



UNIVERSITY OF WALES
Trinity Saint David
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MODULE
THE GLOBAL BUSINESS ENVIRONMENT

ASSINGMENT-1
Environmental Analysis of an industry –
Assessment 1

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Research informed literature

Automobile industry was at its verge of exposure during 1890, the time when technology was at a budding stage with the commercial production of cars. Since then, automobile industry across the world kept evolving and a race was prevalent across the globe for automobile production at the lowest cost possible. In Slovakia, a \$890 million automobile factory was recently inaugurated for the manufacture of low emission vehicles (europa.eu, 2017). Since the initiation of automobile industry in early 1980s, international automakers invested an amount over \$75 billion in minimum 32 US based production in 14 states and additional R&D facilities in approximately 16 states (Selectusa.gov, 2017). They have also received strong governmental support because of minimal environmental impact. The US government has imposed a 4% sales tax rate on purchase of vehicles (Selectusa.gov, 2017). Pinkse, Bohnsack and Kolk (2014), opined that increasing amount of global income has boosted the sales of automobiles across the globe. For instance, US are expected to make a total number of 12.6 million cars in 2018 which will allow them to increase the production by 9% when compared to 2017. Similarly, Japan is expected to manufacture about 10.3 million vehicles in the forthcoming year, which will be a 2% increase from 2017 (Tagliabue, 2017).

On the contrary, Britain has dropped the production of vehicles to 1.5 million in 2017 from 1.8 million in 2016. France is also facing a similar situation where the vehicle production is stagnant at 3.6 million, which is less than 0.1 million when compared to that of 2016. Volkswagen stopped the production of in a plant in Brussels, Belgium that eliminated 4,000 jobs (Tagliabue, 2017). Brown, Renner and Halweil (2014) sheds light on the fact that economic crisis that automobile industry suffered in 2009 on a global arena, played a significant role in reshaping this industry to its current state. It can be highlighted that automobile industry is neither global nor tied to narrow geographic region of nations. However, Shende (2014) contradicting this fact stated that in present days automobile industry is more region-centric. This is because for the adherence of taking greater advantage of economies of scale as well as reduced labour costs available in emerging markets.

Emerging markets in automobile industry are capable of attracting pioneer manufacturing organisations as a result of rapid growth. For example, organisations in China are adopting different strategies such as cautious and aggressive localisation for reducing their variable costs. This enhances their efficiency and competitiveness in their operating regions (Volberda, Van

Den Bosch and Mihalache, 2014). MacDuffie (2013) supporting this fact stated that Rapid growth of Chinese automobile market has large potential of attributing to their liberal policies for joint ventures. Government of China has undertaken automotive industry as one of the pillar industries of the country. In 2016, China topped the list of world's largest vehicle market with a sale of over 28 million units. This portrayed a growth of 9% from 2015 (DeseretNews.com, 2017). Brazil is another significantly growing market that was projected to be ranking in the sixth position in the world's largest car manufacturer in the year 2013 (DeseretNews.com, 2017). High rate of import taxes ensured local manufactures of company. (*Refer to appendix 1*)

Knowledge and understanding of subject

Assessing environment of Global Automobile industry via PESTEL model

Discussion in this section will allow getting an idea of the macro environmental factors that are capable of impacting global automobile industry. Political factors impact strongly on growth as well as development of global automobile industry. According to Smith *et al.*, (2014), production of hybrid vehicles is trendy that needs more financial support from national and local governments because of eco friendliness. Manufacturers of these vehicles need to comply with established standards of vehicle emission. Governments of countries across the globe need to provide economic support for favouring vehicle distribution with reduced CO2 emissions. In addition to this tax rates and import laws impact growth of this industry. Legal requirements are much important that are needed to be met by manufacturers comprising environmental regulations, import and export laws and trade acts (Allan *et al.*, 2014).

