

Mobilization Of Domestic Financial Resources For Improved Industrial Development In Nigeria

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Abstract: *The paper examines the mobilization of domestic financial resources for improved industrial development in Nigeria with a view to identify the contributions of the various sources of finance to industrial sector development in Nigeria. To achieve this objective, the paper employed Augmented Dickey Fuller Test (ADF), Error Correction Mechanism (ECM) and Co-integration to analyze time series data from (1986 – 2015). The paper identified the various instruments and strategies used by the government for mobilizing resources for the industrial sector in Nigeria from deposit money banks. The co-integration result revealed that there exist long run relationships among the variables employed in the study. The ECM result revealed positive relationships between the variables and industrial development. The paper therefore recommend that the Federal government capital expenditure should be reviewed upward for enhanced industrial sector productivity and that both the Federal government and the Commercial Banks should mobilize more financial resources toward the industrial sector to boost industrial productivity which would guarantee stable and improved development in industrial productivity in Nigeria.*

I. INTRODUCTION

Economic growth and sustainable development can be achieved through the effective mobilization of the necessary resources, both internally and externally Wujung & Aziseh, (2016). Resource mobilization is the fundamental prerequisite to achieve a balanced economic growth and just and equitable society free of poverty. The availability and mobilization of resources is a sine qua non for real capital formation and, hence, national development. Sustainable development can only be achieved if resources are efficiently mobilized and transformed into productive activities. The rationale of a greater focus on domestic resource mobilization thus springs from the quest for sustainable growth and poverty reduction, and the need to create “policy space” to accommodate genuine domestic ownership and country diversity. In other words, it is hypothesized that greater domestic resource mobilization can facilitate higher levels of economic growth and poverty reduction, and can also be a powerful means of enhancing policy space and domestic ownership Roy & Aniket, (2008).

Domestic savings have a critical role to play in financing development. They are needed to provide resources for investment, boost financial market development, and stimulate

economic growth. Yet, most Less Developed Countries(LDCs) including Nigeria have technical hitches mobilizing adequate domestic resources to meet their investment needs especially when it comes to mobilizing resources for industrial sector development. This is mainly due to the predominance of subsistence activities which barely generate enough resources to meet basic consumption needs and the overall high levels of poverty, with extreme poverty exceeding 50 per cent on average in LDCs.

Rapid industrial development has been the main focus of economic development because of its potential benefits. Industrialization tends to propel economic growth and quicken the achievement of structural transformation and diversification of economies Adegbite & Adeniji, (2008). Nigeria, like other developing countries still finds it challenging to mobilize resources needed to transform its industrial landscape, although recently the industrial sector has witnessed some dramatic changes. These changes are principally due to the efforts of the government to transform the economy from agricultural to an industrialized one Ayodeji & Balcioglu, (2010). This arises from the conviction that industrialization in addition to minimizing dependence on the developed economies, increases the country’s national

output, generates funds for the government, and leads to the conservation of foreign exchange earnings.

The path towards industrialization in Nigeria has not been easy because of the disparity in resources endowment of the economic units and the low level of investment in the economy. This can be attributed to the inability of the economy to generate resources domestically needed to trigger significant changes in the industrial sector. While some units have resources beyond their immediate needs, others may have need for resources beyond what they can presently generate. Pass and Pike (1983) as cited in Ayodeji & Balcioglu, (2010) opined that the level of investment in an economy is one of the major fundamentals in deciding its future productive capacity and in due course the growth in the real living standards of its people. Correspondingly, Adeyemi and Badmus (2000) argued that lack of finance is a critical restrictive factor in industrial growth and the realization of an entrepreneur's dream.

In view of the above and in realization of the fact that industrialization is required for rapid economic development, successive government in Nigeria formulated many policies and sometimes reversing earlier ones to ease industrialization. To solve the financing problems, particularly of Small and Medium Enterprises (SMEs), a number of specialized financial institutions like the Nigeria Industrial Development Bank (NIDB), the Nigerian Bank for Commerce and Industry (NBCI) and the newly introduced Microfinance Banks have been established besides the formulation of many favorable credit policies. Inability of large-scale industrialization policy to propel the growth of the industrial sector in Nigeria informed the policy shift to small-scale industrialization policy. Small scale enterprises presently maintain a very strong presence in the economy, playing a leading role in the industrial development of the country Okafor, (2000). The sub-sector is performing at sub-optimal levels, contributing less than an annual average of 4.0 per cent of the sector's contribution to GDP over the period 1981-2013 Central Bank of Nigeria, (2013). For instance, between 1981 and 2012, manufacturing posted its highest contribution of 38.44 per cent to sectoral share of GDP (49.70 per cent) in 1983. By 2012, contribution from manufacturing to industrial sector output (39.03 percent) stood at a paltry 1.88 per cent (Central Bank of Nigeria, 2012). The Nigerian government has been intervening in the industrial sector through its policies, programmes and strategies to increase production and strengthen the sector so as to play its expected role in the development process but such efforts have not been fruitful despite the size of resources committed.

In the light of the above, this study therefore sought to examine the contribution of domestic resources for improved industrial development.

