
DOES BUSINESS ENVIRONMENT IMPEDE PERFORMANCE OF NIGERIAN COMMERCIAL BANKS? A RETURN ON EQUITY APPROACH

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Abstract

Business environment could make or mar business potentials and opportunities of a viable business. When favorable, it is expected to foster productive private investment in all sectors of the economy. This study sought to get answers on how business environment otherwise called investment climate could impede the performance of the Nigerian banking industry within the period under study. Time series data were analyzed using multiple regression method to carry out test and analysis. Findings from the study revealed that, business environment had affected the commercial banks performance over the years studied. In particular, electricity consumption negatively and significantly leads bank returns on equity, followed by domestic inflation rate and insecurity in the Nigerian business climate ranked third in their descending order of magnitude. All these three indicators were negative and significant in influencing bank performance in Nigeria. We therefore recommend for urgent policy action in order to positively transform Nigeria business environment and make it conducive for investors to operate unhindered. The government should create the right atmosphere for businesses including banks to thrive in the Nigerian economy by seriously tacking insecurity, moderate domestic inflation and adequately provide electricity to increase its consumption by banks and other businesses operating in Nigeria. This positive posture will no doubt trigger various investment studies in the years ahead.

Keywords: *Return on equity, Bank performance, Business environment, Commercial banks, Central Bank of Nigeria, Monetary policy rate.*

INTRODUCTION

According to World Bank report (2021), the private sector has consistently led economic transformation, job creation, and poverty reduction around the world in the last 30 years. Global markets integration and improved investment climate has contributed to the immense growth of many economies of the world. However, a good number of developing countries are yet to fully harness their economic potential especially in the post COVID-19 pandemic era.

Business as part of man's activities thrives in a conducive and sustainable environment. A Conducive and sustainable environment depends on the availability of infrastructures put in place by the government. Nigeria's business environment in the

recent years has been bedeviled with fear and uncertainty leading to collapse of several business outfits particularly, the small scale industries and the relocation of the big ones to other countries in west African sub region like Ghana, (Ogunro, 2014).

In Nigeria and in every part of the world, there exists a direct relationship between business and environment. The duo compliments the activities of the each other towards creating a serene atmosphere for growth and development. Obiwuru et al (2011) defined the business environment (that is, Investment climate) as the aggregation of the pattern of all the external and internal conditions and influences that affect the existence, growth and development of the business.

Nwaogwugwu and Onwuka (2013) also opined that investment climate is the economic and financial conditions in a country that affects both individuals and businesses. It thus includes the policy, institutional and behavioural environment, both present and future, that are expected to influence the risks and returns associated with investment.

A good investment climate fosters productive private investment which is the bedrock for economic growth and poverty alleviation in most countries of the world. According to, World Development Report (2005), investment climate creates opportunities and jobs for all classes of people. It expands variety of goods and services available in a country, reduces their costs to the benefits of customers. It supports a sustainable source of tax revenue to fund other important social goods.

Indicators of good investment climate include adequate infrastructures represented by good roads, efficient power supply, good legal system, financial markets, etc. These indicators should improve people's lives whether they go to work or engage in cottage industries.

Improving investment climate in the country is the key to sustainable progress in tackling poverty issues and enhancement of living standards of the people. The investment climate influences the decisions of firms in all categories; the decision to start a business, the decision to expand and the decision of the multinationals to locate their next global productive facilities (see World Bank, 2004). A good investment climate is not just about making profits for firms or declaring dividends to the shareholders of the multinational companies, rather it is about enhancing outcomes for society (see World Development Report, 2005). According to, Solanke (2010), effort put into a venture is nothing but results achieved meant everything. Therefore, any productive effort that is not aimed at adding value to the society is not worthwhile.

On the other hand, a bad or unfavourable investment climate is one of the many hindrances faced by underdeveloped nations (with Africa having a lion share of these problems). Regulatory reforms are often a key component of removing the barriers to investment. An unfavourable investment climate is characterized by poor infrastructures, lack of adequate power supply, corruption, unstable policy, instability, insecurity of lives and properties, high cost of running business, double digit inflation rate, etc. It also extends to adverse government and business policies. Nigeria as a developing nation is not far from these characteristics highlighted above.

Furthermore, the Nigerian banking sector is not an exemption to these economic cum environmental challenges. They also do experience impediments posed by adverse

investment climate. Over the years, many banks have closed down, relocated to other towns or reported loss of profits as a result of prevailing adverse investment climate. However, the Nigerian government has made concerted efforts to improve its investment climate. The sincerity and genuineness of these efforts have remained unanswered due to series of failed attempts made in the past.

