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# THE NIGERIAN JOURNAL OF ECONOMIC AND SOCIAL STUDIES

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# THE AUTOMOTIVE INDUSTRY IN NIGERIA Problems and Prospects

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## ABSTRACT

Serious national efforts towards the development of the automotive industry in Nigeria took place in the early 1970s, with initial joint venture agreements between Peugeot and Volkswagen companies. By 2001, there were over 20 different enterprises manufacturing different types of vehicles, from boats to trucks, including motorcycles and bicycles and automobiles established in Nigeria. The capacity utilization of the majority of these companies is, however, very low, largely due to the high cost of importing the components needed to assemble vehicles. The authors suggest that government policy should promote the development of a wholly made-in-Nigeria automobile, and that this would in turn stimulate the establishment of ancillary companies to supply the necessary components.

JEL classification: E2, L6, L9

#### 1. Introduction

THE AUTOMOTIVE industry consists of the manufacture, sales and servicing of such products as tractors, vehicles, motorcycles, boats, bicycles and the earthmoving vehicles. It is generally believed that the development of the automotive industry, with its associated multiplier effects, is an important stimulus to the growth of other industries in an economy. Development in the automobile industry finds expression in Fordism, neo-Fordism and the Marxian political economy

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otherwise known as the 'regime of capital accumulation'. Henry Ford' specialized long-run production lines, which raised the productivity for standardized goods (Aglietta, 1979), had its roots in Taylorism (Pallox, 1976; Braverman, 1974; and Oberhauser, 1987). Fordism underwent a crisis in the late 1960s and early 1970s arising from limitations reached in its labour productivity, and decreases in the creation of surplus for continued investment in fixed capital (Oberhauser, 1987).

Under neo-Fordism, production and consumption underwent a transformation in the light of the social and technological changes in production and the emergence of international competition (Pallox, 1976; Oberhauser, 1987). Production switched from long-run production lines in which labour performed routinized work on assembly lines to the parcelization of production into organized working groups.

Oberhauser (1987), however, notes that 'the shift in social and economic forces under Fordism and neo-Fordism were reflected in the spatial reorganization of production'. The automobile industry experienced sharp increases in productivity in the 1950s and the late 1960s, partly because of the efficient organization of labour in assembly line production. Indeed, Sabel (1982) describes the transformation in the automobile industry from Fordism to neo-Fordism as a shift from mass markets, standardized goods, and routinized production processes to unstable markets, specialized goods, and a collaboration of the conception and the execution processes of production. The transition from Fordism to neo-Fordism is represented by the social and spatial organization of capitalist accumulation. This transformation has thus formed the basis for the automobile industry in most 'newly industrializing countries' (NICs), typified especially by the Japanese JIT - 'Just-in-time' manufacturing company (Mair, 1992), and France (Oberhauser, 1987).

The Japanese JIT has heralded the concentration of its major factories in one place, ie, for example, the assembly and major component plants are located in and on the outskirts of Toyota City, dominating not only employment, but also consumption and local politics in relatively isolated, previously rural locations, with close proximity to many supplier firms, the Toyota complex of assembly and major components plants. A new dimension in the process of networking is the globalization of the automobile industry as a firm's competitiveness in any one of the world's major regional markets is interdependent, and symbiotic with its position elsewhere (Porter, 1986; and Bçlis-Bergouignan et al., 2000).

In Nigeria, serious national efforts at developing the automobile industry began with the federal government's joint venture agreements with Peugeot Automobile and Volkswagen companies for the local assembly/manufacture of passenger cars in 1972. Other agreements, which followed in 1975, led to the establishment of Steyr, ANAMCO, Leyland and National Trucks Manufacturing (NTM) for the production of medium/heavy commercial vehicles.