A. STATEMENT OF THE PROBLEM

The structure of the Nigerian economy is typical of an underdeveloped country. Over half of the gross domestic product (GDP) is accounted for by the primary sector with agriculture continuing to play an important role. The oil and gas sector, in particular, continues to be a major driver of the economy, accounting for over 95 per cent of export earnings

and about 85 per cent of government revenue between 2011 and 2012. The sector contributed 14.8 and 13.8 percent to GDP in 2011 and 2012, respectively. It also recorded an increase in reserves from 37.119 billion barrels (bbs) in 2012 from 36.042 bbs in 2011. In contrast, the industrial sector in Nigeria (comprising manufacturing, mining, and utilities) accounts for a tiny proportion of economic activity (6 per cent) while the manufacturing sector contributed only 4 per cent to GDP in 2011. This is despite policy efforts, over the last 50 years, and, in particular, more recently, that have attempted to facilitate the industrialization process.

According to Adeoye (2005) industrialisation can be seen as a proper channel of achieving the sublime and necessary conception and goals of improved quality of life for the populace. This is because, industrial development involves extensive technology-based development of the productive (manufacturing) system of the economy. In other words, it could be seen as a deliberate and sustained application and combination of suitable technology, management techniques and other resources to move the economy from the traditional low level of production to a more automated and efficient system of mass production of goods and services Ayodele and Falokun, (2003).

Against this background, however, industrialisation seems to be central to economic growth and development. This therefore explains the reason why successive governments in developing countries such as Nigeria emphasise industrialisation as a way of transforming the economy. In the last three decades, since independence, Nigeria has pursued industrialisation with the hope to transform the economy from a monolithic, inefficient and import-dependent economy to a more dynamic and export-oriented economy, especially exports of industrial goods. These aspirations as contained in the successive development plans (especially, first and second development plans) of the Federal Government were further reinforced by the windfall gains from crude oil boom of the 1972/73 and 1979/80 periods. However, despite series of policies introduced since 1986 by successive governments to facilitate industrialisation process in an economically conducive manufacturing environment, the performance of the industrial sector remains undesirable. In the last two decades, Nigeria recorded an unremarkable economic performance especially in manufacturing industry in the areas of production and international trade. Besides, its lack of proper domestic resource mobilisation might have largely contributed to such unfavourable performance of the industrial (manufacturing) sector. Very few research works has been carried out on the role of domestic resource mobilization on improved industrial development, industrial productivity remained low due to the neglect of the importance of constant supply of financial resources domestically and other industrial facilities or resources that may likely arouse interest in industrial development practices and undertakings. This is the area in which this paper intends to contribute to knowledge.

B. OBJECTIVES OF THE STUDY

The objective of this study is to fill the gap in the existing literature in regards to the mobilization of financial resources for improved industrial development. Other objectives are to:

- ✓ examine the effect of sectoral distribution of bank credit to the industrial sector development.
- ✓ Investigate the impact of federal government capital expenditure on industrial development.
- ✓ Analyse the effect of lending rate on industrial sector development.

C. RESEARCH QUESTIONS

In the light of the objectives of the study, an attempt will be made to provide answers to the following pertinent questions:

- ✓ To what extent has sectoral distribution of bank credit in Nigeria affected the industrial sector development?
- ✓ To what extent has federal government capital expenditure in Nigeria affected the industrial sector development?
- ✓ To what extent has lending rate in Nigeria affected the industrial sector development?

D. RESEARCH HYPOTHESES

The study is therefore designed to test the following hypotheses which are stated in their null form:

H₀: There is no significant relationship between sectoral distributions of bank credit and industrial sector development.

H_{0II}: There is no significant relationship between federal government recurrent expenditure and industrial sector development.

H_{0III}: There is no significant relationship between lending rate and industrial sector development.

E. SIGNIFICANCE OF THE STUDY

The necessity for such a study at this time cannot be over emphasized. The dwindling global oil price coupled with the state of the Nigerian economy has given the government no option other than to aggressively embark massively on industrialization oriented policies in order to revive the distressed sector. Though several articles have been attributed to the need to mobilise resources in order to achieve desirable industrial development, this study will give a new light and perspective to the subject in question. Over the years production in this sector has been declining at a considerable rate and at the same time there is rapid increase in population. In order to ensure that the industrial sector perform its role in economic transformation, it is necessary to ensure the continuous flow of fund to this sector most especially the infant industries for the acquisition of necessary technological skills.

This study will also assist policy makers in the areas of making appropriate credit policy that will not only suit the sector but also the credit institutions especially deposit money banks. It will also open up exploitable areas on the subject matter for researchers and students.

II. LITERATURE REVIEW

A. CONCEPT OF INDUSTRIALIZATION

In recent economic development studies, industrialization has gained prominent interest and amongst development economists, it has been diversely depicted as “prime mover of the economy”, and powerful factor in the development process”. Industrialization is a sine qua non for economic transformation and development. Undeniably, industrialization has come to be seen as a key to rapid economic development in developing countries such as Nigeria Okoye, Nwisiyeni & Eze, (2013).

