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*Original Article*

# Classic Theories of Development, A Review of Literature

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**Abstract -** The perpetual underdevelopment experience in developing nations calls for constant research to reverse the trend. The paper extensively analyses the classic theory of development with major emphasis on the Linear stages of growth, Structural change, International-dependence revolution, and Neoclassical counterrevolution theories. The research uses time series data from 1987 to 2023 for the Nigerian economy. A test of the classic theory of development was conducted using Autoregressive Distributed Lag (ARDL) models in its methodology. Although the variables are co-integrated, the short-run dynamic result shows that Agricultural Output (AGRI), Industrial Output (IND), and Services (SERV) need to change at a very high rate to bring a unit change in output, indicating that they are not major drivers of economic development. The findings revealed that developing countries must adopt the model that best suits their economic and socio-political atmosphere rather than dogmatically applying economic development theories that work best in developed nations. It was recommended that each state should establish four firms per year, while the local government should be merged into groups of five to establish one firm per year as an industrial revolution strategy. The federal government is to establish one firm in each geopolitical zone, making a total of six firms established by the federal government.

**Keywords** - Economic development, Models, Classic, International-dependence, Structural-change.

## 1. Introduction

Economic development naturally connotes increases in Gross National Product (GNP) with an increasing level of technology. Classic analysts proposed four major theories of development that dominate the 'post-World War Two' economic literature (Todaro, 2006). The classical theory of linear stages of growth model viewed development as a series of stages that all economies must pass through. On one hand, development is viewed as advancement in economic growth and on the other hand, economic development is viewed as a linear stage process. Two prominent writers dominated the linear stages of the growth model. W. W. Rostow and Harrod-Domar model. Rostow identified five stages that all economies must pass through in the development process. The traditional society, the pre-condition for take-off, the take-off, the drive to maturity and the age of high mass consumption. Harrod and Domar proposed that to achieve economic growth, certain proportions of the GNP must be saved and invested (Todaro & Smith, 2006). The tenets of these theories are necessary conditions but not sufficient conditions for economic development. These theories assume that developing countries possess well-trained technicians and educated human resources, an organised market structure, an effective political structure with absence or minimal level of corruption and a highly developed transportation system. Most of the above-mentioned economic and social-political structures are absent in developing countries.

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Structural-change model emphasises changes in the economic structure in terms of transformation from subsistence agriculture to a modern industrialised and service economy. Two major theories are observed under this model: Lewis 'two-sector surplus labour theory and Hollis Chenery's 'pattern of development' The international-dependence revolution theory postulates that developing countries are perpetually underdeveloped because of over-dependence and dominant relationships with developed countries. While Aladejana et al. (2021) analyse the implication of debt, Abidemi et al. (2023) analyse the impact of migrants' remittances. Three models often surface in the international dependence revolution theory: the neocolonial dependence model, the false-paradigm model and the dualistic development model. The neocolonial dependency theory attributes underdevelopment to the unequal relationship between the poor (underdeveloped) countries and the rich (developed) nations. The theory explains that the rich nations exploit the low-income nations to increase further indices that perpetuate underdevelopment. The theory indicts international organisations such as the World Bank and the International Monetary Fund (IMF) as agents that perpetuate inequality. The false-paradigm model attributes underdevelopment to inappropriate policy implementation. Complex econometric theories and elegant theoretical structures could be adequate in developed nations. However, underdeveloped countries are faced with a different economic climate that often invalidates rich nations' expert advice on macroeconomic policies. The dualistic theory explains that the presence of a dual world between the rich and low-income nations and the existence of wealth and high levels of poverty in developing nations perpetuate underdevelopment. It explains the existence and continuous increasing divergence between rich and poor countries. In this condition, some are regarded as superior while others are inferior. This divergence is not transitional; the possibility of disappearing is abysmally very low, if not impossible. The indices between the nations show that the divergence has a greater tendency to increase instead of decreasing, thereby causing developing nations to slide into perpetual underdevelopment.

The neoclassical counterrevolution ascribes underdeveloped countries being beset by ineffective allocation of scarce resources, inadequacy in pricing policies and a high level of state intervention in economic activities. Wayne (2014) tags development as an increase in the environmental and social responsibility of individual agents of society. In defining economic development, Dudley opined that three variables must be of concern. Poverty level, unemployment rate and inequality. Dudley maintained that if these three above-mentioned variables are increasing over time, without any tendency of reversal, it will be difficult to say such an economy is experiencing economic development even if GNP and other economic indices doubled. Economists have advanced from the traditional meaning of development, which emphasises extensively an increase in GNP and technology, to a new economic view of development. The current view of development insists on a sustained elevation of the entire society toward a better and more 'humane' lifestyle. This view emphasises the core values of economic development, which include sustenance, self-esteem and freedom from servitude. While (Tmmer, 1992) found that strategies based on market forces perform better in the agricultural sector, (Agarwal, 2023) questions whether the free market mechanism can drive the industrial sector. The paper argues that Japan supported more than fifty-seven companies with subsidies of over five hundred million dollars as an incentive for the companies to invest domestically. The European Union set aside one hundred and sixty billion pounds for digital innovation and climate adaptation. Italy's economic minister recently suggested that industrial production must be supported in the country for competitiveness in industrial space in response to massive subsidies by the US Inflation Reduction Act. Argarwal paper demonstrates clearly that nations of the world are on the move, and governments are supporting industrial drive with high levels of technology heavily, rather than relying on the interplay of market forces to drive the development process. Given the above, the paper is situated to achieve the following objectives.

