

Real Sectors` Performance as a Precursor to Economic Restructuring in Nigeria

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ABSTRACT

This study focused on real sectors performance as a precursor to economic restructuring in Nigeria. There seemed to be an unbalanced transition of the Nigerian economy from agriculture to industrial and to services sector which failed to achieve a transformed economy. The individual real sectors` growth have been disproportionate. Sector-specific policies need to be implemented due to recent service sector led growth in the economy. To proceed, we analyzed individual real sector performance using real sectors time series data from 1981 to 2018 sourced from CBN statistical bulletin and WDI. The study utilized the following variables: growth rate of real GDP (GDPR), growth rate of services sector output (SEVR), growth rate of manufacturing sector output (MANR), growth rate of industrial sector output (INDR), growth rate of Agricultural sector output (AGCR), growth rate of trade openness (OPEN) and Real interest rate (INTR). The Autoregressive Distributed Lag bounds testing approach to cointegration was utilized for this study. Using the bounds test, the result from the ARDL model indicate that the variables for this study are cointegrated while the error correction term appeared significant and confirms that short-run disequilibria are corrected up to 100 percent annually. This shows that the real sectors are the backbone of the economy. The empirical results reveals that the real sector growth exert positive and significant impact on economic growth both in the short-run and the long-run. Unlike previous findings that structural change must follow a certain pattern, our result implies that economic transformation in Nigeria requires a holistic policy framework to address each specific sector. We therefore, recommend that government should implement policies that will promote inter-sectoral linkages to achieve simultaneous growth in the real sectors. Nigerian trade performance should be improved through economic diversification and further availability of funds to private sector at competitive interest rate in order to produce internationally competitive products.

Keywords: restructuring, real sector, Bounds test.

JEL Code: L16, O14

INTRODUCTION

Economic restructuring and diversification have remained a contentious issue in Nigeria. Every government have attempted one version of diversification or another with no identifiable success while the political economy of Nigeria have inadvertently encouraged the maintenance of an unsustainable economic structure. In recent times, there have been renewed call for restructuring because of its implication to economic development of Nigeria. In order to achieve a sustainable economic growth and competitiveness, the Nigerian economic must be restructured. Economic restructuring entails the transformation from a primitive agricultural economy into an industrialized economy where the industrial sector contribute a high proportion to overall economic growth. Historical evidence shows that most industrialized economies had adopted policies that supported economic transformation through structural change from low to high productive economic activities. Particularly, the manufacturing sectors remain the engine of growth in the development process (Storm, 2015). The structural change hypothesis posits that there is higher productivity in the

industrial sector than in the agricultural sector due to transfer of resources from agriculture to manufacturing and from manufacturing to services. The manufacturing sector in turn provides opportunities for capital accumulation and technological advancement in developing countries. This provides the reason why the growth of manufacturing sector has been so important in the process of growth and development. In fact, recent growth in China's aggregate productivity and export has been linked to her manufacturing sector activities. Szirmai (2013) argues that virtually all cases of high, rapid, and sustained economic growth in modern economies have been associated with industrialization.

Structural transformation has remained a single global issue in which individual countries have followed different paths depending on their initial conditions and moment of their entry into the race (Pollard, 1990). Developing countries, Nigeria inclusive, have been very slow in achieving structural transformation from predominantly agrarian and extractive nature of production to a strong and virile industrial base when compared to developing Asian and South American countries. Despite several policies targeted at expanding the industrial capacity of African economies, they have remained structurally unbalanced and uncompetitive. Due largely to growing population and poor technology absorption capacity, there has been huge number of people entering the labour force without requisite human capital qualities and so their mode of production had remained labour-intensive. Manufacturing capacity have grossly remained under-utilized over time with the production of uncompetitive products in the international market. There is dearth of critical investments required to drive the industrial development process with poor entrepreneurial initiatives.

In the wake of the fourth industrial revolution being powered by artificial intelligent, many jobs will become automated. This will affect many routine jobs in the agricultural and industrial sectors. Due to lack of human capital development through education, the impact of structural transformation on labor markets in developing countries may result to massive unemployment. Expectedly, as agricultural and manufacturing jobs are getting automated, workers will continue to flood the services sector. This brings to the fore the idea that economic transformation should be widespread and not necessarily concentrated in selected sectors.

