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CHARACTERIZATION OF DETERMINANTS OF ECONOMIC GROWTH IN NIGERIA

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Abstract
Central to public discourse and aspirations across economies is the economic progress of such societies often referred to as economic growth. However, the determinants of growth across economies (developed or developing), remain vague or unsustainable. Several growth theories sufficiently emphasize different determinants or factors and this trends and have shaped economic policies and literature in different countries but there are (is) yet no consensus on the key determinants of growth especially in Nigeria. This study is attempts to add to the narrative with focus on Nigeria by explanatory method thereby characterizing retinue of factors as elicited in literature are related to Nigeria. The study try to offer a subjective and stylized characterization of the determinants to Social and Political, Economic and Financial , and New Emerging Factors. It was found that found that agriculture and oil and gas which fall within the Natural resources factors class, appear to be the main determinants of growth in the Nigerian economy. It is recommended that formulating new and improved theories and models around these determinants and other emerging factors of information technology in order to promote economic growth.

Key Words: *Determinants, Economy, Government, Growth, Nigeria.*

Introduction
Historical public discourse and aspirations of man and the societies in developing economies such as Nigeria, appear to revolve about the attainment of the goals of socioeconomic development (Upreti, 2015; Ojo & Fadaka 2022). Central to the discourse and aspirations is the economic progress of such societies often referred to as economic growth. However, growth aspiration is premised on determinants or factors across economies (developed or developing), expectedly not seasonal, occasional or cyclical but consistent and sustainable and such determinants remain vague or unsustainable. Though economic growth has been severally interpreted by scholars and researchers (Adelakun, 2011: Fasoranti, 2016; Edeme, 2018) but central to the views is greater output (or income) as a derivative of amount of inputs factors and efficiency of the factors use in an economy over a long time period. This simply means a sustained increase in capital income (i.e. monetary value) made possible by production of goods and services in a nation's economy within a time period usually expressed in Gross Domestic Product

(GDP). Fasakin & Jegede (2018) submitted that nominal GDP deflated by inflation rate is the real GDP and when denominated by the population becomes GDP per Capita.

Economic growth is a very dynamic process and its determinants are traditional sources of economics debate globally (Salari, Javid, & Noghanibehambari, 2021) and particularly in Nigeria (Urhie et al.,2020). Several growth determining factors are historical, empirical and theoretical. Theoretically, earlier thoughts on input- output assumption related to economic growth by classical economic theorists view led by Smith, (1776) that centered on rate of population growth and efficient use of factor inputs, while Harrod-Domar (HD) model of 1948 accentuated this through their that the economy grows as it generates savings for investment at a constant proportion of national income. Neoclassical equilibrium theories postulations such as in Solow-Swan model in 1956 also agreed with the classical thoughts but added advancement or rate of progress in technology that is independent efficiency factor inputs as growth determining factors. Yet, the deficiencies in the neoclassical growth model led to the New growth theories (Endogenous Growth Model) such as Romer in 1990 that augmented the formers with need for research and development (R&D) i.e. accumulation of knowledge capital and externalities e.g. the environment, along the process as some key determinants of growth. According to the model, long-run growth rate is a function of factors like stable business environment through public policies (taxation, law and order), infrastructures services, international trade, financial markets, and other aspects of the economy.

Empirical studies have linked or associated many factors as growth determinants in Nigeria. For example, Adefeso and Mobolaji, (2010) examined Fiscal-Monetary Policy and Economic Growth; Adelakun, (2011) associated human capital development and economic growth; (Onuorah and Akujuobi, 2012; Babatunde, Salisu and Olasunkanmi, 2012) linked economic growth with public expenditure specifically infrastructure spending and crude oil revenue; Iheanacho, (2016) looked at the contribution of government expenditure to economic growth; Akinkunmi, (2017) associated Nigeria's Economic Growth with economic reforms; Nwosa, (2019) linked Income Inequality and Economic Growth, just to mention but a few. Yet no consensus was and has been reached on the determinants of growth amongst contemporary researchers and economists.