Increased costs for vehicles are associated with rate of inflation rate as well as economic crisis in a particular nation. Moreover, the automobile industry is primarily dependent on price of oil. These factors act as the drivers of shifting of automobile industry with relevance to price elasticity and supply demands (Ülengin *et al.*, 2014). In addition to this, other economic factors that are responsible for growth of automobile industry are government taxes, materials price and resources cost, buying capacity, population growth, economic activities, commercial use of vehicles and fuel economy. There are certain social factors, which impact on the growth and development of automobile industry. These factors include education level, lifestyles and trend, cultural differences, buying habits and attitudes towards ecological automobile products (Tagliabue, 2017). Moreover, certain styles are prevalent in specific countries. For example, in

European market, it is observed that 60% of the car buyers prefer SUVs whereas US market prefers Sedan (Selectusa.gov, 2017).

Innovation and technology are important determinants of share in automobile market. As per the view of Brown, Renner and Halweil (2014), more innovative a company is, higher is its share in market. Based on this fact, most of the major international vehicle manufacturing companies allows huge investments in their R&D. International brands such as Hyundai, Toyota and Ford invests in low emission and eco friendly vehicles with the implementation of technology. For example, Toyota has planned to plan to release driverless car in forthcoming years. Major technological players are intending to enter automobile industry forming a prime basis of differentiation in case of automobile manufacturers.

Assessing environment of Global Automobile industry via Porter's Five Forces model

Automobile industry on a global arena is a multi-billion dollar industry, despite the extreme and firm competitiveness. Pioneer organisations are present in the market constantly trying to leverage competitive advantages for gaining majority of the market share. Environmental factors of this industry play a crucial role and thus automobile manufacturers cannot only rely on safety to stay competitive. As per the view of Porter and Heppelmann (2015), threat of substitutes is a major issue in automobile industry where, enhancing fuel prices pushes urban drivers for using public transportation. Considering the example of Ford Motor Company in this context, it is observed that they had put major effort to ease pressure of substitutes like public transport. Customers will get the benefits of Ford's largest-ever investment in fuel-efficient power trains. In 2010, Ford launched nine new engines and six new six-speed transmissions.

On the other hand, Nag, Han and Yao (2014) commented that bargaining power of customers in automobile industry is moderate as customers always do not possess enough information about products. This is evident presently in Europe in case of Ford. The company had to close some of their plants and terminate 6,200 employees that contributed 13% of European workforce and exceeded stem loss of US\$1.5 billion (europa.eu, 2017). Customers are maintaining their automobiles for a longer period and are much judicious and prudent while buying new. Strategically, opportunity lies for automobile industry for focusing on efficiency of fuel as well as price effective strategies and shift from models of profit and production that are truck and SUV-centric. Competitive rivalry is moderate in automobile industry. Pisano (2017) stated that

automobile industry is oligopolistic, where 10 international manufacturers are controlling about 70% of international market (Selectusa.gov, 2017). Top 20 manufacturers sold approximately 78 million cars in 2013. Rivalry is likely to increase due to the effect of globalisation. (*Refer to appendix 2*)

Analysis

The above discussion highlights the major areas of global automobile industry. The above section focuses on the macro environmental factors as well as porter's five forces that impact on the levels of competition, credibility as well as sustainability of the industry. It can be analysed that political factors act as a significant role player in evolution of automobile industry in a global arena that directly impact on profitability of this industry. As mentioned by Pavlínek (2015), government bodies around the world are on the favour of low emission vehicles, thus imposing higher taxes on fuel guzzlers and luxury vehicles. EU and UK markets are providing government subsidies for enhanced introduction for low emission vehicles. Thus, political factors impact on the global automobile industry as automobile sectors is one of the big sources for revenue generation of Government (Mankiw, 2014). As per the above discussion, it has been observed that Brazilian automobile industry has developed a unique aspect in their market with relevance to their dependence on ethanol market. The government of Brazil is supportive of the progression of automobile industry since it contributes to employment of more than one million people as well as protects automobile industry ranging from flux of oil expenses.

