e-ISSN : 2347 - 9671 Impact Factor : 0.998 p- ISSN : 2349 - 0187

EPRA INTERNATIONAL JOURNAL OF ECONOMIC AND BUSINESS REVIEW

www . epratrust.com

September 2014 Vol - 2 Issue- 9

POLICY REVERSAL AND ITS IMPLICATION ON THE ECONOMIC GROWTH OF NIGERIA: A STUDY OF THE NIGERIA MANUFACTURING SECTOR

AMOS, Nneoma B[1], AJIKE, Emmanuel O[2], AKINLABI, Babatunde H.[3]

[1] *Dept of Business Administration & Marketing, Babcock University, Ilishan Remo Ogun State Nigeria.*

[2] *Dept of Business Administration & Marketing, Babcock University, Ilishan Remo Ogun State Nigeria.*

[3] *School of Transport, Lagos State University, Ojo, Lagos, Nigeria.*

ABSTRACT

Policy reversals have taken a big toll on the economic development of most nations especially Nigeria. Investment friendly reforms typically raise expected returns, but may also increase uncertainty if the investors believe that the reforms could be reversed. This paper investigates the effect of policy reversals on the economic growth of the nation using the manufacturing sector as a case. The data necessary for this study were obtained from secondary sources (CBN Statistical Bulletin and Nigerian Bureau of Statistics). The variables utilized from these bulletins are manufacturing sector output, the exchange rate, the inflation rate and the interest rate. A co-integration test was performed on these variables to determine the long-run relationship between the variables. The results of unit root suggest that all the variables in the model are stationary and the results of Causality suggest that exchange rate and interest rate cause manufacturing sector output (MSO) and not MSO caussing exchange rate and interest rate. The result a one-way causation running from exchange rate and interest rate to MSO. The Johansen cointegration result shows that despite no causation between exchange rate and interest rate, but there is still existed 1 cointegrating equation, implying the existence of long run relationship between policy reversals and economic development in Nigeria. The result also revealed significant positive relationship between exchange and interest rates with economic growth. The result indicated that policy reversals have negatively affected the manufacturing

sector which has in turn adversely affected the economic growth of the nation. Therefore, it is recommended that for the manufacturing sector to perform at optimum level, the level of reversals in some basic economic indicators such as interest rate, exchange rate and inflationary rate should be reduced and controlled to the bearest minimum.

KEYWORDS: Policy reversals, Economic development, Manufacturing Sectors, Performance

INTRODUCTION

The Nigerian manufacturing sector has witnessed a terrible and a serious downturn since the discovery of oil in 1972. Frequent and indiscriminate policy reversal has been a major impediment to the success and growth of the manufacturing sector which in turn has affected the economic growth of the nation. Banjoko (2007) clearly asserts that the spate of government policy reversals in recent time have thrown many companies out of business. Other problems of the economy include excessive dependence on imports for both consumption and capital goods, dysfunctional social and economic infrastructure, unprecedented fall in capacity utilization rate in industry and neglect of the agricultural sector, among others. These have resulted to serious downturn and a major impediment to economic growth of Nigeria despite all effort made by structural adjustment programme (SAP) to address the problem. Nigeria is noted today as among one of the 30 poorest nations in the world and this have brought the country back and have limited the growth of the nation. Stating the importance of high productivity in boosting economic growth and the standards of living of the people, it is necessary to evaluate the productivity of the Nigerian manufacturing sector. In light of the foregoing, it is important to evaluate the role of the Nigerian manufacturing sector in the economic growth and the development of the country. The paper presents possible implications of industrial policy reversal on economic growth of Nigeria.

LITERATURE REVIEW

The word policy can be defined from different perspectives depending on the authors. Adeleke, Ogundele and Oyenuga (2010) defined policy as a guide to action and decision makings within an organizations. In the perpective of Lawal (1993), policy is a statement of an organization's principles and objectives, accompanied by a directive indicating the general pattern to be followed to secure its implementation. Ogundele and Olajide (2010) defined policy as the decision made to be continuously applied to repetitive problems provided the conditions that form the basis of the decision have not changed. Aluko, Odugbesan, Gbadamosi and Osuagwu (2009) argue that policy can be define in general and specific terms. In general terms, a policy is an instrument of management. In specific term, policy is a managment tool for solving socio-economic and political problems in human, public and industrial organizations. It is statement of plan of actions proposed to be pursued or adopted by an organization, which can be small, medium, big, and even government.

