National Dividend Inequality and Economic Welfare in Nigeria

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**Abstract:** This study seeks to evaluate the influence of change in Distribution of the national dividend/income on the welfare of the Nigerians, utilizing secondary data sourced from central bank of Nigeria statistical bulletin between the periods 1986 to 2015. To achieve the objectives of this study, Unit root test, Johansen Cointegration, and Pairwise Granger Causality test were employed. The results show that while the study variables are stationary at level, the results of Johansen’s Cointegration and Granger Causality Test indicate the absence of any significant long run relationship as well as any significant level of support and/or promotion on the Nigerian economy and the study's explanatory variables. The results might probably be attributed to the following factors which prevail significantly in Nigeria. This factors includes Lack of feminine activity privatization especially in the business world and meagre funds disbursed to the minorities like the small and medium scale enterprises. In the light of this findings, study recommended that the nation should uphold a fairer and more lucid income distribution technique towards allocating more to those with lower income/finally, Taxation should be done progressively to avoid the tax burden resting evenly on all income group of the economy.

**Keywords:** Income Distribution, Economic Welfare, Minority, National Dividend

**INTRODUCTION**

Equitable distribution of income and poverty reduction between the gender and economic class of a nation is a crucial responsibility of the government and the anticipation of the populace towards this end is extraordinary. This goal sits somewhat uncomfortable beside the traditional concerns among economists for economic efficiency and provision of public goods. But it is important politically and socially, perhaps more so than issues of economic efficiency. Even the most neo-classical policymaker must heed a policy’s consequences for the poor [1]. For clarity of purpose, it should be understood that national income signifies national dividend which would be utilized subsequently in the study.

Disparity in income distribution is most evidenced in some developing countries of the world, Nigeria inclusive. Nigeria falls within the Gini index ratio of 0.50 to 0.70 while the countries with relatively equitable distributions have their Gini coefficient between 0.20 and 0.35. South Africa has been declared as the country with the highest income disparity in the world with a Gini index ratio of 0.65 [2].

In the past decade, Nigeria has struggled to implement a restrictive fiscal policy of inflation targeting and fiscal sustainability. The goal is to ensure sustained economic growth and fiscal discipline. Over these periods, the successes of various economic reforms pursued by the government and prudent policies have contributed to the consolidation of macroeconomic stability and improvements in major economic indicators. To this effect, the Nigerian economy has experienced an astronomical rate of growth in the past decade. However, such level of growth has not translated to the expected increase in employment opportunities and poverty reduction on the ground. Thus, there is an apparent trade-off between the various macroeconomic policies in Nigeria in the past decade and the creation of productive employment and poverty alleviation for the populace. Like most developing countries, there has been a mismatch between macroeconomic policy strategies and socio-economic development goals in Nigeria [3].

Meanwhile, the word ‘gender’ relates to the socially assigned roles and behaviors of men and women. It is the social meaning of biological sex differences. “It affects the distribution of resources, wealth, work, decision-making and political power, and the enjoyment of rights and entitlements within the family as well as public life” [4, 6]. While income security is traditionally viewed as having two
dimensions – spatial and temporal; in fact, it has three, with gender being the third and most overlooked [5]. Identifying individuals’ differential access to resources and benefits is the fundamental feature of gender analysis, and ensuring equitable access and distribution will enhance income security. Research and field experience have clearly illuminated the different roles and responsibilities that men and women have in their individual lives, in their families and households, and in their communities. While both men and women are income earners and agricultural producers, women also process and prepare food, and use their income for their children’s benefit (Thomas, 1997; Carr, 1991).

Statement of Problem

A shrinking economy with receding growth, two-thirds living under a dollar (USD) a day, soaring unemployment, public office corruption, socio-infrastructure decadence, mono-sector dependence, insecurity (food and human lives), environmental degradation and a collapsing debt ceiling. The growth and development of the Nigerian economy through equitable distribution of income has not been stable over the years as a result, the economy has witnesses so many shocks and disturbances both internally and externally over the decades. Internally, the unstable investment and consumption patterns as well as the improper implementation of public policies [7]. Inequality is seen as an agent that can harm social cohesion and may exacerbate conflict.

