Long-Run Relations Between the Financial Institutional Reforms and the Nigerian Manufacturing Performance (1970 - 2005)

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Abstract
This paper investigates the impact of financial institutional reforms on the manufacturing performance in Nigeria. Co-integration and Error Correction Model (ECM) techniques were used on annual time series covering the period between 1970 and 2005. It was observed that, in general the financial institutional reforms did not have a significant impact on the Nigerian manufacturing sector performance during the period under review. In particular financial reforms exhibited an insignificant relationship with the share of manufacturing in GDP.

1. Introduction
One significant element of any market driven economy is the quality of its supporting institutions. These institutions play advisory and facilitatory roles in the industrialization process. This consensus results from a wide body of evidence suggesting that a country’s overall economic performance is affected by its institution. It has been observed that ailing institutions are associated with slower growth, lower total factor productivity and lower per capita income (Mauro, 1995; Hall and James, 1999; and Acemoglu, 2001).

It has been posited that without high level of domestic savings, broadly based human capital, good macro-economic management and limited price distortions which are all embedded in a healthy institution, there would be no basis for economic growth. Olson et al (2000). Furthermore, economists traditionally have viewed investment as one of the driving forces of economic growth. It is widely believed that savings and investment must go hand in hand for sustained economic growth. Thus, policies to assist the financial sector, especially banks whose traditional business is financial intermediation to capture non-financial savings and to increase household and corporate savings are considered central.

Series of reforms had taken place in the Nigerian Financial Institutions, ranging from the promulgation of laws and regulations up to the recapitalization of banks. Ostensibly, the series of reforms in the banking and financial institutional sectors were geared towards positioning banks and other financial institutions to play their primary and very crucial role of financial intermediation in the economy as the driving force for generating high saving and investment.

With the adoption of these financial institutional reforms in Nigeria, the assumption is that banking sector liberalization accompanied by increased capital base requirements is a necessary condition for improved performance of the banking sector especially in the area of financing the manufacturing sector. The underlying argument draws its strength from the neo-classical supply side economics, rooted in Say's law that “supply creates its own demand” (Jhingan, 2003). That is, increased capital base may imply increased availability of loanable funds to the Nigerian manufacturing sector.

On the contrary, none of the aforementioned financial institutional reforms have been able to deal specifically with low manufacturing performance and output in the economy. In Nigeria, the role of institutional reforms in development of the manufacturing sector appears not to have been fully addressed as there is no observable impact in the sector. The growth remains stunted and its contribution to Gross Domestic Product (GDP) has remains low. For instance, the manufacturing sector accounted for only 5.6 percent of GDP in 2003 and 12 percent of employment (Central Bank of Nigeria, 2003). According to the Manufacturing Association of Nigeria, it had dipped to 4.2 percent by 2010. The production indices, using 1990 as the base year also indicated that while agriculture experienced a modest growth from 5.29 percent in 1999 to 6.5 percent in 2005, manufacturing sector recorded a decline from 6.93 to 3.5 in the same period. Capacity utilization in the manufacturing sector declined from about 55.7 percent in 2004 to just 53.3 percent in 2005 (Central Bank of Nigeria, 2006).

Moreover, since the introduction of Structural Adjustment Program, (SAP), in Nigeria high and increasing cost of production have been recorded by most Nigerian firms as a major constraint to their operations. Increased cost, traced largely to high interest and exchange rates, has resulted into increased unit price of manufactures, low effective demand for goods, liquidity squeeze and fallen capacity utilization rates. The special purpose fund created to provide “cheap and long term” finance for industries by Nigerian Economic Reconstruction Fund (NERFUND) in the late 1980s was crippled as a result of fluctuations in the exchange rate.
Another constraint that hinders the performance of Nigerian manufacturing sector, most especially in the area of financing their operations, is the government’s fiscal operation. The largest single spender in the economy is government who often finance its deficit through the ways and means of Central Bank of Nigeria (CBN). This mode of deficit financing directly increase the monetary base and increase the level of excess liquidity with adverse effect on exchange rate and price level (Ojo, 2001). Looking at the financing deficits through the money market, one can adduce some negative impact on the banking industry and the Nigerian economy. The way it affects banking industry and the Nigerian economy is that once government gets the money from Treasury Bills (TB), through mopping the liquidity in the system, it deprives the private sector from having loan able funds. This, in turns makes the cost of the fund very high for manufacturing firms.

