## Example of report on world car manufacturing

Business, Marketing

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2012 marked the first time in history that about 60 million cars were manufactured in the course of a single year. An average of 165, 000 new cars were produced on a daily basis which is an amazing feat considering that the automobile industry suffered a 9\% decline in the year 2009 because of the international financial crisis of 2008. The word " car" in this context deals exclusively with passenger cars, which can be defined as motor vehicles possessing a minimum of four wheels, used for the purpose of transport of passengers. Passenger cars do not have more than eight seats, excluding the driver's seat. Cars account for almost 74\% of the entire annual production of motor vehicles across the world while the remaining $26 \%$ is comprised of heavy trucks, light commercial vehicles, minibuses, coaches and buses. The estimate for the total number of automobiles produced in a single year depends on the availability of the current data, sales productions as well as historical trends. Since the automobile industry is one of the most essential sectors of the international economy, the sales data is analyzed thoroughly by economic and financial institutes all over the globe to produce the future outlook (Worldometers, 2013).

The hardest blow to the automobile industry was dealt in 2009, a year after the global economic crises. But production of cars in the world jumped back almost immediately in the next year and the final growth rate was an impressive 22\% increase for the year 2010. The international car production ultimately consolidated at the present annual growth rate of 3\%. To understand the significance of the current growth rate in global car production, it is necessary to look at history. The global rate of production of passenger cars was fewer than 50 million in 2006 , with a $6.45 \%$ rise over
the course of the last year. 2007 witnessed a more satisfactory increase while 2008 experienced a sharp decline. Analysts belonging to different reputed institutes had foreseen 2007 to be the year when the 5 year cycle of record international car sales, which began in 2002 and lasted till the year 2006, would come to an end (Worldometers, 2013).

## Car Production Statistics

In the present day, China happens to be the largest producer of automobiles in the market. 1 out of every 4 cars manufactured in the world originates from China. But even in 2006, China occupied the position of only the thirdlargest car producer in the world when the sales of automobiles in China increased by almost $40 \%$ to reach 4 . 1 million units. China, however, soon overtook the car sales in Japan and became the first biggest car market in the world. Factors that contributed to this development include low penetration of vehicles, increased availability of credit, rising incomes and dwindling car costs. Even now, China records a vehicle penetration of 40 vehicles per 1,000 consumers in comparison to the mature G7 markets that stand approximately at 700 vehicles every 1, 000 people. Oceania and Asia together produce more than half of the automobiles while a third of the cars are manufactured in Europe. The top 5 global automobile producing countries as of the year 2011 are China, Japan, Germany, South Korea and India. Estimates suggest that there are more than 1 billion passenger vehicles on the roads and streets of the world at present and the number is increasing daily. 2010 was the first time that the 1 billion-unit mark was crossed (Worldometers, 2013).

## World Car Manufacturing Comparison

The analysis of historical patterns both across time and countries of the world indicates that the ownership of automobiles seems to increase with GDP per capita but in a manner that happens to be non-linear. Ownership rises slowly in the beginning with income; at levels of middle income it becomes more rapid, before decreasing the rate at levels of higher income as it reaches saturation point. When this relationship is used in combination with income projections, population data and scrapping rates, it helps estimate a medium term trend for sales of cars. It is then possible to compare this trend with present sales in order to understand any developments in future demand. Comparison of the trend with production capacity, on the other hand, suggests where the biggest challenge for the sector lies (OECD, 2013).

The future trends in the sales of automobiles are likely to differ considerably across the countries in the G7 region as well as other advanced nations such as Mexico, China and India. In countries with high levels of income, automobile ownership per capita is most probably going to be comparatively close to saturation and so, any developments taking place in the future are likely to be the result of a slow rise in automobiles per capita. In Japan, there might be stagnation in the sales of trend car since a minor increase in cars per capita is more than balanced by a dwindling population. In the countries of Italy and Germany, trend car sales will most likely be flat. In the United States, the United Kingdom and France, trend sales will continue to rise due to increase in population along with some amount of improvement in car ownership per capita even though the latter effect does not hold much
significance in the United States, which already has high density (OECD, 2013).

The contrast between the G7 nations and China is rather striking. In the latter case, the levels of car ownership are quite low and incomes have now increased to a level where the elasticity of automobile ownership per capita is usually high. The mix of high income elasticity, low vehicle ownership per capita and quickly increasing income levels indicates that trend car sales in the nation of China are rising very rapidly and this trend is going to continue in the near future. Trend car sales rose from almost 4 million per annum in the year 2005 to about 9 million in 2009. This trend has also resulted in the increase of actual sales from almost 4 million in the year 2005 to approximately 7 million for 2008. China has now overtaken the U. S. to become the biggest automobile market in the globe. Beginning from a reduced level than in the country of China, trend sales are also rapidly increasing in India (OECD, 2013).

Comparing the sales of recent cars with trend sales is likely to offer an indication of developments in car sales over the near term beyond the next few months. The car scrapping approach in Germany seems to have pushed the sales of automobiles far beyond their long term trend which is indicative of the fact that the prospect of near term car sales are probably going to be weak. In France, Korea, Italy and Australia, sales seem to be near the trend level. But, in nations like Japan, Spain, Mexico, Canada, the United States and the United Kingdom, the sales of automobiles have decreased clearly below their trend level. This indicates that a cyclical rebound is in the works. The situation in the United States exhibited this trend where the actual
automobile sales in 2009 were projected to be almost $60 \%$ of trend levels (OECD, 2013).