### 1.1. Objectives

1. To analyse major classic theories of development.
2. To analyse the structural change model with a view of revisiting the impact of agriculture, industrialisation and services on the development of Nigeria's economy.

## 2. Literature Review

The empirical literature concentrates on the target variables used in the methodology: agriculture, industrial output, and services. The contribution of agriculture to GDP has been on the downward trend since independence. The share of GDP fell from 39.9 percent in 1970 to 20 percent (based on constant price) in 1988 (Anyanwu, 1993). This was attributed partly to the emergence of oil and partly to the poor performance of the sector. In 2021 it stood at 24.17 percent (Food and Agricultural Organisation of the United Nations, 2021). It recorded 23.67 percent in 2022 and 19 percent in 2023. This continuous decline is against the orthodox doctrine of development.

Ricardo had maintained that a country should specialise in the production of goods and services which she has a comparative advantage over other nations of the world. The corollary of this theory is the principle of absolute advantage by Smith. Blandford accepted the structural change proposition. Blandford opined that as labour is withdrawn from the agricultural sector, output has a tendency to fall from its optimal level, except if there is the judicious and efficient use of the remaining resources, the output may not likely increase.

Blandford cited (Pairy et al, 2007) on the recent assessment by the intergovernmental panel on climate change. The paper shows a mixed reaction to the impact of climate change on agriculture. Higher concentrations of carbon dioxide and associated rainfall combined with a moderate rise in global temperature could increase crop yields in mid-to-high-latitude regions, while this same scenario could reduce yields in low-latitude regions.

The research further submitted that a global average temperature increase over 30c may result in lower yields in all regions. The paper particularly stressed that Sub-Saharan Africa may experience hunger as a result of climate change. The paper explains further that there may likely be an increase in the frequency of extreme climate events, such as increasing risk of fire and heat stress with a combination of drought and floods and pathogens outbreaks as a result of global warming. Timmer (1992) reviewed economic literature regarding the role of agriculture in economic development. Three stages of thought were identified concerning the role of agriculture in economic development. The first is in line with the surplus labour theory.

Timmer argued that the orthodox primitive theory discriminates against agriculture in favour of the industralised and modern sectors where labour is mobilised for effective resource mobilisation. The second stage ensures a balance between the role of agriculture and industrial sectors to derive an optimum benefit, particularly in the agricultural sector. The third stage is where agriculture is directly limited to environmental protection, such as the protection of green space, including the concentration of greenhouse gases. While suggesting that the policy market should not underplay the importance of the non-market role of agriculture, Timmer's finding reveals that strategies based on market forces perform better than the ones that prohibit the role of the market forces.

To achieve sustained economic growth, industrial development is a sin qua non, in line with John (2020), who opined that changing the structure of an economy does not necessarily mean economic success. Further approve the use of indigenous technology in structural change, which is more adaptive to the customs and traditions of developing countries.

The author equally suggests that Nigeria should join the common trend of infant industry protection, with the main aim of encouraging local industries to gain economies of scale. Using generalised least squares it was observed that tariffs had a low effect in protecting infant industries in Nigeria. The paper further recommended a policy mix as a more viable policy option: the use of an indigenisation policy with other infant industries protection policies such as production subsidy, import monopoly, imposition of embargo, exchange control, import quota, import license and preferential duties to achieve the desired industrial economy.

Mitchell et al. (2022) observed nine sterilised facts about the services sector in the post-pandemic period: recovery in demand for services has lagged behind the recent business cycle; transportation, health, hospitality and leisure witness the largest fall in demand; employment issues eclipsing other business problem was reported in small business in most industries; there is a high job separation in leisure and hospitality; people employed in leisure and hospitability a year before and after the pandemic recorded little or no change; it was observed that food services and accommodation recorded the largest wage gain; the importance of interpersonal interactions grows in most occupations; inflation becomes evidence macroeconomic issues with difference trajectory by sector and location and housing services new leases are driving inflation.

Rahman et al. (2020) emphasised the importance of human capital development in the service sector. The paper points out that greater capabilities and opportunities will improve the productivity of labour. The paper used panel data consisting of twenty-five developing and twenty-five developed countries from the years 2000-2014. Random fixed effect, OLS and HDI index were used in the analysis. The research found that a positive relationship exists between HDI and economic growth in both developing and developed economies; health and education- as measured by life expectance- and primary gross enrollment ratio, respectively, have a negative impact on economic growth.