In the Nigerian economy, five real sectors are responsible for the creation and distribution of goods and services: the agricultural, industrial, construction, trade and the service sectors. The respective sector performances indicate a huge disequilibria in their contributions to the GDP. In the 1960's, agriculture was the mainstay of the Nigerian economy contributing about 64 percent to the GDP followed by the services sector (13 percent) against about 6 percent of industrial sector contribution. Before oil boom of the 1970's, 85 percent of Nigeria's total export came from the agricultural sector. However, oil orchestrated perennial decline in the fortune of the agricultural sector as it contributed an average of 21 percent to the GDP while oil now contributed 90 per cent of foreign exchange earnings and about 85 per cent of total exports. At this time, the industrial and services sectors contributed about 27 percent and 14 percent respectively. Thus, the economic structure of Nigeria became distorted by oil subsector while manufacturing subsector growth was impeded.

Furthermore, structural change process of Nigeria failed to follow the empirical three stage process of economic development, that is the shift from agriculture to industry and to services sectors expansion in that order according to Lewis model (Nafziger, 2006). Though this process has recently been challenged due to ability of services sector driven by largely Information Technology (IT) and Business Process Outsourcing services (BPO) as major employment generating sector. According to Schlogl and Sumner (2020), structural transformation engendered a substantial decline in agricultural sector shares of GDP and employment, but inter-sectoral movement toward manufacturing has been slow while the services have been a much more important contributor to growth in all the developing regions. Nigerian experience shows that declining shares of output and employment in agriculture have been absorbed by the services sector instead of the manufacturing sector as employment elasticity of services sector has the highest employment potential at 0.5, relative to agriculture's -0.1 and manufacturing's 0.3 (Nevin et al, 2018). This may imply that Nigeria's

structural change may need to be anchored on the performance of the respective real sector activities instead of a linear process.

The objective of this paper is therefore to analyze the performance of the real sectors of the economy towards the anticipated structural transformation in Nigeria. Economic restructuring without in-depth understanding of the performance of the real sector is bound to fail. In order to achieve this objective, we adopted both a descriptive and econometric approaches. A descriptive analysis of the sectoral contributions to Nigeria's GDP was carried out use graphs and charts. This provided clues to the performance of the sectoral components of the economy which will facilitate functional dimensions for policy reforms towards restructuring in Nigeria. We estimated an Autoregressive Distributed Lag model (ARDL) to ascertain if the real sectors share longrun relationship with economic growth in Nigeria. To the best of our knowledge, there is no study that adopted these approaches to analyze the performance of the real sectors and economic growth in Nigeria. The rest of the paper is organized as follows: section 2 handled literature review, section 3 presented analysis of real sectors performance, section 4 dwelt on methodology and empirical analysis while section 5 is on conclusion and recommendations.

SELECTED LITERATURE REVIEW

Conceptual and Theoretical Review

Structural change or structural transformation refers to the movement of labour and other productive resources from low-productivity to high-productivity economic activities. Structural transformation can be particularly beneficial for developing countries because their structural heterogeneity slows down development (McMillan and Rodrik, 2011). Structural heterogeneity is the combination of significant inter-sectoral productivity gaps in which high-productivity activities are few and isolated from the rest of the economy. Economic activities depends on the strength of their linkages with the entire economy. In developing economies, low-productivity activities make up the bulk of the economy and this reduces the chance of structural transformation and technological change. Thus, there is a negative relationship between differences in inter- sectoral productivity and average labour productivity. A productive structural transformation process brings about simultaneous productivity growth within sectors and shifts of labour from lower to higher-productivity sectors, thereby creating more, better-remunerated, more formal, and higher-productivity jobs. Structural transformation can generate both static and dynamic gains. The static gain is the rise in economy-wide labour productivity as workers are employed in more productive sectors. Dynamic gains, which follow over time, are due to skill upgrading and positive externalities that result from workers having access to better technologies and accumulating capabilities.

In this study, we reviewed development theories that are germane to our objective. Several development theories exist with different postulations. However, the theory of Balanced growth as postulated by Ragnar Nurkse (1953) and the theory of Unbalanced growth whose chief proponent was Albert O. Hirschman (1958) were briefly reviewed. Ragnar Nurkse (1953) propounded the balanced growth theory where there is a synchronized application of capital to a wide range of different industries. Its main strength is based on the requirement that all sectors grow at the same rate and policy attention should be concurrently given to all the major sectors –industry, agriculture, and services. There should be a systematic and equal prioritization for all sectors and regions of the economy. It focuses on balanced type of investment and capital mobilization to make growth more balanced and distributed. This strategy was considered as the only way of escaping from the vicious circle of poverty. Unlike the proponents of gradualism, the balanced growth theorists believe in the Big Push thesis that substantial effort is essential to overcome the inertia inherent in a stagnant economy. Without concerted policy to stimulate the major sectors, there will be pressure on a major sector lacking linkage with other sectors. The balanced growth model was criticized on the ground that developing countries lack the capacity for synchronized investment in all the sectors. Thus, Hirschman (1958) came up