It is against this background that this study was initiated to evaluate if business environment impede the profitability of the Nigerian banks or otherwise within the period understudy. By the time it is completed we shall be in a position to determine which way forward for the performance of Nigerian banks in the years ahead.

Statement of the Problem

The cost of doing business has been very high in Nigeria over the years (Sunday, 2016). This is not ideal for a country that is advancing towards poverty alleviation and entrepreneurial development.

Nigeria as a nation is richly endowed with abundant natural and human resources capable of enriching the people and her economy. Notwithstanding, the investment climate in Nigeria has marred these potentials (see Sunday, 2016 and Uremadu and Sunday, 2016). The Nigerian investment climate has been characterized by corruption, poor infrastructure, exchange rate fluctuations, high interest rate, high cost of running business, erratic power supply, etc. These and many other factors have affected business operations in Nigeria over the years.

Previous studies have made concerted efforts devoted to proffering right solutions that will improve the lot of the Nigerian investment climate. For instance, Bakare (2013) stressed the main constraints in Nigerian business environment as corruption, political instability, poor infrastructure and macroeconomic instability. Ogunro (2014), on his own part, opined that businesses in Nigeria have suffered tremendously as a result of external environment issues. The extent of success recorded by these past works has remained a mirage in Nigeria; hence, the need for the present study which is poised to suggest remedies to the findings of this research targeted to enhance indigenous business growth, development and profitability. By the time it is completed the researchers will be in a better position to suggest which way forward for the Nigerian economy in the times.

However, the main objective of this study is to evaluate effect of investment climate on the profitability of the Nigerian commercial banking sector within the period studied.

REVIEW OF RELATED LITERATURE

Dvorsky, Gavurova, Čepel, and Červinka, (2020) sampled 258 companies in the Czech Republic and Slovakia. The results of the case study showed the impact of macroeconomic environment on the quality of the business environment. Monetary policy and interest rates, corporate finance, and population's consumption do not affect the quality of the business environment in the transport and services segment. Their results also represent an essential basis for organizations supporting the business environment or for state institutions in the creation of materials for improving services or transport in the selected countries.

Stasak and Schmidt (2018) in a study of business environment and firms' performance found that foreign monetary policy, national exchange rate and the business

cycle play a key role in the short and long-term joint movement between capital markets. While a stable economic environment coupled with a strong national currency may reduce the rate of short-term joint movement between capital markets, changes in foreign monetary policy could increase the effect of external shocks. The study also shows that inflation, the exchange rate and the external economic cycle have an essential role to play after more extended periods.

In the works of Bakare (2013), industrial growth in all countries of the world was inextricably linked to the business environment where it was situated. Specifically, the study found that the main empirical constraints to the performance of industrial sector in Nigeria were corruption and political instability while poor infrastructure and macro-economic instability had played significant roles. The study therefore, recommended that policy makers should pay greater attention to the bad investment climate in Nigeria. And that they should put in place macroeconomic policies that could eradicate corruption and checkmate these components of macroeconomic and political instabilities. The major findings of this research established that there was need for the government to continue to develop the infrastructural base of the economy in a bid to boost the Nigerian industrial sector.

Ogunro (2014), highlighted that Nigeria's business environment despite its prospects, was characterized by challenges of various kinds, which ranged from lack of infrastructure such as poor power supply, bad road network, insecurity, multiple tax system, inadequate financial service, corruption to policy instability. He concluded that Nigeria's business environment was characterized by uncertainty, policy instability and lack of necessary infrastructure and he therefore recommended that adequate infrastructure should be provided to enable businesses to thrive in Nigeria.

In the same vein, Guisepe, Mousley and Ismail (2009), opined that, the cost of a poor business environment was significant in Nigeria. Their study had shown that investment climate constraints added substantially to the cost of doing business. They found that each year 16 percent of sales were lost as a result of unreliable power, transport delays, crime, and corruption. This singular study discovered that, the three most important constraints to doing business in Nigeria were power, access to finance, and transport. They thus recommended that, solving the electricity crisis in Nigeria must remain at the very top of her policy agenda. Electricity was, by far, the main obstacle to industrial growth development in Nigeria. Some 80 percent of firms ranked it as the top constraint. Every year almost 10 percent of sales were lost due to power outages. All types of firms, irrespective of size, location, export orientation, and ownership complained about electricity shortages. All firms experienced power outages and 85 percent owned a generator. This was higher than any of Nigeria's competitor countries (Sunday, 2016)

According to, Duncan (1999), availability of basic infrastructures is an important factor in any investment decision by the private sector. When the basic infrastructures which are the main instrument of investment, are inadequate, there will be a decline in investment whereas there is a consensus in the literature on the problem of infrastructures, findings of various empirical studies are not, however, consistent on the relationship between availability of finance and industrial performance.