The term “industrialization” like most terms in social science has no universally acceptable standard of definition. Thus it has been described variously by experts in industrial developments. According to Hughes (1973) as cited in Okoye, Nwisiyeni & Eze, (2013), industrialization is “the system of production that has arisen from the steady development study and use of scientific knowledge. It is based on the division of labour and on specialization and uses mechanical, chemical and power aids in production”. Ojo (1976) simply posited that industrialization means obtaining and possessing more factories or industrial plants. Abdulkadir (1981) perceives industrialization to be a process by which a non-industrialized country becomes industrialized. He went further by given a specified measure the industrial sector is expected to contribute to the GDP. To Abdulkadir (1981), an industrialized country is one in which industrial output accounts for at least 25 percent of gross domestic product(GDP), about 60 percent total industrial output is contributed by manufacturing and the proportion of the population employed in the industrial sector is at least 10 percent. This definition appears to be more expedient for a developing economy in the sense that it provides specific goals and the criteria to be pursued.

B. CONCEPT OF INDUSTRIAL SECTOR

The industrial sector of an economy is often considered as the engine of growth and economic development largely due to its fundamental role in expanding the productive base of the economy, enhancing its revenue earning capacity, reducing the growth of unemployment and poverty as well as checking rural-to-urban migration Lawrence, Clem & Emena, (2016). The industrial sector, according to the Central Bank of Nigeria (2012), consists of crude petroleum and natural gas; solid minerals (including coal mining, metal ores, quarrying and other mining activities) and manufacturing (including oil refining, cement production, food beverages and tobacco; textiles, apparel and footwear; wood and wood products; pulp, paper and publishing; non-metallic products; domestic/industrial plastic and rubber; electrical and electronics; basic metal, iron and steel; motor vehicle and miscellaneous assembly. The manufacturing sub-sector consists of large, medium, small and micro enterprises.

C. PERFORMANCE OF THE INDUSTRIAL SECTOR

Inability of large-scale industrialization policy to propel the growth of the industrial sector in Nigeria informed the policy shift to small-scale industrialization policy. Small scale enterprises presently maintain a very strong presence in the economy, playing a leading role in the industrial development of the country Okafor, (2000). The sub-sector is performing at sub-optimal levels, contributing less than an annual average of 4.0 per cent of the sector's contribution to GDP over the period 1981-2013 Central Bank of Nigeria, (2013). For instance, between 1981 and 2012, manufacturing posted its highest contribution of 38.44 per cent to sectoral share of GDP (49.70 per cent) in 1983. By 2012, contribution from manufacturing to industrial sector output (39.03 per cent) stood at a paltry 1.88 per cent (Central Bank of Nigeria, 2012).

On the other hand, crude petroleum and natural gas sub-sector which trailed behind manufacturing prior to the reform period seems to perform better in the reform period, consistently out-performing the manufacturing sub-sector since 1989, emerging both as the major source of government revenue and export item for the industrial sector. The performance of the solid minerals sub-sector suggests grossly under-exploitation or rather outright neglect. The sub-sector was barely able to contribute just over 1.0 per cent to sectoral output between 1981 and 1984. Between 1985 and 2012, solid minerals contributed less than annual average of 1.0 per cent to industrial share of national output. The sub-optimal performance of the sub-sector has been a source of concern because of its immense potentials as a major foreign exchange earner for the economy. According to Sanusi (2011) sold minerals like coal and tin were major items of export for the country, prior to the discovery of oil. Overall, between 1981 and 1986, industrial output stood at an annual average of about 48.58 per cent of the total output of the economy. Over the 28-year period (1986-2013), the performance of the sub-sector rather than be enhanced, dropped to about 45.15 percent of GDP according to Central Bank of Nigeria, (2012). The declining contribution of the industrial sector, especially the sub-optimal performance of manufacturing and solid minerals, to national output is an issue of serious concern to the authorities in Nigeria and has continued to engage the attention of academics and other stakeholders.

D. HISTORY OF INDUSTRIAL DEVELOPMENT IN NIGERIA

The industrial development in Nigeria can be well explained and traced under the four national development plan. At independence in 1960 and for much of that decade, agriculture was the mainstay of the Nigerian economy providing food and employment for the populace, raw materials for the nascent industrial sector, and generating the bulk of government revenue and foreign exchange earnings Chete, Adeoti, Adeyinka & Ogundele, (2014). Following the discovery of oil and its exploration and exportation in commercial quantities, the fortunes of agriculture gradually diminished while crude petroleum replaced it as the dominant source of revenue and export earnings. This is despite a drive for industrial development in Nigeria dating back to the early

1960s with the first National Development Plan for the period 1962-68 (Chete et al, 2014). Under the First Plan the country embraced import-substituting industrialization (ISI) with the objective of mobilizing national economic resources and deploying them on a cost/benefit basis among contending projects as a systematic attempt at industrial development. The period of this plan witnessed the commissioning of energy projects such as the Kanji dam and the Ughelli thermal plants, which provided a vital infrastructural backbone for the nascent industrial sector. Other important industrial infrastructure developed during this period, which was considered crucial for catalyzing industrial take-off in Nigeria; included an oil refinery, a development bank, and a mint and security company. Even though, the main objective of the ISI strategy was to stimulate the start-up and growth of industries as well as enhance indigenous participation by altering the ownership structure and management of industries, it was characterized by a high degree of technological dependence on foreign know how to the extent that the domestic factor endowments of the country were grossly neglected.