However, as individuals or corporate organizations usually have policy that determines how things are done, so also country has policies that give direction as to how things are to be done. These policies include: economic policies, trade policies, industrial and production policies. These policies significantly impact on the economic development of the country. Otokiki (2005) cited in Ogundele and Olajide (2010) indicated that

economic, trade, industrial and production activities of the government directly and indirectly influence the composition, direction and magnitude of international trade and financial operations. This made Ogundele and Olajide (2010) to conclude that less developed/ developing countries need properly articulated macro-economic policies to grow and develop.

Shonekan (1985) cited in Simon-Oke and Awoyemi (2010) has observed that a well-developed manufacturing and industrial sector is required to bring about profound economic changes in a less developed country like Nigeria. Based on the scope, industrial and production policies represents the decisions that guide industrial and production activities in the country. It focus essentially on the manufacturing sector of the economy. Lall and Wangwe (1999) also defined industrial policy as all government policies directed toward industrialisation. According to Lall and Wangwe (1999) industrial policy is of two forms: functional and selective policies, are formulated to affect resource allocation. The former aims at improving markets in a generic manner,such as improving education, infrastructure or capital markets, while the later promotes specific industries or economic agent. In Nigeria, the traditional industrial policy includes import substitution, export promotion and exchange rate adjustment policies.

Given the importance and relevance of industrialization (industrial sector) to economic growth and development, Nigeria since independence has put in place various policies, incentives and institutions to drive industrial development. These policies and strategies embarked upon in Nigeria since independence are Import Substitution Industrialization Policy, Nigerian Indigenization policy (established in In 1972), Nigerian Enterprises Promotion Act (in 1977), Structural Adjustment Programme, Trade and Financial Liberalization Policy (In 1989), Bank of Industry (BOI) established in 2000, Small and Medium Industries Equity Investment Scheme (SMIEIS) set up in 2000, the National Integrated Industrial Development (NIID) blueprint, the Small and Medium Enterprises Development Agency of Nigeria (SMEDAN and introduction of incentives such as tax holidays, tariff protection, outright ban on certain commodities to encourage domestic production, building of industrial estates (export processing zones) and Industrial Raw Material Research and Development Council (IRMRDC) etc.

Many studies have been conducted to investigate the impact of industrial policy on economic development. Ogundele and Olajide (2010) conducted policy evaluation and comparative analysis of industrial sector in Nigeria. They established that manufacturing sector recorded a modest average growth rate between 1970 and 1980, due to the restrictive trade policy stance of the government. Between 1981 and 1986, it also recorded improved performance, credited to the industrial policy stimulating non-oil exports and providing a base for private sector-led economic growth. However, the performance of manufacturing sector declined marginally between 1987 and 1990, credited to the policy instance. The performance of manufacturing sector declined continuously from 1991 to 1995. Similarly, between 1995 and 2000, manufacturing sector operated below capacity utilization because they relied heavily on internally generated funds which has reduced their productive capacity. From 2000 till date, manufacturing sector performance has only marginally improved.

The low performance is associated with high production cost related with high tariffs, increased cost of energy, rising cost of imported inputs as a result of continuous depreciation

of Naira exchange rate, and rising rate of inflation (Ogundele and Olajide, 2010). Fabayo (1985) opined that the strategy of import-substitution, which is generally favoured in Nigeria, relies heavily on importation and does not sufficiently use local reserves. This has resulted in high production cost for manufacturers, low value added retained in the economy and depletion of international reserves. Consequently, the bulk of manufacturing capacity continued to remain unutilized while the provision of public utilities and other social services has deteriorated.

The indiscriminate and frequent policy reversal is a big problem to successful business operation in the manufacturing sector. Many strategic businesses and investment decision have be rendered useless as a result of government indecision and policy reversal. Banjoko (2009) reports that in 2005 Dunlop Nigeria PLC foresaw a big opportunity in the radical truck tyre market lines of businss. Then the import duty was as high as 40%, sufficiently high enough to make imported radical truck tyre unattractive and uncompetitive Government was contacted and an assurance was given that no change in tarrif was being contemplated. Dunlop went to raise 8 billion from the capital market and invested the money in the expansion its heavy radial truck tyre. No sooner was the expansion completed than the government almost overnight and without prior notice reviewed the import duty on radial truck tyres dowmward from 40% to 10% with effect from the 2007 budget year. Thus dunlop's truck tyre expansion project had to be abandoned. The incidences of policy reversal do not send good signal other than to dampen interest in new investment and destroy confidence in the stability of our industrial sector (Banjoko, 2009).Besides, the Nigeria business environment is not friendly for the manufacturing operatorsto thrives. The problems include; deficient infrastructure, frequent policy somersaults, bureaucratic bottlenecks, high interest rate, completition on the year of government all which have polluted the nations manufacturing landscape (Banjoko, 2009). Finally, improper policy implementations and poor funding are other major reasons for poor performance of most companies in Nigeria manufacturing sector.