It is possible to use the projected equations for automobile sales in G7 nations to form short term equations on a mechanical basis. Such projections are usually based on assumptions regarding economic conditions and developments in financial activity. The results indicate that enhanced economic conditions and higher activity is likely to boost the sales of automobiles by 1.9 million units in the United States, almost 0.3 to 0.4 million in the United Kingdom and Japan, and 0.2 million in the big three euro area nations from the middle of 2009 to the year 2011. In the medium term, the producers of automobiles will face various demand conditions across the globe. Comparing capacity with trend sales offers some perspective on the forces being faced by manufacturers in different countries. However, the excess capacity of manufacturers in a particular area or country depends mostly on their ability to enter into competition for market share in export markets and their home market. There are countries that need to develop a significant presence in foreign markets to prevent over-capacity (OECD, 2013).

## The EU Production

The production of motor cars in the European Union member states progressed on a slow route to recovery in 2010 after attaining very low levels in the year 2009. The overall increase in vehicle manufacture was 11\%. But the overall output was still about 8\% below the 2008 levels (European Automobile Manufacturers' Association, 2013).

In the year 2009, production of vehicles in the EU dropped in almost every
segment. Then, in 2010, the recovery of the automobile market started even though it had not yet managed to attain pre-crisis levels. More than 16. 9 million motor vehicles were manufactured in the EU during the year 2010, which happens to be $11 \%$ more than the last year but $8 \%$ less compared to the year 2008 and less than 14\% in comparison to the crisis-free 2007 year (European Automobile Manufacturers' Association, 2013).

Even though an 8\% growth was experienced in terms of passenger car production, the manufacture of new passenger cars reached the lowest recorded level since the year 1997, apart from the year 2009. The total number of cars that were produced in the EU in 2010 was almost 15. 1 million units, which is almost 8\% greater than the last year but 6\% less than in the year 2008 (European Automobile Manufacturers' Association, 2013). Germany remained the greatest car producer within the European Union, with the manufacture of 5.6 million units in the year 2010. Spain and France performed on par with each other since both the nations produced 1.9 million cars and increased their manufacturing capacity by $5.6 \%$ and $5.7 \%$ respectively, compared to the year 2009. In terms of the largest markets, the United Kingdom expanded the most in 2010 with 1.3 million cars. The Czech Republic managed to produce more than one million cars for the first time (European Automobile Manufacturers' Association, 2013).

## The Car Production Competition

The competitive aspect of the automobile industry happens to be dynamic.
The approaches adopted by the car companies are far less defined at present. The car production competition depends on four generic phases, viz. variety and choice, cost leadership, customization and diversification. In

2011, most companies are at the customization and diversification stages of the model even though some companies which suffered heavy losses due to the financial crisis of 2009 like General Motors and Ford in North America have remained at the stage of variety and choice. The major car production companies in the world have found their diversifying feature in the form of innovative design, brand image, manufacturing excellence and leading product technology and have established separate competitive profiles. Most manufacturers of automobiles have begun to produce individually customized cars but some have chosen to opt out of the challenge. They have instead tried to compete on the basis of reduced cost through quality production. Sustainable competition in the present car production companies can only be witnessed in developing customer-responsive supply systems that cater to the increasing model and product variety as well as demanding needs of customers to invoke long term chances in the financial basis of the international automobile sector.

## Importing for Manufacturing

Every country has some specific rules and regulations that need to be kept in mind by manufacturers who wish to import vehicle parts for the production of new vehicles. The regulations are devised by agencies with detailed requirements and the mass importing of vehicle parts is difficult. In the United States, for example, non-conforming vehicles less than 25 years old must be brought into compliance or scrapped. Manufacturers need to go through tons of paperwork to obtain the necessary permits. If the paperwork is in order, the entry needs to be filed at the border (U. S. Customers band Border Protection, 2013).

## Works Cited

ACEA - European Automobile Manufacturers' Association. (2013). Production. [ONLINE] Available at: http://www. acea. be/news/news_detail/production/. [Accessed 20 August 2013]

Holweg, Matthias. (2008). Chapter 2: The evolution of competition in the automibile industry. In: Parry, G. and Graves, A. P. Build To Order - The road to the 5 Day Car. Palgrave: Springer. 13-33.

OECD. (2013). Chapter 2: The Automobile Industry in and Beyond the Crisis. [ONLINE] Available at: http://www. oecd. org/eco/outlook/44089863. pdf. [Accessed 20 August 2013].
U. S. Customs and Border Protection. (2013). Requirements for importing a vehicle / vehicle parts. [ONLINE] Available at: https://help. cbp. gov/app/answers/detail/a_id/218/~/requirements-for-importing-a-vehicle-\%2F-vehicle-parts. [Accessed 20 August 2013]

Worldometers. (2013). Cars produced in the world - Worldometers. [ONLINE] Available at: http://www. worldometers. info/cars/. [Accessed 20 August 2013]