Meanwhile Cramer, [8] reported that income inequality is capable oforchestrating internal conflict. Nigeria is a country that is characterized with a high level of income disparity going by the income distribution data. The disparity can be trace to regional development disparity. However, Inequality can be traced on the path or pace of development in different regions or country. Below is a regional human development index value in the country. Cases of which government expenditure data inevitably assumes that marginal benefits equal average benefits [1].

It thus becomes paramount to investigate the influence of the nation’s distribution of dividend on the poor via its public and private sector on the activities and welfare of the women and minorities since they constitute the poor portion of the nation, utilizing the Small and Medium Scale Economic output as Minority output, and using a statistical proportion of female population on aggregate fiscal capital expenditure and examining the Financial Loans to Small and Medium Scale enterprise as assumed loan to minorities in the nation over the period of 1985 to 2015.

THEORETICAL FRAMEWORK AND LITERATURE REVIEW

To clarify theoretical postulation related to changes in income distribution of the nation and welfare of the poor, this segment is discussed under the following captions.

Theoretical Framework

Ernest Engel’s Theory of Public Expenditure

Ernest Engel was also a German economist writing almost the same time as Adolph Wagner in the 19th century. Engel pointed out over a century ago that the composition of the consumer budget changes as family income increases. A smaller share comes to be spent on certain goods such as work clothing and a larger share on others, such as for coats, expensive jewelries etc.

As average income increase, smaller changes in the consumption pattern for the economy may be to occur. At the earlier stages of national development, there is need for overhead capital such as roads, harbors, power installations, pipe-borne water etc. But as the economy developed, one would expect the public share in capital formation to decline over time. Individual expenditure pattern is thus compared to nation expenditure and Engel finding is referred to as the declining portion of outlays on foods [9].

Wagner Law of Increasing State Activities

Thus, Wagner was emphasizing long-term trend rather than short-term changes in public expenditure. Moreover, he was not concerned with the mechanism of increase in public expenditure. Since it is based on historical experience, the precise quantitative relationship between the extent of increase in public expenditure and time taken by it was not fixed in any could not use to predict its rate of increase in future. Actually, it is consistent with the Wagner’s law of the state that in future, the state expenditure will increase at a rate slower than the national income though speaking; it had increase at a faster rate in the past.

Thus, in the initial stage of economy growth, the state finds out that it has to expand its activities quite fast in several fields like education, health, civil amenities, transport, communications, and so on. But when the initial deficiency is removed, then the increase in state activities many be slowed down. The factors, which contribute to the tendency of increasing public expenditure, relate to a growing role of the state in ever-increasing socio-economic complexities of modern society [9].

Peacock and Wiseman’s Theory of Expenditure

Peacock and Wiseman’s study is probably one of the best known analyses of the time pattern of public expenditures. They founded their analyses upon a political theory of public determination namely that governments like to spend more money and citizens do
not like to pay taxes, and that government need to pay some attention to the wishes of their citizens. The duo saw taxation as setting a constraint on government expenditure. As the economy and thus incomes grew, tax revenue at constant tax rate would rise, thereby enabling public expenditure would show a gradual upward trend even although within the economy there might be a divergence between what people regarded as being desirable level of public expenditure and the desirable level of taxation. During the periods of social upheaval however, this gradual upward trend in public expenditure would be disturbed [9].

These periods would coincide with war, famine or some large-scale social disaster, which would require a rapid increase in public expenditures; the government would be forced to raise taxation levies. The rising of taxation levels would, however, is regarded as acceptable to the people during the period of crisis. Peacock and Wiseman referred to this as the “displacement effect”. Public expenditure is displaced upwards and for the period of the crisis displaced private for public expenditure does not however fall to its original level.