A year earlier, Weder (1998), investigated the relationship between investment climate and industrial productivity on 21 Sub-Saharan African countries using data on institutional factors that are of relevance in the present study. The institutional factors employed by Weder (1998) were qualitative information on annual ratings of the following indicators: (i) quality of bureaucracy; (ii) the rule of law; (iii) policy surprises; (iv) credibility of announcements; (v) extent of availability of information on new rules; (vi) degree to which businesses can participate in making new rules; (vii) predictability of judiciary enforcement; (viii) theft and crime; (ix) security of property rights; (x) frequency of corruption; (xi) uncertainty of corruption; and (xii) corruption perceived as an obstacle to business. All these indicators are rated from 1 (worst) to 6 (best). Data on (i) and (ii) were drawn from a private firm study on international country risks. Others from (iii) to (xii) were drawn from the data collected by the World Bank and University of Basel. These were based on private sector surveys commissioned in 73 countries in Africa, Asia and Latin America in preparation for the World Development Report 1997 (World Bank, 1997). As these data pertained to a short period, a cross-country regression analysis was found more appropriate for the 21-country study (Weder, 1998). The study thus concluded that factors (vii), (viii), (ix) and (xi) were highly significant constraints to industrial productivity in the affected countries. In other words, these factors which happened to be the components of investment climate had negative relationship with industrial productivity.

METHODOLOGY

Research Design:

The study used the analytical research design technique which employed empirical evidence to investigate the relationship between relevant variables used in the study which is centred on the effect of business environment and bank profitability in Nigeria.

The estimation technique used to carry out this study is the ordinary least squares (OLS) multiple linear regression method. It is adopted because of its best linear unbiased estimator (BLUE) properties (see Sunday, 2016, and Uremadu, Onyele and Ariwa, 2016).

Model Specification:

The study estimated the commercial banks' performance function, which assumed that a positive or negative change in the Nigerian commercial banks' profits (CBP) was a function of investment climate (X_1) by adapting the works of Bakare (2013), on a related study thus:

$$CBP = B_0 + B_1 X_i \text{-----Eqn. (1)}$$

To understand the relevance of this specification to the objectives earlier highlighted in this study, the researchers stated components of investment climate that combined to determine the commercial banks' returns or profitability in Nigeria. They included: electricity consumption, interest rate on lending, monetary policy rate (MPR), insecurity and inflation rate as relevant explanatory variable in the study's model building process.

Based on Bakare's study, the commercial banks' profitability could be specified using a profitability indicator as specified in the model below:

$$ROE = f(E\text{-CONSM}, MPR, INT, INF, INSEC) \text{-----Eqn. 2}$$

Where:

ROE = Return on equity (proxy for commercial bank performance)

E-CONSM = Electricity consumption (-): this is the quantum of electricity consumed in a process or system, by a firm. It consists of total electricity generated annually plus import minus export expressed in kilowatt hour.

MPR = Monetary policy rate (+) / (-): it is the rate at which the Central Bank of Nigeria lends to commercial banks. Other interest rates in the economy take a cue from it.

INFR = Inflation (-): this is domestic inflation rate. It is the persistent rise in the general price of goods and services within the country. It usually has adverse effect on profits.

INTR = Interest rates on bank lending (+) / (-): this is nominal lending rate paid on bank loans and advances by corporate borrowers.

INSEC = Insecurity (proxied by dummy variables, D=1 –indicating insecurity, D= 0, indicating no insecurity (-). In Nigeria, insecurity manifests in form of kidnapping, militancy, armed robbery attacks and terrorism (example Boko Haram)

Econometrically, equation (2) can be specified thus:

$$ROE = \alpha_0 - \alpha_1 E-CONSM + \alpha_2 MPR + \alpha_3 INT + \alpha_4 INF + \alpha_5 INSEC + \mu_i \dots \dots \dots \text{Eqn. 3}$$

μ_i = error term.