with the unbalanced growth model. This model supports the idea of unbalanced investment to complement existing imbalances and that deliberate unbalancing of the economy in line with a predesigned strategy is the best path for economic growth. According to Hirschman, poor countries need a development strategy that spurs investment decisions since resources and abilities are limited. Therefore, a big push is sensible only in strategically selected industries within the economy. Thus, a disequilibrium (unbalance) can create equilibrium (balance) with induced investment targeted at highly potential productive sectors. Growth then spreads from one sector to another. Proponents of this theory suggest that unbalanced growth remains the best way to achieve development in developing countries.

EMPIRICAL REVIEW

Empirical literature on economic restructuring in Nigeria is sparse. In this section, we reviewed selected empirical studies related to our study. Ekpo (2014) made an analytical exploration of Nigeria's Industrial Sector Performance and Policies from 1960 to 2013. The finding of the study reveal that the policies identified as Import Substitution Industrialization Strategy (ISI), Export Promotion Strategy (EPI) and Foreign Private Investment Led Industrialization Strategy (FPPI), have not helped Nigeria to attain the required level of industrialization that can produce dynamic change in the economic structure of the country. The manufacturing sector, in particular had performed below expectation. Furthermore, industrial policies implemented in Nigeria were found to have a common feature of foreign inputs reliance which makes their successful implementation in Nigeria very expensive.

Isiksal and Chimezie (2016) studied impact of industrialization in Nigeria using quarterly data from 1997Q1 to 2012Q4. Their objective is to analyze the long run relationship between GDP, agricultural sector output, industrial sector output and services sector in Nigeria while deploying the Johansen co-integration testing approach and granger causality test. Their results reveal that agriculture, industry and services have a significant positive relationship with GDP while the causality results demonstrated a bidirectional causal relationship between the selected variables of the study. Ehigiator (2017) studied the service sector as an escalator for new economic growth in Nigeria using descriptive statistics. He showed that the services sector have been contributing significantly to Nigeria's GDP, employment, trade and capital imports in the last 15years. He contended that policy reforms should be targeted at enhancing the performance of all the sector. Services sector is a knowledge-intensive sector, therefore enhancing services will require the possession of adequate skill and knowledge base to improve the human capital. He concluded that Nigeria need to improve its provision for education to ensure sustained growth through services.

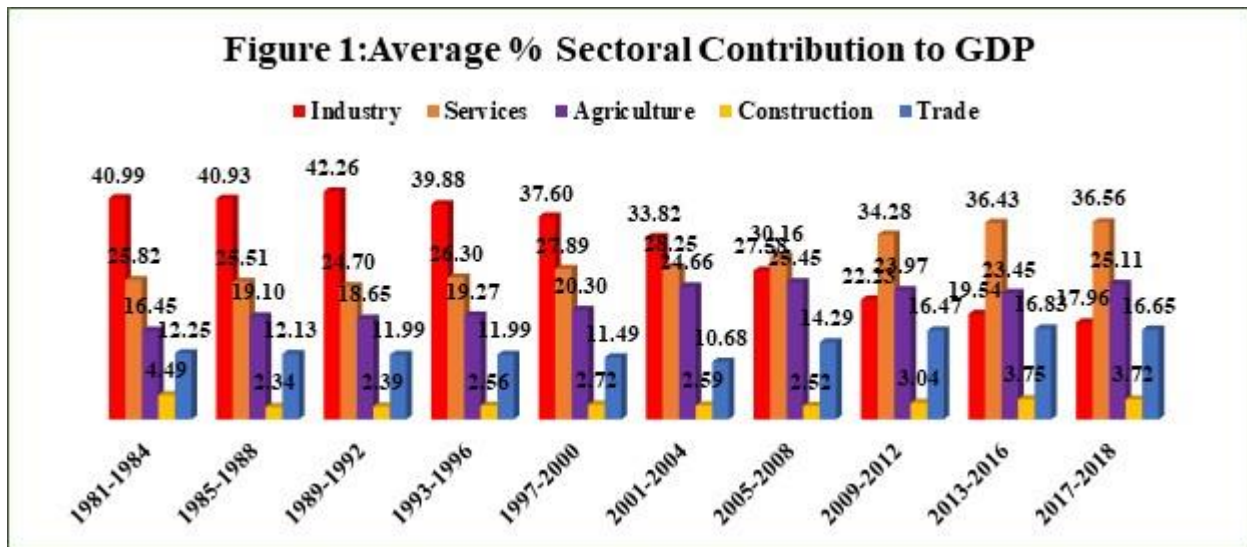
Okonkwo et al (2018) studied the diversification of the Nigerian economy through economic restructuring. They argued that overcoming pending dangers of mono-cultural practice requires diversification as a mono-cultural economy is prone to the vicissitude of market forces. To achieve this, they argued that political economy of Nigeria structured with heavily centralized economic resources makes it impossible for active economic participation of interest groups. Therefore, economic restructuring by decentralization of economic resources to constituent sectors and regions is an alternate way to go. They concluded that devolution of economic resources (economic restructuring) is a sine qua non for diversification of the Nigerian economy for sustainable growth and development.