A war is not paid for from taxation; no nation has such large taxable capacity. Countries therefore borrow and debt charges have to be not after the event. Another effect that they thought might operate was the “imperfection effect” thus they suggested arise from the people Keener awareness of social problems during the period of upheaval. The government therefore expands its scope of services to improve these social conditions and because people perception to tolerable levels of taxation does not return to its former level, the government is able to finance these higher levels of expenditures originating in the expanded scope of government and debt charges [9].

The Discrimination Theory

There is labour market discrimination anytime men and women of equal productivity and aspirations are treated differently in hiring, retention, training, and promotion practices. According to Becker [10] on the demand side, there is labor market discrimination when two equally qualified individuals are treated differently solely on the basis of their gender. Where there is no discrimination, profit-maximizing employers in a competitive labor market will pay workers based on their productivity. Where discrimination exists, it adversely affects the economic status of women by bringing about differences in pay between men and women not accounted for by differences in productivity-related characteristics.

Such inequality may occur when women are paid less than their marginal products as a result of discrimination or when labor market discrimination directly lowers women's productivity and their pay. Forms of labor market discrimination vary. One is the "taste for discrimination" model or human capital choice which with respect to gender involves the pure dislike of working with someone of the opposite sex. This may be from employers, other employees who refuse or customers who are consequently willing to pay something either directly by way of a reduced income to be associated with certain persons rather than others [11].

Theory of Increasing Public Expenditure

There are two important and well-known theories of increasing public expenditure. The first one is connected with Wagner and the other with Wiseman and Peacock. On the one hand, Wagner revealed that there are inherent tendencies for the activities of different layers of a government (such as central, state and local governments) to increase both intensively and extensively. He maintained that there was a functional relationship between the growth of an economy and government activities with the result that the governmental sector grows faster than the economy. However Nitti (1903) not only supported Wagner’s thesis but also concluded with empirical evidence that it was equally applicable to several other governments which differed widely from each-others (Nitti, 1903). All kinds of governments, irrespective of their levels (say, the central or state government), intentions (peaceful or warlike), and size, etc., had exhibited the same tendency of increasing public expenditure. But on the other hand, Wiseman and Peacock in their study of public expenditure in UK for the period 1890-1955 revealed that public expenditure does not increase in a smooth and continuous manner, but in jerks or step like fashion. At times, some social or other disturbance takes place creating a need for increased public expenditure which the existing public revenue cannot meet.

The Structural Hypothesis

This theory was propounded by Gerschenkron (1962); the theory emphasizes imperfections in banking systems and deficiencies on the demand side of financial services in the initial stages of economic development. According to him, as the relative backwardness of the economy increases, the role of the banks in industrial capital formation declines. To drive home his point, Gerschenkron categorized the countries of Europe according to degrees of historical backwardness with Britain coming first on the list as the most developed. Russia came last as the most backward and Germany midway in the classification. In a comparative developed economy like that of Britain, the role of banks in financing growth and development according to the believers of this view, was minimal because alternative sources of finance were available while in a moderately backward economy, the banks
were expected to play a more prominent role as a source of capital for promoting industrialization. In the case of extremely backward or developing economies which Nigeria is inclusive, Gerschenkron argued that because of economic structure of those nations, banks could not supply the capital necessary for industrialization. This according to him is caused by standards of honesty and fraudulent bankruptcy [12].

**Financial Repression Hypothesis**

This is associated with the work of Mckinnon (1973) and Shaw (1973). The theory emphasizes that financial development would contribute most significantly to economic growth if the authorities were not to interfere in the operations of the financial institutions. According to the proponents of the theory, poor performance by banks and other financial institutions is thus often attributed to interest rate regulation, ceiling on deposit and loan rates and official guidelines pertaining to lending operations. Such interferences results in a low and often negative real case of return on financial assets and therefore inefficient savings mobilized and channeled into investment projects. To this end, the theorists advocated a positive real interest rate and financial liberalization which would ensure an optimal financial structure for development as well as eliminating the fragmentation of market. It is on these premises that this study choose to base its theoretical framework on the financial repression hypothesis [12].

