REGULATORY FRAMEWORK AND BANK OPERATIONS IN NIGERIA: A VECM APPROACH

AKUJUOBI, Ngozi Edith
Research Student, Department of Finance and Banking, Imo State University Owerri, Nigeria,
E-mail:akujuobing2020@gmail.com

ANYANWU, Godson Ikechi
Department of Finance and Banking, Imo State University Owerri, Nigeria,
&
EKE, Chinonso Karen
Department of Financial Management Technology, Federal University of Technology Owerri,
P.M.B. 1526, Owerri, Imo State, Nigeria, E-mail: chinonsoeze98@gmail.com

Abstract

This study investigated the effect of regulatory framework on banking operations in Nigeria, 1981-2018. It adopted the vector error correction procedures. Prominent among the findings is that a significant relationship exists between Nigeria's regulatory framework and banking operations but only in the short-run analysis. From the findings, regulatory framework exerts a significant effect on commercial bank operation in Nigeria within the study period, 1981-2018. Also, revealed is that most of the included explanatory variables bore the expected signs, while only two out of the five explanatory variables were statistically significant. Thus, the study therefore concluded that there is the existence of possible poor regulatory/supervisory role by the Central Bank of Nigeria. Hence, there is an urgent need for the CBN to pay more attention to the use of these regulatory instruments in controlling the banking system and hence maintain sanity in the banking industry in Nigeria.

Keywords: Regulatory framework, Banking operations, Vector Error Correction Approach

1.0 Introduction

Banks generally play crucial roles in the economic development of countries. Banks, through the intermediation mechanisms, provide the much-needed funds for development; mobilizing investible funds from the Surplus Spending Units (SSUs) for onward-lending to the Deficit Spending Units (DSUs), thereby ensuring that investment programmes that hitherto would not have been, are pursued for economic development. Also, banks function in a dynamic environment, pursuing accelerated technological developments and innovations. Suleyman *et al*. (2015), Huang and Kang (2017), Oino (2017) and Ozili (2019), posit that these new experiences must bring about new rules and regulations into the daily life of banks, if banks must survive.

It is therefore, in recognition of this pivotal role of banks in economic development of countries that the soundness of the banking system has always been a key issue not only for domestic governments but also for international regulatory bodies and organizations (Pasiouras, 2008). According to Kofo (2019), in Nigeria, the primary legislation for the regulation of banks is the Banks and Other Financial Institutions Act (BOFIA) which, with the Central Bank of Nigeria (Establishment) Act 2007 (CBN Act), gives the Central Bank of Nigeria (CBN) powers to supervise and regulate banks and other financial institutions in Nigeria.

The challenge of ensuring sound financial practice in the economy can hardly be over-stressed. It is therefore in line with this that regulatory measures are considered a necessary recipe for sanity to be accomplished in our financial system (Kama, 2003; Muktar, 2010; Umar, 2015; Klomp and Haan, 2015; Cucculleli and Bettineli, 2016). Umar (2015) succinctly chronicled inadequate supervisory framework and lack of an effective risk asset data base and information sharing system as well as lack of commitments and abuse of duties on the side of financial institutions as the bane of sound financial practice among banks, insurance companies and securities firms thereby, leading to distasteful incident of bank distress and liquidation by the regulators.

To forestall these problems, various financial sector legislations/acts have been promulgated, with the introduction of different strategies all aim at increasing the effectiveness of financial regulation and supervision (Iyade, 2006 and Anyanwu, 2010). These measures are claimed to be mutually reinforcing and designed to timely identify and diagnose emerging problems in the sector with a view to presenting most efficient resolution directed towards ensuring continued public confidence and stability in the Nigeria's financial system, which the banking industry occupies a central place.

In line with the foregoing therefore, economic discourse in Nigeria has been awash with debates on achieving sanity in the financial system in general, with emphasis on the banking industry (Muktar, 2010; Umar, 2015; Suleyman *et al.*, 2015; Kofo, 2019). These debates have, no doubt been fueled by the recent economic meltdown that shook the foundations of world financial sectors, leaving at its wake the collapse of major banks in the US and UK. Also, the Nigerian financial sector had witnessed more than enough dose of this ugly trend that exposed the nation's weak financial system, especially as it affected the banking industry in Nigeria. In swift response to these financial anomalies, a consolidated model for financial regulation was proposed in Nigeria both during and after the crises, with various financial sector legislations/acts being promulgated. This was followed by the introduction of different strategies all aimed at increasing the effectiveness of financial regulation and supervision.