Nevin et al (2018) investigated the issue structural transformation with jobless growth in Nigeria between 2000 and 2017 by analyzing the job creating potentials of the real sector. They argued that despite strong economic growth which averaged 6.5 percent between 2000 and 2017, unemployment remained very high at 18.8 percent while underemployment stood at 21.2 percent. A counterfactual analysis shows that Nigeria's industrialization process (like that of India where positive contribution to growth and employment is driven by the expansion of the high productivity activities within the services sector) is inconsistent with the three-stage process where the Agriculture, Industry and Services sectors dominated output in that sequence. They

found that the declining shares of output and employment in agriculture have been absorbed by the services sector as estimates of employment elasticity suggest Nigeria’s services sector has the highest employment potential at 0.5, relative to agriculture’s -0.1 and manufacturing’s 0.3.

Real sector growth performance (1981 – 2018)

Due to the protracted structural imbalance introduced to the Nigeria economy by the oil sector, the real sectors have continued to underperform in terms of contribution to the GDP. Between 1981 and 2018, average sectoral contributions to the GDP have been very unstable despite several economic policy reforms. Figure 1 shows a four year average percentage sectoral contribution of the five real sectors of Nigerian economy-Industrial, Services, Agricultural, Construction and Trade sectors.



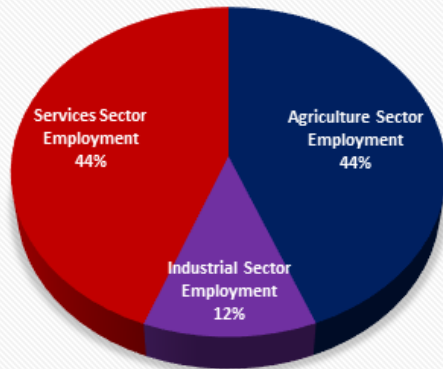
Author Compilation (CBN Stat Data)

A cursory look at Figure 1 shows that the industrial sector contributed the highest average percentage to the GDP between 1981 and 2004. It contributed about 41 percent between 1981 and 1988. This was expected as crude oil and natural gas sub-sector which constituted the major economic activity sector was the major driver of the industrial sector and contributed about 75 percent within 1981 and 2004. Conversely, the agricultural sector’s contribution constituted about 19 percent up till 2004 despite employing the highest number of people. Meanwhile, the manufacturing sub-sector which was supposed to be the driver of economic transformation contributed about 11 percent within the entire period of this study while the solid mineral sub-sector contributed less than one percent within the entire study period which shows a huge neglect to the sub-sector. However, the services sector led the growth of the GDP between 2005 and 2018 contributing about 34 percent which is antithetical to postulations of economic theory of service sector growth trailing manufacturing sector growth. This may be connected with the many activity sub-sectors like the transport, information and communication, finance and insurance, real estate and the arts/entertainment which have been on the upward spiral since the rebasing of the GDP. The agricultural sector, on the other hand, contributed higher than the industrial sector between 2009 and 2018 averaging 24 percent against the industrial sector contribution of about 20 percent. External trade sector contributed about 13.3 percent to the GDP within the entire study period while construction sector’s contribution stood at 3 percent.

A key result due to economic transformation is employment generation capacity. In terms of employment generation and percentage of total employment by the three leading sectors as shown in Figure 1 (that is industrial, agricultural and services sector), Figure 2 shows that the agricultural and services sector employed 44 percent each between 1991 -2019 while the industrial sectors had only 12 percent of the total

employment in the economy. This has serious policy implication as the quest for economic restructuring should be a job creating endeavor. Since the past nine years prior to 2016 recession, macroeconomic environment of the Nigerian economy witnessed growth without commensurate job creation which further indicate that the growth was mainly led by the service sector instead of the manufacturing sector. As earlier espoused, growth in the industrial sector was led by crude and natural gas employing less than 2 percent of the labour force showing paucity of its labour force employment.