The focus on an ISI strategy as the cornerstone of industrial development efforts during the period of the First Plan therefore seemed to have neglected many of the factors required for managing the emergent industrial sector and in particular, the management of technologies transferred or acquired.

The Second National Development Plan (1970-74), attempted to address the limitations of the ISI strategy, and placed emphasis on 'the upgrading of local production of intermediate and capital goods for sale to other industries'. This was the first systematic effort to create an industrial structure linked to agriculture, transport, mining, and quarrying. The Second Plan coincided with Nigeria's newly acquired status as a major petroleum producing country. As the economy benefited heavily from enormous foreign exchange inflows, the government embraced ambitious and costly industrial projects in sectors such as iron and steel, cement, salt, sugar, fertilizer, pulp and paper, among others. According to the plan, the establishment of industrial projects during this period was inspired by the need to increase the earning power of the populace; to minimize social tension by generating more employment; to make essential goods easily available; and to lay the foundation for a self-sustaining economy. The shallow nature of Nigeria's technological capacity, however, prevented the economy from moving beyond the elementary phases of these projects, and indeed, virtually all of these projects have today either been shut down or operate at very low capacity.

The period of the 1970-74 Plan also witnessed a dramatic shift in policy from private to public sector-led industrialization. Industrial planning took place in the public sector which also executed most of the industrial projects as the government invested directly in productive activities. It was clear at this time that Nigerian entrepreneurs did not have the money or the techno-managerial capacity to establish and manage such enterprises and so the government had to lead the way. On balance, a critical appraisal of the nature of the industrial development challenge of the 1970s reveals that the limitation was not so much that of finance but dearth of human capital including techno-managerial capabilities and skills

required for initiating, implementing, and managing industrial projects. This was all the more evident by the fact that project preparation, feasibility studies, engineering drawings and designs including construction, erection, and commissioning, relied greatly on foreign technical skills and services. The 1972 Act on Indigenization of Enterprises Operating in Nigeria resulted in an indigenization policy which was subsequently amended, repealed, and replaced by the Nigerian Enterprises Promotion Act of 1977. The objectives of the policy were to:

- ✓ Transfer ownership and control to Nigerians in respect of those enterprises formerly owned (wholly or partly) and controlled by foreigners;
- ✓ Foster widespread ownership of enterprises among Nigerian citizens;
- ✓ Create opportunities for Nigerian indigenous businessmen;
- ✓ Encourage foreign businessmen and investors to move from the unsophisticated spheres of the economy to domains where large investments are required.

The Third National Development Plan (1975-80) was launched at the height of the oil boom. Despite a lack of executive capacity in the country, the plan envisaged an investment outlay of 42 billion NGN (up from 3.2 billion NGN of the Second Plan). Emphasis remained on public sector investment in industry, especially heavy industries. With easy access to foreign exchange, private firms opted for investments in the light, low technology consumer industries which were heavily dependent on imported machinery and raw materials. It became apparent that the country had entered into industrial project agreements with very little concern for the country's capabilities for technology acquisition. While by their nature each of these projects required the acquisition of key sector-specific skills, the agreements made by the Nigerian planners were for the turnkey transplantation of technology. Attendant to the fact that during the same period, the nation's oil sector had become vibrant and prosperous, and the gates of the economy had been opened up to all sorts of imports. This had a debilitating effect on real industrial growth. In effect, the period of the Third National Development Plan failed to advance the course of industrial development in Nigeria in a significantly positive way.

The Fourth National Development Plan (1981-85) coincided with the inception of a global economic recession which sparked declining foreign exchange earnings, balance of payment disequilibrium and unemployment in the Nigerian economy. As a result, the hugely import-based manufacturing sector was severely hit. Plummeting world oil prices and dwindling foreign exchange earnings left industries in need of foreign exchange to import new materials and parts. Indeed, this global recession exposed profound weaknesses in Nigeria's industrial structure and planning. It was evident at the end of the fourth development decade in Nigeria that existing strategies targeted at industrial development could neither solve the problem of economic under development nor the social ones created by mass poverty, unemployment, and insecurity of life and property. As a result, the pressure to seek alternative development paradigms had been triggered, not just by technical and economic imperatives, but also by social considerations.

The structural adjustment programme (SAP) was adopted in 1986, as an alternative framework for addressing the weaknesses and ineffectiveness of previous development planning efforts. The objectives of SAP included promoting investment, stimulating non-oil exports and providing a base for private sector-led development; promoting the efficiency of Nigeria's industrial sector; privatizing and commercializing state-owned enterprises to promote industrial efficiency; developing and utilizing domestic technology by encouraging accelerated development and use of local raw materials and intermediate inputs rather than imported ones.

E. PROBLEMS OF INDUSTRIALIZATION

The structural problems of the financial market in mobilizing domestic resources in Nigeria and their inadequacies in the industrialization process of the country are briefly examined from the following main points.

