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THE AUTOMOTIVE INDUSTRY IN NIGERIA: TRENDS, CHALLENGES AND PROSPECTS IN THE 21ST CENTURY

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Abstract

This paper reviewed and examined the historical development of the automotive industry in Nigeria alongside the National Automotive Council which is a major indicator for the reawakening and growth of the Nigeria auto industry. The activities, achievements, challenges and prospects of the automobile industry were theoretically ex-rayed. The study recommends among others the review of automotive policy to favor Nigerian auto industry, acquiring modern engineering infrastructure for efficient production and reviewing tariff to discourage importation, encouraging patronage of local automotive products.

Introduction

Automobile plays a major role in people's lives, whether it is used for daily transportation or for pleasure. The automobile is an extremely complex and technologically sophisticated unit whose emissions threaten the health of humans, animals and plants globally (Salami, 2007). William and Donald (2007) defined the automobile as any self propelled vehicle which is used for the transportation of people and goods on the ground (land). They also used the term automobile interchangeably to mean the same thing as motor vehicle or automotive vehicle which runs on the road to distinguish it from locomotive vehicles that move on rails. An engine provides the power to move or propel the motor vehicle.

The automobile can be described as a wheeled vehicle that carries its own engine and is used for transporting or moving people and goods on land and not on rails. It is designed primarily to run on roads. The automobile was also defined by Khurmi and Gupta (2007) as any self-propelled vehicle which is used for the transportation of passengers and goods on the ground. Khurmi and Gupta (2007) referred to a self-propelled vehicle as any vehicle in which power is produced within itself for its propulsion. They highlighted the various types of self-propelled vehicles among others to include: scooters, motor cycles, cars, buses, trucks, tractors, locomotives, motor boats, ships, aeroplanes, helicopters and rockets.

Today's automobile is a complex integrated product with more than 3000 parts that all need to work in harmony. The automobile can be divided into two major constituents: the body and the chassis. The body is that part where passengers have their seats or the goods (luggage and cargo) to be carried are placed. The chassis is the main machine portion which has among others, constituents like frame, wheels, axles, engine, steering, fuel tank and radiator (Hillier & Rogers, 2007). The automotive industry embraces the manufacturing, sales and services of automobile products such as tractors, motor vehicles, motorcycles, boats,

bicycles, among others. The development of the automotive industry in Nigeria has generally been acknowledged as an important stimulus to, and with a multiplier effect, on the growth of other allied industries and supporting industries. According to the National Automotive Council (2001) survey report, local studies and survey exercises have revealed a great deal of Nigerian indigenous capabilities for the design and production of many automobile components and units.

Full operation of the automobile industries in Nigeria has the capacity to engage over ten thousand persons in paid employment. However these capabilities have not been exploited for the maximum benefit of Nigerians due to varieties of problems that have bedeviled the automobile industry in Nigeria. They include, low involvement of government in the informal automobile sector, introduction of the Structural Adjustment Programme (SAP) in 1985, dearth of supporting local industries, massive uncontrolled importation and the dumping of fairly used vehicles (Tokumbos), inconsistency in tariff and government protection policies, low patronage by government and the general public, absence of low cost, long term loans, and poor involvement in technology transfer activities; research and development (R & D) activities and staff capacity building.

The Structural Adjustment Programme (SAP) has serious adverse effects on the Nigerian automobile industries. It has resulted to low product demand due to the high unit cost of vehicles while the purchasing power of Nigerians were poor; low local content input due to the absence of the pursuit of local development of ancillary industries; and absence of full local support by core support industries like the Ajaokuta steel company, Aluminium and Plastic Industries. The inability of the local supporting industries led to the scarcity of raw materials like steel cast iron, on ferrous metals and plastics. Other factors that inhibited the growth of the automobile industries in Nigeria include among others :

the prohibition of local automobile firms from either distributing or assembling any automobile products other than the products of the licensors (foreign partners), and other strict conditions placed on local automobile industries that has discouraged transfer of technology and "copying of technology". This has greatly helped the developing countries to improve on their local technological capabilities through imitation, copying and originality of technological products. There is therefore room for improvement in Nigeria's automobile industry.