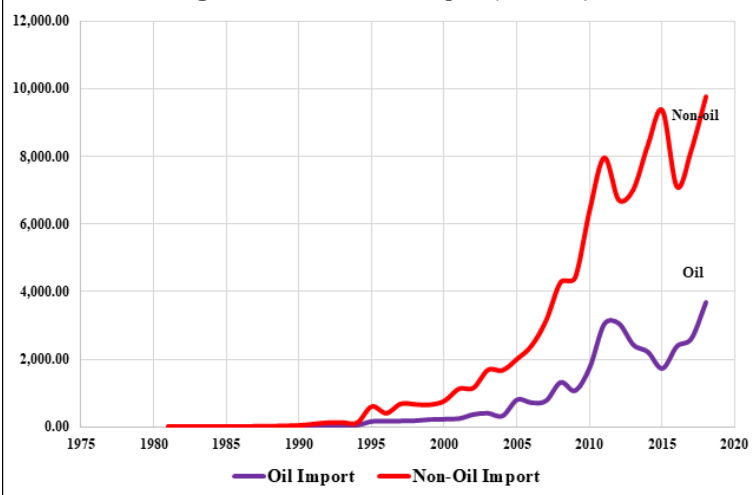
Figure 2: Sectoral Percentage of Total Employment (1991-2019)



Author Compilation (WDI)

Furthermore, structural transformation opens opportunity for a competitive international trade as economic restructuring goes together with export diversification. Figures 3 and 4 shows the composition of Nigeria’s import and export in terms of oil and non-oil sectors between 1981 and 2018. Despite the import substitution industrialization and export promotion strategy of the government, the composition of Nigeria’s trade reveal that much needs to be done towards economic restructuring. Figures 3 shows Nigeria’s import constituted majorly of non-oil products which indicate that the real sectors are underperforming in terms of creating import substituting goods and services. In other words, restructuring of the economy may remain a mirage if Nigeria cannot replace non-oil consumer imported products by locally manufactured products. This may further save foreign exchange for the economy.

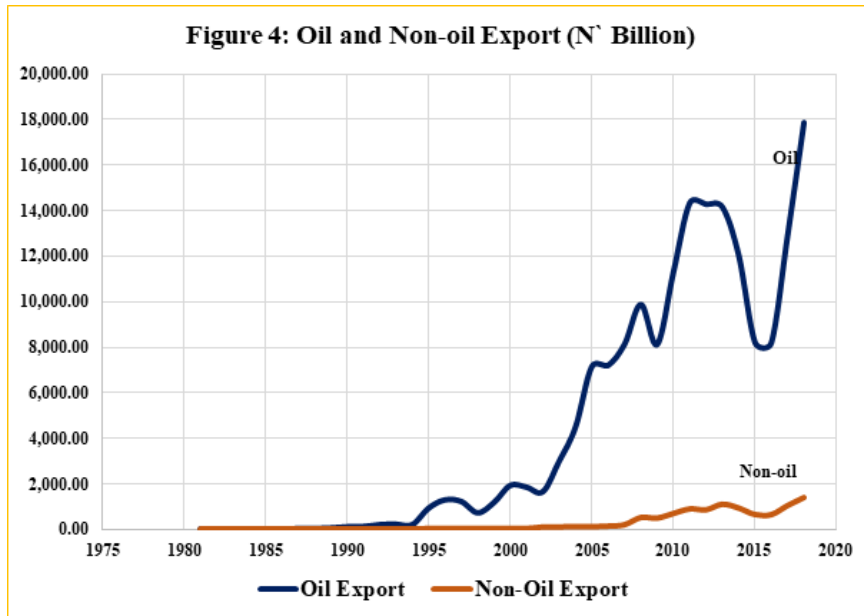
Figure 3: Oil and Non-oil Import (N` Billion)



Author Compilation (CBN Stat Data)

Contrarily, the reverse is the case with the composition of Nigeria’s export. While non-oil import continued

to increase, non-oil export continued to trail behind. Figure 4 shows that oil has continued to dictate the composition of our export and foreign exchange earnings as export in the real sector has remained low over the study period despite repeated diversification efforts of the government.



Author Compilation (CBN Stat Data)

METHODOLOGY AND EMPIRICAL ANALYSIS

The time series data used for this study was sourced from the World Bank Development Index (WDI) and CBN statistical bulletin 2018 spanning between 1981 and 2018. The variables for the study include the Real GDP, Services sector output, Manufacturing sector output, Industrial sector output, Agricultural sector output, trade openness and Real interest. We included the key real sector variables as well as a policy variable to capture the effect of macroeconomic policy on the real sectors. We equally included trade openness variable to capture the economy's international interaction via import and export. Previous studies in this area utilized data in their levels which does not indicate the rate of change or growth and does not show effect of policy on the sectors. This study utilized the growth rates of the data in order to capture the actual performance of the respective sectors within the study period except the interest rate. This precludes the natural logarithm transformation of the variables since they are in growth rate.