There are also two private companies, namely, the Federated Motor Industries (FMI) now called General Motors (GM) and the SCOA Motors, which produces light/heavy commercial vehicles. Seven motorcycle/bicycle outfits are Honda, Yamaha, CFAO, Boules, Raleigh, Basico, Comrade and Chellarams. Three companies, Almarine, Q-Boats and Mordant Marine were established to manufacture and assemble motorboats using fiberglass. Table 1 shows the list of existing automobile and bicycle companies in Nigeria and their installed capacities.

Plant	Installed capacity				
PAN	63,000 cars				
VWN	45,000 cars				
STEYR	8,000 buses/trucks 5,000 tractors/cycles 5,000 m/cycles				
ANAMMCO	7,800 buses/trucks				
SCOA	12,000 buses/trucks				
GM	7,5000 buses/trucks				
LAMCYL	120 buses/trucks				
BUREM	60 buses/trucks				
HONDA	140,000m/cycles				
YAHAMA	144,000 m/cycles				
CFAO (2 Wheels)	75,000m/cycles				
BOULOS (Suzuki)	150,000 m/cycles				
RALEIGH	450,000 Bicycles				
CHELLARAMS	N/A				
BASICO	15,000 Bicycles				
COMRADE	60,000 bicycles				

Table 1. Existing Automobile and Bicycle Industries (installed capacities in Nigeria, 2001)

Source: Adapted from Turner Isoun (2001: 4) and Filani (2001:2).

# 2. Performance in the Automotive Industry in Nigeria

Over the years, the Nigerian automobile industry has performed very poorly. This poor performance is demonstrated by the low capacity utilization of the existing automobile manufacturing enterprises and the low level of locally made components. In terms of capacity utilization, table 2 presents the abysmal picture of the performance of the eight automobile assembly plants in Nigeria. In 1992,

which is the best in the 8-year period (1992-1999), only three of the plants had capacity utilization of 10 per cent and above. In that year, Anammco with an installed capacity of 7,800 produced only 782 vehicles (10.0%); GM, with installed capacity of 7,500 produced 1,776 (23.7%); and PAN, with installed capacity of 63,000 produced only 12,557 ((19.9%). In 1993, only two of the automobile plants, GM (18.1%) and PAN (10.8%) reached the 10 per cent capacity utilization level. In the remaining six years (1994-1999), all the assembly plants (except LAMCL 1997 (30.0%), could not reach even the 10 per cent mark. In fact, by 1999, only four of the plants were producing any vehicle at all. These are PAN (9.5%), Anammco (5.7%), CM (3.1%) and Burem (0.02%). The remaining four, SCOA, Steyr, LAMCL and Volkswagen of Nigeria (VWN) produced nothing (see table 2). With respect to the use of local components, the picture is equally dismal. For example, the average percentage of local components used by the Nigerian automobile industries is less than 30 per cent. Volkswagen Nigeria utilized not more than 20 per cent local components in the early 1990s, while PAN utilized around 35 per cent in the same period. These percentages are much lower than the targets set for these enterprises at the time of their inception.

Table 3 shows the heavy dependence on foreign imports in the manufacturing/assembly of a typical saloon car in Nigeria. For example, foreign material content accounts for as much as 73 per cent, combined foreign/local raw material content is 21 per cent, while the purely local material content accounts for only 6 per cent of the total.

By international standards, Nigerian automobile manufacturing enterprises have performed very poorly with respect to the level of local components utilized. For instance, the Peugeot assembly plant in Argentina achieved 95 per cent utilization of local components within 15 years of establishment. In Brazil, high percentages of local component utilization have been recorded for the Volkswagen assembly plant, within the relatively short span of its establishment.