The objective in this paper is to examine the relationship between financial institutional reforms and the performance of manufacturing sector in Nigeria.

2. Literature Review

Numerous attempts have been made by different researchers to provide empirical evidences on the linkages between financial institutional reforms and one aspect of economic growth or the other.

Galindo and Weiss (2002) tested for the impact of financial liberalization on the allocation of resources, using microeconomic evidence from developing countries. Specifically, the authors tested whether financial liberalization has increased the share of investment going to firms with a higher marginal return to capital. Using firm-level data from 12 developing countries, the authors constructed an index of investment efficiency, which compares the marginal returns obtained across firms in a given year with a benchmark return that would have been obtained had resources been distributed according to the firm’s capital share. Their results suggested that for most countries, the introduction of financial reform has increased their measured level of efficiency.

Al-Awad and Harb (2005) used both panel and individual country co integration and Granger causality tests within a quadvariate VAR framework, for ten countries for the period 1969-2000. They based their analysis on a single financial measure, namely, the ratio of private credit to monetary base. Their co integration results strongly support the existence of a long-run relationship between the two variables but they failed to establish clearly the direction of causality.

Bandiera and Honohan (2002) analyzed the experience of eight countries that underwent significant reforms in their financial systems, namely, Chile, Ghana, Indonesia, Korea, Malaysia, Mexico, Turkey and Zimbabwe. They estimated an econometric relationship expressing the private saving ratio as a function of the real interest rate and the index of financial liberalization, alongside with income, inflation and public savings. In addition to directly measuring the contribution of liberalization to the volume of growth, their procedure improved on the saving-interest rate relation, which limited the role of financial sector liberalization to the real interest rate channel.

Beck and Levine (2003) used firm-level survey data covering 54 countries to evaluate the impact of financing obstacles on firm growth and found that the negative impact of financial obstacles on growth is more substantial for small firms. They showed that industries with a larger share of small firms grow faster in economies with well-developed financial systems.

Bekaert and Lundblad (2001) examined the importance of financial liberalization for economic growth. They decomposed GDP into the proportions due to investment, consumption, government and the trade sector. He applied a General Method of Moment estimator on panel data for a growth equation with overlapping observations. The data revealed that the investment- GDP ratio rises after capital market liberalizations while the consumption- GDP ratio decreases. The trade balance turns negative but there is limited evidence that the size of the government sector changes following financial liberalization.

Beck, Clarke, Keefer and Walsh (2000) found in his own research that finance impacts manufacturing growth through improvements in capacity utilization rate, rather than through increase in the volume of saving and investment. Using data from a cross country sample of 63 industrial and developing countries over 1960-1995. It is shown that financial reforms exert a large and positive impact on total factor productivity growth which eventually translates into faster overall GDP growth.

On the other hand, Al-Awad and Harb (2005) measured the impact of financial reforms on growth by using only the ratio of private credit to monetary base as their major indicator. Although, careful studies by (Beck et al., 2000) took great pains to show the impact of financial reforms on manufacturing growth through the capacity utilization rate, without emphasis on the Share of Manufacturing in GDP to capture growth of manufacturing.

Ndebbio (2004) and Nnanna (2004) were able to establish significant relationship between financial institutional reforms and manufacturing growth in Nigeria. However, they applied Ordinary Least Square method to estimate their regression models which restricted their studies to short-run analysis. Other authors who
made use of co-integration and error correction techniques however restricted the variables on financial reforms only on interest rate without emphasis on such financial variables as exchange rate, fiscal deficit, banks loan to manufacturing and inflation rate.