Following the theoretical and empirical connection of the variables, we hypothesize the functional relationship amongst the variables as follows

$$GDPR = f(SEVR, MANR, INDR, AGCR, OPEN, INTR) \tag{1}$$

Where

GDPR = Growth rate of real GDP

SEVR, = Growth rate of Services sector output

MANR = Growth rate of Manufacturing sector output

INDR = Growth rate of Industrial sector output

AGCR = Growth rate of Agricultural sector output

OPEN, = Growth rate of trade openness

INTR = Real interest

Therefore, the initial econometric model takes the following form

$$GDPR = \beta_0 + \beta_1 SEVR_t + \beta_2 MANR_t + \beta_3 INDR_t + \beta_4 AGCR_t + \beta_5 OPEN_t + \beta_6 INTR_t + v_t \quad (2)$$

In order to test for the existence of long run equilibrium relationship, we utilized the bounds test to cointegration approach based on the Autoregressive Distributed Lag (ARDL) framework as proposed by Pesaran et al (2001). The ARDL model has the following advantage: it can be implemented for I(0) and I(1) time series variables in a single-equation set-up; different variables in the model can be assigned different lag-lengths; it is possible to implement this model for short time series; it simple to implement and interpret. Following the ARDL model (p,q) of equation (2), we formulate a generic unrestricted error correction model (UECM) as follows:

$$\Delta y_t = \sum_{j=1}^{p-1} \beta_j \Delta y_{t-j} + \sum_{j=1}^{p-1} \alpha_j \Delta x_{t-j} + \phi [y_{t-1} - \{\beta + \delta_1 x_{t-1}\}] + \varepsilon_t \quad (3)$$

Where y is difference stationary growth rate of the real GDP (GDPR), x is a vector of difference stationary explanatory variables (SEVR, MANR, INDR, AGCR, OPEN, INTR), β and α are short-run coefficients of the determinants of growth rate of the real GDP in our model, ϕ represents long-run coefficients of the first lag of the explanatory variables, δ is the speed of adjustment to long-run equilibrium relationship while ε is a white noise error term. A generic model akin to equation (2) which is represented by the term in the bracket is the long-run equilibrium relationship which can be written as follows:

$$y = \beta + \delta_1 x + u_t \quad (4)$$

From equation (4), y is distributed as an I(0) process before cointegration can be concluded. Bounds testing approach to cointegration as proposed by Pesaran et al (2001) is based on the F- statistics or Wald test which is non-standard under the asymptotic distribution. The test is couch under the null hypothesis of no cointegration between the examined variables, irrespective of whether they are distributed as purely I(0) or I(1). To implement the bounds test, the null hypothesis is tested on equation (3) based on the joint significance test performed as follows:

$$H_0 : \delta_i = 0 \quad \text{and} \quad H_0 : \delta_i \neq 0$$

Pesaran et al (2001) constructed two sets of critical values for significance test at a given level. One set assumes that all the variables are I(0) while the second assumes that they are all I(1) processes. If the calculated F-statistics exceeds the upper critical bounds value, the null hypothesis of no cointegration is rejected. If the calculated F-statistics lies below the lower critical bounds value, the null hypothesis of no cointegration is not rejected and if the calculated F-statistics fall between the lower and upper critical bounds value, the test is inconclusive. After the identification of a long-run relationship, the short-run and long-run dynamic model for equation (3) can be estimated from the following ARDL specification

$$\Delta GDP R_t = \gamma_0 + \sum_{i=1}^k \gamma_1 \Delta GDP R_{t-i} + \sum_{i=0}^k \gamma_2 \Delta SEVR_{t-i} + \sum_{i=0}^k \gamma_3 \Delta MANR_{t-i} + \sum_{i=0}^k \gamma_4 \Delta INDR_{t-i} + \dots \\ + \sum_{i=0}^k \gamma_5 \Delta AGCR_{t-i} + \sum_{i=0}^k \gamma_6 \Delta OPEN_{t-i} + \sum_{i=0}^k \gamma_7 \Delta INTR_{t-i} + ec_{t-1} + \eta_t \quad (5)$$

Where ec_{t-1} is the first lag of the stationary residual from long-run equation (4). Further tests are performed to check the stability of the estimated parameters on the model.