The emphasis on economic growth in theories, models and empirical studies highlight the importance of it to economies and the society for economic planning and decisions in terms of policies, strategies, monitoring and evaluation etc. Though some researchers have argued that economic growth is not the concern of developing economies like Nigeria but economic development (Jhingan, 2011; Ajide, 2014), yet economic growth is subsumed in economic development (Ojo & Fadaka 2022). However, the historical trajectory of economic growth in Nigeria has been generally disappointing and does not always reflect the living standards of people. For example, the Nigerian economy grew at an average of 2.45% GDP between (years 1999-2017), specifically with 5.52% GDP in year 2000, 6.8% GDP in 2005 through 9.54% in 2010 but slowed to 2.79% (in 2013) and contracted by -1.5% in 2016 (NBS, 2016) but recovered with average of 1.95% since

201 fiscal years 2017 (NBS, 2017). Though was earlier promoted by Agriculture and natural resources but following the discovery and exploitation of crude oil, economic growth appears to premise on crude oil revenue and hence fluctuate with oil price shocks (Nweze & Edame, 2016).

From the divergent and convergent approaches, economic growth is more contentious in empirical than in theoretical views in Nigerian context. Specifically, the novelty of this study is that, though voluminous works have been conducted on economic growth, however the problem arise the question of the assessment and characterization of the determining factors of economic growth in developing economies and Nigeria particularly in recent years. The rest of this study is organized as follows: literature review, research gap; methodology and the last section provide conclusion and policy recommendations.

Literature Review

From avalanche of literature, there is no consensus on conceptual views about economic growth and a one –off determining factors of economic growth. Though earlier views in economic history as the theoretical perspectives had consented to Labor and Land by the classical thoughts as determinants of growth (Smith, 1776). Soon the neoclassical economists views prominent amongst was Solow (1957), argued for the inclusion of Capital (human capital) as a factor-input in production function The inability of the interaction of Capital, Labor and Land to explain long-run growth among economies ushered in the influence and emergence of the new growth theory that emphasizes technological progress to facilitate efficiency and inform economic growth. More recent endogenous growth theorists approached growth by galvanizing the previous views but with focus on sustainable increase of the factors like in areas of educational and health access (capital) and development.

Contemporary assumptions by Acemoglu, (2009) also advanced economic determinants like capital accumulation, technological progress, labour and non-economic determinants like government efficiency, institutions, political and administrative systems, cultural and social factors, geography and demography. Boldeanu & Constantinescu, (2015) affirmed six major factors grouped under supply determinants which are natural resources, capital goods, human resources and technology, and efficiency and demand Dwivedi, (2019) submitted that institutional framework, Trade, Socio-cultural factors etc., as growth factors. In Nigerian experience, several studies had consented to Oil revenue as link with growth in Nigeria because growth theories centers on natural resources as a source of energy for production process despite their depleting nature (Okonkwo & Mojekwu, 2018). Other determinants are not limited to Foreign Exchange Rate, Money Supply etc, in the views of Nweze, & Edame, (2016) and Fasakin & Jegede (2018) as economic growth determinants, Beside, Ajide, (2014) opined that economic, social, cultural, political and more recently, institutional reasons are considerable factors of growth while Babatunde (2018), Fasoranti, (2016) and Ojo & Amasoma (2021) emphasized public expenditure, infrastructures development and Environmental Quality as essentials to growth in Nigeria.

Growth has enjoyed mention in both theoretical and empirical studies and the consensus amongst avalanche of studies and literature appear to rally around human resources, physical capital, natural resources, financial resources, technology, governance and politic, and recently environment and yet counting, which are far more than the earlier thoughts on land, labor, and capital. In any case, growth is measured as the changes in nominal Gross Domestic Product (GDP) from one year to the next across all economic sectors expressed in percentage reflects economic growth rate and serves as common bases for measuring performance and strength of nation’s economy (Babatunde, 2018).

Stylized Characterization determining factors of economic growth
Following growth theory synopsis above, identified three contributory factors are capital accumulation, human capital, R&D(improved technology). However, it appears there are diverse economic growth determinants or factors and these factors are inter-related in the economy. This study attempts to stylize by characterization of the determining factors as discussed in literature thus;

A. **Social and Political factors.**

i. **Human Capital (Labour) and Healthiness:** Growth of population results in the growth of labour force, as a positive factor in the early stages of economic growth. Labour as a means of production has number and quality. While quality of labour refers to the skill and training, the qualitative of labour is human capital. Higher education, public health spending and provision of social services were found to underscore and exerts positively on economic growth due to their efficiency and dependence (Omitogun, Osoba and Tella 2016). Akinola and Josue, (2019) suggested that higher education sector needs to target skills that are more appropriate to the economies and economic growth.