**Credit Market Theory**

A model of the neoclassical credit market postulates that the terms of credits clear the market. If collateral and other restrictions (covenants) remain constant, the interest rate is the only price mechanism. With an increasing demand for credit and a given customer supply, the interest rate rises, and vice versa. It is thus believed that the higher the failure risk of the borrower, the higher the interest premium [13].

Though this theory does not explicitly discuss how collateral impact on the risk premium, it creates the impression that collateral has no effect on lending rate, and if a risky borrower would wish to face the same lending rate as a borrower with a lower risk, then all that is required is to pledge more collateral to lower his risk profile and therefore enjoy a lower risk premium. This brings about the moral hazard and adverse selection phenomena, firstly because of information asymmetry existing between the lender and borrowers (Karumba & Wafula, 2012).

This theory is related to this study because it explains risk as one of the factors that may affect lending to farmers. If the risk level in the farming sector is high, then they will have to pay higher risk. The higher interest is due to the commercial banks requiring protection against the arising losses (Panagopoulos & Spiliotis, 1998).

**Empirical Literature**

In a quest to amplify the opportunities of small and medium scale enterprises in Nigeria, Ogunbiyi and Monogbe [14] examine leveraging Nigerian SMEs to economic growth. The electric objective of the paper was to identify which of this institution has significantly contribute to the Nigerian economy via SMEs. Study employed stationarity test, multiple regression, error correction mechanism and test of influence. Findings reveals that microfinance institution credit to SMEs have displayed a significance nexus to the current growth trend in the nation’s output showing that the Microfinance credits have actually achieved their expected aim at stimulating output. Sequel to this, study recommends that the public authorities and relevant monetary institutions should foster the activities of the Microfinance banks and enlarging the purse of the Deposit Money banks towards funding Small and Medium Scale Enterprise activities.

Monogbe, et al [15] examine the SMEs funding in Nigeria economic development process using ARDL approach between the periods 1992 to 2015. Study reveals that the synergistic effect and contribution of the SMEs to economic development in Nigeria is insignificant in the long run. From the study, it was reveal that the insignificances of SMEs to economic development in Nigeria could be attributed to insufficiency in the quantum of fund allocated to the SMEs and as such, this debars its significant contribution to economic development. Study thus recommend that loan allocation scheme should be review such that significant percentage will be allocated to SMEs as this will help spur the contribution of SMEs to economic development.

Aremu and Adeyemi (2011) examined the role of minorities such as small and medium scale enterprises as a survival strategy for employment generation in Nigeria. The study observed that the SME sector is the main driving force behind job creation, poverty reduction, wealth creation, income distribution and reduction in income disparities in Nigeria and that most of the government interventions failed to create a much needed transformation due to poor coordination and monitoring and policy inconsistencies.

Chidi and Shadare (2011), investigated the challenges confronting human capital development in small and medium-sized enterprises (SMEs) in Nigeria. It was found that human capital development in Nigerian SMEs leaves much to be desired. They recommended the need to address the issues of human capital development in SMEs and for SMEs to embrace
the investor in people criteria if the desired corporate and national goals are to be realized.

Babagana, (2010) examined impact of the role played by micro finance banks MFBs in promoting the growth of SMEs in Nigeria. An empirical study was carried out using Garu Micro Finance bank in Bauchi, Bauchi State being one of the most successful Micro-Finance Banks in North East sub region to determine impact of the role of MFBs in promoting small and medium enterprises growth. Out of the total number of employees in the bank, 15 members of staff whom constitute the middle and management staff were used as respondents. Questionnaire was developed and distributed to them which they all filled and returned. The study revealed that MFBs have contributed to the promotion of small and medium enterprises growth in Nigeria.

