EMPIRICAL EVIDENCE BETWEEN PUBLIC POLICY AND BUSINESS ORGANIZATION IN NIGERIA

MURITALA, Taiwo Adewale
Department of Economics and Financial Studies,
Fountain University Osogbo,
Nigeria

ABSTRACT: *This paper empirically examines the causal relationship between public policy and its impact on business organisation. Data collections are mainly secondary over the period of 1980 to 2010. The study hypothesized negative relationship between inflation rate; value added tax; exchange rate and economic growth. Collected data were regressed using OLS technique and Augmented Dickey Fuller to test for the stationarity of the variables. Findings indicate a negative relationship between Public Policy and Return on Assets (ROA) while that of value added and exchange rate conforms with the apriori expectation of positive relationship and inflation maintains a negative relation. Hence, it is therefore recommended that Nigeria government should be consistent with a policy framework that is creditably maintained (fiscal stance, exchange rate policy, interest rate policy, pricing policy, etc) and the policy makers should also create credibility including political will in order to spur investor confidence for both local and foreign investments.*

KEYWORDS: Public Policy, Business Organisation, Augmented Dickey Fuller, Regression, Nigeria

INTRODUCTION

The evaluation of public policies to improve the performance of the small business sector has provoked a great deal of debate and research activity in recent years. Once upon a time economists thought government policies has no impact on business. But after the great depression of the 1930's Keynes, the great economist, showed government policies could effect business. For example, if a govt imposes taxes and duties on a particular sector than its justified by its profit margin, it would go down or the businessmen in it can lose their interest in sector and give up their business. Similarly, tax and duty exemption for a particular sector would encourage businessmen to invest in it . as a result the sector will grow. If a country's monetary policy ensures availability of loans at a reasonable rate, investment will grow up.

The prevailing global order has a tremendous impact on a country's business. It may be legal or illegal. For example, the USA manipulate the UN to impose sanctions on Iraq in the 1990s. The sanctions destroyed Iraqi business for which it lost business worth billions of dollars as well as its money in the banks of the USA and its allies. Iran is another example. The impact of government policy on business can be explained from the political and technical perspective.

Statement of Hypothesis

Hypothesis I

H0: That the public policy has no significant impact on business performance in Nigeria

H1: That the public policy has significant impact on business performance in Nigeria

LITERATURE REVIEW ON IMPACT OF PUBLIC POLICY ON BUSINESS PERFORMANCE

From the political point of view, political parties, their ideologies as well as world politics are relevant. From the technical perspective, the following policies of a government can impact business directly or indirectly: (a) taxation, (b) subsidies, (c) interest rates, and (d) exchange rates. The government policy of a country depends upon its political culture. It can also vary depending on the form of government. Policy in a communist country will be different from that in a democracy or monarchy. The government policy in a politically stable country will also be different from an unstable country. In a stable political system, a government can take sustained business-friendly decisions to strengthen local business. The government, in this situation, gets the help of the opposition. But in an unstable political system in which the opposition boycotts parliament and takes to street agitations businesses and investment would suffer. In such a negative political culture, a country cannot have a sustained business-friendly environment or policy. In an unstable system, a government finds it difficult to maintain law and order which affects the business environment. It hampers business. Foreign investors do not invest in such an environment.

Taxation policy can affect businesses. High tax rate on imported products would encourage local entrepreneurs to produce goods at home. But high tax rate on raw materials will discourage domestic production and encourage imports.

Lending rates of the banks and the financial policy of a government can affect the economy. If interest rate rises, investment falls because businessmen would not borrow at unviable rates.

Governments create the rules and frameworks in which businesses are able to compete against each other. From time to time the government will change these rules and frameworks forcing businesses to change the way they operate. Business is thus keenly affected by government policy. Key areas of government policy that affect business are:

Economic policy

A key area of government economic policy is the role that the government gives to the state in the economy. Between 1945 and 1979 the government increasingly interfered in the economy by creating state run industries which usually took the form of public corporations. However, from 1979 onwards we saw an era of privatisation in which industries were sold off to private shareholders to create a more competitive business environment.

Taxation policy affects business costs. For example, a rise in corporation tax (on business profits) has the same effect as an increase in costs. Businesses can pass some of this tax on to consumers in higher prices, but it will also affect the bottom line. Other business taxes are environmental

taxes (e.g. landfill tax), and VAT (value added tax). VAT is actually passed down the line to the final consumer but the administration of the VAT system is a cost for business.

Another area of economic policy relates to interest rates. In this country the level of interest rates is determined by a government appointed group - the Monetary Policy Committee which meets every month. A rise in interest rates raises the costs to business of borrowing money, and also causes consumers to reduce expenditure (leading to a fall in business sales).