On the other hand, a major part of the car owners agree that convenience in case of using a personal car or vehicle offsets enhancement in the price of fuel. However, Shende (2014) stated that if such trend gets continued automobile manufacturers will not be able to give a cost effective solution to this issue. As a consequence, the threat of substitution will definitely increase. In addition to this, globalization has emphasises the companies in expanding as well as competing in the emerging markets. As per the above discussion it has been highlighted that competition in automobile industry is moderate. Koh *et al.*, (2013) analysed this fact informing that rivalry in the business of automobile manufacturing is moderate owing to the relative number of competitors. Despite having more than 50 competitors in this industry, only 4-5 companies each are capable of producing more than 5 million vehicles in the year 2013

(Volberda, Van Den Bosch and Mihalache, 2014). Another factor of internal rivalry in being moderate is the strong customer loyalty that is prevalent.

Pinkse, Bohnsack, and Kolk (2014) evaluated that globalization has forced many manufacturing companies for expanding as well as competing in the emerging markets. This has a direct relation with their profitability within this particular industry that is related to the range of financial opportunities and exposures of the customers. This fact can be related with the fact that Central Europe, which comprised in the European Union, possesses the advantage of getting a stable economy. This has resulted in creating an increased number of manufacturing jobs in four major countries located in Central European. The number of manufacturers has risen already to 284,507 in 2014 (Tagliabue, 2017). In addition to this, growth and enhancement in the automobile industry is much dependent on preferences of customers. Brown, Renner and Halweil (2014) analysed that most of the customers' intent to purchase the vehicles for family needs and purposes. Thus they consider both safety and price the car. As a result, socio-economic factors are one of the major factors that contribute in vehicle surge. Allan, Lecca, McGregor and Swales (2014) on the contrary, analysed that as a consequence of the shifting focus of the customers towards the efficiency of the fuel and high mileage, the vehicle surge mostly occurs. The sale of vehicles that emit low and are fuel efficient is always high compared to the other types of vehicles. Such scenario highlights the fact that technology plays a significant part in affecting sales and consequent profitability of the global automobile industry.

Practical application

The above discussion provides an in depth knowledge on the findings of different factors of macro environmental factors along with the five forces that are applied in the market of automobile industry on a global arena. This has provided a detailed acknowledgement of the social, political economic, legal, technological and environmental factors. These factors are related to the case study of "car production surges in Eastern Europe" that has provided a well acquaintance of the different areas prevalent in the market. In this context, political and economical factors are emphasised on a global basis that allowed in comprehending the prevalent scenario global automobile industry and its future in the forthcoming year. The Porter's five forces model allowed identifying the areas of threat in the automobile market, its impact and the ways by which it retains its sustainability in the adversities of the market. It is also related to

the case study where the areas are highlighted portraying the impact of the economic and political scenario of a country on their respective automobile industry. The analysis part evaluates the formation of such scenarios in the ways by which it enable the automobile industry to enhance profitability and sustainability.

Self development

I have come across a number of information regarding the factors that contribute to the global arena of automobile industry while working on this essay. It provided me the opportunity of highlighting the areas that are crucial in identifying the environmental factors affecting an entire industry performing its activities in an international platform. I have also gathered knowledge primarily on the political and economical condition prevalent in countries across the globe to analyse the impact of the same on the automobile industry. I have put forward all the relevant data and information based on the topic and gathered information from websites, journal articles and newspaper articles. This had allowed me to proceed with the essay and complete my work conveniently to analyse the environment of global automobile industry.