This paper applies co-integration techniques and error correction mechanism which have been recognized as the best methods for estimating multiple variables. In addition a wide range of variable such as saving rate, lending rate, inflation rate, fiscal deficit, exchange rate and banks loan to manufacturing sector are used to cover financial institutional reforms in Nigeria. Share of Manufacturing in GDP is used to capture the performance of manufacturing sector in Nigeria.

3. Methodology

Theoretical Framework

The analysis of the impact of financial institutional reforms on the performance of Nigerian manufacturing sector is rested on the conventional theory of IS-LM-BP model, which is an open economy general Keynesian model, developed by (Mundell, 1963) and (Fleming, 1963). The theory was revised by (Tobin and Macedo, 1980). The choice of this analytical framework is informed by the conclusions of many economic studies that the output of a firm depends, among other factors, on the interest rate and exchange rate (Gylfason and Helliwell, 1983).

The IS-LM-BP model is discussed in this study under two policy measures – Fiscal and Monetary Policy Measures. We use this framework to examine how a nation’s equilibrium nominal interest rate, its equilibrium real income and its balance of payment position, given a current exchange rate can determine the output of firms. Change in the nominal money stock can influence the position of the LM schedule and variation in government spending policies can affect the position of IS schedule. Consequently, such policy actions could affect a nation’s economic performance, and so Central Banks and Government might contemplate adopting policy strategies with an intention to achieve a specific national economic goal.

One aim of Central Banks and Governments could be to achieve internal balance, which refers to the attainment of purely domestic policy objectives. Internal balance objective of policymakers might be to achieve the highest possible growth in Gross Domestic Product; this is the total value of final goods and services produced within a nation during a given year.

The fiscal and monetary policy measures in an open economy are generally based on a number of postulates:

First, there is an expenditure sector where the level of income is a function of level of disposable income \( Y - T \), the investment function which is a function of income \( Y \), and interest rate \( r \), and level of government expenditure \( G \), so that:

**IS:** \[ Y = C(Y - T, r) + I(Y, r) + G \]  \[ \cdots \text{1} \]

Second, there is a monetary sector where the demand for cash balances \( L \), is a function of level of aggregate income \( Y \), and interest rate \( r \). While the supply of money is exogenously determined by the monetary authorities and can only vary in real terms as a result of changes in the price level i.e.:

**LM:** \[ L(Y, r) = \frac{m}{p} \]  \[ \cdots \text{2} \]

Third, there is an external sector where the level of import \( F \) is a function of the level of income \( Y \), and exchange rate \( \alpha \) while the level of export \( X \) is only a function of exchange rate \( \alpha \). Therefore, the balance of trade function is:

**BP:** \[ B = X(\alpha) - F(Y, \alpha) \]  \[ \cdots \text{3} \]

With capital inflow and outflow being made a function of domestic rate of interest, i.e. \( k(r) \)

The balance of payments function \( H \) can therefore be expressed as:

\[ H = B(Y, \alpha) + k(r) \]  \[ \cdots \text{4} \]

Given the above postulates, the fiscal policy measures and monetary policy measures will have the following impact on the performance of manufacturing firms:

An expansionary fiscal policy measures in terms of an increase in the level of government expenditure will lead to a rise in interest rate. Since an increase in expenditure will lead to a rise in the demand for money, which, given a fixed money supply, will lead to a rise in interest rate \( r \), thereby, causing a decline in desired investment expenditure and thus a reduction in firms output. Therefore,

\[ \frac{dr}{dG} > 0 \]  \[ \cdots \text{5} \]
For the external sector expansionary fiscal policy, increase in government expenditure will lead to an increase in the level of aggregate income and hence, import (F). The rise in import spending and reduction in export spending places downward pressure on the performance of the nation’s manufacturing firms i.e.: 
\[
\frac{dy}{df} = \frac{dy}{dG} > 0 \quad \ldots 7
\]

Also, an expansionary monetary policy measure in term of an increase in money supply (M) or a reduction in the demand for money (L) is expected to have a negative impact on the balance of trade (B), since this increase is expected to give rise to a higher level of imports i.e.: 
\[
\frac{dB}{dM} = -\frac{dB}{dL} < 0 \quad \ldots 8
\]