#### **3.** Factors Responsible for Poor Performance

The automotive industry in Nigeria is bedeviled by a myriad of problems, which have stifled its development and created the abysmal picture of performance painted above. Some of the factors responsible for this include:

- i. excessive and ruinous competition from vehicle importation, especially through smuggling
- ii. heavy dependence on imported components foreign exchange demand

Plant	ANAN	IMCO	0	GM	SC	COA	ST	EYR	LA	MCL	PA	N	VV	VN	BU	REM	
	7,800	4	7,	500	12	,000	8,	000		120	63,0	000	45,	000		60	TOTAL
Year	ali A	% of IC*		% of IC		% of IC		% of IC		% of IC		% of IC		% of IC		% of IC	
<b>'</b> 92	782	10.0	1776	23.78	1031	8.6	472	3.6	-	0.0	12,557	19.9	1238	2.8	1.000 <b>-</b>	0.0	17,856
<b>'93</b>	316	4.1	1359	18.1	1058	8.8	33	0.3		0.0	6,828	10.8	708	1.6	1=	0.0	10,329
<b>'94</b>	243	3.1	563	7.5	530	4.4	58	0.4	-	0.0	4,761	7.6	385	0.9	81415	0.0	6,540
<b>'</b> 95	190	0.2	313	4.2	614	5.1	4	0.03		0.0	3,754	6.0	0	0.0	-	0.0	4,875
<b>'</b> 96	475	6.1	540	7.2	507	4.2	17	0.1		0.0	3,759	6.0	0	0.0		0.0	5,298
. 97	288	3.7	349	4.7	276	2.3	34	0.3	36	30.0	4,710	7.4	0	0.0	28	0.1	5,721
<b>'98</b>	373	4.8	332	4.4	251	2.1	71	0.6	10	8.3	5194	8.2	0	0.0	7	0.02	6,238
<u>`99</u>	445	5.7	229	3.1	0	0.0	0	0.0	( - S	0.0	6,004	9.5	0	0.0	10	0.02	6,688

Table 2. Capacity utilization of Various Assembly Plants in Nigeria, 1993 – 1999 (installed capacity and utilization rates by plants)

*Note:* \*IC = Installed capacity of each plant per year.

Sources: Calculated from Data from National Automotive Council and Nigerian Automotive Manufacturing Association; Filani (2001) p. 2.

S/N	Material	Weight (KGS)	% Weight	Source
1	Flat mild steel sheets for body work, tubes, etc	368.7	30	Foreign
2	Steel (forged, machined, etc)	393.3	32	Foreign
3	Cast iron	147.5	12.0	Local/Foreign
4	Aluminum alloys	49.2	4.0	Foreign
5	Copper and copper alloys	24.6	20	Foreign
6	Textile and composites	49.2	4.0	Local/Foreign
7	Rubber	73.7	6.0	Local
8	Plastics	49.2	4.0	Local/Foreign
9	Glass	43.0	3.5	Foreign
10	Paint/primer/sealant	18.4	1.5	Foreign
11	Others	12.3	1.0	Foreign/Local
		1229.1	100.0	

Table 3. Material Content of a Typical Saloon Car. 2001

Source: Isoun (2001) p. 12.

- absence of definite and implementable plan for transfer of the relevant iii. technology to Nigerians in the automotive industry
- unstable exchange rates and devaluation of the local currency iv.
- inadequate infrastructural facilities ν.
- low level of education among small- and medium-scale enterprises vi. (SMSES)
- absence of clear and specific policy for the development of the automotive vii. industries.

#### 3.1 Excessive and ruinous competition from vehicle imports

Perhaps the most important factor for the poor performance of the Nigerian automobile industry is the country's continued dependence on heavy importation of all brands of vehicles. Table 4 presents the situation for seven years (1993-1999). In this period, imports of new and used vehicles totalled 384,162. This figure, however, excludes that of used vehicles, which were smuggled into the country in order to avoid payment of duties and preshipment inspection.

A developing country like Nigeria cannot afford to engage in trade liberalization to the extent of throwing open her doors to heavy imports. This is a veritable way of stifling local production efforts. Even technologically developed countries are often wary of such trade liberalization. The example of the United States of America is instructive here with her threat of retaliation on Japanese export at a particular period. The country (USA) then argued for a 'managed'

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trade with Japan. Thus, a developing country such as Nigeria must protect its local firms from unequal competition from foreign exporters.