Akingunola [16] assessed specific financing options available to minorities like the SMEs in Nigeria and their contribution to economic growth via the investment levels. The Spearman’s Rho correlation test was used to determine the relationship between SMEs financing and investment level. The analysis reported a significant Rho value of 0.643 at 10%. This indicated that there was significant positive relationship between SMEs financing and economic growth in Nigeria via the investment level. Descriptive statistics were equally used to appraisal certain financing indicators. The paper later proffered that accessibility to relative low interest rate finances should be provided to small and medium enterprises in Nigeria in order enhance economic growth.

Hassan and Olaniran [17] examined how assistance institutions have contributed to the development of minorities like the small and medium enterprises (SMEs) in Nigeria, with special reference to Industrial Development Centre (IDC), Osogbo, Nigeria. Survey research was used in order to carry out the study and three hundred and forty (340) respondents from university students, trade union congress and private entrepreneurs in Nigeria were sampled. Four research questions were generated from the literature review, questionnaire on developing small business entrepreneurs through assistance institutions, and the responses elicited from respondents were numerically quantified, tabulated and analyzed using the Likert Scale. The analysis of the study showed that assistance institutions in Nigeria, especially IDC, have really contributed immensely to the promotion of small and medium enterprises as well as entrepreneurship development generally.

Obasan and Arikewuyo (2018) studied the effect of pre-post bank consolidation on the accessibility of finance to minorities like the SMEs in Nigeria. This study was carried out to ascertain whether bank consolidation exercise in Nigeria had improved accessibility of finance to SMEs in Nigeria or not. This study uses empirical analysis (Ordinary Least Square). The study found out that banks’ consolidation has failed to foster a vibrant and competitive SMEs sector that could enhance job creation and economic growth in Nigeria, thus the need for government intervention. This study, therefore, submits that the government should evolve a workable policy at directing banks to channel finance to SMEs so that bank can play an active developmental role to achieve economic growth and development in Nigeria.

Ahiawodzi and Adade [19] examined the effect of access to credit on the growth of minorities like the Small and Medium Scale Enterprises (SMEs) in the Ho Municipality of Volta Region of Ghana by using both survey and econometric methods. The survey involved a sample of 78 SMEs in the manufacturing sector from the Municipality. The specified econometric model has firm growth as the dependent variable, and the independent variables include access to credit, total current investment, age of the firm, start-up capital, education level and annual turnover of the firm. Both survey and econometric results show that access to credit exerts a significant positive effect on growth of SMEs in the Ho-Municipality of Ghana.

Yusuf and Dansu [20] examined the relationship between business risks and the sustainability of minorities like the SMEs in Nigeria. They assert that SMEs, face a number of risks that requires objective and conscious risk management efforts. Primary data were generated from fifty (50) SMEs in Lagos State. Data analysis and hypotheses testing were done with the use of Chi-square and descriptive statistics. The results revealed that standard risk management strategy by SMEs would result to their sustainability.

MATERIALS AND METHODS

For purpose of lucidity, this section is further divided into subsections as presented below:

Data and Employed Variables Description:
Table 1: Aggregate Output of the poor minority (APMO), Federal Government Dividend Disbursement (FGDD) and Average Micro Credits (AMM)