Apriori expectations to the Study Model

Contrary to all other expectations, it is believed that electricity consumption, interest rate on lending, insecurity, monetary policy rates, and inflation rates could negatively affect the performance of Nigerian banks and by extension, the nation's economy at large.

Electricity consumption is expected to impact negatively on the banks' output. Banks operating on alternative power supply usually have increased operational costs which would in turn affect their profitability. Energy generation in Nigeria is still at a very low ebb and as a result, banks need to operate 24 hours power supply to enjoy efficient service delivery.

Insecurity of lives and properties has suddenly become a prominent consideration in Nigeria, from kidnapping, election crisis, Niger Delta militancy to Boko Haram onslaught to name the least. These acts of violence and deprivation will undoubtedly have negative implications on the domestic economy and business operations as many enterprises (including banks) have been destroyed, shut down and or relocated to less prolific areas. Besides, several billions of naira have also been lost by the nation through all these due to the current insecurity facing the Nigerian business environment in recent times.

Bank lending rate is expected to have a positive relationship with bank's output. Banks are expected to give facilities (credit) at a possible minimum interest rate on lending and with less stringent conditionalities, thereby making gains from such ventures. On the contrary, when interest rate on lending is too high, we will expect a negative relationship to exist between it and the bank profitability, because less people will come for loans to do business (investment). This will invariably affect profitability of the Nigerian banks generally as they (banks) mainly depend on lending to generate profits, (see Uremadu, 2000 and Uremadu, 2004). The banking firm is in business to make profit as a business venture, it must be well stated.

A high rate of inflation is expected to induce a high rate of real investment. But in Nigeria, where the capital and financial markets have been largely underdeveloped, a high rate of inflation lowers private investment. This is an indication that the government has failed to efficiently manage the economy (Bakare, 2013).

The effects of Central Bank of Nigeria's monetary policy rate (MPR) from which the banks take a cue are enormous. Monetary policy could be expansionary or contractionary depending on which policy measure is being pursued by the monetary authorities. An expansionary policy increases the total supply of money in the economy more rapidly than usual, and contractionary policy on the other hand expands the money supply more slowly than usual or even shrinks it. Expansionary (otherwise called deficit financing) policy is traditionally used to combat unemployment in a recession by lowering interest rates in the hope that easy credit will entice businesses into expanding. Contractionary policy is intended to slow inflation in a bid to avoid the resulting distortions and deterioration of asset values.

Unit Root Test

Table 1: UNIT ROOT TEST RESULTS

Variables	ADF Test	Philips – Peron Test	ADF & Philips Peron Critical Values	Order of Integration
MPR	- 1.511284	- 1.458804	- 2.040390	I (1)
INFR	- 4.179111	- 2.938987	- 2.929734	I (0)
INTR	- 1.993315	- 1.826972	- 2.941145	I (1)
ROE	- 1.678659	- 1.727774	- 3.081002	I (1)
E-CONSM	- 1718228	- 1.646243	- 2.938987	I (1)

Source: Author's computations

Most time series data are non-stationary and using non-stationary variables in the model often leads to spurious regressions (Granger and Newbold, 1977). The first or second differenced terms of most variables will usually be stationary (Ramanathan, 1992). As evidenced in Table 1 above, all the variables were tested at levels for stationarity using both the Augmented Dickey – Fuller (ADF) and Philips – Peron (PP) tests. Table 1 above, reveals that when the tests were done at levels, all the variables were non-stationary except inflation rate (using Augmented Dickey – Fuller test). This is against the backdrop that in both the ADF and PP tests, the individual test statistics of all the variables were less than the critical values. However, in the case of inflation rate, its ADF value (- 4.179111) was greater than its critical value (- 2.929734). Thus, while all the other variables used in the study namely monetary policy rate (MPR), lending (interest) rate (INTR), return on equity (ROE) and electricity consumption (E-CONSM) were non-stationary at levels in both the ADF and PP tests, inflation rate was stationary at levels using the ADF test. Since an overall non-stationarity exists amongst the variables at levels, there was a need to subject the variables to first differencing in order to see whether stationarity could be achieved.

At first difference, all the variables became stationary as both the ADF and PP tests values were greater than their critical values at five percent level of significance. Thus, the null hypothesis of unit root which indicates non-stationarity was rejected at first difference. Because the variables have become stationary, they can now be used to run the ordinary least squares (OLS) regression without the fear of obtaining spurious results.