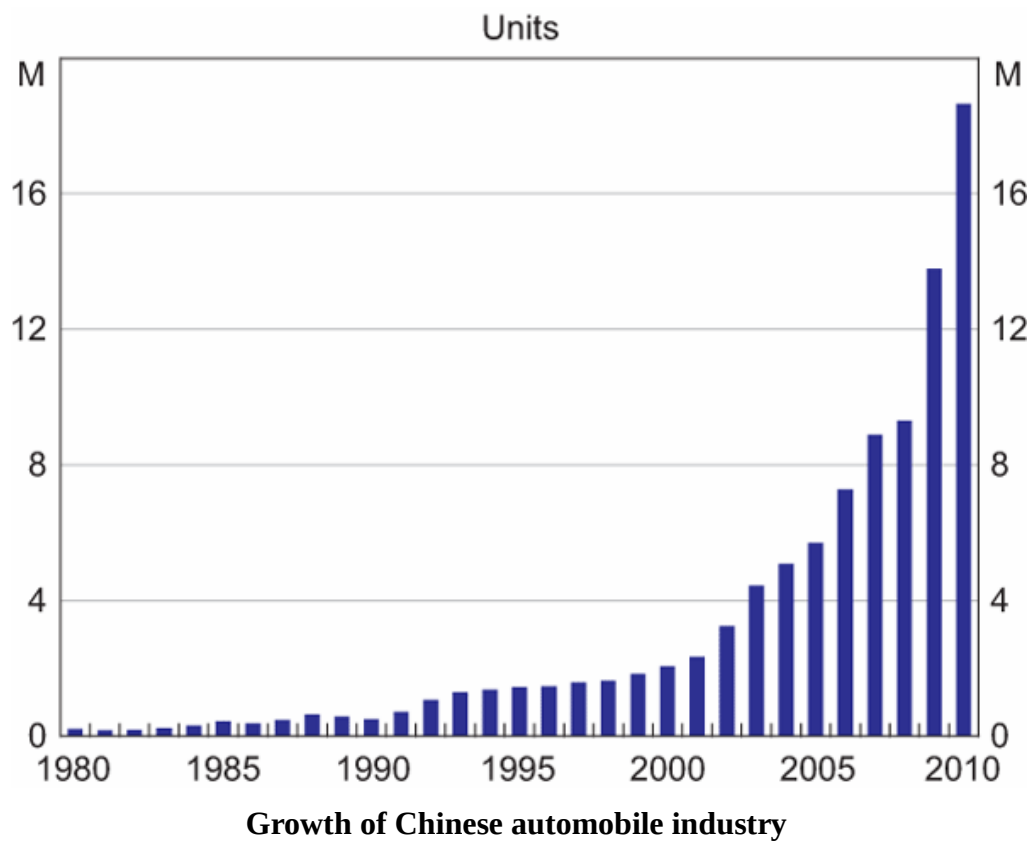
Reference List

- Allan, G., Lecca, P., McGregor, P. and Swales, K., 2014. The economic and environmental impact of a carbon tax for Scotland: a computable general equilibrium analysis. *Ecological Economics*, 100(1), pp.40-50.
- Brown, L.R., Renner, M. and Halweil, B., 2014. *Vital Signs 2000-2001: The Environmental Trends that are Shaping our Future*. Abingdon: Routledge.
- DeseretNews.com (2017) *Auto Production Surges In Eastern Europe* (2017) Available at: <https://www.deseretnews.com/article/650209939/Auto-production-surges-in-eastern-Europe.html> [Accessed on 29 July 2017].
- europa.eu (2017) *The Economy - European Union - European Commission*. Retrieved from https://europa.eu/european-union/about-eu/figures/economy_en
- Koh, S.L., Genovese, A., Acquaye, A.A., Barratt, P., Rana, N., Kuylenstierna, J. and Gibbs, D., 2013. Decarbonising product supply chains: design and development of an integrated evidence-based decision support system—the supply chain environmental analysis tool. *International Journal of Production Research*, 51(7), pp.2092-2109.
- MacDuffie, J.P., 2013. Modularity-as-property, modularization-as-process, and 'modularity'-as-frame: Lessons from product architecture initiatives in the global automotive industry. *Global Strategy Journal*, 3(1), pp.8-40.
- Mankiw, N.G., 2014. *Principles of macroeconomics*. Boston: Cengage Learning.
- Nag, B., Han, C. and Yao, D.Q., 2014. Mapping supply chain strategy: an industry analysis. *Journal of Manufacturing Technology Management*, 25(3), pp.351-370.
- Pavlínek, P. 2015. The impact of the 2008–2009 crisis on the automotive industry: global trends and firm-level effects in Central Europe. *European Urban and Regional Studies*, 22(1), pp.20-40.
- Pinkse, J., Bohnsack, R. and Kolk, A., 2014. The Role of Public and Private Protection in Disruptive Innovation: The Automotive Industry and the Emergence of Low-Emission Vehicles. *Journal of Product Innovation Management*, 31(1), pp.43-60.
- Pisano, G.P., 2017. Toward a prescriptive theory of dynamic capabilities: connecting strategic choice, learning, and competition. *Industrial and Corporate Change*, 26(5), pp.747-762.
- Porter, M.E. and Heppelmann, J.E., 2014. How smart, connected products are transforming competition. *Harvard Business Review*, 92(11), pp.64-88.