The saving-investment requirement of industrialization, that is, the problem of gross capital formation and its financial where adequate machinery exists, it is possible to mobilize internal resources within a country and also to attract large sums from abroad to finance industrialization. In Nigeria however, the financial market development has been relatively solved and it had not yet constituted effective industrial machinery. The major problem that crops up is that of making for capital formation, the large number of small individual units of savings which are scattered over the wide geographical areas of Nigeria. The redevelopment of the existing financial system is a more suitable form and the integration of the capital market in order to be able to mobilize efficiently the substantial foreign investment in the sector, would provide a firm basis for sustainable economic growth and development.

F. MAIN THRUST OF NIGERIA'S TRADE AND INDUSTRIALIZATION

Nigeria's current industrial policy thrust is anchored on a guided deregulation and privatization of the economy and government's dis-engagement from activities which are private-sector oriented, leaving Government to play the role of facilitator, concentrating on the provision of incentives policy and infrastructure that are necessary to enhance the private sector's role as the engine of growth. The industrial policy is intended to:

- ✓ Generate productive employment and raise productivity;
- ✓ Increase export of locally manufactured goods;
- ✓ Create a wider geographical dispersal of industries;
- ✓ Improve the technological skills and capability available in the country.
- ✓ Increase the local content of industrial output by looking inward for the supply of basic and intermediate inputs;
- ✓ Attract direct foreign investment;
- ✓ Increase private sector participation.

The Nigerian Enterprise Promotion Acts, which hitherto regulate the extent and limits of foreign participation in diverse sectors of the economy, were repealed in 1995. The principal laws regulating foreign investments now are the Nigerian Investment Promotion Commission Decree and the Foreign Exchange (monitoring and miscellaneous provisions)

Decree both enacted in 1995. Given the need to stabilize the banking and finance sectors, and promote confidence in these vital institutions, the Failed Bank (recovery of Debts) and Financial Malpractices in Banks decree of 1994 were put in place. The Investment and Securities Decree was also promulgated to update and consolidate capital market laws and regulations into a single code.

Under the privatization and Commercialization law of 1988, the government successfully sold its holdings in industrial enterprise and financial institutions, and such divestments were made by way of "offers for sale" on the floors of the Exchange, that ultimate shareholdings in such enterprises could be widespread. However, government retained full control of the public utility services corporations.

The 1997 Budget proposed the repeal of all existing laws that inhibit competitions in certain sectors of the Nigerian economy. Consequently, with the promulgation of the Public Enterprise promotion and Commercialization Decree in 1998, private sector investors (including non-Nigerians) will now be free to participate in and compete with government owned public utility services corporations in the areas of telecommunications, electricity generation, exploration of petroleum, export refineries, coal and bitumen exploration, hotel and tourism. As a policy objective, the liberalization and deregulation of the exchange control regime is designed to facilitate and enhance trading activities. Items on the import prohibition list have been drastically reduced with government opting to utilize tariff structures to protect end-user products pricing of local industries and discourage frivolous imports. In 1998, the import prohibition list was reduced to 11 items namely ,maize, sorghum, millet, wheat flour, vegetable oils(excluding linseed and castor oils used as industrial raw materials), bantes and bentonites, gypsum, mosquito repellent, coils, domestic articles and wares made of plastic materials (excluding babies feeding bottles) rethreaded used tyres, gaming machines.

However, more items have since been added to the list, especially where the country has comparative advantage in their production, either in real or potential terms. The primary objective has been to encourage local production and industrialization, while also reducing the country's import bills, thereby conserving scarce foreign exchange.

G. EMPIRICAL LITERATURE

Adegbie and Adeniji (2008) assess the evolution of industrial development in Nigerian economy, its challenges and prospects. The study adopted empirical and exploratory by opinion survey. The analysis of variance (ANOVA) statistical tool was used to analyze the survey result. The result of the survey shows that an economy cannot develop if the real sector is not active. Good and viable operating environment guided by policies is needed to enhance development in the real sector and active participation by the banking industry to help develop the sector.

Okoye, Nwisienyi and Eze (2013) examined whether the growth of the Nigerian capital market has impacted in any significant way to the growth and development of the industrial sector and hence the economic development of the country in general. The study revealed that the capital market

has contributed positively to the economic development in Nigerian through the promotion of the industrialization process. The socio-economic development which can be achieved through taxes, equipment, provision of products and services etc are obtained basically through industries.

Lawrence, Clem and Emena (2016) examine the effect of the economic liberalization policy on the performance of the industrial sector in Nigeria. Specifically, the study examines the extent to which changes in some key economic indicators like exchange rate, financial deepening, trade openness and lending rate account for the trend in output performance of Nigeria's industrial sector in the post reform period. Data over the period 1986-2014 were analyzed using econometric technique based on the Vector Error Correction Model. The study shows that rate of change in exchange rate, trade openness and lending rate exert significant negative impact on industrial output. There is also evidence of significant positive impact of financial deepening on industrial output. The Granger causality estimate shows weak causal impact of financial deepening on industrial output as well as bi-directional causation between trade openness and industrial output. There is also evidence of causal impact of industrial output on lending rate, an indication that industrial development generates demand for financial resources. Investment-friendly climate should be created by the governments as well as monitor real sector operators to ensure that foreign exchange allocations are not diverted.

