Economic Planning and Real Sector Development in Nigeria

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Abstract

One of the principal objectives of planning in underdeveloped or less developed countries is to increase the rate of economic development. This can be achieving through importing capital from abroad and localized force saving to support the level of industrialization in the real sectors of the economy. The central focus of this research is to examine economic planning and real sector in Nigeria by looking at the causes, consequences, and the way forward. The paper used library science method and collected data purely from secondary materials. The paper found that amongst the challenges of the real sectors development is poor government policies and monoculture nature of the Nigerian economy. These consequently resulted into not achieving macroeconomic objectives such as increase in output growth in all the sectors as expected. The study therefore suggested articulated development plan, improved governance, and service delivery. Governments should create an enabling environment through her planning for private driven economy to thrive through realistic power and energy programmes and reforms, functional institutions. This will encourage local industries and foreign direct investments into the real sector of the economy thereby increasing the levels of economic development in the economy.

Keywords: Economic; Planning; Real Sector; Development; Underdeveloped

1.0 **Introduction**

Economic planning has been the bedrock of achieving development objectives in many successful developing countries. Thus, economic planning is a mechanism for the allocation of resources between and within organizations which is held in contrast to the market mechanism. As an allocation mechanism for socialism, economic planning replaces factor markets with a direct allocation of resources within a single or interconnected group of socially owned organizations. At the heart of such planning is effective coordination and integration of development policies, whether fiscal, monetary, or social, across government. However, despite good intentions that always underpin development strategies, the development plans of many

developing economies are expected to trigger growth in the real sectors but either fail outright or produce disappointingly average returns (Gumede, 2009).

Meanwhile, according to Ewubare and Obayori (2015), the real sector is the sector in which there are productions of goods and services through combined utilization of raw materials and other factors of production such as labour force, land and capital or using production process. It also refers to those areas of activities in the agricultural and industrial sectors that result in the production of traded and non-traded goods and services. Therefore, Nigerians have to work hard to produce goods and services to be able to compete favourably with other nations of the world.

The ability to compete with other nations is a key element to survival as a nation. Hence, there is a need for a sustained increase in production in all sectors of any economy (Udah, 2010). It is pertinent to make clear that the real sector of an economy principally consists of the agricultural sector and the industrial sector, in which there is the production of goods through the combined utilization of raw material and other production factors such as labour force, land and capital goods or utilizing production process. In the agricultural sector, production is categorized into crops, staples, livestock, fishery, forestry, and other produce (Central Bank of Nigeria, 2012). On the other hand, production in the industrial sector is split into manufacturing, mining, and electricity, among others. The need to improve the real sector productivity cannot be overemphasized given particularly the less propitious economic conditions that face most developing countries today, manifested in massive poverty and un-sustained performance of major macroeconomic variables. This has the effect of undercutting output growth via procurement of factor inputs as expenditure on offshore inputs, which constitute a large chunk of total inputs. This must be cut back significantly.

Thus, to trigger and sustain the growth momentum, enhancing real sector performance is critical. Thus, Nigeria, like other developing countries of the world views high industrial and agricultural production as vital for rapid economic growth and development. Consequently, changes in the relative importance of agriculture and industry have been recognized as the core of the growth process. Thus, the Nigerian government in its quest to promote rapid and sustained economic performance has over the years employed various policies and strategies toward improving the agricultural and industrial sectors" production for the actualization of better macroeconomic well-being. In response to the outward miserable performance of the agricultural and industrial sectors, Idachaba & Ayoola (1991) argued that there was an urgent need for policy redirection aimed at re-aligning domestic production with the local resources base. Despite these laudable policies of past and present governments, available statistics indicate that the Nigerian agricultural and industrial sectors are still characterized by poor productivity, low output, and low level of gainful employment.

