car. And there are other aspects to the changing lifestyle and attitudes of a new generation of younger people which also threaten to severely impact the auto industry in the longer term.

Sharing vs Owning

The emergence of the sharing economy and a greater propensity to share rather than 'own' assets threatens considerable disruption to the traditional car ownership business model (manufacturer-dealer/finance-owner) that has dominated the car business for the last century. Car sharing, or rental by the hour typified by companies such as Zipcar, has shown impressive growth in recent years. E-hailing, typified by companies such as Uber, is another form of on-demand asset sharing that has clearly struck a chord with consumers in urban areas across the world. The potential implications for car companies are stark if large numbers of people who would previously have purchased and owned a car opt instead to forego purchase of the asset in favour of sharing solutions.

Car companies have certainly shown some willingness to embrace the changing consumer. They have even set up their own captive car sharing operations. Some have even developed

hardware solutions for 'last mile urban mobility' (e.g. Renault's electric Twizy and Toyota's i-Road electric micro vehicle). There is a widespread acknowledgment that sustainable transportation solutions for urban areas and 'mega-cities' will, in the future, rely less on the privately owned car. A new focus for car companies is to interpret the important global societal or economic changes and remain at the core of the emerging new realities.

Ford, for example, is aggressively courting the new generation of digital consumers and repositioning itself as both a mobility services provider as well as a manufacturer of vehicles. With its 'FordPass' mobility experience platform, it claims it can do for car owners what iTunes did for music fans. It has partnered with a number of companies – including Spotify, McDonald's, 7-Eleven and BP – to pitch the FordPass membership service to Ford vehicle owners and non-owners alike. Ford says the platform "reimagines the relationship between automaker and consumer by offering benefits that include a marketplace of mobility services and rewards for membership". A range of services will be made available to FordPass members which develops the relationship between car brand and customers, or potential customers. It's an innovation that could help Ford to build loyalty among young people and retain share as the transportation or mobility space fragments in the future. Other carmakers are also addressing the changing mobility landscape and the potential for disruptive business models to significantly impact the carmakers' core business. General Motors, for example, recently invested \$0.5bn in rideshare start-up Lyft and sees opportunities to supply vehicles to Lyft's fleet of drivers. Similarly, Toyota is working with Uber. And Uber, by the way, is also interested in driverless solutions.

Autonomous Vehicles and New Brands

There is, however, an elephant in the room. The traditional carmakers are particularly worried about the potential impact of new entrants to mobility coming from Silicon Valley. The Apple and Google brands are extremely powerful and carry particular resonance with the digitally savvy millennial generation. The companies behind the brands are today's giant corporations, embedding themselves in our lives through their devices and platforms that enhance our personal digital connectivity. They are both planning to address the transportation space, but are taking their time to get their strategies right. The autonomous 'Google Car' certainly points to one direction, but there are multiple possibilities for the final roll-out of the products. The time spent in a vehicle is too valuable for them not to want to address it and embed themselves still further in our digital lifestyles.

A high degree of automated drive will be a key aspect and they will certainly be looking to disrupt the business operations of the major carmakers. This is something that keeps car executives awake at night. A lot of profit margin comes from the smoke and mirrors that is the strength of the car company brand. Strip away that allure with a commoditised driverless pod allied to a brand like Apple and the appeal of traditional car company brands could fade rapidly.

A Different Business Model

The auto industry, let's remind ourselves, is set up on a business model that is essentially a century old. Cars are purchased (mainly owned by individuals) and sold on a three-year cycle that yields big revenues and keeps the vehicle parc or fleet of cars ticking over. The car companies of today want that model to move in the direction of 'owned autonomy'. So the car becomes able to perform autonomous driving via the clever sensor tech and algorithms that are already making their way into cars. The future, as they would like it, sees the basic business model remaining unchanged with utilisation of the asset – the sold car that sits in the driveway or street doing nothing for 95% of the time – staying conveniently very low. Apple and Google, however, are targeting that low rate of asset utilisation as a major opportunity. 'Shared autonomy' may be closer to their vision.

Some analysts have said that a shift to widespread car sharing could halve the vehicle market. It will not happen overnight, but the second half of the next decade could see some major structural changes. Hanging on to the value that people are prepared to pay for, in terms of mobility, will be a challenge for everyone. Will the typical car of 2030 be, say, a Ford-branded car powered by Apple or an Apple-branded car powered by Ford?

The battle for control of the automotive value chain and the next generation consumers of mobility services has hardly begun. The car companies can enjoy their profits, for now. But they know that those profits will be under increasing pressure. In the short term, the cyclical market squeeze will concern investors, as they naturally become worried when demand turns down and easy profits stop rolling in. Tactical and strategic effectiveness will be required to stay competitive and maintain profit. The longer term threats, however, are potentially existential. The smarter companies are already anticipating the direction they will need to head in to stay in business.