Historical Development of the Automotive Industry in Nigeria

The Automotive Industry in Nigeria dates back to early 1960s when private companies like UAC, Leventis, SCOA, BEWAC and R.T. Briscoe pioneered the establishment of Auto Assembly Plants using Completely Knocked Down (CKD) or Semi-Knocked Down (SKD) parts. Government however, became involved in the industry between 1970-1980 when government had become aware of the importance of the industry in supporting growth in the economy. Given this strategic importance, government became involved in the sub sector essentially to aid their integrated developments that will stimulate the growth of the indigenous automobile industry. Based on this premises, the third National Development Plan (1975-1980) concluded agreements with a number of Automobile Plants in Europe to set up two cars and four truck/light Commercial Vehicles Assembly Plants using Completely Knocked Down (CKD) Parts. The two car plants are Peugeot Nigeria Ltd. (PAN), Kaduna, and Volkswagen of Nigeria Ltd. (VWON) Lagos. The four truck plants are Anambra Motor Manufacturing Company (ANAMMCO), Enugu, Styer Nigeria Ltd., Bauchi, National Truck Manufacturers (NTM), Kano, and Leyland Nigeria Ltd., Ibadan. These cars and truck/light commercial vehicle plants were all privatized by the end of 2007.

In 1982, the Federal Government

completed agreements with five manufacturers for the establishment of the following five light commercial Vehicle Assembly Plants: Mitsubishi in Ilorin, Nissan in Minna, Peugeot in Gusau, Isuzu in Maiduguri and Mazda in Umuahia. However, they were not established, though GM subsequently entered into partnership with UAC to produce Isuzu by FMI of UAC, which later became GM Nigeria Ltd. The Nigerian automotive Industry has installed capacity to produce 108,000 cars, 56,000 commercial vehicles, 10,000 tractors, 1,000,000 motor cycles and 1,000,000 bicycles annually. Capacity utilization in vehicle manufacture is below 10% and about 40% in motorcycle, bicycle and components parts manufacturing. (Salami, 2007).

According to Salami (2007) the assembly plants performed fairly well in the 1970's as Nigeria economy was relatively good, but due to unfavorable government policies all the automobile plants set up in the 1970's closed down except Peugeot automobile of Nigeria (PAN). The formulation and adoption of the National Policy in 1993, and subsequent establishment of the National Automotive Council (NAC) represented a landmark in the development of automobile industry in Nigeria. At this time, the automotive industry is regarded as an engine of growth whose establishment serves as an important stimulus to other types of manufacturing activities because the industry has capabilities to create many job opportunities and generate acquisition of technology. The current vehicle inflow into the economy is about 50,000 new and 150,000 used ones. This translates into about 100,000 units of new vehicles annually and is set to rise as the economy improves. The ECOWAS countries are current and potential customers for these auto products. It was in the realization of the lapses and crucial need for a more stable and functional automobile industry in Nigeria, that the Federal Government established the National Automotive Council (NAC) on 10th August, 1993.

The National Automotive Council of Nigeria

The National Automotive Council (NAC) was established on 10th August, 1993. The trust of the National Automotive Policy was to ensure the survival, growth and development of the Nigerian automotive industry using local human and material resources. This is with a view to enhancing the industry's contribution to the national economy in the areas of employment generation, technology acquisition, effective utilization of local raw materials and resources and in the transportation of people and goods. The policy was approved by the Transitional Council on 10th August 1993, and launched on August 23rd 1993. The National Automotive Policy provides for the establishment of the National Automotive Council as the agency that will carry out its objectives. Act No. 84 of 25th August 1993 was promulgated to back up the establishment of the Council as a Parastatal of the Federal Ministry of Industry.

The functions of NAC include to regularly study and review the automotive parts/ components development industry in Nigeria; evolve a local content programme specifying which component parts are to be continuously deleted from the imported CKDs; recommend incentive measures for ensuring compliance with approved local programmes; approve and recommend new models of vehicles envisaged for the Nigeria market to ensure model rationalization; among others (FRN, 1993).

The National Automotive Policy

- i. Government recognized the importance and basic role of the automotive industry in the industrial development of Nigeria by resuscitating the standing technical committee on National Automotive Industry (STC on NAI) in 1990.
- ii. The STC on NAI (now NAC) with inputs from the Nigerian Automobile Manufacturers Association (NAMA), and other organizations involved in the industry drafted the automotive

policy for Nigeria.