RESULTS AND DISCUSSION

Table 2: Ordinary Least Squares (OLS) Result for Return on Equity (ROE)

Variable	Coefficient	Std. error	T-statistics	Prob.
INFR	-1.385465	0.299499	-4.625941	0.0009*
INTR	3.397262	3.119817	1.088930	0.3017
ECONSM	-9.539789	1.605890	-5.940500	0.0001*
MPR	-6.187082	3.981868	-1.553814	0.1513
INSEC-1	208.4388	55.74998	3.738814	0.0039*
C	12.23328	1.274657	9.597316	0.0035*

R- Squared (R^2) = 0.832597 (83.26%)

Adjusted R-squared (R^2) = 0.765636 (76.56%)

F-Statistic = 13.47899

DW = 1.984154

(a) t 0.05 = 2.021

(b) F 0.05 = 3.83

Key: *Implies significant at 1% level.

Source: Author's Computations using E-views version 8.0 package.

Note: insecurity (INSEC) was assigned a dummy variable value of 1 in the time series data used for our tests and analysis.

Return on Equity (ROE) Model

The return on equity model was used to investigate the effect of the aforementioned explanatory variables on return on equity (Profitability) of commercial banks in Nigeria. The results of the return on equity model as shown in Table 2 above can be specified thus:

$$\begin{aligned} \text{ROE} = & 12.23328 - 9.539798 \text{ E-CONSM} - 6.187082 \text{ MPR} + 3.397262 \text{ INTR} \\ & (9.597316) \quad (5.940500) \quad (1.553814) \quad (1.088930) \\ & - 1.385465 \text{ INFR} + 208.4388 \text{ INSEC} \\ & (4.62541) \quad (3.738814) \end{aligned}$$

R – Squared (R^2) = 0.83 (83%)

Adjusted R – squared (R^2) = 0.77 (77%)

F – Statistic = 13.48

DW = 1.98

Note: Absolute values of t- statistic appear in parentheses

The return on equity model was analyzed under economic, statistical and econometric considerations. First, the results revealed that the constant term has a positive sign which confirms to economic *a priori* expectations. As stated earlier, this result has indicated that the activities embarked upon by the commercial banks in Nigeria were targeted at profitability of the banking firm.

Second, electricity consumption (E-CONSM) had a negative and significant relationship with commercial banks' profitability in Nigeria. From the result, a unit increase in electricity consumption leads to 9.54 units decrease in commercial banks' profitability in Nigeria. By this magnitude, the computed t-value for electricity consumption (5.940500) has exceeded the critical value (2.021) implying that electricity consumption had a negative and significant impact on commercial banks' productivity in Nigeria.

Third, the results showed that monetary policy rate (MPR) had a negative and insignificant relationship with commercial banks' profitability based on the return on equity model. This result is consistent with economic *a priori* expectations by its sign and it shows

that a unit decrease in monetary policy rate would lead to 6.19 units increase in commercial banks' profitability in Nigeria. By magnitude, the result showed that monetary policy rate did not have significant impact on commercial banks' profitability in Nigeria. This is going by the computed t-value for electricity consumption (1.553814) been less than the critical value (2.021). A confirmation test is that the P-value for electricity consumption (0.1513) exceeded the critical P-value (0.05) since the test is conducted at five percent level of significance.

Fourth, contrary to what was obtained in the return on assets model used by Uremadu and Sunday (2016)'s study, the results showed that lending rate had a positive but insignificant relationship with commercial banks' profitability (proxied by return on equity) in Nigeria. By its sign, the result was not consistent with economic theory. As stated earlier, a high lending (interest) rate ought to make borrowing expensive with the negative consequences it should bring to commercial banks' lending activities. From the results, one unit rise in lending rate would lead to 3.40 units rise in commercial banks' profitability in Nigeria.

Conversely, the return on equity model had indicated that lending rate did not have significant impact on commercial banks' profitability in Nigeria unlike what was obtained in the return on assets model (see Uremadu and Sunday, 2016). This is because the computed t-value of lending rate in the return on equity model was less than the critical value. As a confirmation to this result, the probability value (P-value) for lending rate (0.301) had exceeded the critical P-value (0.05). It is thus confirmed that lending rate did not have significant impact on commercial banks' profitability in Nigeria.

Fifth, results from Table 2 above, revealed that inflation rate had a negative and significant relationship with profitability (proxied by return on equity) in the Nigerian commercial banks. This result has conformed to economic *a priori* expectations and it has also indicated that as inflation rate rises, interest rate will rise which is detrimental to the profitability of the commercial banks. From the results of this study, one unit rise in inflation rate will lead to 1.39 units decrease in commercial banks' profitability in Nigeria. The computed t-value for inflation rate (4.62541) was greater than the critical value (2.021) at five percent level of significant effect on commercial banks' profitability in Nigeria.