However, the extent all these laudable efforts have helped the authorities to achieve sanity in the nation's financial system is yet to be fully examined. Against this backdrop, there is need to investigate the extent this current regulatory framework in Nigeria has attended to the set objectives of addressing the perceived ills in our banking operations. Consequently, this study, empirically examined the impact of regulatory framework on banking operations in Nigeria for the period 1981-2018.

This study is divided into five sections. While section one contains the general introduction which provides the background to the study, section two examines the relevant literature on the subject matter of regulatory framework. Section three provides the methodology employed. In section four, the model is estimated, while section five contains the summary, conclusion and recommendations.

2.0 Review of Related Literature

2.1 Conceptual Review

The Central Bank of Nigeria and other regulatory agencies spell out rules meant to govern banking operations in Nigeria. Sometimes, these financial regulatory measures could be self-imposed as they form the norms in such institutions targeted at achieving defined objectives such as products and services synchronization within the ambits of the law as well as ensuring that the general public are shielded from the exploitative tendencies of some financial institutions while guaranteeing financial competitiveness. Through this regulatory framework, financial institutions align their activities to laid-down rules that ultimately bring about sanity in the financial industry and the economy at large (Chris, 2003; Kama, 2003; Uffot, 2003; Olorushola, 2003).

2.2 Theoretical Review

To pattern the behaviour of financial institutions, government and its agencies specify the code of conduct that financial institutions are expected to conform with as they engage in their daily activities. Therefore, these regulatory measures present the guideline in form of codified legislations and government policies that financial institutions are expected not just to obey but which should also help to uphold sound financial practice in the economy. In line with this government interventionist role, Keynes and his contemporaries argue that through government direct and active participation through "the invisible hand of the public sector" would drive the free flow of capital in the economy.

In this paper, efforts are made to follow three strands of theories of financial regulations and they include the agency theory, risk management theory and the regulatory dialectic theory. In the Agency theory, Stiglitz in 1989 was of the opinion that government needed to intervene in order to protect and save the general public from the unwholesome practices of the financial institutions who may be tempted to pursue more of their profit-maximization motives to the detriment of the investing public and hence jeopardize economic growth.

Therefore, to protect and save the investing public, high supervisory role by the government and its agencies is very vital as it helps to curtail the excesses of financial institutions. In furtherance to Stiglitz view, Sinkey(1992) came up also with the attendant problem of " hidden action and information" on the part of financial institutions, who, if left to act uncontrolled, may be tempted to act in a manner that arbitrarily exploit the saving public which in turn has the tendency to erode public confidence in the financial institutions.

Viewing from another though similar angle however, the risk management theory, as developed by Davis in1991 tried to support government intervention especially from the side of the volatility and risky nature of liquidity and credit management associated with the financial system. The argument under the risk management theory is that because mismanagement of credit by financial institutions spells doom for the economy at large, financial institutions therefore need to be closely supervised in order to avoid the attendant crises if financial institutions are left to act arbitrarily (Currie, 2003).

For the regulatory dialectic theory as propounded by Kane (1981), there is this raging war between the regulators and financial institutions. Following this theory, as the regulators role out policies that create impediment on the paths of financial institutions to maximize profit, the financial institutions on their path, strategize to manipulate the system in order to avoid such bottlenecks that tend to hinder their profit maximization motives thus, leading the government and its regulatory agencies to continually weigh the benefits of pursuing certain regulatory constraints against their associated costs. This contagion, therefore determines whether a given regulatory policy is actually desirable or needs to be either changed if not dropped in its entirety.

2.2.1 Institutional Structure of Nigeria's Financial System (Regulatory Models)

The institutional structure of financial regulations currently used by most countries evolved alongside the evolution and development of financial markets rather than as a result of coordinated efforts of setting up a regulatory framework that meets all regulatory objectives. Major factors that influence the choice of a particular design of institutional structures for financial regulation include the decision and preference of political authorities, the nature and size of a country's financial sector and the practice that have built up in a country's central bank.

Internationalization of financial services, emergence of large financial conglomerates and lesson from financial crises in other countries are some regional or external factors that equally influence the choice of financial regulatory structure among countries (Mukhtar, 2010). This therefore explains why there is a wide range of models to institutional structures across the world, with no single model considered as the optimal or best for all countries. Despite some differences in the institution structure, almost all countries provide regulation for banks, insurance companies and securities firms.