Similarly, an increase in money supply (M) or a reduction in the demand for money (L) is expected to have adverse consequences on the balance of payment (H) i.e.: 
\[
\frac{dH}{dM} = -\frac{dH}{dL} < 0 \quad \ldots 9
\]

These phenomena can be explained by the fact that an expansionary monetary policy action in terms of an increase in the quantity of money causes at least a slight short-term increase in a nation’s real income level, thereby leading to a rise in import spending and a reduction in export spending. This eventually leads to the poor performance of the nation’s manufacturing firms.

Another feature of the external sector that may be derived from the above postulates is the fact that an increase in exchange rate will lead to the devaluation of a nation’s currency in terms of other currencies of the world. This increases the rate of exportation by the local firms and a reduction in the rate of importation, thereby enhancing the performance of manufacturing firms in term of productivity and vice versa i.e.: 
\[
\frac{dx}{da} = \frac{df}{da} > 0 \quad \ldots 11
\]

(i) Model Specification

In this study, one equation is used, which defines the manufacturing performance in term of a Share of Manufacturing in Gross Domestic Product. The reason for adopting this measure is that the improvement in the performance of manufacturing sector can greatly be felt by considering this dependent variable (Gylfason and Helliwell, 1983).

The independent variables which enter into the equation adopted in the study include the following: Lending Rate, Saving Rate, Bank Loan to Manufacturing Sector (BLM), Inflation Rate (INF), Fiscal Deficit (FD) and Exchange Rate (ER).

The model used in this study is explicitly specified as follows: 

\[
SMGDP = f (LR, SR, ER, BLM, FD, INF) \quad \ldots 12
\]

These can be specifically expressed in explicit econometric linear equation forms as: 

\[
SMGDP = a_0 + a_1 LR + a_2 SR + a_3 ER + a_4 BLM + a_5 FD + a_6 INF + u \quad \ldots 13
\]

Where:

\[
\begin{align*}
SMGDP & = \text{Share of Manufacturing in the Gross Domestic Product} \\
LR & = \text{Lending Rate} \\
SR & = \text{Saving Rate} \\
INF & = \text{Inflation Rate} \\
ER & = \text{Exchange Rate} \\
BLM & = \text{Banks Loan to Manufacturing Sector} \\
FD & = \text{Fiscal Deficit} \\
u & = \text{The Error Term} \\
a_0 & = \text{Intercept Term} \\
a_1 - a_6 & = \text{Coefficients}
\end{align*}
\]
(iii) A priori expectation
A priori specification: The expected signs of the coefficients of the explanatory variables are:

\[ a_1 > 0, a_2 > 0, a_3 > 0, a_4 > 0; \quad a_5 < 0, a_6 < 0 \]

A positive relationship is expected between the financial reforms and growth of manufacturing sector in Nigeria.

4. Sources of Data
The data set for this paper consists of annual time series spanning 1970 through 2005. The variables under consideration are: Share of Manufacturing in the Gross Domestic Product (SMGDP); Lending Rate (LR); Saving Rate (SR); Banks Loan to Manufacturing Sector (BLM); Inflation Rate (Inf); Fiscal Deficit (FD); and Exchange Rate (ER). These variables are computed from International Financial Statistics (IFS), Central Bank of Nigeria (CBN); and National Bureau of Statistics Data Base.

5. Estimating Procedures
This study employs co-integration technique and Error Correction Mechanism suggested by Granger (1969, 1986) to estimate the model and the causality between the dependent variables and the explanatory variables. However, in order to avoid spurious regression results, stationarity of variables and co-integration among them should be tested prior to estimation of error correction model. However, co-integration tests for stationary variables would be meaningless because variables have to be integrated individually, in order to be co-integrated, we have to examine the stationary of variables, if the variables are non-stationary, we can induce stationarity by performing unit root test.