ii. **Population Growth:** Nigeria's population has witnessed a major increase from her independence and population growth appears to have mixed effect on the real gross domestic product. Economic growth entails an increase in per capita income along with an increase in population. While (Wang, Li and Fang 2018) linked Nigeria’s population growth rate at about 2.8% with human activities like natural resources exploration and infrastructure development as huge influence for disruption of the ecosystem with resultant negative externalities of social and economic costs and effects that influence market failures, (Edeme, 2018 and Knoema, 2019) are of the opinion that standard of living emphasize the equal distribution of real income from productive activities among the population as a measure of economic growth and welfare contexts. For example, GNI per capita in Nigeria increased from US $562 in 2000 to US $2,049 in 2018 growing at an average annual rate of 0.93 % while population growth grew at average of 0.98% within the same period

iii. **Good Governance,Institutions and Policies**: Good governance is the concept used in the recent past by World Bank to reflect economic growth because of the poor performance of the countries experienced in structural adjustment programs (SAPs). For example, though real per capita GDP growth of developing countries was found higher than the world average, they are however having low levels of socio-economic conditions practically partly due to weak institutions, low human and physical capital, conflicts, poverty, a low level of productivity, lack of international trade, and heavy reliance on external help.

B. Economic and Financial Factors

i. Fixed Capital Formation and development: Capital as a growth factor refers to only productive assets which produce goods and services directly classified under three categories: (i) physical capital (includes tools and equipment, machinery, building and plant, etc.) (ii) social overhead capital(dams, bridges and canals, electricity generation plants, telecommunication equipment, roads) and (iii) human capital (as above discussed). In a narrow sense, rate of saving and investment is no doubt a very strong indicator of capital accumulation.

ii. Financial Policies and System: Some studies have argued that financial system (bank, non-bank and capital and money markets) of any economy is an engine to economic growth as it is significantly related to GDP, gross domestic savings and gross fixed capital formation. Lenee & Oki, (2017) contend that the capital market development is synonymous with economic growth because it drives the realization of the predictive outcomes of the economy. Agu, Okwo, Ugwunta & Idike,(2015) also attributed the contribution of both monetary and fiscal policy to economic growth as effective, stability and predictability in Nigeria.

iii. **Foreign Capital Inflow:** These include Foreign Private Investment, Remittances, Foreign Aid/ Grants, Foreign Direct Investment, Foreign Portfolio Investment, Foreign debt etc. For example, Nigeria public sector debt history predated 1960; $23million (1.0%GDP in 1960), N1.89B (16.2% GDP in 1980), reaching N3.10Trillion (83.6%GDP in 2000), stood at $6.54Trillion (17.8% GDP in 2012) (BudgIT, 2018) and N27.4Trillion (24.5% GDP in 2019) presently at N33.4Trillion (26.5% GDP in 2020). FDI is seen as an amalgamation of capital, technology, marketing and management and are significant in not only raising the efficiency of a given amount of labour, but also allowing a large labour force to be employed. FDI exerts both positively and negatively on economic growth. For example (Akiri, Vehe & Ijuo, 2016) submitted that FDI stimulates development in investment in technology, increases the capital stock, and increases employment but also has a crowding out effect on domestic investment and eliminates competition in the local markets.

iv. International Trade: International trade enhances the economy of both importing and exporting countries. There is a positive relationship between international trade and economic growth. Comparative advantage is the ability of a country to produce goods at a lower opportunity cost

C. New Emerging Factors

i. **Technological advancements.** One important nugget of the neoclassical theories of growth is the assumption a multifactor production function, including labour, capital and technology particularly the impact of technology into production and growth. This means that the convergence of labour and capital(due to their diminishing return vulnerability) are better reinforced by the propelling force of adaptation and continuous improvement in technology in an inexplicable (exogenous) manner in

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production to have constant per capita growth rate in the long run (Jhingan, 2011). Technical progress succinctly accommodates infrastructures development, equipment and machines and the impact of information and communication technologies (ICT) that facilitate efficiency of other factor inputs for improved output and hence growth (Niebel, 2014; Babatunde, 2018). In Nigeria, like in most developing countries, though technological progress has not significantly impact on growth, but help in some sectors like financial, communication and energy. Nweze, & Edame, (2016) submitted that technology has helped increased, enhanced the discovery, exploration, production and supply of crude oil which ultimately enhanced foreign public revenue earning, GDP and economic growth. Moreover, results from studies have shown significant returns to infrastructure investment arising from its growth-inducing effects in Nigeria.