Sixth, the return on equity model has shown that insecurity had a positive and significant relationship with commercial banks' profitability in Nigeria. By its sign, this result did not confirm to *a priori* economic theory. An avalanche of insecurity is expected to drive away potential investors which obviously would negate whatever gains the banking sector and indeed the entire economy would make. From the result of the return on equity model, one unit increase in insecurity would lead to 208 units rise in commercial banks' profitability in Nigeria. This result is also surprising to us. More so, looking at the magnitude, the t-value computed (3.738814) for insecurity which exceeded the critical value (2.021). Thus, we could safely conclude that insecurity had a significant impact on commercial banks' profitability in Nigeria. The plausible reason for this unexpected result could be due to distortions in our investment climate to which Nigeria is fraught with.

Finally, the coefficient of determination in the return on equity model showed that 83 percent of the variations in commercial banks' profitability were explained by changes in the explanatory variables. Hence, the remaining 17 percent of the variations in commercial

banks' profitability might be attributed to other factors (which maybe qualitative in nature) that were not included in the model. The results also have represented a goodness-of-fit. The computed F-statistic value (13.48) has exceeded the critical value (3.83) which indicated that the return on equity model was significant and realized. The Durbin-Watson statistic which was tending to (at 1.98) 2, showed that there was no evidence of autocorrelation (been that $2 \leq DW < 4$). Since the Durbin-Watson statistic value 1.98 could be approximated to 2, we could comfortably conclude that there was no auto correlated errors in the results, hence there existed absence of a high degree of multicollinearity between independent variables in the model (3.2).(see Uremadu and Ngerebo, 2006).

SUMMARY OF FINDINGS, RECOMMENDATIONS AND CONCLUSION

Findings

Electricity consumption in the return on equity model had a negative and significant relationship with commercial banks' profitability in Nigeria. Possibilities are that the banks might use high cost of running their generating sets (due to low power supply) as an excuse for depriving the shareholders of their due return on equity. Therefore, the return on shareholders' equity might suffer as a result of high cost of doing business amongst commercial banks in Nigeria. Hence, the significant impact electricity consumption exerted on bank profitability, as evidenced in this study cannot be over emphasized.

Monetary policy rate (MPR) was also revealed to have a negative and insignificant relationship with commercial banks' profitability in Nigeria. As earlier stated, monetary policy rate is the official interest rate at which the commercial banks borrow from the apex bank and amongst themselves. Hence the lower the MPR, the lower the expected lending rate and the higher the volume of borrowing by customers which would lead to higher profitability of these banks. This result is in tandem with the works of Ogubiyi and Ihejirika (2014) which found a negative relationship between monetary policy rate and commercial banks' profitability in Nigeria.

The study in addition revealed that lending (interest) rate had a positive and insignificant relationship with commercial banks' profitability (proxied by return on equity) in Nigeria. This finding was in contrast with the works of Ogunbiyi and Ihejirika (2014) which found a negative relationship between lending rate and return on equity in Nigeria. To the extent of the impact of lending rate on bank performance, both studies confirmed that lending rate had an insignificant effect on banks' profitability in Nigeria using return on equity as the proxy for bank profitability. These studies showed that lending at the maximum interest rate had a crowding-out effect on borrowers, reduced investment and thereby reduced the interest earning activities of banks as such reducing their overall profits.

In the return on equity model of this study a negative and significant relationship existed between inflation rate and return on equity (profitability) of commercial banks' in Nigeria. This finding conformed to *a priori* economic theory and revealed that, if inflation rate increases, it reduces the profitability of banks in Nigeria. More so, the findings of research showed that inflation rate is a strong determinant of commercial banks' profitability in Nigeria. This finding is similar to those of Mohammed et al (2014); Aigbeyisi and Edore (2014) which opined that inflation rate had an adverse and significant impact on commercial banks' performance in Nigeria. These findings are not surprising as inflation

affects the equity / shareholding performance of banks by reducing their equity capital thereby affecting the long run efficiency of these banks. This is against the backdrop that the real share prices of banks are inversely related to both anticipated and unanticipated inflation expectation. With this, it is obvious that inflationary pressures had reduced the level of profitability of these commercial banks in Nigeria.