Essentially, this study is also premised on the desire of Nigeria to effectively develop the real sectors via good planning to achieve developmental goals. Thus, despite the various development strategies that have been introduced and implemented, the country needs a policy measure that will aim at improving the growth rate of per capita income necessary for poverty reduction. Also, since economic planning models must be relevant in promoting economic growth and development along the thought of Todaro and Smith (2011), it is worthwhile to explore how planning models are relevant to economic development in Nigeria. The rest of the work is structured thus: section two treats the literature review as the third section discusses the real sector. The conclusion which wraps the work is in section four.

2.0 Literature Review

2.1 Theoretical Framework

The framework provides a structure for understanding the key variables that drive the sector, and the linkages among the key macroeconomic variables as well as other sectors of the economy. Theoretically, models of the real sector largely transcend demand-side approaches as in the traditionally closed economy Keynesian framework to the Mundell-Flemming open economy macroeconomic models and supply side-based production and cost function approaches. Several modifications in recent times have resulted in the widespread applications of the real business cycle and new Keynesian models with micro-foundations. Quite importantly, the overriding structure of these models leads to the reflection of supply, and demand price evolution processes within the real sector model.

2.1.1 Aggregate Supply Theory

The theoretical foundation of the aggregate supply embodies the view that the accumulation of savings is pertinent to enhancing capital formation that can boost productivity and economic growth. In most developmental states the fiscal operations of government alter investment incentives, allocative efficiency, and growth through adjustments to relative prices. In other words, Matlanyane (2005) underscores that the analysis of factor supply decisions can be useful in the evaluation of policies that are meant to bring about higher levels of capital formation. In the context of the neo-classical flexible accelerator model, investment decisions are determined mainly by the cost of capital, influenced by the tax policy and other incentives that may include a favourable macroeconomic environment. However, public and private investment demand must be accompanied by a concomitant supply of financial capital; otherwise, as noted by Boskin (1982), interest rates will go up to levels that will undermine further investment.

In the literature, modelling the supply side output determination process depends on two approaches, namely, the production and the cost structure approaches. A typical specification of the production function follows a Cobb-Douglas production function of the form:

$$y = Ak al-a$$

Where y is output, k and l are the capital stock and the level of employment, respectively. A represents the level of factor efficiency or technological progress, while a' and 1-a are the relative factor contributions of the stock of capital and employment, respectively. Although the Cobb-Douglas production function has widespread applications, the constant elasticity of substitution (CES) production function has been introduced to allow for a discretional degree of factor substitution (Matlanyane, 2005). The transcendental logarithmic function has also been applied recently to permit relative flexibility in technology and relax the assumptions of homotheticity and quasi-addictiveness in the CES.

To address the difficulty of consistency between factor demands and the price setting behaviour, the cost function approach to the supply side has also received relative application. It involves minimizing the cost function subject to production constraint and it takes the form:

C = wK + rL

Where C, K and L are the cost, capital stock and employment respectively, while w and r' are respectively, the wage rate and the cost of capital. This approach provides an opportunity to derive the price equation within a consistent framework alongside factor demands but cannot generally derive a measure of capacity utilization, as observed in many macro-based models (Matlanyane, 2005).

2.1.2 Aggregate Demand Theory

On the demand side, the open economy Keynesian income framework has been the benchmark model in the output determination process. It underscores four main economic agents, namely, households, businesses, government and the rest of the world. The aggregate demand, therefore, sums up consumption, investment, government expenditure and trade balance associated with these economic agents and is represented by: Where Yt represents the real GDP, Ct represents the real private consumption expenditure. It represents the real gross domestic investment, Gt represents the real government expenditure on domestic goods, Xt represents the real exports and Mt represents the real imports.