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Years	New	Used	Total		
1993	10,918	143,641	154,559		
1994	5,996	83,560	89.556		
1995	5,231	43,181	48.412		
1996	6,792	8,414	15,206		
1997	8,564	7,835	16,399		
1998	12,426	8,164	20,590		
1999	8,841	30,599	39,440		
Total	58,768	325,394	384,162		

Table 4. Vehicles\* Imported Through Lagos Ports

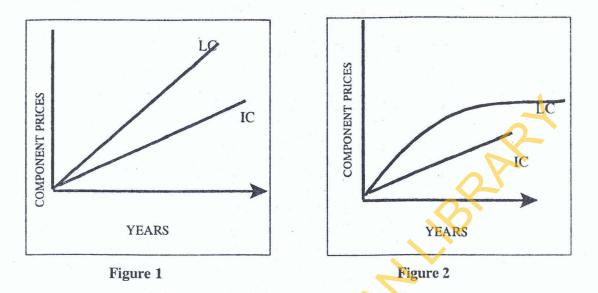
Source: Extracted from the National Automotive Council figures acquired from the Nigerian Ports Authority and Nigerian Automotive Manufacturers Association. 1996 - 1998; figures for used vehicles are underestimated as many were smuggled in to avoid duties and preshipment inspection.

#### **3.2** Heavy dependence on imported components

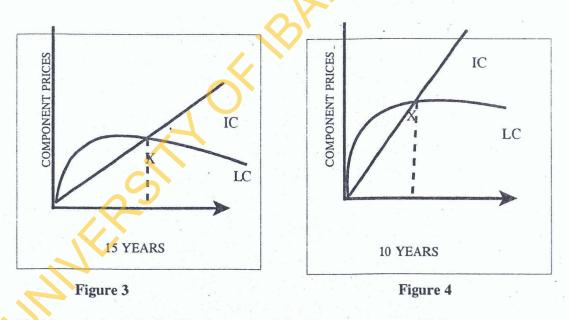
Competition with local automotive industries is not only in respect of whole vehicles or fully built units (FBU) and the completely knocked down (CKD) parts but also in respect of their various components.

Local components in the auto-industry include paint, processing materials, adhesives, windscreen glass, battery, radio cassette, lubricants, brake fluid and petroleum products. Others include fuel filter, oil filter, seat foams, castings, seat belts, rubber and plastic components, press parts, tyres and tubes etc. The competition in respect to these components has to do mainly with prices. Foreign competitors have a great advantage because they produce the components for a vast 'world' market, thus making the unit cost per component extremely low. This is not the case with local (Nigerian) producers whose market is limited and has a low effective demand. The possible relationships between local components (LC) and imported components (IC) can be hypothetically demonstrated in figures 1 and 2 (PI International Associates, 1993).

In figure 1, the cost of local components is rising faster than those of imported components over time. In such a situation, it would be economically irrational to encourage utilization of local components. In figure 2, the prices of local components rise faster over the first few years and later stabilize although they are still higher than those for foreign imports. Again, it would be unwise to utilize local components given this situation. These two scenarios seem to be operative in Nigeria at present, hence the heavy dependence on imported components.



Hypothetical relationships between the prices of local components (LC)and imported components (IC)



Ideal hypothetical relationships between prices of local components (LC) and imported components(IC)

The reasons generally cited by local vehicle assembly plants in Nigeria for the poor utilization of local components include lack of suitable local components and government incentives. The first reason is untenable because the quality of local components in Nigeria is very high. The qualities which automobile companies desire most in any component are durability, reliability, international standards, regular supply and competitive prices. In the PI study, all the auto-enterprises surveyed agreed that the small and medium scale enterprise (SMSEs), suppliers of

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local components meet almost all these requirements except price, which they considered too high for local components. Of course, one of the major reasons for the high prices of the local components is that the SMSEs themselves import many of their inputs. It is, therefore, plausible to argue that the prices of local components can only become competitive if the suppliers (SMSEs) reduce their reliance on imported inputs.