Government spending policy also affects business. For example, if the government spends more on schools, this will increase the income of businesses that supply schools with books, equipment etc. Government also provides subsidies for some business activity - e.g. an employment subsidy to take on the long-term unemployed.

METHODOLOGY AND DATA

Sources of Data and Model Specification

Data for the study are obtained from secondary sources such as the Statistical Bulletin of the Central Bank of Nigeria (CBN) for various editions annual reports account of selected commercial banks in listed in Nigeria stock exchange, as well as review of existing literatures. This study is empirically examining the effect of public policy on business performance in Nigeria for the period 1980- 2012. First of all, the problem of stationary has been solved through employing the unit root test. Augmented Dickey-Fuller (ADF) test is carried out to test for the stationarity of the variables. In implementing ADF unit root test, each variable is regressed on aconstant, a linear deterministic trend, a lagged dependent variable and *q* lags of its first difference .The ADF test for unit root tests the null hypothesis *H*o: p = 0 against the one-sided alternative H1: p < 0 in equation above. The optimal lag length for conducting ADF tests is usually picked with the help of various information criteria. Thus, the model for public policy on business performance relationship follows the specification of Greene, J. (1989) that based their empirical model specification on the Gravity growth model. Through the use of Ordinary

Least Square Method, the model has the specified thus:

$$\text{Log ROA} = \alpha_0 + \text{LOG } \beta_1 \text{INF} + \text{LOG } \beta_2 \text{ VTAX} + \text{LOG } \beta_3 \text{EXRT} + \mu$$

Where:

αo = Autonomous incomes

β_1, β_2 and β_3 are parameters

ROA = Return on Assets

INF = Inflation rate

VTAX = Value Added Tax

EXRT = Exchange rate

μ = Error Term

A Priori Expectation

It is clear that $\beta 0$ should be positive ($\beta_0 > 0$) as there can be no negative value for ROA. $\beta_1 < 0$; a change in inflation rate will lead to change in ROA, $\beta_2 > 0$; a change in value added tax will lead to a positive change in ROA and $\beta_3 < 0$; a change in exchange rate will lead to a positive change in ROA

PRESENTATION AND INTERPRETATION OF FINDINGS

Descriptive Statistics

The summary of the statistics used in this empirical study is presented in Table 1 below. As can be observed from the table, the mean value of ROA is 12.88667, Inflation rate is 10.94714, value added tax is 9.028245 and Debt servicing is 10.029339. It is also observed that LROA, LINF, LVTAX and LEXRT are positively skewed.

Table 1 Showing the Summary of Descriptive Statistics

LROA	LINF	LVTAX	LEXRT
Mean	12.88667	10.97147	9.03457
Median	12.59709	12.50672	8.95036
Maximum	16.89371	15.30246	14.98523
Minimum	8.47821	5.67832	4.98602
Standard Deviation	2.98302	3.36721	3.29137
Skewness	0.12894	-0.46921	-0.2.08432
Observation	33	33	33

Source: Author's Computation

Result of Unit Root Test

Time series properties of all variables used in estimation were examined in order to obtain reliable results. Thus, this exercise was carried out through Augmented Dickey Fuller (ADF) test as articulated by Engel and Granger (1987). In this analysis, constant model was considered. The null hypothesis in the ADF is that there is the presence of unit root. Table 2 report the results of ADF, respectively.

Table 2. Stationary Test Result

Variables	At Level		At First Difference		
	ADF Values	Mackinnon Critical Values	ADF Values	Mackinnon Critical Values	Order of Integration
LROA	-0.229023	-3.605593	-5.444020*	-3.610453	I(1)
LINF	-1.673291	-3.873219	-3.974328*	-3.610453	I(1)
LVTAX	-0.943218	-3.954621	-3.398321*	-3.610453	I(1)
LERT	-0.249215	-3.250234	-4.382104*	-3.610453	I(1)

Source: Author's Computation

NOTE: One, two and three asterisk denotes rejection of the null hypothesis at 1%, 5%, and 10% respectively based on Mackinnon Critical Values.

The unit root test is conducted on the variables used in this study in other to avoid a spurious regression. From the above results, it shows that the data are not stationary at level form since the

critical values are high when compare to the ADF statistics and probability value is very high indicating that it is not statistically significant at all significance levels. Moreover, the variables became integrated of order one at first difference considering the low probability value and critical values that are significant at 1%, 5% and 10% when compare to the ADF test statistics.

The above result show that LNGDP, LNEDEBT and LNDESER are non stationary series at level form but became an I(1) series after first differencing. This implies the above Augmented Dickey Fuller (ADF) tests suggest that LNGDP, LNEDEBT and LNDESER are of the same order of integration.