2.1.3 Consumption Theory

According to economic theory, consumer behaviour is explained by four theories with microfoundations. The first of the theories is Keynes' absolute income hypothesis (Keynes, 1936), which postulated that consumption is positively related to the current level of disposable income. The other is the relative income hypothesis later developed by Duesenberry (1946) and Modigliani (1949), which predicted that an individual's consumption depends on his income relative to that of the society. Later extensions of the theory of consumer behaviour were the life cycle and permanent income (Friedman, 1957) hypotheses. The life cycle hypothesis tied consumption to lifetime income rather than the individual's current income, while the permanent income hypothesis presupposed that consumption was dependent on permanent income – which in simple terms is the average of contemporaneous and expected income.

Several works have extended these basic theoretical approaches to analyze consumption in the context of uncertainty, multiple assets and risk, liquidity constraints and buffer stock models. Other variables such as interest rate, alternative measures of wealth, taxation, financial intermediation and demographic factors have also been included to determine consumer behaviour. Inflation has also been incorporated into the consumption function to capture the inflation loss on liquid assets (Whitley & Bai, 1997). Deaton (1978) supported the inclusion of the rate of inflation as a measure of uncertainty. From the above theoretical proposition, private consumption could take a form such as: The variables in the above specification are defined thus: = disposable income, = the deposit rate, = the inflation rate and = the real wealth of households.

2.1.4 Investment Theory

As in the case of consumption behaviour, four theoretical models have been developed to explain investment demand. These included the Keynesian present value and marginal efficiency of investment, Jorgenston's (1971) accelerator principle, the user cost of capital and the Tobin Q theory (Brainard & Tobin, 1968). The accelerator theory and the Tobin Q theory are considered the most suitable for modelling investment behaviour in a supply-constrained economy (Matlanyane, 2005). The preference stemmed from the flexibility of the inclusion of policy

instruments that the government can manipulate to enhance aggregate supply. The choice of the accelerator theory over the Tobin Q is mainly associated with measurement issues associated with the unobservable marginal Q, inaccurate measurement of the financial firm by financial markets and the rudimentary stage of capital markets (Geda, et al., 2001).

2.2 Conceptual Framework

2.2.1 Economic Planning

Economy Planning is a mechanism for the allocation of resources between and within organizations which is held in contrast to the market mechanism. As an allocation mechanism for socialism, economic planning replaces factor markets with a direct allocation of resources within a single or interconnected group of socially owned organizations (Mandel, 1986)There are various forms of economic planning. The level of centralization in the decision-making depends on the specific type of planning mechanism employed. As such, one can distinguish between centralized planning and decentralized planning. An economy primarily based on planning is referred to as a planned economy. In a centrally planned economy, the allocation of resources is determined by a comprehensive plan of production which specifies output requirements. Planning may also take the form of directive planning or indicative planning.

A distinction can be made between physical planning (as in pure socialism) and financial planning (as practiced by governments and private firms in capitalism). Physical planning involves economic planning and coordination conducted in terms of disaggregated physical units whereas financial planning involves plans formulated in terms of financial units. Different forms of economic planning have been featured in various models of socialism. These range from decentralized-planning systems which are based on collective decision-making and disaggregated information to centralized systems of planning conducted by technical experts who use the aggregated information to formulate plans of production. In a fully developed socialist economy, engineers and technical specialists, overseen or appointed democratically, would coordinate the economy in terms of physical units without any need or use for financial-based calculation.

The economy of the Soviet Union never reached this stage of development, so planned its economy in financial terms throughout the duration of its existence (Bockman, 2011) Nonetheless, several alternative metrics were developed for assessing the performance of non-financial economies in terms of physical output (i.e. net material product versus gross domestic product). In general, the various models of socialist economic planning exist as theoretical constructs that have not been implemented fully by any economy, partially because they depend on vast changes on a global scale. In the context of mainstream economics and the field of comparative economic systems, socialist planning usually refers to the Soviet-type command economy, regardless of whether or not this economic system constituted a type of socialism or state capitalism or a third, non-socialist and non-capitalist type of system. In some models of socialism, economic planning completely substitutes the market mechanism, supposedly rendering monetary relations and the price system obsolete. In other models, planning is utilized as a complement to markets.