6. Empirical Results
i. Unit root test
Firstly, the time series property of the variables used in the model is investigated before actual model estimation. This is done by carrying out a unit root test on each variable. This process is also known as determination of stationarity of the variables. According to Engle and Granger (1987), a variable is stationary when it has no unit root. This is necessary to know how sensitive is each variable to shocks or disturbance over time.

<table>
<thead>
<tr>
<th>Variables</th>
<th>ADF Statistics Value</th>
<th>Critical Value for 95% ADF</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXR</td>
<td>-0.98932</td>
<td>-3.5468</td>
</tr>
<tr>
<td>LDR</td>
<td>-2.1977</td>
<td>-3.5468</td>
</tr>
<tr>
<td>SR</td>
<td>-0.68623</td>
<td>-3.5468</td>
</tr>
<tr>
<td>INF</td>
<td>-3.7099</td>
<td>-3.5468</td>
</tr>
<tr>
<td>SMGDP</td>
<td>-1.8304</td>
<td>-3.5468</td>
</tr>
<tr>
<td>MPGR</td>
<td>-2.5869</td>
<td>-3.5468</td>
</tr>
<tr>
<td>FD</td>
<td>-3.0778</td>
<td>-3.5468</td>
</tr>
<tr>
<td>BLM</td>
<td>-2.9177</td>
<td>-3.5468</td>
</tr>
<tr>
<td>CUR</td>
<td>-2.4498</td>
<td>-3.5468</td>
</tr>
<tr>
<td>CPI</td>
<td>-2.1412</td>
<td>-3.5468</td>
</tr>
</tbody>
</table>

Source: Computed by the researchers

Table 1 shows that all the variables are not stationary at levels except inflationary rate. This is because the absolute values of the ADF statistics of the variables are less than the critical value at 95% with the exception of inflationary rate which has a greater value; hence, it is the only variable that is stationary at levels. This means that any disturbance or shock to it will not be sustained at all. But the remaining variables exhibit persistent shock.
Table 2. Result of the ADF Unit Root Test After Their First Difference

<table>
<thead>
<tr>
<th>Variables</th>
<th>Order of Integration</th>
<th>ADF Statistics Value</th>
<th>Critical Value for 95% ADF</th>
</tr>
</thead>
<tbody>
<tr>
<td>∆EXR</td>
<td>I(1)</td>
<td>−3.9108</td>
<td>−3.5514</td>
</tr>
<tr>
<td>∆LDR</td>
<td>I(1)</td>
<td>−5.9072</td>
<td>−3.5514</td>
</tr>
<tr>
<td>∆SMGDP</td>
<td>I(1)</td>
<td>−4.2814</td>
<td>−3.5514</td>
</tr>
<tr>
<td>∆FD</td>
<td>I(1)</td>
<td>−5.8331</td>
<td>−3.5514</td>
</tr>
<tr>
<td>∆SR</td>
<td>I(1)</td>
<td>−4.0165</td>
<td>−3.5514</td>
</tr>
<tr>
<td>∆BLM</td>
<td>I(1)</td>
<td>−5.9831</td>
<td>−3.5514</td>
</tr>
<tr>
<td>∆CUR</td>
<td>I(1)</td>
<td>−3.5718</td>
<td>−3.5514</td>
</tr>
<tr>
<td>∆MPGR</td>
<td>I(1)</td>
<td>−4.3611</td>
<td>−3.5514</td>
</tr>
<tr>
<td>∆CPI</td>
<td>I(1)</td>
<td>−3.7637</td>
<td>−3.5514</td>
</tr>
</tbody>
</table>

Source: Computed by the researchers

A further test for unit root to ascertain whether such shock is that of infinity or will die out over time is conducted using the first difference of each variable. Table 2 above shows that all the variables are stationary at their first difference and therefore integrated of order one denoted as I(1). Since stationarity was induced after the first difference, a necessary condition for long-run equilibrium relationship known as co-integration is met.