METHODOLOGY

The data utilized for this study were gathered from secondary sources. The major sources of data collected for the sources were gotten from CBN statistical bulletin, the Nigerian Bureau of Statistics and CIA world fact book. The dependent variable was converted to its log form, in order to reflect the diminishing importance of policy to increasing GDP.

3.1 Model Specification:-

The following models were employed, which is based on modified work of (Banjoko, 2009) to investigate the study. In the model, manufacturing sector output is used as the dependent variable, while exchange rate, interest rate and inflation rate are the independent variables.

The model is specified as $LOGMSO = f(EXCR, INTR, INFR)$ .....(1)

Where:

LOGMSO = Log of Manufacturing sector output

EXCR = Exchange Rate

INTR = Interest Rate

INFLR = Interest Rate

The equation (1) above is transformed to econometric equation.

$$LOGMSO = \beta_0 + \beta_1 EXCR + \beta_2 INTR + \beta_3 INFLR + \ell \quad \text{..... (2)}$$

Where:

β_0 = Constant term

$\beta_1 - \beta_3$ = Coefficients to be estimated

ℓ = Error Term

A priori expectation:-

It is expected that: $\beta 1 < 0, \beta 2 < 0, \beta 3 < 0$. For effectiveness of this study, both descriptive and analytical techniques were employed. These include multiple regression analysis of a single-equation model based on method of Ordinary Least Squares (OLS), unit root test and Johansen cointegration test. The E-view 7.0 software is used to estimate the model above.

4.0 RESULTS AND DISCUSSION

Table1: Regression Result for the model

Dependent Variable	Explanatory Variables	Obtained estimates	Standard Error	Estimated t-value	Sig.
LOGMSO	Constant	6.725051	0.386859	17.38371	0.0000
	EXCR	0.030330	0.003392	8.942232	0.0000
	INFLR	0.007654	0.010375	0.737718	0.4652
	INTR	0.119483	0.029858	4.001776	0.0003
R^2 = 0.838186 Adj R^2 = 0.825412 F-stat = 65.61274 D-W = 0.516363	$t_{0.025}$ = 2.014 $F_{0.05}$ (3, 38) =2.85				

Source: Computation and Output of eviews based on Authors Field study (2014)

Table 1 contain regression results of our model. The results indicated that the coefficient of inflation rate is statistically insignificant while the coefficients of exchange rate and interest rate are found to be statistically significant. Precisely, the coefficient of inflation rate is found to be 0.7654 percent, as indicated by the probability value of 0.4652. The coefficients of exchange rate and interest rate are positive and statistically significant as indicated by their probability values of 0.0000 and 0.0003 respectively. The coefficients of exchange rate and interest rate though statistically significant but are not consistent with the expectation of this paper. The low probability values of exchange rate and interest rate implies that the variables have effects and predict changes in manufacturing sector. Exchange rate and interest rate policies though unstable effect positive changes in the manufacturing industry in Nigeria. However, inflation is positive which is contrary to

expectation showing presence of inflation in the nation. It has no significant effect on manufacturing sector which is the hub of the nation economy, hence, economic growth and development. The F-statistic value of 65.61274, which measure the joint significance of the explanatory variables, is found to be statistically significant at 5 percent level as indicated by the corresponding probability value of 0.000000 in table 1. This implies that at least one of the exchange rate, inflation rate or interest rate is statistically significant.

Table 1 shows that the coefficient of determination also called the R square is 83.8 percent. This means that the combined effect of the predicted variables (exchange rate, inflation rate and interest rate) explains 83.8 percent of the variations in manufacturing sector output/performance. Furthermore, the goodness of fit of the regression line is high after adjusting for the degree of freedom as indicated by adjusted R^2 (0.8254 or 82.54%). The Durbin –Watson statistic 0.5163 is very low and lesser than 2 indicating presence of /or positive autocorrelation.