2.2.2 Concept of Socialist Planning

The classical conception of socialist economic planning held by Marxists involved an economic system where goods and services were valued, demanded and produced directly for their use-value as opposed to being produced as a by-product of the pursuit of profit by business enterprises. This idea of production for use is a fundamental aspect of a socialist economy. This involves social control over the allocation of the surplus product and in its most extensive theoretical form calculation-in-kind in place of financial calculation.

For Marxists in particular, planning entails control of the surplus product (profit) by the associated producers democratically.[6] This differs from planning within the framework of capitalism which is based on the planned accumulation of capital to either stabilize the business cycle (when undertaken by governments) or to maximize profits (when undertaken by firms) as opposed to the socialist concept of planned production for use. In such a socialist society based on economic planning, the primary function of the state apparatus changes from one of political rule over people (via the creation and enforcement of laws) into a technical administration of production, distribution, and organization; that is, the state would become a coordinating economic entity rather than a mechanism of political and class-based control and thereby ceasing to be a state in the traditional sense.

2.2.3 Planning versus command

The concept of a command economy is differentiated from the concepts of a planned economy and economic planning, especially by socialists and Marxists who liken command economies (such as that of the former Soviet Union) to that of a single capitalist firm, organized in a top-down administrative fashion based on bureaucratic organization akin to that of a capitalist corporation.[8]Economic analysts have argued that the economy of the former Soviet Union represented an administrative or command economy as opposed to a planned economy because planning did not play an operational role in the allocation of resources among productive units in the economy since in actuality the main allocation mechanism was a system of command-and-control. As a result, the phrase administrative command economy gained currency as a more accurate descriptor of Soviet-type economies (Wilhelm, 1985).

2.2.4 Decentralized planning

Decentralized economic planning is a planning process that starts at the user level in a bottom-up flow of information. As such, decentralized planning often appears as a complement to the idea of socialist self-management (most notably by libertarian socialists and democratic socialists). The theoretical postulates for models of decentralized socialist planning stem from the thought of Karl Kautsky, Rosa Luxemburg, Nikolai Bukharin, and Oskar R. Lange.

This model involves economic decision-making based on self-governance from the bottom-up (by employees and consumers) without any directing central authority. This often contrasts with the doctrine of orthodox Marxism—Leninism which advocates directive administrative planning where directives are passed down from higher authorities (planning agencies) to agents (enterprise managers), who in turn give orders to workers. Two contemporary models of decentralized planning are participatory economics, developed by the economist Michael Albert; and negotiated coordination, developed by the economist Pat Devine.2.3 Needs for Planning in Developing Countries.

One of the principal objectives of planning in underdeveloped or less developed countries is to increase the rate of economic development. Let us consider the words of —Gadgil D.Rl planning for development implies external direction or regulation of economic activity by the planning authority which in most cases is identified as the government. As you know that LDCs are characterized by low levels of savings, and low levels of income, what is prevalent in such countries are poverty-ridden people. This vision's economic circle can only be broken by planned development. This can be achieved through importing capital from abroad known as a foreign direct investment (FDI) and localized force saving to support the level of industrialization. Therefore, the rationale and the need for planning arise in such countries to achieve the following. Strengthening the market mechanism works imperfectly in LDC because of ignorance and unfamiliarity with it. This is so because the production factor, money and capital markets are not organized properly, thus the price system fails to bring about adjustments between aggregate demand and supply of goods and services. Therefore, to remove market imperfection, mobilize and utilize efficiently the available resources, determine the amount and composition of investment and overcome structural rigidities, the market mechanism is required to be perfected in LDCs through planning Using a workable planning model.