<table>
<thead>
<tr>
<th>Year</th>
<th>APMO</th>
<th>FGDD</th>
<th>AMM</th>
</tr>
</thead>
<tbody>
<tr>
<td>1986</td>
<td>39.93</td>
<td>4433.936</td>
<td>1.8303</td>
</tr>
<tr>
<td>1987</td>
<td>57.58</td>
<td>3313.7</td>
<td>2.4271</td>
</tr>
<tr>
<td>1988</td>
<td>86.58</td>
<td>4336.852</td>
<td>3.0667</td>
</tr>
<tr>
<td>1989</td>
<td>122.23</td>
<td>12505.272</td>
<td>4.2214</td>
</tr>
<tr>
<td>1990</td>
<td>144.7</td>
<td>14737.268</td>
<td>5.0127</td>
</tr>
<tr>
<td>1991</td>
<td>217.42</td>
<td>20676.916</td>
<td>6.9789</td>
</tr>
<tr>
<td>1992</td>
<td>350.05</td>
<td>28340.936</td>
<td>10.753</td>
</tr>
<tr>
<td>1993</td>
<td>528.95</td>
<td>36877.516</td>
<td>17.758</td>
</tr>
<tr>
<td>1994</td>
<td>940.3</td>
<td>62991.916</td>
<td>25.279</td>
</tr>
<tr>
<td>1995</td>
<td>1,275.75</td>
<td>110617.676</td>
<td>33.264</td>
</tr>
<tr>
<td>1996</td>
<td>1,445.15</td>
<td>140218.884</td>
<td>27.931</td>
</tr>
<tr>
<td>1997</td>
<td>1,600.58</td>
<td>160688.112</td>
<td>31.014</td>
</tr>
<tr>
<td>1998</td>
<td>1,704.82</td>
<td>258974.352</td>
<td>41.029</td>
</tr>
<tr>
<td>1999</td>
<td>1,801.48</td>
<td>124514.468</td>
<td>55.846</td>
</tr>
<tr>
<td>2000</td>
<td>2,100.05</td>
<td>228137.312</td>
<td>62.103</td>
</tr>
<tr>
<td>2001</td>
<td>2,410.11</td>
<td>167105.016</td>
<td>74.047</td>
</tr>
<tr>
<td>2002</td>
<td>2,847.11</td>
<td>125666.268</td>
<td>106.35</td>
</tr>
<tr>
<td>2003</td>
<td>3,231.44</td>
<td>125666.268</td>
<td>135.7</td>
</tr>
<tr>
<td>2004</td>
<td>3,903.76</td>
<td>182650.16</td>
<td>149.58</td>
</tr>
<tr>
<td>2005</td>
<td>4,752.98</td>
<td>270124.4</td>
<td>152.1</td>
</tr>
<tr>
<td>2006</td>
<td>5,940.24</td>
<td>287240.616</td>
<td>199.39</td>
</tr>
<tr>
<td>2007</td>
<td>6,757.87</td>
<td>394826.224</td>
<td>277.59</td>
</tr>
<tr>
<td>2008</td>
<td>7,981.40</td>
<td>499662.852</td>
<td>356.35</td>
</tr>
<tr>
<td>2009</td>
<td>9,186.31</td>
<td>599456.0</td>
<td>435.7</td>
</tr>
<tr>
<td>2010</td>
<td>13,048.89</td>
<td>459612.42</td>
<td>128.41</td>
</tr>
<tr>
<td>2011</td>
<td>14,037.83</td>
<td>477620.16</td>
<td>155.21</td>
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<tr>
<td>2012</td>
<td>15,816.00</td>
<td>454896.0</td>
<td>291.31</td>
</tr>
<tr>
<td>2013</td>
<td>16,816.55</td>
<td>464042.8</td>
<td>348.14</td>
</tr>
<tr>
<td>2014</td>
<td>18,018.61</td>
<td>503234.116</td>
<td>401.89</td>
</tr>
</tbody>
</table>

Sources:
(i) Central Bank of Nigeria, Statistical Bulletin (Various Issues)
(ii) Index mundi (2015)

Model specification
In line with theoretical basis and underpinning, the following model is proposed:

\[ APMO = f (FGDD, AMM) \]

Converting the above to mathematical model with the introduction of the constant parameter and error terms the model is restated as follows:

\[ APMO_t = \beta_0 + \beta_1 FGDD_t + \beta_2 AMM_t + \mu_t \]

Where
- APMO = Aggregate Output of the poor minority
- FGDD = Federal Government Dividend Disbursement
- AMM = Average Micro Credits
- \( \beta_0 \) = Constant parameter
- \( \mu_t \) = Error Term

Operationalized Variables
- Federal Government Dividend Disbursement being the ratio of total female proportion multiplied by aggregate capital expenditure of the federal government in Nigeria.
- Bank loan to Small and Medium Scale enterprise to capture the level of minority financing by the financial institutions in the nation
- Minority Output as proxied by the aggregate Small and Medium scale Output.