RESULT

In other proceed with the implementation of ARDL model, we carried out unit root test using Augmented Dickey-Fuller (1979) (ADF) test to confirm that none of the series are distributed as I(2) stochastic process. The test is based on a null hypothesis of non-stationarity in the series. The result of the test at level and first difference of the series are presented in Table 1.

Variables	Test statistic	5% Critical value	Remark
GDPR	-3.840	-2.945	Stationary
SEVR	-1.829	-2.948	Nonstationary
MANR	-4.479	-2.945	Stationary
INDR	-5.335	-2.945	Stationary
AGCR	-5.867	-2.945	Stationary
OPEN	-0.794	-2.945	Nonstationary
INTR	-7.068	-2.945	Stationary
SEVR	-10.01	-2.948	Stationary
OPEN	-4.558	-2.948	Stationary

The result of the ADF unit root tests indicate that all the series selected for this study are stationary at level except SERV and OPEN which became stationary at their first difference. This means that none of the variables is an I(2) process which indicate that bounds test can be implemented.

We estimated a restricted error correction model with constant from equation (3). We selected the maximum lag length of the parsimonious model based on Akaike Information Criterion (AIC). The appropriate lag order for this study is ARDL (1, 1, 0, 1, 0, 0, 0) from which we obtained the result of the Bounds test as presented in Table 2.

F-Statistics (GDPR/SEVR, MANR, INDR, AGCR, OPEN, INTR)	6.99*`**		
Critical Bounds Values			
5%		10%	
I(0)	I(1)	I(0)	I(1)
2.45	3.61	2.12	3.23
Note: k = 6, * =5%, ** = 10%			

Given that the computed F-statistics of 6.99 is greater than the upper critical bounds at both 5 and 10 percent levels of significance of 3.61 and 3.23 respectively, we conclude that the variables in our model are cointegrated. Therefore, a long-run equilibrium relationship exists among the selected variables in our model. Given the existence of a long-run relationship, we estimate the long-run model of equation (4) from where we extracted the restricted error correction term of equation (5). Table 3 presents the result of the long run model.

Table 3: Long Run Model Result Dependent Variable: GDPR

Variable	Coefficient	t-Statistic	Prob.
AGCR	0.181	9.516	0.000
INDR	0.416	13.23	0.000
OPEN	0.040	2.473	0.020
INTR	-0.019	-1.322	0.197
SEVR	0.412	15.13	0.000
MANR	0.030	1.726	0.096
C	-0.338	-1.635	0.114

From Table 3, all the estimated coefficient of real sector variables and openness variable are positively signed and statistically significant. This implies that real sector structural reforms and concomitant trade diversification will yield a positive and significant economic growth in the long run. However, the coefficient of INTR is negatively signed and statistically insignificant. Policy rates is expected to be competitive in order to stimulate real sectors growth. High interest rate will yield a decline in real sector activities and this causes a decline in the long run growth of the economy. The residual from the long-run equation (4) is distributed as I(0) and therefore stationary at level. To find the short-run dynamic equilibrium relationship of equation (5), we estimated the error correction model (ECM) based on the selected ARDL (1, 1, 0, 1, 0, 0, 0) model. The result is presented in Table 4.

Table 4: Short-run Error Correction Model Result Dependent Variable: DGDPR

Variable	Coefficient	t-Statistic	Prob.
DAGCR	0.175	12.41	0.000
DINDR	0.429	15.68	0.000
DOPEN	-0.073	-1.633	0.114
DINTR	-0.019	-1.335	0.193
DSEVR	0.425	13.16	0.000
DMANR	0.031	1.711	0.098
ec_{t-1}	-1.030	-26.94	0.000

The result of the error correction model from Table 4 indicate that the estimated error correction term ec_{t-1} is negatively signed and statistically significant at all conventional levels. The speed of adjustment of short run deviations from the equilibrium path is 100 percent. Thus, there is full adjustment of previous year's disequilibria as a result of shock back to long-run equilibrium in the current year. The estimated short run coefficients of the real sector variables are positively signed and statistically significant. This indicate that short term government policy towards the stimulation of real sector growth will yield positive and significant growth in the economy. This corroborates the long run model result.

Stability Test

In order to check the stability of our selected model for the given period, we performed the Breusch-Godfrey Serial Correlation LM Test and CUSUM stability test. The result of the serial correlation as shown in Table 5 indicate the absence of serial correlation in the residual. Therefore, we do not reject the null hypothesis of no serial correlation. Figure 5 reports the CUSUM stability test. At 5 percent level of significance, the CUSUM test statistics lies within the critical bounds which confirms that the coefficients of the estimated model is stable within the period selected for this study.