2.2.5 The necessity of removing unemployment

The neccesity of removing unemployment is a situation where resources are not fully utilized. Capital is scarce and labour is in abundance thereby creating the problem of providing gainful employment and 31 resulting in absence of sufficient enterprises and initiatives. This required urgent attention by the planning authority in LDC's immediately adopts a planning model that can salvage the situation. The development of Agricultural sectors ad industrial sectors. The agricultural sector is known to produce food for households, raw materials for industries and foreign earnings for the government when exported abroad. The industrial sector on the other hand utilizes the raw materials from the agricultural sector to produce further finished goods that can be used for infrastructural development like roads, railways, power stations etc.

Therefore there should be a conscious attempt by the LDC's planning authority to have a road map planning model for the development of their agricultural and industrial sector. D) The necessity of removing the nation's poverty. The need for reducing inequalities in income and wealth raising per-capita income, increasing employment opportunities, all-around rapid development and national independence substance require a careful ad conscious idea of planning targeted through a planning model that can achieve this. This was seen in the rapid development and transformation of the USSR, a poor country at the time of the October revolution. Planning for economic development is undertaken presumably because the pace of direction of development taking place in the absence of external intervention is not considered to be satisfactory and because it is further held that appropriate external intervention will result in increasing considerably the pace of development and direct it properly.

2.2.6 Criticism of Economic Planning

The most notable critique of economic planning came from Austrian economists Friedrich Hayek and Ludwig von Mises. Hayek argued that central planners could not possibly accrue the necessary information to formulate an effective plan for production because they are not exposed to the rapid changes that take place in an economy at any time and place and so they are unfamiliar with those circumstances. The process of transmitting all the necessary information to

planners is thus inefficient. Proponents of decentralized economic planning have also criticized central economic planning. For example, Leon Trotsky believed that central planners, regardless of their intellectual capacity, operated without the input and participation of the millions of people who participate in the economy and so they would be unable to respond to local conditions quickly enough to effectively coordinate all economic activity

2.3 The Real Sector

The real sector of Nigeria's economy has arguably been the engine of the country's economic transformation over the years. Importantly, the sector has metamorphosed into an emerging industrial workhorse from a hitherto rudimentary agrarian economy that can hardly be ignored. A plethora of factors, including infrastructural gaps, inefficiencies in the public sector project management and service delivery, the resource curse of oil exploration, and a dysfunctional macroeconomic policy environment, among others have truncated the real sector revolution.

Nevertheless, the government has continued to play a catalytic role through the enunciation of policies and provisioning of financing havens to elevate the sector to levels that can make Nigeria an economic hub and a driver of Africa's economic renaissance. Although recent numbers suggest resilient growth (especially at the heels of recent trepidations in the global economy), it is incontrovertible to see that currently, most countries that were at the same or even lower stage of development decades ago such as Malaysia have transformed their real sectors beyond mean proportions.

The issues of real sector development in Nigeria remain intricate and reflect a mix of both domestic and international characteristics. The real sector comprises agriculture, industry, building and construction, wholesale and retail and the services sectors, while from the international front, developments in the international oil market and the oil and gas sector are influenced by global financial activities. Thus, the policy environment must be adequately focused on enhancing the capacity of the private sector to drive real sector activities and hence, achieve desirable levels of growth. There is no gainsaying the fact that the complex interactions of agents and economic activities pose the challenge of clearly understanding the adjustment mechanisms required to attain optimal levels of output. Although not exhaustive, econometric models are helpful tools that could be used in the determination of quantitative signposts to assist policymakers in formulating and implementing sound policies.

Formulation and implementation of sound economic policies had made differences between developed, emerging and developing economies, and econometric models have played a part in these differences. In Nigeria, several models have been developed to assist policy formulation and implementation. The economic model could be dated back to the work of Cater in 1960, who constructed an input-output table to aid the formulation and implementation of the first National Development Plan. Several other models have been developed to assist in policy formulation, implementation and analysis including the World Bank, 2010).