# 3.3 Absence of definite and implementable plan for relevant technology transfer

The National Office for Technology Acquisition and Promotion (NOTAP), a parastatal of the Federal Ministry of Science and Technology (FMST), is responsible for ensuring equitable and effective technology transfer agreements between Nigerian enterprises and the foreign owners of the technology, as well as the assimilation of the transferred technology within a specific time-frame. Established in 1983, NOTAP is responsible for rendering technology advisory services to the automotive companies established either by the government or the local investors. It was for this reason that the six (6) automotive companies established by government through joint venture arrangements in 1972 were made to submit their agreements to NOTAP for evaluation and registration. The companies concerned are:

- Volkswagen Nigeria Limited, (VWN) Lagos
- National Trucks Manufacturing Limited, (NTM) Kano
- Anambra Motors Manufacturing Company Limited, (ANAMCO) Enugu
- Leyland Nigeria Limited, Ibadan
- Peugeot Automobile Nigeria Limited (PAN) Kaduna
- Steyr Nigeria Limited, Bauchi.

However, it has been discovered that most of the automotive industry agreements have undesirable, onerous, or restrictive clauses that have hindered the assimilation and absorption of the imported technologies in Nigeria. Some of the undesirable and restrictive clauses include among others (Isoun, 2001):

- a. Absence of a comprehensive training programme for the Nigerian personnel to facilitate the transfer of technology.
- b. Absence of a provision for research and development (R&D) activities within the factories in Nigeria.
- c. Prohibition of local firms from either distributing or assembling any automotive products other than those of the licensors (foreign technical partners).

- d. Restriction of the sale of the products to the geographical boundary of Nigeria, thereby prohibiting the sale outside of Nigeria.
- e. A provision that permits the foreign technical partners to buy back the license of all unused, knocked-down components, equipment specifications, list models, and records after the termination of the agreement.
- f. Vague and ambiguous definition of the phased local fabrication of specific components parts from, 20 per cent to 100 per cent resulting in non-implementation.
- g. Prohibition of local firms from carrying out the assembly, manufacture or distribution of products which require the use of facilities or documents provided by the licensor after the termination of the agreement.
- h. Total absence of provisions to ensure the implementation of the agreement so as to guarantee transfers of technology into Nigeria.

#### 3.4 Unstable exchange rates and devaluation of the local currency

One of the major reasons for the poor performance of the Nigerian automobile industry is the instability of the country's exchange rates and the excessive devaluation of the local currency (naira). It is instructive to note that, in the last four decades, prices of vehicles have been relatively stable in other parts of the world. In Nigeria, however, prices of vehicles and other products have risen astronomically since 1985, when the Structural Adjustment Programme (SAP) was introduced leading to the excessive devaluation of the local currency.

This devaluation, however, has both advantages and disadvantages. Its major advantage is that it encourages Nigerian enterprises to be more inward looking. On the other hand, it creates exchange rates instability, thus making forward planning difficult if not impossible for the same enterprises.

#### 3.5 Inadequate infrastructural facilities

The limitation imposed on the automobile industries to develop by low capacity utilization is made worse by the heavy burden of providing municipal facilities such as water, electricity, etc. in running the factories. For instance, VWN provides its own water, electricity and roads.

The opportunity cost of providing these facilities can be very high because scarce capital, which could have been used for expansion, research and development and promotion of local components, is expended on municipal services, which are normally provided by governments and their agencies elsewhere in the world. These costs, added to the final costs of vehicle production, constitute a drag on the industry.

#### 3.6 A low level of education among SMSEs

Another major problem in the automobile industry is the poor education of the entrepreneurs running the SMSEs. Examples of the new industrializing countries (NICs) of Taiwan, South Korea, Hongkong, Singapore and more recently, India show that adequate education is imperative for industrial innovation and development. In the PI-International Associate's study referred to earlier, it was discovered that most of the entrepreneurs running the country's SMSEs have only primary school education. Very few, less than 15 per cent, have HND and higher degrees. In a technologically developing country, inadequate education cripples technological innovation.