Unit Root Test:-

It is almost a convention in time series analysis, to verify the order of integration for each series so as to avoid perennial problem of spurious regression. A test of stationarity property for each variable in the study is conducted using Augmented Dickey Fuller (Dickey and Fuller, 1981) procedure. The result of the stationarity test are shown in Table 2

Table 2: Unit Root Test results using ADF procedure

Variable	ADF test statistics	1% Critical Value	5% Critical Value	10% Critical Value	Order of Integration
MSO	-6.635625	-4.211868	-3.529758	-3.196411	I(2)
EXCR	-5.558125	-4.205004	-3.526609	-3.194611	I(1)
INFLR	-5.868736	-4.211868	-3.529758	-3.196411	I(1)
INTR	-10.18290	-4.205004	-3.526609	-3.194611	I(1)

Source: Authors' Compilation based on Output result from the E-views (2014)

The results of the unit root test for stationarity of the individual time series reported in table 2 above revealed that all the variables of the model are found to be stationary at 1, 5 and 10 percent. Manufacturing output is found to be stationary at level (d(2)), while exchange, inflation and interest rates are both found to be stationary at first difference (d(1)), which is indicated by ADF results at all levels less than the critical values in negative direction. The ADF value for MSO is -6.635 and the critical values are -4.211, -3.529 and -3.196 at 1, 5 and 10 percent respectively. The ADF value for EXCR is -5.558 and the critical values are-4.205, -3.526 and -3.194 at 1, 5 and10 Percent level respectively, the ADF value of INFLR is -10.18290 and the critical values -4.211, -3.529 and -3.196 at 1, 5 and 10 percent level respectively, while the ADF value for INTR is -10.182 and the critical values are -4.205, -3.526 and -3.194, also at 1, 5, and 10 percent respectively.

Causality Test Among the variables:-

The pairwise Granger Causality Test was further used to augment the estimated model of the study. A simple standard causality test that is pair wise Granger causality test employed examines bi-directional relationship between two variables selected at a time in the study. Our empirical results are presented in table 3.

Table 3: Granger causality test results

Pairwise Granger Causality Tests			
Date: 07/09/14 Time: 12:53			
Sample: 1970 2011			
Lags: 2			
Null Hypothesis:	Obs	F-Statistic	Prob.
EXCR does not Granger Cause MSO	40	9.19926	0.0006
MSO does not Granger Cause EXCR		0.97320	0.3879
INFLR does not Granger Cause MSO	40	0.89902	0.4162
MSO does not Granger Cause INFLR		0.81169	0.4523
INTR does not Granger Cause MSO	40	1.75202	0.1883
MSO does not Granger Cause INTR		0.94423	0.3987
INFLR does not Granger Cause EXCR	40	0.34389	0.7114
EXCR does not Granger Cause INFLR		0.94312	0.3991
INTR does not Granger Cause EXCR	40	1.08431	0.3492
EXCR does not Granger Cause INTR		0.16540	0.8482
INTR does not Granger Cause INFLR	40	1.18434	0.3179
INFLR does not Granger Cause INTR		1.17851	0.3197

The results of causality are contained in table 3. The results revealed that exchange and interest rates granger causes MSO, the null hypothesis are rejected at 5 percent 10 percent respectively as indicated by their probability values of 0.0006 and 0.1883 respectively, this is confirmed by their F-statistics values of 9.199 and 1.752 respectively. The results also revealed that MSO does not granger cause exchange, inflation, and interest rates, the null hypothesis is accepted at 38 percent, 45 percent and 39 percent respectively, as indicated by their probability values of 0.3879, 0.4523 and 0.3987. This result therefore, indicates one-way causation flowing from exchange and interest rates to MSO. The result further reveals no causation existed between exchange and interest rates. This provide the basis to conduct cointegration test in order to find out whether there existed a long run relationship between economic growth and development, exchange rate, inflation rate and interest rate (proxy for industrial policy) in Nigeria.

Cointegration Test:-

Having confirmed that the data are stationary, we proceed to examine if the variables are cointegrated, When a cointegration relationship is present, it means that the variables in our model follow the same trend in the long-run. Based on the information, provided by the Akaike information criteria (AIC) and Schwarz criteria (SC), we choose lag, up to 3 periods. The table below summarizes cointegration result, using the Johansen cointegration test.