In 2008, the Central Bank of Nigeria developed a macro-econometric model of Nigeria to assist the Bank in policy analysis. The model, which was an aggregated model might not be able to capture all the sectoral interplay in the real sector due to the complexity of the workings of the economy. This study, therefore, set out to develop a disaggregated model of the real sector of the Nigerian economy. The model is not to compete with the aggregated macroeconomic model but to complement it and serve as input to the maintenance of the macro model.

3.0 Empirical Review

Real sector activity is commonly disaggregated in several models into various value-added sectors. The level of disaggregation in these models usually depends upon the estimation approach and availability of data which may have placed some limitations on the depth of such studies in developing economies. While a Cobb-Douglas production function is commonly used and found to be appropriate in most estimations, Klein (1983) proposed the use of the input-output (IO) approach to modelling the real sector highlighting the relationship between value-added and components of final demand. The approach specified value added as a function of various components of final demand, emphasizing the responsiveness of output to changes in aggregate demand conditions. As applied in Musila and Rao (2002) and Elliot et al. (1986) the approach was used to varying sectoral outputs for the Kenyan and Sri Lankan economies.

Similarly, El-Sheikh (1992) and Marzouk (1975) used a less disaggregated model classified into agriculture and urban value-added and further cascaded into manufacturing, construction, and other sectors. Both specifications and classifications had gained reasonable support empirically. A slightly different approach was used by Ghartey and Rao (1990) by estimating three equations for the production sector. These were aggregate output, agricultural output, and manufacturing output. From the model, GDP responded well to changes in total employment as well as aggregate capital stock while exhibiting increasing returns to scale for the equations. On the other hand, industrial output increased with GDP while agricultural output increased with industrial output.

Another approach that captured market imperfections in modelling the labour market was implemented by DU Toit and Koekmoer (2003) for the economy of South Africa. Demands for unskilled and skilled labour were specified in the paper. They revealed that the labour market was significantly influenced by factors which included government interventionist policy, union powers, the structure of the labour force, inappropriate production technologies and low productivity. Drachman and Zilberfrab (1987) built a small annual econometric model of the real sector in Israel to forecast key real macro variables and policy analysis by the relevant Economic Planning Authority. It employed data spanning 1965 – 1983 and the Ordinary Least Square (OLS) technique in estimating the equations. The model comprised five equations namely, private consumption, private investment, exports, imports and output. The study discovered that structural changes had occurred in the last decade, making extrapolations of previous estimates less reliable. In addition, the analysis of the response of the model to fiscal policy revealed low multipliers owing to the crowding out of exports by government expenditure.

In his study, Matlanyane (2005) developed a small model for the national account sector in South Africa. The sector was divided into five sub-sectors, namely: the agricultural sector, the construction sector, the manufacturing sector, the electricity and water sector and the net indirect taxes as a function of some components of real aggregate demand. Using this technique, he estimated four equations comprising consumption, investment, exports and imports. Consumption, investment as well as agricultural and manufacturing output were made to determine the import of goods and services in the model.

Musila (2007) estimated a small-open economy macroeconomic model for Malawi. Given that the economy had followed an export-oriented agriculturally based development strategy since independence, the model was structured to consist of production, expenditure, government, monetary, employment sectors and prices. The model employed data spanning 1967 - 1996 and

had 37 endogenous variables of which 23 were explained by stochastic equations and identities and bridge equations, which closed the model. There were 15 exogenous variables, 4 of which were dummy variables (intended to capture structural shifts in the economy that might have resulted from the oil crisis of 1972 – 1974 and the economic reforms that were launched in 1981). The short-run version of the model was estimated using the cointegration estimation technique. The estimated parameters of the long version of the model were used to perform dynamic simulation experiments, which indicated that a sustained devaluation of the Malawi kwacha improved the real trade balance but led to higher inflation and reduced real GDP growth.