Nwachukwu, Dibia and Ogudo (2014) study the role of financial sector reforms in enhancing industrial development. It utilizes aggregate annual time series data from 1980-2010. The study employed econometric tools such as unit root test, co-integration test, and error correction model. The empirical results revealed that financial reforms encourage the industrial growth and recommended that policies to be pursued by the government should take cognizance of inflation rate if the effect of financial reform programmes will be desirable. For this reason, it is necessary for the federal government to disburse funds with strict monitoring in order to encourage the low levels of development in the industrial sector in the economy.

Ayodeji and Balcioglu (2010) addressed the financing of industrial development in Nigeria (especially on the Small and Medium Enterprises (SMEs) sub-sector in Kwara State). The study examined ownership structure, entrepreneur's capacity development, sub-sector type of the SME, source of start-up (seed) capital, and source of business/financial information and membership of business/trade organization. The analyses of the data collected including the testing of the hypotheses were carried out using simple descriptive statistical tools and the chi-square.

The major findings of the study concluded that the ownership structure, entrepreneur's capacity development level, Small and Medium Enterprises sub-sector type, source of seed capital, source(s) of business/financial information and the membership of trade/business organization significantly affect the financing of Small and Medium Enterprises in Kwara State. The sole proprietorship type of ownership, low capacity development level of entrepreneurs, low size of annual revenue and the emphasis placed on Small and Medium Enterprise sub-sector type constituted a clog in the

financing of the SMEs cum industrialization process in Kwara State. Also, the recourse to owner's savings as source of seed capital, usage of unreliable information source(s) and the non-membership of business/trade organizations by SMEs greatly impaired their financing.

Wujung and Aziseh (2016) empirically assess the effect of mobilizing various sources of domestic resources on the economic growth of Cameroon. The empirical investigation is carried out using data from the World Bank's development indicators WDI, (2014) for Cameroon for the period 1980-2013. Descriptive statistics and the Instrumental Variable Generalized Method of Moments (IVGMM) were used to analyze the data. The results show that there is a positive and significant relationship between the various sources of domestic resources and economic growth in Cameroon.

Awe (2013) examines the mobilization of domestic financial resources for agricultural productivity in Nigeria with a view to identify the contributions of the various sources of finance to agricultural productivity in Nigeria. The paper employed Vector Auto Regressive Model (VAR) to analyze time series data from (1980 – 2009). The OLS (VAR) result revealed positive relationships between the variables and the variance decomposition measured the proportion of forecast error. Based on the recommendation of the study, Federal government recurrent expenditure on agriculture should be reviewed upward for enhanced agricultural productivity and that both the Federal government and the Commercial Banks should mobilize more financial resources toward the agricultural sector to boost agricultural productivity which would guaranteed maximum agricultural productivity in Nigeria.

Bakare and Fawehinmi (2011) explored the impact of trade openness on industrial output. The findings of the study revealed that public domestic investment, savings rate, capacity utilization and infrastructure have negative impact on industrial output performance in Nigeria.

The available literatures provide a sketchy view of different scholars about the relationship between mobilization of domestic resources on industrial development. However, most of the research findings are not in agreement.

III. RESEARCH METHODS

The choice of research design depends solely on the kind of research carried out. The research design of this study is descriptive and analytical because it tries to give an explanatory relationship existing between domestic mobilization of resources and improved industrial development in Nigeria. It deals with the acquisition of relevant data and the nature of analysis that is econometrically oriented. The technique will assist to advance the set objectives of the study and analyze findings from the study.

A. SOURCE OF DATA

Annual time series data for this study were generated from the Central Bank of Nigeria Statistical Bulletin for the period of 1986-2015. For this study, we required the following data;

- ✓ Industrial Output to GDP
- ✓ Sectoral allocation of credit
- ✓ Federal government capital expenditure
- ✓ Lending Rate

B. MODEL SPECIFICATION

The model employed was adopted from the study of Awe (2013) and Lawrence, Clem & Emema (2016) with a little modification to capture the role domestic mobilization of resources on improved industrial development and the objectives of the study. Lending rate was included. The model is thus, specified below;

$$INDP = f(SAC, FGCE, LR, \mu) \dots \dots \dots (1)$$

This empirical model for the purpose of simplicity be stated in econometric form i.e. equation terms as depicted below:

$$INDP = \beta_0 + \beta_1SAC + \beta_2FGCE + \beta_3LR + \mu \dots \dots \dots (2)$$

Where:

INDP= Industrial Output to GDP

SAC = Sectoral Allocation of Credit

FGCE= Federal Government Capital Expenditure

LR = Lending Rate

Ut = Error term

β_0 = Constant Term

$\beta_1 - \beta_3$ = Coefficients of the independent variables

The data used in this study covered the period between 1986 and 2015 as accurate data was sufficient during this period while 2016 till date 2019 were fluctuating.

C. VARIABLES/PROXIES

Industrial Output: This is the aggregate output from crude petroleum and natural gas, solid minerals and manufacturing sub-sectors in a given year, its contribution to the GDP.