Specification of Analytical Tools and Tests
The key objectives of this study are to evaluate the nature of long run relationship prevailing among the Trade Liberalization components and economic growth in Nigeria as well as the extent of causal interrelationships that pertain among them, in order to ascertain the extent to which these study variables tend to promote and/or reinforce themselves in the process of Nigeria’s economic growth. For cleaner appreciation, this subsection is further subdivided as follows:
Stationarity Tests
The stationarity of series is necessary to evaluate unit root properties of the time series. Accordingly, the Augmented Dickey Fuller (ADF) test is employed. The decision is to reject the null hypothesis if the ADF test statistics is absolutely higher than the Mackinnon’s Critical Values at 1%, 5% and 10% levels of significance (Brooks, 2009).

Johanssen’s Cointegration Test
The Johansen Co-integration test is utilized to ascertain the extent of long run equilibrium relationship between the study variables (Awe, 2012).

Granger Causality
This is a statistical test for determining whether time series are significantly supporting or promoting each other in the economic growth process in the light of inclusion of lagged values of the time series (Granger 1981, Engle and Granger, 1987)

PRESENTATION OF RESULTS
Presentation of Stationarity (Unit Root) Test Results:

Table 2: Results of Stationarity (Unit Root) test

<table>
<thead>
<tr>
<th>Variable</th>
<th>ADF t-statistics</th>
<th>Critical Value 5%</th>
<th>Order of Integration</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1%</td>
<td>5%</td>
<td>10%</td>
</tr>
<tr>
<td>D(APMO)</td>
<td>-5.380482</td>
<td>-3.699871</td>
<td>-2.976263</td>
<td>-2.627420</td>
</tr>
<tr>
<td>D(FGDD)</td>
<td>-7.737873</td>
<td>-3.699871</td>
<td>-2.976263</td>
<td>-2.627420</td>
</tr>
<tr>
<td>D(AMM)</td>
<td>-9.651481</td>
<td>-3.699871</td>
<td>-2.976263</td>
<td>-2.627420</td>
</tr>
</tbody>
</table>

Note: D(APMO), D(FGDD) and D(AMM) is the respective differenced version of Minority Output (APMO), Federal Government Dividend Disbursement(FGDD) and Bank loan to Small and Medium Scale enterprise (AMM).
Source: Authors Computations using E-Views 8.

Going by the decision rule above, it could be observed that all variables are stationary at their first difference (1), as the absolute values of their ADF test statistics are all higher than their respective MacKinnon’s critical values at 1%, 5% and 10% respectively. This shows that the employed data are suitable for evaluation and possess predictive trends which would lead to the evaluation of a long run relationship between the study employed variables.

Presentation of Johansen’s Co-integration Test Results
The results of Johansen Cointegration tests for all the time series variables of this study are presented in table 3 below:

Table 3: Results of Johansen Unrestricted Cointegration Rank Test Test (Maximum Eigen Value):

<table>
<thead>
<tr>
<th>Obs</th>
<th>Series</th>
<th>Hypothesized No. of CE(s)</th>
<th>Eigenvalue</th>
<th>Max-Eigen Statistic</th>
<th>0.05 Critical Value</th>
<th>Prob.**</th>
</tr>
</thead>
<tbody>
<tr>
<td>29</td>
<td>APMO(-1)</td>
<td>None</td>
<td>0.639808</td>
<td>26.54909</td>
<td>33.87687</td>
<td>0.2883</td>
</tr>
<tr>
<td>29</td>
<td>FGDD(-1)</td>
<td>At most 1</td>
<td>0.504339</td>
<td>18.24842</td>
<td>27.58434</td>
<td>0.4746</td>
</tr>
<tr>
<td>29</td>
<td>AMM(-1)</td>
<td>At most 2</td>
<td>0.450234</td>
<td>15.55483</td>
<td>21.13162</td>
<td>0.2519</td>
</tr>
</tbody>
</table>