Finally, the findings of research also revealed that insecurity had a positive and significant relationship with return on equity (profitability) of commercial banks in Nigeria. The study revealed that insecurity had a significant impact on commercial banks' profitability in Nigeria. This profoundly implied that the level of insecurity in Nigeria might, to a large extent, determine the profitability of the commercial banking firm in terms of return on equity. It is noteworthy to state here and now, that shareholders may or may not invest depending on the level of insecurity in order not to lose their investments. For instance, the issue of Boko Haram terrorist attacks in the North East might have created fear and panic among would be investors in the Nigerian banking sector (at both home and abroad) thereby scaring away would be investors from other countries into the country. The end result is that such fear has a strong impact on the profitability of commercial banks in Nigeria.

Recommendations

Based on the empirical findings of this study, the work recommended the followings for urgent policy direction of the government and the relevant monetary authorities:

- (1) The Central Bank of Nigeria (CBN) should fashion out ways of keeping the inflation rate at its lowest ebbs. This is against the backdrop that its impact on the profitability of commercial banks in Nigeria is no longer in doubt irrespective of the profitability measure one adopts.
- (2) Commercial banks should therefore maintain a moderate, transparent interest rate on lending in Nigeria so as to encourage further borrowings for domestic increased investments.
- (3) The Nigerian banks should also introduce solar power systems in their power generation set up. Also, the federal government should tackle headlong the epileptic electricity supply situation in the country as it has been evident from the findings of the study that the more the banks invested on private power generation in order to meet up with their desired consumption level, the lower their profitability.
- (4) The apex bank (that is, Central Bank of Nigeria) should maintain its monetary policy rate (MPR), to the barest minimum in a bid to enhance the profitability of the commercial banks in Nigeria.
- (5) These commercial banks in Nigeria should further invest in ICT in a bid to boost their technological and innovational base as it has been evident that the duo had enabled it escape the untold misfortune it would have faced as a result of insecurity prevalent in the Nigerian investment climate.

Conclusion

The present study has examined the effect of investment climate on the profitability of the Nigerian banking sector. In order to achieve this objective, the study adopted a return on equity (ROE) model. The model had relevant explanatory variables that included

inflation rate, interest rate on lending, electricity consumption, monetary policy rate and insecurity. From our earlier discussions and empirical evidences from the study, it was discovered that three of the explanatory variables (INFR, E-CONSM, MPR) used in the study exhibited negative association with bank performance while the remaining two variables (INTR, INSEC) had a positive relationship with bank profitability. Of all these variables, three out of five variables (INFR, E-CONSM, INSEC) had exhibited significant impact on commercial banks' profitability in the applied model though domestic inflation led other variables. The study therefore established that inflation rate is a strong determinant of the commercial banks' profitability in Nigeria, as such; monetary authorities should pay greater attention to reducing its negative effects on the performance of Nigerian banks in the years ahead as has been highlighted in the recommendations of the study.

References

- Abubarkar, Z., Haruna, M.A. and Ahmed, B.A (2013) *The Role of Nigerian Investment Promotion Council (NIPC) in Attracting Foreign Direct Investment in Nigeria* Abuja NIPC
- Aigheyisi, O.S and Edore, J.O (2014): Effects of Economic openness and inflation on commercial banks' profitability. Panel data evidence from Nigeria post banking consolidation (2005-2012). *European Journal of Business and management, Vol.6, No. 30*
- Bakare, A.S (2013): Investment Climate and the Performance of Industrial Sector in Nigeria. www.hrmar.com/journals. DOI: 10.6007/IJARBS/V3-110/27. retrieved on October 28,2021
- Clementina, K., & Isu, I. G. (2016). Security challenge, bank fraud and commercial bank performance in Nigeria: An evaluation. *Journal of Business and Management, 5(2), 1-21*. <http://dx.doi.org/10.12735/jbm.v5n2p01> retrieved on October 28,2021
- Dvorsky, J, Gavurova, B. Čepel, M. and Červinka, M (2020). Impact of Selected Economic Factors on the Business Environment: The Case of Selected East European Countries. *Polish Journal of Management Studies. Vol. 22, No 2, 2020*
- Granger, C.W.J and Newbold, P, (1977): The time series approach to econometric model building. In C.A Sims (ed.) *New methods in Business Cycle Research* proceeding from a conference, *Federal Reserve Bank of Minneapolis*.
- Gujarati, D.N (2006): *Essentials of Econometrics (3rd ed.)* Singapore: Mc Graw-Hill.
- Guiseppe L., Peter Mousley and Ismail R. (2009): *An Assessment of the Investment Climate in Nigeria*. Washington DC. World Bank.
- Mohammed, U, Danjuma, M and Mohammad, A (2014): Conceptual Exposition of the effects of inflation on Bank Performance. *Journal of World Economic Research. Vol. 3, No. 5*
- Ngerebo, T.A (2006): "Impact of Time Value of Money on TWCs External Debt Management." *Nigerian Journal of Education, Planning and Finance, 1(384), 90-98*