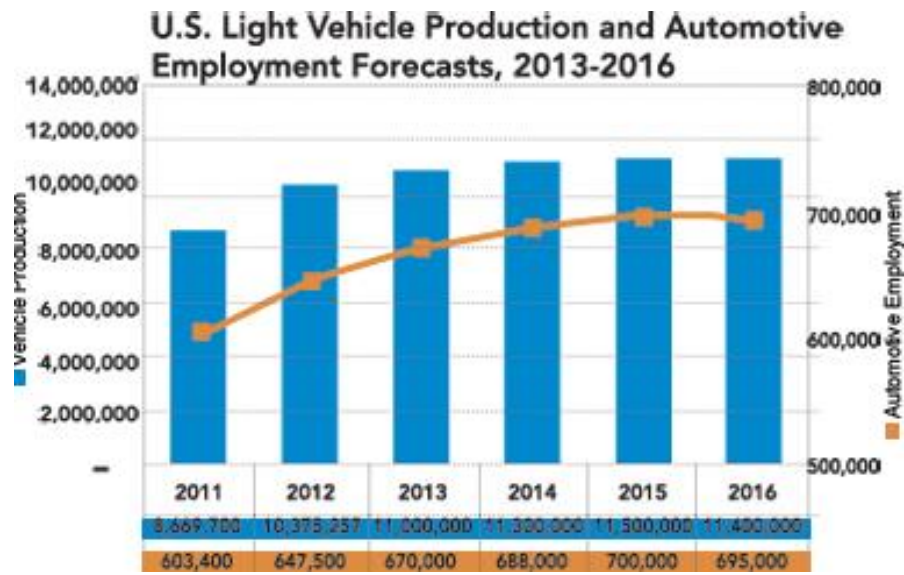
- Selectusa.gov. (2017). *Automotive Industry Spotlight | SelectUSA.gov*. Available at: <https://www.selectusa.gov/automotive-industry-united-states> [Accessed on 29 July 2017].
- Shende, V., 2014. Analysis of research in consumer behavior of automobile passenger car customer. *International Journal of Scientific and Research Publications*, 4(2), pp.1-50.
- Smith, A., Pickles, J., Buček, M., Pástor, R. and Begg, B., 2014. The political economy of global production networks: regional industrial change and differential upgrading in the East European clothing industry. *Journal of Economic Geography*, 14(6), pp.1023-1051.
- Tagliabue, J., (2017). *There's Detroit And There's Trnava; Car Production Surges In Eastern Europe* Query.nytimes.com. Available at: <http://query.nytimes.com/gst/fullpage.html?res=990DE3D7133EF936A15752C1A9609C8B63&pagewanted=all> [Accessed on 29 July 2017].
- Ülengin, F., Önsel, Ş., Aktas, E., Kabak, Ö. and Özaydın, Ö., 2014. A decision support methodology to enhance the competitiveness of the Turkish automotive industry. *European Journal of Operational Research*, 234(3), pp.789-801.
- Volberda, H.W., Van Den Bosch, F.A. and Mihalache, O.R., 2014. Advancing management innovation: Synthesizing processes, levels of analysis, and change agents. *Organization Studies*, 35(9), pp.1245-1264.

Appendices

Appendix 1



Appendix 2



Employment forecast in US automobile industry