Max-eigenvalue test indicates no cointegration at the 0.05 level
* denotes rejection of the hypothesis at the 0.05 level
**MacKinnon-Haug-Michelis (1999) p-values
Source: Authors Computations using E-Views 8.

The Cointegration results indicate rejection of the null hypothesis at all levels due to the fact that the probability level of all employed variables at all co-integrating equations are seen to be greater than the 5% (0.05) significance level, thus showing no evidence of long run relationship amongst employed variables of study. In the light of the above results, there is invariably no further need to correct errors for the short and long run dynamics.

Presentation of Granger Causality Test Results:
The results of the Pair-Wise Granger Causality tests are presented in table 4 below:
Table 4: Results of Pair-wise Granger Causality Tests

<table>
<thead>
<tr>
<th>Pairwise Granger Causality Tests</th>
<th>Lags: 2</th>
<th>Null Hypothesis:</th>
<th>Obs</th>
<th>F-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>FGDD(-1) does not Granger Cause APMO(-1)</td>
<td>26</td>
<td>0.58178</td>
<td>0.5677</td>
<td></td>
<td></td>
</tr>
<tr>
<td>APMO(-1) does not Granger Cause FGDD(-1)</td>
<td>1.42637</td>
<td>0.2625</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AMM(-1) does not Granger Cause APMO(-1)</td>
<td>26</td>
<td>0.22553</td>
<td>0.8000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>APMO(-1) does not Granger Cause AMM(-1)</td>
<td>0.64871</td>
<td>0.5329</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LCEXR(-1) does not Granger Cause APMO(-1)</td>
<td>26</td>
<td>1.63694</td>
<td>0.2184</td>
<td></td>
<td></td>
</tr>
<tr>
<td>APMO(-1) does not Granger Cause LCEXR(-1)</td>
<td>0.08404</td>
<td>0.9197</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Authors Computations using E-VIEWS 8

Table 4 above using the 5% confidence level as benchmark for the significance of the causality a case in which a probability level above 0.05 is seen as insignificant the study therefore shows the absence of both bi-directional and uni-directional causalities between employed variables as indicated by their probability values which far greater than the preferred alpha level.

Discussions of findings

The above goes a long way to show that in the Nigeria context, the national change in distribution of dividend and wealth in the nation does not stimulate or affect the welfare of the poor significantly, this goes a long way to show the prevalence of unequal distribution of wealth within the nation and the wide gap between the minor rich and the poor majority.

Discussion, Conclusions and Policy Recommendation:

The results of Johansen’s Cointegration and Granger Causality Test indicate the absence of any significant long run relationship as well as any significant level of support and/or promotion among Nigerian economy and the study’s explanatory variables. The results might probably be attributed to the following factors which prevail significantly in Nigeria;

- Lack of feminine activity privatization especially in the business world.
- Meagre funds disbursed to the minorities like the small and medium scale enterprises.
- Prevalence of significant infrastructural deficiency especially in the power and transport sectors which escalate cost of production in Nigeria.

In the light of these issues raised above, it is recommended that:

i. The nation should uphold a fairer and more lucid income distribution technique between genders and economic sectors towards allocating more to those with lower income.

ii. Taxation should be done progressively to avoid the tax burden resting evenly on all income group of the economy.

iii. The independent corrupt practices and other related crimes commission and the economic and financial crime should be reformed, strengthened and modernized to engender transparency in the conduct of government affairs.

References