3.1 Real Sector Developments in Nigeria

Structurally, Nigeria's economy can be classified into three major sectors — primary, secondary, and tertiary. The primary sector consists of agriculture and natural resources; the secondary sector is mainly industry, which is made up of processing and manufacturing, as well as building and construction, while services and wholesale & retail trade make up the tertiary sector. The real sector is also classified into oil and non-oil sectors. While the oil sector is made up of crude petroleum and gas production, the non-oil sector is made up of agriculture, industry, wholesale and retail and services.

The oil sector has been the dominant sector in terms of foreign exchange earnings. However, its contribution to GDP has been on the decline since the turn of the millennium. The oil sector contributed about 30.8 percent of GDP in 1999, which rose to 32.5 percent in 2000 declined to 31.5 percent in 2001 and fell consistently to 14.8 percent in 2011. For the period 1999 to 2011, the oil sector contributed an average of 23.3 percent. While the contribution to the GDP has been on the decline, its growth performance has been mixed. The oil sector growth rate declined by 7.5 percent in 1999, but grew by 11.1 percent in 2000, reaching its peak in 2003 with 23.9 percent growth. On average, the oil sector grew by 1.6 percent in the period 1999 to 2011. The percentage share of non-oil GDP during the period 1999-2011averaged 76.7, increasing from 69.2 percent in 1999 to 85.2 percent in 2011. Its growth performance also followed the same trend. It grew by 4.4 percent in 1999 and peaked at 9.4 percent in 2006 and by 2011 it grew by 8.9 percent, averaging 7.2 percent during the period.

An analysis of the sectoral contributions to GDP (as shown in Figure 3) revealed that the share of agriculture in GDP averaged 40.3 percent during the period 1999-2011. It was 36.7 percent in 1999; peaked at 43.9 percent in 200 and stabilized at 40.2 percent in 2011. The agricultural sector is expected to play its traditional roles of meeting the food needs of the teeming population, providing the required raw material needs of the industrial sector and providing the envisaged surplus for exports and thereby generating foreign exchange to improve the balance of payments position. The subsistence nature of farming characterized by low adoption of technology, inadequate use of fertilizers and improved seeds accounted for the low productivity of the sector. Also, lack of access to adequate funds to invest in the sector had been identified as a major hindrance to improved productivity. The industrial sector consists of manufacturing and mining (including crude petroleum, gas and solid minerals).

The manufacturing sector in Nigeria consists of large, medium, small, and micro-scale enterprises. On attainment of independence, the government embarked on transforming the country from its predominantly agrarian nature, into an industrialized economy through various policies and programmes as encapsulated in the development plans. The share of the industrial

sector averaged 27.9 percent during the period of analysis, with its sectoral contribution declining from 35.4 percent in 1999 to 19.3 percent in 2011. The decline in the sectoral contribution of the industrial sector to GDP is attributed to various factors including policy inconsistencies and reversals, as well as infrastructural bottlenecks.

The share of the manufacturing sector averaged 4.0 percent during the period of analysis. The declining share of the industrial sector, especially the manufacturing sector is worrisome as this has exacerbated the unemployment situation in the country. The mining sub-sector is made up of crude petroleum, gas and solid minerals. Solid minerals such as coal and tin used to be the main mining activity and export items for Nigeria before the discovery of crude oil. However, this changed following the discovery of petroleum, which has dominated activity in the mining sector and constituted the major source of government revenue and export earnings. The crude petroleum & natural gas sector accounted for 23.3 percent of the share of total GDP during the period under review, which showed a similar declining pattern with the industrial sector falling from 30.8 percent in 1999 to 14.8 percent in 2011. The share of building and construction in the GDP fluctuated around 1.8 percent during the period of analysis. As a percentage of GDP, the share of wholesale & retail trade averaged 14.8 percent during the period 1999-2011. The share of the sector increased during the period of analysis from 13.6 percent in 1999 to 19.4 percent in 2011. Similarly, the share of services in GDP averaged 15.5 percent during the review period, increasing from 12.3 percent in 1999 to 19.1 percent in 2011.