In the same vein, three major models of institutional structure for financial regulation can be observed among the various models used worldwide. These are: the Multiple-Agency "regulator model (where each type of financial activity is regulated by specific or specialized agency), the “Unified" regulator model (requires merging all existing regulatory institutions into a single institution to undertake both prudential and market conduct supervision in the financial sector), and the "Common" regulator model (where one regulator is responsible for at least two of the three major financial sectors while another regulator takes care of the other).

However, Nigeria's institutional structure for financial regulation revolves around the multiple-agency regulator model, as the three major financial sector activities are regulated by entirely independent agencies. The CBN and NDIC jointly regulate Banks, NAICOM regulates insurance companies and SEC regulates securities firms. This model allows clarity of objective, focus, responsibility and accountability. Because of the complexities associated with financial sector, it is difficult for a sole regulator to strike a balance between different objectives of regulating each subsector.

Adopting the multiple-agency regulator model will ensure that the objectives of each agency are clearly and unambiguously specified. This will also keep each agency focused on her objectives and held responsible in the event of any regulatory failure. Nevertheless, it has been criticized on the ground that it does not provide for effective consolidated supervision and create room for regulatory arbitrage. As financial institutions become more sophisticated, they have exploited the regulatory gap often created by the multiple-agency regulator system to avoid regulation or reduce regulatory burden. There is also duplication of regulatory efforts. Despite the serious flaws associated with this model, it is widely used mainly because the institutional structure of financial regulation currently used in most countries reflect the historical evolution of the respective financial sectors.

2.2.2 Financial Regulations in the Nigeria's Banking Sector

The Central Bank of Nigeria (CBN) in collaboration with the National Deposit Insurance Corporation (NDIC) regulates and ensures sanity and efficiency in the banking sector. The supervision and examination of banks are premised on the legal authority given by the provision of sections 30-32 of BOFID 1991 as amended whereby the CBN Governor is given power to appoint a Director of Banking Supervision (DBS) with the responsibilities to carry out supervisory duties in respect of banks and other financial institutions in the country (Nwoha, 2003).

In carrying out this duty, the DBS shall among other things under conditions of confidence, examine periodically the books and affairs of each bank; access at all times the accounts and vouchers of banks in the country. NDIC is required by its enabling Act to assist the minority authorities in the formulation and implementation of banking policy so as to ensure safe and sound banking system.

It is the responsibility of the Banking Supervision Department (BSD) to process the returning schedule of the activities of banks. In this respect, the department plays the following roles in ensuring smooth operations in the Nigeria's banking industry.

1. To receive meaningful information on timely basis from banks, stock exchange and other financial institutions so as to facilitate early detection of problems.
2. To monitor compliance of banks with the BOFID and the monetary policy circular.
3. To perform its supervisory function of scrutinizing, analyzing and processing information on each institution.
4. To control the structure and system of banking in the country, identify trends and developments in the industry.

5. To ascertain the accuracy and timely delivery of reports, determine the adequacy and internal control system of banks.
6. To relate, compile and submit reports and ensure that, reports are effectively coordinated and working papers are properly kept to support compilation of information and facilitate verification.
7. To employ corrective measures where deficiencies are found. The role of NDIC can be brought into sharper focus when examined within the context of its activities in the discharge of its primary mandate of deposit insurance. The roles are:

A. To guaranty deposit; it is to guaranty payment of depositors in the event of failure of an insured bank. In 2003, the corporation had paid about N3.29b to depositors representing 63% of total insured claims to the depositors of 34 banks in liquidation.

B. To protect depositors through supervision; supervision of insured banks as an integral part of the mechanism for ensuring safe and sound banking practices and the corporation has continued to accord this top priority. This entails on-site examination and off-site surveillance, both of which are mutually reinforcing. The off-site supervision provides early warning signal which is used in prioritizing on-site examinations and assessing potential problem areas.

C. Failure resolution in the banking industry; it is worth noting that NDIC was established when banking sector was already in crises, there were about seven technically insolvent banks in 1988.

NDIC had over the years successfully adopted the following measures:

1. Accommodation facilities were granted to ten (10) banks which had serious liquidity crises to the tune of N2.3bin 1989 following the withdrawal of public sector funds from commercial and merchant banks.
2. Take-over of management and control of twenty-five (25) distressed banks by CBN/NDIC to safeguard their assets; acquisition, restructuring and sale of seven distressed banks to investors.
3. Closure of 36 terminally distressed banks that failed to respond to various regulatory/supervisory initiatives. The combined effect of these measures was a significant reduction 'in the level of distress in the banking system. As part of the failure resolution measures, NDIC continues to serve as the liquidator to 34 closed banks (CBN, 2010).