- iii. Presidential approval for the policy was given on December 30, 1992 and later endorsed by the transitional council on August 10, 1993.
- iv. The policy document was formally launched on August 23, 1993. The document provided for the establishment of the National Automotive Council as a parastatal of the Federal Ministry of Industry.
- v. Act No. 84 of August 25, 1993 backed up the establishment of the council.

The trust of the National Automotive Policy shall be to ensure the survival, growth of the Nigerian automotive industry using local, human and material resources. This is with a view to enhancing the industry's contribution to the national economy, especially in the areas of transportation of people and goods.

The elements of this objective according to FRN (1993) include;

- i. Provision of automotive vehicles for urban and rural areas.
- ii. Accelerated technological development of the Nigerian economy.
- iii. Increased employment opportunities for Nigerians.
- iv. Conservation of scarce foreign exchange.
- v. Establishment of Integrated Automotive Industry in Nigeria.
- vi. Standardization and rationalization of the Nigerian automotive industry.
- vii. Increased private sector participation in the establishment of the auto industry.
- viii. Technology acquisition; and
- ix. Creating conducive operational environment through the introduction of appropriate fiscal policy and monetary incentives.

National Automotive Council Achievements

Achievements recorded by the council over the years in spite of budgetary limitation include:

- i. Pursuit of local content program with

- government protective support, resulting in almost 70% local content in the manufacture of bicycles. A draft local content programme for vehicles and motorcycles has been produced.
- ii. Automotive technician skills upgrade schemes has commenced in Nigeria. Nigerian auto mechanics under the aegis of Nigeria technicians association (NATA) are the target.
- iii. The council in collaboration with the Federal Ministry of Environment, NNPC, removed Lead from gasoline in Nigeria in 2003

Conduct of industrial environment surveys and sector studies:

The council in its bold effort to attract foreign direct investment (FDI) into the auto industry had concluded plan to engage consultants to carry out a national survey of consumer preference for different brands of vehicles with a view to branding rationalization and guide prospective investors in the industry. Capacity building in the repairs and maintenance of automobiles in Nigeria.

The council in its bold effort at capacity building in the repairs and maintenance of new generation vehicles had, in collaboration with other stakeholders carried out the following;

- i. Development and launching of curriculum for teaching automotive mechatronics in the informal sector
- ii. Several critique workshops were held on the curriculum of automotive mechatronics
- iii. Concluded arrangement for the printing of the curriculum and its subsequent launching
- iv. The acquisition of mechatronics diagnostic equipment and tools for training Nigerian auto technicians is ongoing.

Challenges and Problems of the Automotive Industry in Nigeria

The Nigerian automotive industry can be said to be performing poorly because of:

- i. Low Patronage by government and the general public on local automotive products.

- ii. Very low capacity utilization and high rate of corruption among public officers in Nigeria.
- iii. Poor perception of locally made automobile products by Nigerians
- iv. High cost operating environment.
- v. Inconsistency in tariff policy and insufficient government protection policy;
- vi. Absence of low cost, long term funds;
- vii. Weak and deteriorating infrastructure.
- viii. Uncontrolled massive importation foreign vehicles.
- ix. Dearth of supporting local industries resulting to scarcity of raw materials like steel, iron, non ferrous metals and plastics.
- x. Absence of active technology transfer arrangements.
- xi. Nonexistence of strict laws to enhance development and advancement of indigenous technology in automobiles.

Prospects of the Automotive Industry in Nigeria

With a market size of one million Bicycles, one million motorcycles and 100,000 vehicles annually, provision of right incentives, conducive/enabling environment and the window of opportunities for export, the future for the automotive Industry is bright. These are the likely prospects:

1. **Employment:** The automotive industry will end up as one of the largest industries in Nigeria employing labour and generating an increase in the national income. It will also boost other industries like iron and steel, Aluminium, Plastics, Rubber, Copper, Lead, Glass, insurance and finance, thereby creating lots of Jobs and other employment opportunities for Nigerian engineers, technologists and craftsmen.

2. **Boost in Non-Oil Export:** The Industry will help to boost the non-oil export sector of the Nigerian economy, and helps to generate income into the Nigerian economy,

thereby increasing national income.