ii. **Climate Change and Environment Issues:** Environmental Kuznets Curve (EKC) widely explains the nexus of economic growth and environmental risk emphasizing negative perspective (Cumming & Cramon-Taubadelb, 2018). This is because environment substantially supports human life and living activities that promote growth but is vulnerable to intensive and extensive risks e.g., pollution (air, water, soil and radioactive) according to Ohiare, (2015) and the nexus creates positive and negative externalities for economic growth in developed and developing economies (Maliszewska and Mensbrugghe 2019) not limited to improved income per capita and output, yet decreasing agricultural output, increasing air pollution, health challenges etc. However, alternative routes to reduce environmental risks and its economic consequences such as renewable energy sources, green or ecofriendly methods and materials, etc, are recently in vogue according to (Olanipekun, 2016). However, according to Urhie et al., (2020), the realization of high levels of economic growth engenders implications for pollution of the environment and hinders the attainment of other development objectives in the economy.

D. Natural Resources Factors.

i. Oil and Gas: Natural resources as a growth factor relates to land, air and water and everything inside and contained in them as basic needs of human living and sources of industrial raw materials. For example, Nigeria is rich in natural resources like hydrocarbon energy sources, water bodies, wind and solar particularly crude oil and gas with reserves estimated at 37billion barrels, accounting for about 80% of energy production, about 85% of foreign earnings, 10% GDP and about 90% gross export of the Nigerian economy (Federal Government of Nigeria (FGN), 2017). Also, the mining industry is a substantial sector driving the growth of Nigerian economy, contributing approximately 4-5% to the GDP in the 1960s-70s, but have declined in the 80s resulting in its current merely 0.17% between 2018-2022 according to PwC Global Mines Report (2023). With discovery of crude oil and gas, the Nigerian economy apparently has been pivoted on their export and sales revenue. According to a report by BudgIT, (2017), an economic research organization in Nigeria, that copiously cited Central Bank of Nigeria (CBN), World Bank, Nigeria Bureau of Statistics (NBS), and Nigeria National Petroleum Corporation(NNPC) reveal that within the First and Second Republics (1960-1983) /Fixed- Term Plan (1962-85), spanning about 25years of post-independence of Nigeria, crude oil sales earned was about $37Billion, deplored to expand and grew the GDP, recording average/ peak of 9.04% in (1975/76), contributed 26% of Federal Government revenue and strengthened Naira exchange (66 kobo to 1$) etc., rising up to 79% or US$1.5 trillion total trade side inflows according to Central Bank of Nigeria, (2019) as significant revenue to annual budget expenditure increased (National Budget Office, 2019), and in effect, it influenced the growth from 5.52% GDP in year 2000, through 9.54% in 2010 but slowed 2.79% (in 2013) but contracted by -1.5% in 2016 (NBS,2016), rose again to 1,5% (2017-2019).

ii. **Agriculture:** Historically, agricultural sector, as a primary productive economic sector dominated and contributed significantly to Gross Domestic Product (GDP) in the 1960s, accounted for about 90% of export earnings and revenue, and supported other sectors' development, particularly energy sector (Mgbame, Donwa & Osunbor, 2015). Yilson et al.,(2021) argued that the agricultural sector engages 50% of rural areas work force providing a livelihood for many Nigerians, comprises forestry, livestock, fishing, food, and cash crops production in Nigeria, with 1.2 million hectares (72.4%) of arable land cultivated. Sequel to the oil and gas sector is the contribution of agricultural sector the growth contributing about 60% to GDP in the 1960s, declined to 48% in the 1970s, 23% to GDP in the 1980s, rose to average 36.6% in the 1990s due certain aggressive state policies but decline again to average of 23% from 2000s till 2022 (Nwogwugwu, Nwokoye & Osai, 2023 ; O'Neill, 2024).

4. Conclusion

Having discussed above the factors that contribute to economic growth of a countries, the factors that matter most in economic growth amongst the list are contentious since all the factors have relative importance role to play from time to time.

The real sector of agriculture and oil and gas which fall within the Natural resources class, appears to be the main driving force of the progress of Nigerian economy, since they account for a substantial proportion of a nation's Gross Domestic Product (GDP). This has created a great spatial and sectoral unevenness in terms of the share of GDP and growth performance but calling for the need to address manufacturing sector given its linkage effect and value addition. It is recommended that governments in Nigeria should emphasize more on factors that engender growth in the Nigeria economy.

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