Sectoral Allocation of Credit to the Industrial Sector: This is the total credit allocated to the industrial sector by the commercial banks in a given year.

Lending Rate: This is the price or interest rate the commercial banks charge on loans and advances or credits.

Federal Government Capital Expenditure: This is the aggregate expenditure spend by the federal government on capital expenditures.

D. ESTIMATION TECHNIQUE

a. UNIT ROOT TEST (URT)

Following the submission made by Engle and Granger (1985) and Dickey and Fuller (1981), there is the likelihood of obtaining a spurious regression if the series that generate the results are non-stationary. The Unit root test is a standard approach in co-integration analysis used for determining and re-determining the stationarity of the time series properties of the data. It can either be performed by using the Augmented Dickey Fuller (ADF) unit root test or the Philips-Perron (PP) test. Hence, this study employed ADF test.

b. CO-INTEGRATION TEST

Co-integration implies that if two or more series are linked to form an equilibrium relationship spanning the long run, even though the series themselves may be non-stationary, they will move closely together over time and their difference will be stationary. The Johansen-Juselius (JJ) maximum likelihood method of co-integration test is adopted in this study simply to show the long-run relationship subsisting between the dependent and the independent variables. This is done by evaluating both the trace and maximum Eigen statistics to determine the co-integration rank. The test is conducted assuming a linear deterministic trend with a lag interval of 1 to 4.

IV. RESULTS AND DISCUSSION

A. THE AUGMENTED DICKEY FULLER (ADF) UNIT ROOT TEST

The Augmented Dickey Fuller (ADF) unit root test is shown in table 4.1 below:

Variables	Level Data	First Difference	1% critical value	5% critical value	10% critical value	Order of Integration
INDP	-2.49	-3.89	-3.68	-2.97	-2.63	1 (1)
SAC	-2.09	-6.05	-3.71	-2.97	-2.62	1 (1)
FGCE	-1.99	-5.81	-3.68	-2.97	-2.62	1 (1)
LR	-4.89	-5.04	-3.68	-2.97	-2.62	1 (0)

Source: Author's Computation via EViews 2017

Table 4.1

Table 4.1 above, showed that all the variables were originally non stationary. However, they became stationary after the first difference was taken.

B. JOHANSEN CO-INTEGRATION TEST

According to Johansen (1991) the concept of co-integration is relevant to the problem of determination of long-run equilibrium relationship. However, co-integration is the statistical implication of the existence of a long-run equilibrium relationship between variables in a research model.

DECISION RULE: The condition for a long run co-integrating vector to be established is that, if the trace statistics or if you like Likelihood ratio is greater than the 5% critical value at none**. Then we conclude that a co-integrating vector exist. Hence, we reject the Null hypothesis (H₀) which says that there is no long-run relationship and accept the Alternate hypothesis (H₁) which says that there is long-run relationship between the variables in a research model.

The table below however, shows the result of the Johansen co-integration test obtained from the co-integration result.

Eigen Value	Trace Statistics	5% Critical Value	Probability Value	Hypothesised No of (CE)
0.775862	50.24939	47.85613	0.0293	None *
0.294344	15.85301	29.79707	0.7226	At most 1
0.193468	7.834567	15.49471	0.4832	At most 2
0.118052	2.889305	3.841466	0.0892	At most 3

Trace test indicates 1 cointegrating eqn(s) at the 0.05 level

* denotes rejection of the hypothesis at the 0.05 level

**MacKinnon-Haug-Michelis (1999) p-values

Source: Author's Computation 2017 via EViews 7

Table 4.2: Presentation of Johansen Co-Integration Result

The result of the co-integration test which test for the existence of a long term linear relation is presented in table 4.2. Under the Johansen co-integration test, it is observed that there are one co-integrated equations. In Johansen's Method, the eigenvalue statistic is used to determine whether long run relationships among variables exist. Co-integration is said to exist if the values of computed statistics are significant different from zero. This is reflected in the Trace Statistics (likelihood ratio) of the first row of the second column of the table that shows a value greater than that of the 5% critical value. Hence, the hypothesis of no co-integration (H₀) is rejected and that of presence of co-integration (H₁) is upheld at 5% significance level. The test result shows the existence of a long-run equilibrium relationship in one co-integrating equations at 5% significance level.

The growth of the industrial sectors is affected through domestic mobilization of resources. Therefore, sectoral allocation of credit, federal government capital expenditure and lending rate in the model, changes the growth of industrial sector through domestic mobilization of resources.