Result of OLS Regression

This approach involves the estimation of static OLS regression which captures any possible long run relationship between LNGDP, LNEDEBT and LNDESER. The OLS regression model is specify as follows;

$$\text{Log ROA} = \alpha_0 + \text{LOG }\beta_1\text{INF} + \text{LOG }\beta_2\text{ VTAX} + \text{LOG }\beta_3\text{EXRT} + \mu$$

Where:
α_0 = Autonomous incomes
β_1, β_2 and β_3 are parameters
ROA = Return on Assets
INF = Inflation rate
VTAX = Value Added Tax
EXRT = Exchange rate
μ = Error Term

Table 3. OLS Result

Dependent Variable: LROA				
Method: Least Squares				
Variable	Coefficient	Std.Error	t- Statistic	Prob
C	5.340264	0.369733	14.44358	0.0000
LINF	-0.156431	-0.245391	-4.429143	0.0051
LVTAX	0.027722	0.112537	9.982341	0.0003
LERT	-0.249211	-0.245811	-3.824351	0.0013
R = 0.816077 Adjusted R^2 = 0.912713 DurbinWatson: 2.160321				

$$\text{Log ROA} = \alpha_0 + \text{LOG }\beta_1\text{INF} + \text{LOG }\beta_2\text{ VTAX} + \text{LOG }\beta_3\text{EXRT} + \mu$$

DISCUSSION OF FINDINGS FROM OLS RESULT

LROA = 5.340264 – Log 0.156431 + Log 0.27722 – Log 0.249211

S.E = (0.369733) (0.245391) (0.112537) (0.245811)

Variable	Coefficient	Std.Error	t- Statistic	Prob
C	5.340264	0.369733	14.44358	0.0000
LINF	-0.156431	0.245391	-4.429143	0.0051
LVTAX	0.027722	0.112537	9.982341	0.0003
LERT	-0.249211	0.245811	-3.824351	0.0013
R = 0.816077 Adjusted R^2 = 0.912713 DurbinWatson: 1.960321				

The analysis on the impact of public policy on business performance is presented in the table above. The results obtained from the dynamic model indicate that the overall coefficient of determination (R^2) shows that the equation has a good fit with 0.816077 meaning that 82% change in the dependent variable (ROA) is caused by the independent variable (INF, VTAX and EXRT). The higher the R^2, the higher the goodness of fit the higher the goodness of fit the higher the reliability of the model.

As the adjusted (R^2) tends to purge the influence of the number of included explanatory variables, the (R^2) of 0.912713 shows that having removed the influence of the explanatory variables, the model is still of good fit, hence, in terms of the goodness of fit we can say that the test is fair. The Durbin Watson (D.W) statistics of 1.960321 is significantly within the benchmark, we can conclude that there is no auto- correlation or serial correlation in the model specification. The prob. (F- statistic) shows that the model is significant at 1%, 5%, and 10%.The t-test values of the parameters estimates could be deduced from the computed regression result in the table above. The results confirm that growth of business performance in Nigeria has an automatic mechanism and that ROA growth in Nigeria responds to deviations from equilibrium in a balancing manner. As for the effect of public policy on business performance is consistently steady towards business growth despite all externalities. Although sound government policy is crucial in stimulating business growth, there seems to be a growing consensus that consistent and increasing government presence in an economy can hinder economic growth, especially in developing countries like Nigeria.

CONCLUSION

This research work has sought to analyze the effect of external debt on economic growth in Nigeria using annual data over the period 1970 to 2010. This research analysis drew upon the Ordinary Least Square Method (OLS) approach to estimate these relationships which was found to be appropriate with the use of Augmented Dickey Fuller (ADF) to test for the stationary nature of the data.

Availability of external finance should be consistent with a policy framework that is creditably maintained (fiscal stance, exchange rate policy, interest rate policy, pricing policy, etc). The policy makers should create credibility including political will in order to spur investor confidence for both local and foreign investments. Nigeria is facing many problems like political instability, terrorism etc because of which the country has lost its confidence for investors. The need of the

day is to rebuild that confidence so that the investor may invest in the country and the country can get rid of heavy reliance on adverse public policies.

REFERENCES

Barclays Bank (1998), 'Small Business Review', London.

Ernst & Young (1996), 'Evaluation of Business Links'. Department of Trade and Industry, London.

Harrison, R.T. and Leitch, C.M. (1996), 'Whatever You Hit Call the Target: An Alternative Approach to Small Business Policy', in Small Firm Formation and Regional Economic Development, M.W. Danson (ed), Routledge, London and New York.

de Koning, A. and Snijders, J. (1992). 'Policy on Small and Medium Sized Enterprises in Countries of the European Community", International Business Journal, Vol.10, No.3, pp.25-39.

Lerner, J. (1997), 'The Government as Venture Capitalist: The Long Run Impact of the SBIR Programme'. Harvard Business School.

O.E.C.D. (1995, 1006, 1997), 'Best Practice Policies for Small and Medium Sized Enterprises' Paris.