#### 3.7 Absence of clear and specific national policy

Any national approach to the development and management of an identified critical sector of an economy is usually based on a well-articulated formal policy designed and implemented through an appropriate institutional infrastructure.

In Nigeria, until the advent of the Automotive Council of Nigeria (ACN) in 1994, the development of the automotive industry was pursued merely within the broad context of the national industrial policy (Isoun, 2003). As a consequence, even the ACN has been unable to cope with the enormous challenges in the industry and has, in fact, been described as a 'toothless bulldog'. There is, therefore, a compelling need for a well-articulated national automotive and allied sub-sector policy that would promote a sustainable growth of the industry and enable the ACN to perform its expected functions.

#### 4. The Way Forward

Give proper attention, the automotive industry could become the cornerstone of industrial growth in Nigeria. A careful look to the development of the industry would promote the sourcing of local raw materials, the acquisition and adaptation of new technologies, and provide gainful employment to the country's teeming population. For this to happen, the industry should be reorganized, and the output level of the manufacturing/assembly plants increased. This requires certain policy initiatives and actions to address the problems enumerated in section II of this paper. The problems include the following:

- a. internalization of automobile components production
- b. provision of appropriate fiscal incentives
- c. manpower development
- d. review of the role of government and empowerment of the Automotive Council of Nigeria
- e. promotion of research and development
- f. development of a Nigerian car .
- g. provision of national policy on automotive industry

#### 4.1 Internalization of automotive component production

Nigeria's current trade liberalization policy which allows unrestricted importation of vehicles, is injurious to the automobile industry because it exposes the local assembly firms to unequal competition from foreign exporters.

As stated earlier on, the possible relationships between local components and imported components depicted in figures 1 and 2 put local component entrepreneurs at a disadvantage vis-à-vis their foreign counterparts and make the use of local components unattractive to the local assembly plants because of higher prices. Figures 3 and 4 show the areas on which government policies should focus more. In figures 3 and 4, X represents the breakeven point beyond which gains accrue from using local components. In figure 3, X is reached in 15 years, while in figure, 4, it is reached in 10 years. The implication of this is that sharp increases in the prices of local components do not matte at the initial stages, provided they will later stabilize and begin to fall. Such a situation will allow local components to be fully competitive with those of imports in the long run.

It has become imperative, therefore, that production of automotive components should be internalized in order to ensure a high level of local contents and value added into the production of automobiles in Nigeria. Efforts should be geared towards the development of automotive related downstream and ancillary industries to ensure that their products meet desired specifications. Fortunately, the Raw Material Research and Development Centre (RMRDC) in its Techno-survey Report, identified many automotive components which are within Nigeria's local manufacturing capability. A list of these components is as follows:

- Shock absorbers
- Fuel pumps
- Fuel Injectors
- Wheel rims
- Wiper blades
- Axles
- Brake shoes
- Brake drums
- Brake discs
- Brake pads
- Brake linings

- •Air filters
- Clutches
- Park plugs
- Contac sets
- Ignition coils
- Distributors
- Alternators

- •Extruded rubber
- Lamps
- Source: Isoun (2001: 14).

Pistons/conrods/sleeves

Gaskets

Coils springs

- •Tool for press-shop
- •Dies for press-shop
- •Mould-making for plastics/light alloy parts
- Starters
- •Beautifiers

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A viable automotive industry has to be fed by clusters of small enterprises, which are engaged in the production of these components for assemblage. Assembly plants would rely on being to fill their orders from these small enterprises. Therefore, the success of the assembly plants depends on the performance of these smaller enterprises. Government should, therefore consciously promote the catalyze the establishment and development of these smaller enterprises by assisting them to surmount their technical and financial problems.