F-statistic	0.723	Prob. F(2,24)	0.4953
Obs*R-squared	2.047	Prob. Chi-Square(2)	0.3593

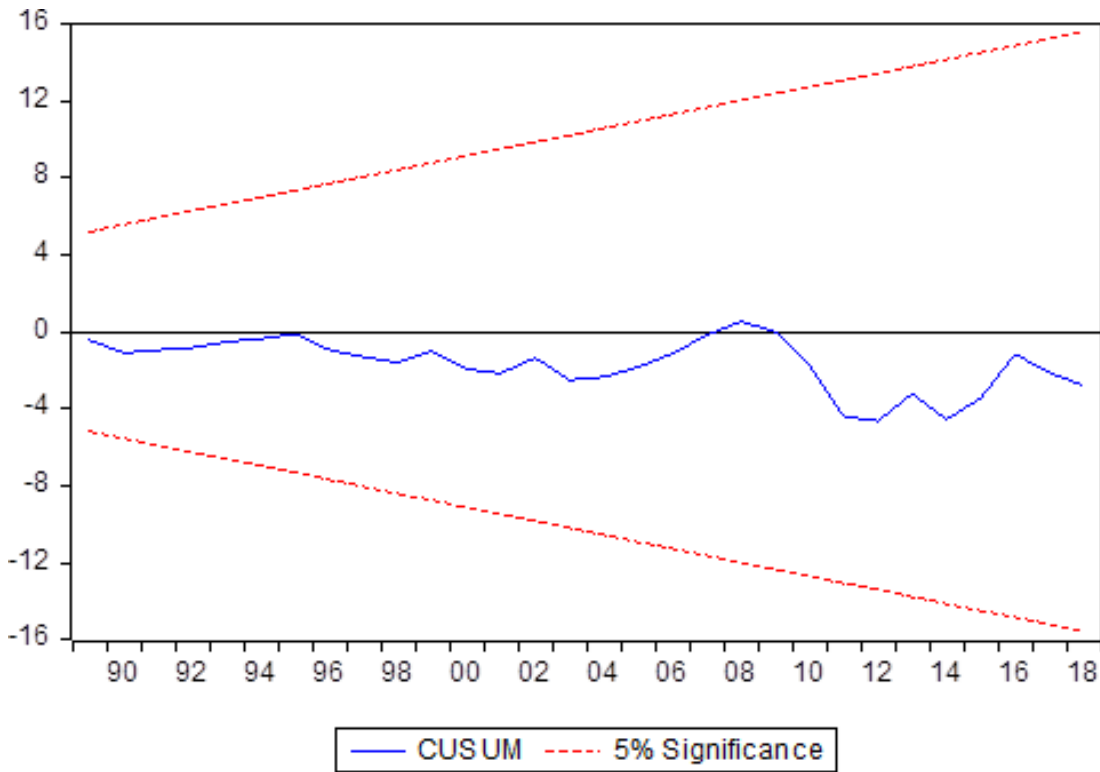


Figure 5: Plot of Cumulative Sum of Recursive Residuals.

CONCLUSIONS AND RECOMMENDATION

The paper investigated the real sectors performance as a precursor to economic restructuring in Nigeria. The motivation for this study is based on the observation that there is disproportionate and unbalanced growth in the individual components of Nigeria's the real sector. This appears to be antithetical to theoretical predictions that agricultural sector is followed by the industrial sector before service sector development. Data set from CBN statistical bulletin and the World Bank development indicator (WDI) covering between 1981 and 2018 was utilized. The study utilized the following variables: growth rate of real GDP (GDPR), growth rate of services sector output (SEVR), growth rate of manufacturing sector output (MANR), growth rate of industrial sector output (INDR), growth rate of Agricultural sector output (AGCR), growth rate of trade openness (OPEN) and Real interest rate (INTR). This paper adopted the content analyses style of interrogation as well as the Autoregressive Distributed Lag bounds testing approach to cointegration. The result from the ARDL model indicate that the variables for this study are cointegrated and that short-run deviations from equilibrium are corrected up to 100 percent annually. This shows that economic transformation is driven by the real sector growth performances. The implication of our result is that economic transformation in Nigeria requires a holistic policy framework to address each specific sector. We therefore, recommend that government should implement policies that will promote inter-sectoral linkages to achieve simultaneous growth in the real sectors. Nigerian trade performance should be improved through economic diversification and investible funds should be made available to private sector at competitive interest rate in order to produce internationally competitive products.

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