C. ERROR CORRECTION MECHANISM

The error correction mechanism is the speed or degree of adjustment, that is, the rate at which the dependent variable adjust to changes that occur in the independent variables. In line with the result obtained in the unit root rest, above, the error correction mechanism showed that the ECM is stationary at level, therefore, an over-parameterized error correction model is required in this analysis and was obtained by using the lag length to ensure that the dynamics of the model is not compromised and properly captured. The result of the over-parameterized error correction model (ECM1) is presented in table 4.7 below:

Dependent Variable = D (INDP, 2)

Variable	Coefficients	Standard Error	T-Statistics	Probability Value
D(INDP(-1),2)	0.515289	0.190819	2.700412	0.0146
D(LR, 2)	0.157441	0.126581	1.243798	0.2295
D(LR(-1), 2)	0.043617	0.114562	0.380729	0.7079
D(SAC, 2)	0.039355	0.039383	0.999297	0.3309
D(SAC(-1),2)	0.009808	0.061803	0.158690	0.8757
D(FGCE, 2)	-0.103870	0.090026	-1.153782	0.2637
D(FGCE(-1),2)	0.048637	0.084258	0.577237	0.5709
ECM(-1)	-1.558486	0.281282	-5.540652	0.0000
C	-0.000611	0.013019	-0.046932	0.9631

R-squared = 0.726436 Durbin-Watson Stat = 2.096296

Source: Author's Computation 2017

Table 4.3: Result of the Over-Parameterized Model (ECM 1)

The summary of the over-parameterized ECM results above reveals that the coefficient of the error correction term is significant with the negative sign i.e. the (-) sign justifies its significance. This means that it will be effective in the correction of any deviations from the long-run equilibrium. The coefficient of ECM is -1.558486, indicating that, the speed of adjustment to long run equilibrium is approximately 1.56% when any past deviation will be corrected in the present period. This implies that the present value of INDP adjust slowly to changes in SAC, FGCE and LR.

However, in order to attain effectiveness of the research model there is a need to simplify the research model into a

more interpretable and certainly more parsimonious model. The parsimonious model would be developed by estimating the equations of only those variables found to be significant in the over-parameterized model i.e. those that have the least probability value, with the lead and lagged value of the dependent variable being inclusive. The table below shows the result of the parsimonious model estimated.

Dependent Variable = D (INDP, 2)

Variable	Coefficients	Standard Error	T-Statistics	Probability Value
D(INDP(-1),2)	0.480604	0.172829	2.780804	0.0112
D(LR, 2)	0.128348	0.085242	1.505687	0.1470
D(SAC, 2)	0.031639	0.023731	1.333254	0.1967
D(FGCE, 2)	-0.124961	0.067788	-1.843406	0.0794
ECM (-1)	-1.554926	0.248974	-6.245334	0.0000
C	-0.001719	0.011842	-0.145177	0.8860

R-squared = 0.715598 Durbin-Watson Stat = 2.047929

Source: Author's Computation

Table 4.4: Result of the Parsimonious Model (ECM 2)

From the table above, it can be deduced that the coefficient of ECM is -1.554926. The negative value obtained in the parsimonious model, further proved that the ECM is significant. This shows that present value of the dependent variable adjust more slowly to changes in the independent variables than what was obtained in the over-parameterized model. Hence the short run deviations from equilibrium position are readjusted to maintain balance in the system by the variables in the long-run.

The coefficient of multiple determination (R^2) in the parsimonious model is 0.715598 \approx 0.72 which indicates that in the long run, only 72% of total variations or changes in the present value of INP is explained by changes of past value in the explanatory variables (SAC, FGCE and LR) all put together while the larger percentage i.e. the remaining 28% is explained by other variation that exist outside the research model i.e. the error term or stochastic variables.

Furthermore, the combined impact of the explanatory variables on the dependent variable is statistically significant. This is also confirmed by the F-probability which is statistically zero. Equally, the Durbin-h test which measures the auto-correlation of annual data is 2.05 approximately. This indicates no auto-correlation in the model.

The result revealed that all the independent variables (LR and SAC) have a positive relationship with industrial development (INDP) except FGCE which exhibit otherwise, i.e a negative relationship. Finally, the results of the study do provide support for the hypotheses that domestic mobilization of resources has a significant impact on the growth of industrial sector development. Although, the explanatory variables jointly impact industrial development, taking the significance of each variable separately, the result showed that none of the explanatory variables has significant impact on industrial development. The result of this study is consistent with that of Odi (2013).

V. CONCLUSION

The main objective of this study was to establish the role of mobilisation of domestic resources on improved industrial development and the specific objectives were to examine the relationship between sectoral allocation of credit and industrial sector development, investigate the relationship between

lending rate and industrial sector development and explore the relationship between federal government capital expenditure and industrial sector development. In achieving the objectives, various literatures on the subject matter were reviewed. From the empirical findings, the proportion of domestic resources has significantly impacted on the development of industrial sector.

A. RECOMMENDATION

In lieu of the empirical findings and conclusion drawn from this study, the need to make policy recommendations that this study considered necessary for the development of the economy and for the improvement of the agricultural sector in terms of financing;

- ✓ It is recommended that the economy be diversified to boost its foreign exchange earning capacity in order to develop small scale industries so as to boost industrial output.
- ✓ There should be strong credit support for the industrial sector to enhance its output performance in Nigeria. This could be achieved through the establishment of special funds from which investors can borrow at concessionary rates for industrial development.
- ✓ Government should give serious attention to infrastructural development so as to lower the cost of banking operations as an incentive for lower interest rates.
- ✓ The monetary authorities should also review credit policies with the aim of reducing bureaucratic practices that hinder easy access to credit as well as strongly emphasize monitoring and supervision of the credit portfolio of lending institutions.
- ✓ Export promotion strategies should be intensified to enhance trade balance. Local content in production should also be promoted.

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