#### 4.2 Provision of appropriate policy and fiscal incentives

Any meaningful policy to bring down the prices of vehicles and their components and at the same time enhance the output of the local automobile industries must, of necessity, not only strive to stabilize exchange rates but also make them competitive. The time has come for the Nigeria government to look again at the principle of purchasing power parity (PPP), which has long been abandoned in fixing exchange rates. This principle simply states that exchange rates must be related to what hard currencies can be bought across countries. For example, the current market rate for the pound sterling is about N262.00 and that of American dollar is N140.00. Now N262.00 and N140.00 can do far more for us in Nigeria than £1 and \$1 can do for us in Britain and the United States of America respectively. Applying the PPP principle, means that the naira is grossly undervalued and should be corrected in order to avoid stifling local production and to correct the existing serious distortions in the vehicle production sub-sector.

Government should put in place policies and incentives that are not only geared towards protecting the local industry but also ensure the attainment of a high level of local production to meet local demand. Such policies and incentives include:

- imposing the necessary tariffs on imported fully built units
- ensuring that auto components on import deletion list can only be imported at higher duty (minimum 50%) when local output can meet the local demand
- •) ensuring low tariff on raw materials for the automotive industry, that are not available locally
- implementing the National Automotive Policy provision of achieving 80 per cent CKD deletion by the year 2010
- releasing of the 2 per cent levy on automotive imports to the National Automotive Council's Auto Development Fund to support R & D and the development of downstream industries (Isoun, 2001:16 & 17)

Consequent upon the above, government should encourage the automotive industry to accelerate the adaptation of already identified local raw materials as substitutes for the imported materials or CKD. The industry should also implement local content programmes to accelerate the standardization of locally sourced components; encourage local manufacturers of auto components, and invest an agreed percentage of their annual profit in the implementation of the local content development programmes.

#### 4.3 Manpower development

One of the ways to ensure the survival and growth of the automotive industry is the training of automotive engineers, designers and other relevant staff. As stated earlier, the level of education of the entrepreneurs in the SMSEs is currently too low to enable any meaningful innovation in product development; likewise these entrepreneurs are not likely to be able to respond adequately to incentives that might come from policy initiatives. Policy initiatives to enhance the educational levels of these entrepreneurs is therefore required. Education here does not refer to literary education alone, it should encompass practical aspects of running a business, ie, accounting and record keeping, apprenticeships in some trades, other forms of adult education. Whatever type of encouragement is put in place, these entrepreneurs should be enabled to appreciate the ever-changing world technology and the importance of keeping pace.

The graduate automobile engineers from the universities are hardly adequately exposed to the practical aspect of their intended profession. Therefore, ACN should work out an arrangement whereby graduate engineers are attached to organized motor mechanics where they can acquire practical knowledge. These 'industrial' attachments, at specified salaries, should last for 2 years. Most of the beneficiaries of this exercise will be engaged in the revitalized automotive firms, while some will become entrepreneurs for the supply of automotive components and spare parts. Some Nigerian Universities are already practicing similar programmes. For example, at the University of Ibadan, students in the Department of Mechanical Engineering spend several months with local mechanics as interns for practical experience during their academic programmes.

#### 5. The Role of Government and the ACN

In consonance with the current trend especially with Government's privatization policy, the Federal Government's equity holding in the automotive industry should be privatized and commercialized. In this way, Government involvement should be concentrated on providing necessary and appropriate regulations and effective monitoring to ensure compliance with its policies. The Automotive Council of Nigeria (ACN) should be empowered in such a way that it can facilitate among other things, revitalization of ailing or dead automotive companies, ensure local production of quality automotive products that can meet the challenges of globalization, stimulate local entrepreneurs in the relevant downstream and ancillary industries, encourage manpower development and promote a strong Research and Development activities for the automotive industry. There, is therefore, an urgent need for the CAN, in collaboration with other relevant government agencies and the private sector to engage in strategic planning for the development of the auto industry in Nigeria.

#### 5.1 Research and development (R & D)

A major factor in ensuring the development and sustainability of any manufacturing enterprise is research and development (R & D). It is through R & D that a company can be innovative through the development of new and more acceptable products and also be cost-effective through the development of equivalent products that are cheaper than existing ones.