3.2 The Growth Drivers

Generally, the real sector had witnessed some fluctuations in fortune looking at the economic history of Nigeria over the years. Since its return to democratic governance, the economy maintained an impressive average growth of 7.9 percent following the government's resolve and commitment to grow the economy reflecting the improved macroeconomic reforms and policies embarked upon, especially the National Economic Empowerment and Developments Strategy (NEEDS). During the period of analysis, the economy grew at 0.4 percent in 1999; peaked at 10.5 percent in 2004 before moderating to 7.5 percent in 2011. The robust growth rate of GDP during the period 1999-2011 was attributed largely to the development in the non-oil sector.

The non-oil (GDP) growth averaged 8.9 percent in the period 2006 – 2010, which grew from 4.4 percent in 1999 to 8.9 percent in 2011. The performance of the non-oil sector was driven by the agricultural sub-sector, given its contribution to the GDP, which was over 40 percent, followed by the services and wholesale & retail trade sectors. Sectoral analyses showed that growth in the agricultural sector stabilized at around 6.0 percent during the period of analysis. Agriculture accounted on average for about half (3.7 percentage points) of the growth in non-oil sector GDP (7.9 percentage points) in the period 1999 – 2011. In agriculture, evidence suggested that yields were falling and that productivity had declined for both cash and food crops over the past decades. For the cash crops, production levels had also tumbled.

However, production levels for food crops had risen, and the development had been attributed largely to steady and considerable expansion in the area under cultivation as productivity, measured by yields per hectare had declined. Other significant sub-sectoral growth drivers during this period included the services, wholesale & retail trade, and building and construction sectors, with recorded growth rates of 4.3 percent to 13.3 percent, 2.5 percent to 11.3 percent, and 3.8 percent to 12.3 percent in 1999 and 2011, respectively. In the services subsector,

communications recorded the highest growth rate of about 73.0 percent on average over the period. The growth rate in this sector was buoyed by the sustained liberalization and expansion of telecommunications services.

4.0 Conclusion

The real sector of Nigeria's economy is the engine of the country's economic transformation over the years. The juxtaposition of several factors including infrastructural gaps, inefficiencies in the public sector project management and service delivery, the resource curse of oil exploration, and a dysfunctional macroeconomic policy environment, among others had truncated the real sector revolution. Nevertheless, the government has continued to play a catalytic role through the enunciation of policies and provisioning of financing havens to elevate the sector to levels that could make Nigeria an economic hub and a driver of Africa's economic renaissance.

Although recent numbers suggest resilient growth (especially at the heels of recent trepidations in the global economy), it is incontrovertible to see that currently, most countries that were at the same or even lower stage of development decades ago such as Malaysia have transformed their real sectors beyond mean proportions. The complex interactions of agents and economic activities could obscure the understanding of the adjustment mechanisms required to attain optimal levels of output. This study, therefore, developed a disaggregated model of the real sector of the Nigerian economy to complement the macroeconomic model earlier built by the CBN. The performances of the real sector over the years mirrored the happenings in the economy. For years, the oil sector had been the dominant sector in terms of foreign exchange earnings.

However, its contribution to GDP had been on the decline since the turn of the millennium. The robust growth rate of GDP during the period 1999-2011 was attributed largely to the development in the non-oil sector. The non-oil (GDP) growth averaged 8.9 percent in the period 2006 - 2010, which grew from 4.4 percent in 1999 to 8.9 percent in 2011. The performance of the non-oil sector was driven by the agricultural sub-sector, given its contribution to the GDP, which was over 40 percent, followed by the services and wholesale and retail trade sectors. Given the background above, the research, therefore, suggested an articulated development plan, improved governance, and service delivery. Governments should create an enabling environment through their planning for the private-driven economy to thrive through realistic power and energy programmes and reforms, and functional institutions. This will encourage local industries and foreign direct investments into the real sector of the economy thereby increasing the levels of economic development in the economy.

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