- Nwaogwugwu, U.C.C. and Onwuka, K.O. (2012): "Do Domestic Condition Matter for Investment? Evidence from Nigerian Data". *Universal Journal of Management and Social Sciences Vol. 2, No.11*;
- Nweze, C.M, Danjuma, M, and Mohammadu, A (2014) "Conceptual Exposition of the Effects of Inflation on Bank Performance. *Journal of World Economic Research, Vol. 3 (5) 55-59*.
- Obiwuru T.C., Oluwalaiye, O.B., Okwu, A.T, (2011) "External and Internal Environments of Businesses in Nigeria: An Appraisal" in *International Bulletin of Business Administration (12)*.
- Ogunbiyi, S.S and Ihejirika, P. O (2014): Interest Rates and Deposit Money Banks' Profitability Nexus: The Nigeria Experience. *Arabian Journal of Management Review. Vol. 3 No 11*
- Ogunro, V.O (2014): Nigeria's Business Environment: Issues, Challenges and Prospects. DOI: 10.6007/IJARSS/V4 retrieved on 15/2/2015
- Onyele, K.O. (2016) Impact of Capital Flight on the Economic Performance of Nigeria *Being a Research Proposal presented to the Department of Banking and Finance, in partial fulfillment for the Award of M.Sc Degree in Finance, COLMAS, MOUAU.*
- Solanke D. (2010) Business Development Strategies in the New Millennium" Aba Lecture at Mega Asset Managers Conference Oct. 2010
- Sunday, D.U. (2016) Impact of investment climate on the Profitability of the Nigerian Banking Sector (1990-2013)" *Being a research proposal Presented to the Department of Banking and Finance, in partial fulfillment for the Award of an M.Sc Degree in Finance, COLMAS, MOUAU.*
- Uremadu, S.O (2000): *Bank Management: Basic Issues in Money, Bank Lending and Credit Administration*. Benin: Mindex Publishing limited
- Uremadu, S.O (2002): *Academic Research Methods: As Applied to Accounting, Banking and Finance, Business Management and Economics. (Revised Edition)*. Benin: Mindex Publishing.
- Uremadu, S.O (2004): *Core Bank Management: Concepts and Application*. Enugu: Precision Publishers limited
- Uremadu, S.O and Azzez A.M (2001): "Risk Management and Corporate Governance in Nigerian Banks: A Review of *Prime Journal of Business Administration and Management, Vol. 1(12), (December) 2011, pp 369-375*
- Uremadu, S.O (2006) "Impact of Savings Mobilization on Economic Growth in Nigeria" An *Unpublished Ph.D thesis, submitted to the Department of Banking and Finance, in partial fulfillment for the award of Ph.D degree in Banking and Finance, Faculty of Business Administration, UNEC, UNN, Enugu State.*

Uremadu, S.O (2009): " Bank Capital Structure, Liquidity and Profitability: Evidence from the Nigeria Banking System" *In the Annals of University of Bucharest Economic and Administrative series.*

Uremadu, S.O (2012): "The Impact of Capital Structure and Liquidity on Corporate Returns in Nigeria: Evidence from Manufacturing Firms" *IJARAFMS, Vol. 2, issue 3 (2012) pp 1-16*

Uremadu, S.O, Onyele, K.O, and Ariwa, F.O (2016) "The Impact of Selected Agricultural Exports on the Growth of the Domestic Economy" *Prime Journal of Business Administration and Management, Vol.6(2), March 2016*

Uremadu, S.O and Sunday, D.U (2016) "Investment climate and the profitability of the Nigerian Commercial Banks (1990-2013): A Return on Asset Approach" *Prime Journal of Business Administration and Management (PJBAM), Vol.6 (3), pp 2047-2055*

World Bank (2002): *World Development Report*, World Bank, New York.

World Bank (2005): *World Development Report*, World Bank, New York.

World Bank (2020): *World Development Report*, World Bank, New York