Table 4: Results of Co-integrated test (Johansen techniques)

Eigen value	Likelihood Ratio	5 Percent Ctitical Value	Hypothesized No. of CE(s)
0.584675	56.18070	47.85613	None *
0.365668	21.03293	29.79707	At most 1
0.052398	2.825601	15.49471	At most 2
0.016678	0.672753	3.841466	At most 3

Source: Researchers' Estimation suing eviews

Johansen cointegration test results contain in table 4 confirm the existence of long run relationship between MSO, exchange rate, inflation rate and interest rate in Nigeria as indicated by the TRACE-statistic. The TRACE-statistics results revealed that there is 1 cointegrating equation at 5 percent level. Therefore, we can can conclude that there is a unique long-run equilibrium relationship between manufacturing output, exchange rate, inflation rate and interest rate.

The co-integrating value of vector normalized on MSO is:

MSO = 13532.22INTR - 8871.841EXCR - 13179.48INFLR

(5297.72) (1059.74) (1059.74)

The results of VECM (see appendix) indicated that the estimated EC_{t-1} (-0.034205) is statistically significant and has a negative sign which confirms that there is no problem in the long-run equilibrium relation between the independent and dependent variables at 5% level of significance. This shows a satisfactory rate of convergence to the equilibrium state per period.

5.0 CONCLUSION AND RECOMMENDATIONS

This paper investigates the effect of policy reversals on the economic growth in Nigeria using the manufacturing sector as a case study between (1970 and 2011 using co-integration and vector error correction models. Our objective was to determine the short and long run impact of Industrial Policy on Nigerian Economic Development through the manufacturing sector. The results of unit root suggest that all the variables in the model are stationary and the results of Causality suggest that exchange rate and interest rate cause MSO and not MSO causing exchange and interest rates. The result shows a one-way causation running from exchange and interest rates to MSO. The Johansen cointegration result show that despite on causation between exchange and interest rates, but there existed 1 cointegrating equation, implying the existence of long run relationship between industrial policy on Nigerian economic development. The results also show that exchange rate and interest rate possessed a positive impact on economic development. The result also shows that inflation does not significantly affect economic development. The estimated coefficient of vector error correction odel is negative and statistically significant which suggests that the rate to long-run equilibrium state per preiod. On the basis of our findings we suggest that for the manufacturing sector to perform at

optimum level, the level of reversals in some basic economic indicators such as interest rate, exchange rate and inflationary rate should be reduced and controlled to the bearest minimum.

REFERENCES

1. *Adeleke, A., Ogundele, O.J.K. Ogundele, and Oyenuga, O.O. (2010). Business policy and strategy (second edition). Lagos: Concept Publications*
2. *Adejugbe, A. (1979). Manufacturing, In Oloku, F.A. et al, eds., Structure of the Nigerian Economy. Macmillan, London.*
3. *Aluko, M., Odugbesan, O., Gbadamosi, G. And Osuagwu, L. (2009). Business policy and strategy. Lagos: Longman.*
4. *Aminu, U., Manu, D. And Salihu, M. (2013). An empirical investigation into the effect of unemployment and inflation on economic growth in Nigeria. Interdisciplinary Journal of Research in Business, 2 (12): 01-14.*
5. *Banjoko, S.A. (2009). Nigerian manufacturing sector: Bumpy post and shaky future- What options for survival. Inaugural Lecture Series 2009, University of Lagos.*
6. *CBN (2000). "The Changing Structure of the Nigerian Economy and Implications for Development". Research Department, Central Bank of Nigeria, August.*
7. *Johansen, S. and Juselius, K. (1991). "Maximum Likelihood Estimation and Inference on Co-integration with Applications", Oxford Bulletin of Economics and Statistics,52(3): 169-210.*
8. *Lall, S. and S. Wangwe, (1999). "Industrial Policy and Industrialisation in Sub-Saharan Africa". Journal of African Economies, 7(1): 57-68.*
9. *Lawal, A.A. (1993). Management in focus (revised edition). Lagos: Sahanit Nigeria Limited.*
10. *Ndebbio, J. E U. and Ekpo, A. H. (1991). The Nigerian Economy at the Crossroads: Policies and their Effectiveness. Calabar-Nigeria: University of Calabar Press.*
11. *Ogundele, O.J.K. and Olajide, O.T. (2010). Fundamentals of Nigeria Commercial Policy. (2nd ed.). Lagos: Pumark Nigeria Limited.*
12. *Simon-Oke, O.O. and Awoyemi, O.V. (2010). "Manufacturing Capacity Utilization and Industrial Development in Nigeria: An Assessment (1976 – 2005)". An International Multi-Disciplinary Journal, 4(2)Pp.265-275, assessed http:// afrrevjo.net/journals/multidiscipline/ Vol_4_no_2_art_21_SimonOke%20&%20Awoyemi.pdf*