Table 3  Johansen’s Co-Integration Rank Test on Share of Manufacturing in GDP (SMGDP) and Financial Reforms

<table>
<thead>
<tr>
<th>Trace</th>
<th>H₀</th>
<th>H₁</th>
<th>Stat</th>
<th>95%</th>
<th>H₀</th>
<th>H₁</th>
<th>Stat</th>
<th>95%</th>
</tr>
</thead>
<tbody>
<tr>
<td>r ≤ 0</td>
<td>r = 0</td>
<td>r = 1</td>
<td>183.4065</td>
<td>140.0200*</td>
<td>r = 0</td>
<td>r = 1</td>
<td>64.2167*</td>
<td>48.5700</td>
</tr>
<tr>
<td>r ≤ 1</td>
<td>r = 2</td>
<td>r = 3</td>
<td>199.1898</td>
<td>109.1800</td>
<td>r ≤ 1</td>
<td>r = 2</td>
<td>44.3609*</td>
<td>42.6700</td>
</tr>
<tr>
<td>r ≤ 2</td>
<td>r = 3</td>
<td>r = 4</td>
<td>74.8290</td>
<td>82.2300</td>
<td>r ≤ 2</td>
<td>r = 3</td>
<td>25.7772</td>
<td>37.0700</td>
</tr>
<tr>
<td>r ≤ 3</td>
<td>r = 4</td>
<td>49.0518</td>
<td>58.9300</td>
<td>r ≤ 3</td>
<td>r = 4</td>
<td>22.7345</td>
<td>31.0000</td>
<td></td>
</tr>
</tbody>
</table>

Source: Computed by the researchers

NOTE: * indicates statistical significance at the 5% level

The analysis of table 3 shows that there is a long-run relationship between the SMGDP and Financial Reform since the null hypothesis is rejected at 5% level by both the maximum eigenvalue and trace statistics.

Table 4 Co-Integration Regression for SMGDP and Financial Reforms

<table>
<thead>
<tr>
<th>Variables</th>
<th>Coefficient</th>
<th>Standard Error</th>
<th>T-Value/Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>8.0768</td>
<td>1.4256</td>
<td>5.6657/0.000</td>
</tr>
<tr>
<td>EXR</td>
<td>0.0083081</td>
<td>0.0201120</td>
<td>0.41293/0.683</td>
</tr>
<tr>
<td>∆LDR</td>
<td>−0.13931</td>
<td>0.85324</td>
<td>−1.6327/0.114</td>
</tr>
<tr>
<td>∆SR</td>
<td>0.26129</td>
<td>0.14113</td>
<td>1.8515/0.075</td>
</tr>
<tr>
<td>∆BLM</td>
<td>−0.039644</td>
<td>0.24622</td>
<td>−0.16101/0.873</td>
</tr>
<tr>
<td>∆FD</td>
<td>0.038591</td>
<td>0.86543</td>
<td>0.44592/0.659</td>
</tr>
<tr>
<td>∆CPI</td>
<td>−0.014079</td>
<td>0.018607</td>
<td>−0.75667/0.456</td>
</tr>
</tbody>
</table>

Source: Computed by the researchers

R – Squared = 0.346
Durbin-Watson Stat. = 1.000
F – Statistics (6, 28) = 1.0149 (0.091)

Table 4 shows the estimated model representing the long run relationship between the share of manufacturing sector in the GDP and the financial institutional reforms in Nigeria. The result also shows that none of the explanatory variables individually has significant impact on the SMGDP. The R² is also low at 0.34, while the model failed to pass the test for overall statistical significance at 5% as indicated by the F – statistics value. The Durbin Watson value of 1.009 shows the presence of auto correlation.
Table 5  Parsimonious Error Correction Model for SMGDP and Financial Reform