3. Savings in Foreign Exchange: The market size for vehicles translate into an annual turnover of N10 billion, 60 billion and 200 billion for bicycles, motorcycles and vehicles respectively, totalling N270 billion. The spare parts requirements for these vehicles is estimated at about 10% the vehicle costs, giving a total annual turnover of N300 billion. The more vehicles produced locally, the more this sum of money is saved locally and save Nigeria's huge foreign exchange outflow.

4. Boosting of Industrialization rate: Manufacture of vehicles is a technology intensive industry and would boost the country's scientific, engineering and manufacturing capabilities, thereby increasing our industrialization rate. Vehicle manufacturing in Nigeria will help to improve the capacity of the Nigerian workforce technologically.

5. Development of the Small Scale Sector: The automotive industry will help to develop the small scale sector in Nigeria. Vehicle parts and components (of about 3,000 in a car) are mainly manufactured by small and medium scale industries for assembly by the main manufacturers. They will also serve the spare parts market estimated at N30 billion annually. The growth of the automobile industry in Nigeria will boost the development and advancement of the small scale sector which comprises of the local supporting industries that process raw materials such as steel, cast iron, non ferrous metals and plastics for the auto industry.

6. Investment Opportunities: The smooth operation of the auto industry created varieties of business avenues to a lot of people who invested directly to the industry or indirectly through sales of spare parts or automobile units. The revival and full operation of the automobile industry is likely to increase investment opportunities in

Nigeria through:

Manufacture of vehicles, especially low cost utility vehicles to serve the rural dwellers

Manufacture of auto components and spares

Manufacture of motorcycles and bicycles especially as government's target of 50% and 100% local content for motorcycle and bicycle respectively is yet to be met.

Conclusion

The Nigerian automobile industry holds tremendous potential in vehicle manufacturing, spare parts and components. It has the capacity to reduce unemployment rate to an appreciable rate. The National Automotive Council in its bold effort to attract foreign direct investment (FDI) into the auto industry has concluded plans to engage consultants to carry out a national survey of consumer preference for different brands of vehicles with a view to branding rationalization and guide prospective investors in the Nigeria industry, including automotive components and parts.

The auto industry in Nigeria has a bright future only if Nigerians decide collectively to act and save the industry from industrial collapse. This can only be done when proactive measures are taken by all stakeholders to implement the appropriate recommendations necessary to revamp the industry.

Recommendations

Based on the review of the activities of the National Automotive Council, the following recommendations were made:

1. The Federal government of Nigeria in collaboration with National Automotive Council (NAC) should review and maintain a consistent policy that will favour the Nigerian Automobile industry.
2. The NAC should put in place adequate engineering infrastructure in government owned automobile industry for effective production, including modern technology.
3. NAC in collaboration with Federal

Government should develop modalities to encourage the patronage of local automobile products by Nigerians.

4. The Factory Act should be reviewed to make the penalty harsher for defaulters of the National Automotive Council laws, rules and regulations.
5. Financial institutions should make available long term funds at low interest rate to prospective investors in auto industry.

References

Federal Republic of Nigeria (1993). *National automotive council guidelines*. Lagos: Federal Ministry of Industry.

Federal Republic of Nigeria (2001). *National automotive council survey report*. Lagos: Federal Ministry of Industry.

Hillier V. A. W. Coombes P. & Rogers D. (2006). *Power train electronics*. 5th Edition Nelson. UK: Thomes Ltd. U. K. 120–125.

Hillier V. A. W; & Rogers D. (2007). *Chassis and Body Electronics*. 5th Edition. Nelson Thomes Ltd.

Khurmi R. S. & Gupta, J. K. (2007). *Mechanical Engineering*. Delhi: Erasia Publishing House Ltd,

Maigida J.F.& Abutu, F. (2011). Effects of Innovations in the Automobile Industries on the Job Security and Performance of Automobile Mechanics Craftsmen and Master Craftsmen in Nigeria. *Journal of Science, Technology and Mathematics Education*. 7, (1),113-119.

Salami, K. A. (2007). Emission Control Technology by Automotive Industry: Trends and challenges. *Inaugural lecture series 10 presented at the Federal University of Technology, Minna*.1–6.

William, H. C. & Donald, L. A. (2007). *Automotive mechanics*. New Delhi: McGraw Hill Publishing Company Ltd, New Delhi. 222–229.

Wikipedia (2009). Modern Automotive service technician. Retrieved on August 30th from <http://mast/course.com.html>