## 3. Methodology

The research uses time series data from 1987 to 2023 for the Nigerian economy. The data were collected from the Central Bank of Nigeria (CBN) website. A test of the classic theory of development (structural change model) was conducted. The effect is to test the impact of agricultural output, industrial output and services on economic development**.** The model is specified as follows:

$$DLn\ (GDP) = \alpha_0 + \alpha_1 D(InIND) + \alpha_2 D(AGR) + \alpha_3 D(SER) + \alpha_4 IND + \alpha_5 AGR + \alpha_6 SER + e_t.$$

Where GDP is the gross domestic product, AGR is agriculture, SER services, and $e_t$ is the error term.

### *3.1. Presentation and Analyses of Results*

**Table 1. Unit root tests- 1987 to 2023 series**

| Variables | ADF Test Stat. Level | Conclusion | ADF Test Stat. 1st Diff. | Conclusion |
|---|---|---|---|---|
| GDP | 1.510062 (-2.954021) | Non-Stationary | 2.761382 (-2.95402) | Non-Stationary |
| AGRI | 0.367182 (-2.93315) | Non-Stationary | -7.552892 (-2.93500) | Stationary |
| IND | -1.740314 (-2.935001) | Non-Stationary | -5.577598 (-2.93500) | Stationary |
| SERV | 0.371088 (-2.935001) | Non-Stationary | -3.242656 (-2.93500) | Stationary |

### *3.2. Result Extracted from E-Views Output*

More often than not, time series data sets are not stationary. It implies that the classical assumptions for econometric estimation and forecasting are negated. In such cases, econometric results may not be ideal for policy formulation and implementation. Hence the need to constantly test the data series for stationarity. GDP is non-stationary both at levels and at first difference. AGRI, IND and SERV are non-stationary at levels but are stationary at first difference. The results in Table 2 show that the variables are co-integrating. The F-statistic value is greater than the critical value, implying that a long-run stable relationship exists among the variables used in this study. This means that any short-run deviation in their relationships would return to equilibrium in the long-run.

**Table 2. Bounds test of co-integration results**

| | |
|---|---|
| F-Statistic | 4.618761 |
| Upper Bounds | 4.35 |
| Lower Bounds | 3.23 |

**Table 3. ARDL co-integrating and long-run form**

| Variables | Coefficients | T-ratio | Prob. |
|---|---|---|---|
| CointEq(-1) | -0.368017 | -0.802177 | 0.4314 |

ARDL co-integration technique is preferable when dealing with variables that are integrated of a different order, I(0), I(1), or a combination of both (Emaka & Aham, 2016). This speed of adjustment, in the long run, is shown in Table 3 (CointEq(-1) -0.368017). This coefficient suggests that deviation from the long-run path is corrected by around 37 percent over the following year.

**Table 4. Short-run dynamic model**

| Variables | Coefficients | Std. Error | t-Statistic | Prob. |
|---|---|---|---|---|
| GDP(-1) | 0.406496 | 0.494464 | 2.001752 | 0.0584 |
| GDP(-2) | 0.034205 | 0.540832 | -2.181704 | 0.0406 |
| AGRI | -4935.023 | 7991.361 | 0.585308 | 0.5646 |
| AGRI(-1) | 1670.538 | 8992.321 | 0.028395 | 0.9776 |
| AGRI(-2) | 3231.202 | 9584.194 | 0.028395 | 0.6320 |
| IND | 3753.190 | 3039.086 | 1.234973 | 0.2305 |
| IND(-1) | 3712.237 | 3554.418 | 1.044401 | 0.3082 |
| SERVICES(-1) | -53988.06 | 21393.01 | -2.523630 | 0.0197 |

*3.2.1. E-Views Output*

Although the variables are co-integrated, the short-run dynamic result shows that AGRI, IND and SERV need to change at a very high rate to bring a unit change in output, indicating that they are not major drivers of economic development—similarly probable value in the dynamic model shows that this variable is insignificant at 5% levels.

## 4. Recommendation and Conclusion

This evidence shows that services, agriculture and industrial output are not major drivers of economic development in Nigeria. This is in line with (Isaiaka, 2023; Ehtisham, & Raju, 2003; and Emediegwu & Okeke, 2017). These authors proposed that oil revenue seems to be the major driver of the economy. The paper makes a proposition to change the trajectory where industrial output, development of agriculture (in line with the principle of comparative advantage of Adam Smith and absolute advantage of David Ricardo) and services can serve as a major driver of Nigeria's development process. It is recommended that each state are to establish four firms per year, while the local government is to be merged in groups of five to establish one firm per year as an industrial

revolution strategy. The federal government is to establish one firm in each geopolitical zone, making a total of six firms established by the federal government.

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