Research and development can be achieved successfully in Nigeria by:

- a. government's active participation in R & D through identification of key research areas and funding
- b. encouraging the private sector in several ways, (for example tax incentives) to engage in R & D
- c. ensuring that the results of R & D whether funded by government or by the private sector, are utilized effectively.

#### 5.2 Developing a Nigerian Car

If Nigeria is serious about developing its automotive industry and bringing down the price of the automobile and their components and at the same time raising the level of component utilization to almost 100 per cent, the most important thing is to develop a Nigerian car. Such a car which can bear any brand name its manufacturer chooses, should be entirely made by components manufactured in Nigeria, and therefore free from the encumbrances imposed by foreign brand names. Even if the standard may not be as high as the foreign car, it is important to emphasize that a developing country like Nigeria will never produce in indigenous car if the inhabitants are not prepared to put up with fairly long period of trial and error. The quality of such a car will improve over time. The development of a Nigerian car will enhance linkages between the auto-industry and small and medium scale enterprises, bring down the price of cars and their components and promote technological transfer in the auto-industry (Filani, 2001).

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#### **5.3 National Policy on Automotive Industry**

All the above suggestions for developing Nigeria's automotive industry cannot be achieved in a vacuum, neither can the development be effectively undertaken through the broad context of existing national industrial policy. There is the need to formulate a well-articulated and definite national automotive and allied subsector policy, which would not only take care of the various suggestions in this paper, but also ensure sustainable growth and development of the industry.

#### 6. Conclusion

All efforts at moving Nigeria forward in the auto-industry sub sector must be seen as highly interrelated. Government policy instruments must be well fashioned in and harmonized in order to make any meaningful impact. Above all, there is need for the creation of a conducive environment for capital investment in the autoindustry, most especially by private concerns. The most important component in such an environment is political stability, which, unfortunately, has eluded the country for the last four decades.

#### References

- Aglietta, M. 1979. The Theory of Capitalist Regulation: The US experience. New Left Books, London.
- Ajayi, D.D. 2003. Spatial patterns of production subcontracting in Nigeria. Research for Development. 17(1&2): 27-56.
- Bçlis-Bergouignan, M., G. Bordenave and Y. Lung. 2000. Global strategies in the Automobile Industry. *Regional Studies* 34(1): 41-53.
- Braverman, H. 1974. Labor and Monopoly Capital. Monthly Review Press, New York.
- Filani, M.O. 2001. Importation of vehicles: Implications for the auto industry in Nigeria. (Paper presented at the Automotive Investors' Forum, Abuja August 28<sup>th</sup> 30<sup>th</sup> 2001.
- Isiaka, Adams. 2001. A Tariff Structure and its Expectations. *Punch Newspaper* (30 January 2001): 19, 22.
- Isoun, Turner. 2001. Revitalising the automotive industry in Nigeria: The FMST position paper. (Paper presented by the Hon. Minister of Science and Technology, at the Automotive Forum, Abuja).
- Madueke, Authur. 2001. Creating an enabling environment for the survival and growth of the automotive industry. (Paper presented at the Automotive Forum, Abuja).
- Mair, A. 1992. Just-in-time manufacturing and the spatial structure of the automobile industry: Lessons from Japan. *Tijdsschrift voor Econ en Soc. Geografie* 83(1):82-92.
- Oberhauser, A. 1997. Labour, production and the state: Decentralization of the French automobile industry. *Regional Studies* 21(5): 445-458.
- Palloix, C. 1976. Le preces du travail: du fordisme au neo-fordism, La Pennsee 185: 37-60.
- PI-International Association. 1993. A study for developing linkages between SMSEs and large- scale enterprises through sub-contracting (A report submitted to the Federal Ministry of Industry and Technology.

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Porter, M. 1986. Competition in global industries: a conceptual framework. In: *Competition in Global Industries*, M.B. Porter, ed, pp. 15-60.

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Sabel, C. 1982. Work and Politics. Cambridge University Press, Cambridge.