<table>
<thead>
<tr>
<th>Variables</th>
<th>Coefficient</th>
<th>Standard Error</th>
<th>T-Value/Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>0.14960</td>
<td>0.28303</td>
<td>0.52858/0.002</td>
</tr>
<tr>
<td>Δ EXR</td>
<td>0.015146</td>
<td>0.022808</td>
<td>0.66407/0.513</td>
</tr>
<tr>
<td>Δ SR</td>
<td>0.29852</td>
<td>0.19863</td>
<td>1.5029/0.46</td>
</tr>
<tr>
<td>Δ BLM</td>
<td>– 0.21826</td>
<td>0.26727</td>
<td>– 0.8166/0.423</td>
</tr>
<tr>
<td>Δ LDR</td>
<td>– 0.067448</td>
<td>0.086173</td>
<td>– 0.78270/0.442</td>
</tr>
<tr>
<td>Δ LDR (-1)</td>
<td>– 0.040719</td>
<td>0.063566</td>
<td>– 0.64057/0.528</td>
</tr>
<tr>
<td>Δ CPI (-1)</td>
<td>0.028418</td>
<td>0.035695</td>
<td>0.79612/0.434</td>
</tr>
<tr>
<td>Δ CPI</td>
<td>– 0.029134</td>
<td>0.35761</td>
<td>– 0.81468/0.424</td>
</tr>
<tr>
<td>Δ FD</td>
<td>0.055691</td>
<td>0.57736</td>
<td>0.964581/0.345</td>
</tr>
<tr>
<td>ECM (-1)</td>
<td>– 0.53532</td>
<td>0.17004</td>
<td>– 3.1482/0.005</td>
</tr>
</tbody>
</table>

Source: Computed by the researchers

Table 5 is the estimated parsimonious model for SMGDP. This is the best fit model representing the long run relationship between the share of manufacturing sector in GDP and the financial institutional reforms in Nigeria. A slight improvement was recorded in the value of $R^2$ which rose to about 35%. The F – Statistics shows that the model also failed to pass the overall test of statistical significance at 5% level. But it passed it at 10% level of significance.

The parsimonious model also shows that the problem of auto correlation noticed in the previous table has been eliminated with the value of D.W. of 1.73. Again, just like the previous model, the explanatory variables are not individually statistically significant. But the ECM value is correctly negative and significant at 5% which still shows that the ECM is able to correct any deviation from the long run equilibrium relationship between the SMGDP and its past values and that of financial institutional reforms.

However, the estimation of this model has revealed that the financial institutional reform does not have a significant impact on the share of manufacturing sector in Nigeria GDP.

Conclusion
Based on the results and discussion of findings of this research work, the study hereby logically and sequentially concludes as follows:

i. There is a long-run relationship among the Lending Rate, Saving Rate, Inflation Rate, Exchange Rate, Banks Loans to Manufacturing Sector and Fiscal Deficit on the performance of manufacturing sector in Nigeria.

iii There is an insignificant relationship between the financial institutional reforms and the Share of Manufacturing in GDP in Nigeria

vi Based on the findings of this research work, the Financial Institutional Reforms in Nigeria do not have a significant impact on the performance of Nigerian Manufacturing sector during the period under review.

8. Recommendation
On the basis of aforementioned findings, the following recommendations are made:

Fiscal Recklessness and Deficit Financing
First, Nigerian government must avoid deficit financing as much as possible. In case it becomes necessary to budget for deficit, it should be financed in accordance to the appropriate regulations which limit the exposure of the Central Bank of Nigeria to the Federal Government through the ways and means mechanism.

Interest Rate Monitoring
Second, since high interest rate in the Nigerian financial system is a reflection of inadequate bank supervision and inefficient institutional framework. Therefore, effort should be made to strengthen the prudential, regulatory and supervisory framework with attention focused on issues like specifying and enforcing rules and guidelines on loan classification, provision for bad debts, capital adequacy standards and limits on loan concentration. These will reduce the tendency for banks to provide risky loans at high interest rate.

Optimal Exchange Rate Policy
Third, optimal exchange rate policy must be designed to obtain real exchange rate that maintains both internal and external balances. When the real exchange rate is optimal, domestic producers of tradable can compete internationally. In order to sustain these exchange rates adjustment, appropriate monetary and financial...
policies have to be put in place.

**Making of Loans to Manufacturing Sector**

Fourth, the Nigerian government should acknowledge the challenges of unavailability of long-term funds to the banking industry and enact policies that will encourage the growth of institutions that can provide long-term funds for the manufacturing industries.

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