2.3 Empirical Review

Das, Quintyn and Kina (2004) seek to explore the impact of regulatory governance on financial system stability. They used multi-cross-sectional data of developing and developed countries and applied Weighted Least-square Regression, found a significance influence of regulatory governance on financial system soundness. Using variables reflecting macroeconomic conditions, structure of the banking system and the quality of political institutions and public sector governance.

In his quest Iganiga (2010) aimed at assessing the effect of financial reforms (regulation) on the effectiveness of financial institutions with emphasis on banking sector, using data from1986, and applying classical least square technique, found that the performance of the financial sector has been greatly influenced by the reforms. In the same vein, Ningi and Dutse (2008) explored the impact of CBN's consolidation on the banking sector. They found a significant difference as the CBN's decision has changed the market structure, increased the efficiency and reliability of banks, created opportunities for participants and raised their intermediation potentials.

Idowu and Babatunde (2010) investigated the effect of financial reform on capital market, using time series data (1986-2010). Applying Ordinary Least Square Regression, they found a negative relationship between the two variables, i.e. financial reform deterred capital market development.

3.0 Methodology

3.1 Research Design and Source of Data

Here, a case study approach was adapted and so Nigeria was the population of interest. This study covers the effect of regulatory framework on the commercial bank credit to the private sector in Nigeria, as a proxy for banking operations for the period 1981- 2018. For the purpose of this study, time series data were collected and they are entirely secondary data, obtained from the Central Bank of Nigeria (CBN) Statistical Bulletin and the National Bureau for Statistics Publications.

3. 2 Test of Hypotheses

This study hypothesizes "*that regulatory framework has no significant relationship with banking operations in Nigeria*". Therefore, the .model shows the relationship existing between regulatory framework explanatory variables and the dependent variable, the commercial bank credit to the private sector. In this study, the regulatory framework is being represented by the cash reserve ratio (CRR), loan-to-deposit ratio (LDR), liquidity ratio (LR), monetary policy rate (MPR) and the Treasury Bill Rate (TBR), while the commercial bank credit to the private sector (PSC) was employed to proxy banking operations.

3.3 The Model Specification

Here the commercial bank credit to the private sector, PSC_t (Y) is regressed against the following bank regulatory framework indicators (X's); Cash Reserve Ratio (CRR_t), Loan-Deposit Ratio (LDR_t), Liquidity Ratio (LR_t), Monetary Policy Rate (MPR_t), Treasury Bills Rate (TBR_t). This study follows the theoretical concept suggested by past and related studies (Egbetunde, 2012; Panizza and Presbitero, 2014). We transform their specification with little modification as follows:

(i) $PSC_t = \beta_0 + \beta_1 CRR_t + \beta_2 LDR_t + \beta_3 LR_t + \beta_4 MPR_t + \beta_5 TBR_t + U_t$……………..3.1

Where:

U_t = Error Term

3.4 Method of Data Analysis

To estimate the model as specified above, the variables of this study were first converted to their natural logarithm before conducting the unit root test, the co-integration test and the granger causality test. These tests permitted the application of the Ordinary Least Square (OLS) method in order to avoid spurious results that are often associated with the use of time series data. It is instructive to note that because the VECM failed to confirm the long-run status suspected in the co-integration result, the estimation was therefore carried out using the ordinary least square multiple regression analysis.

4.0 Data Presentation, Analysis and Interpretation

4.1. Unit Root Test Results

Table 1 shows that beside liquidity ratio and monetary policy rate that were stationary at level, all other variables turned stationary at first difference under both the Augmented Dickey-Fuller and the Philip-Perron tests, thus confirming that they were stable and good for the analysis.

Table 1: Unit Root Test for the Variables Employed

Augmented-Dickey Fuller Unit Root Test					Philips-Perron Unit Root Test		
Variable		T-Statistic	Critical Value	Order of Integration	T-Statistic	Critical Value	Order of Integration
1	PSC	-4.107337	-3.626784	1(1)	-4.050911	-3.626784	1(1)
2	CRR	-6.069164	-3.626784	1(1)	-6.069164	-3.626784	1(1)
3	LDR	-4.066522	-3.632900	1(1)	-6.916038	-3.626784	1(1)
4	LR	-3.659049	-3.621023	1(0)	-3.685655	-3.621023	1(0)
5	MPR	-3.079892	-2.943427	1(0)	-3.068056	-2.943427	1(0)
6	TBR	-4.843680	-3.626784	1(1)	-4.878972	-3.626784	1(1)

Source: E-views 10.0 Econometric Package.

4.2. The Co-integration Result

Table 2 on Johansson co-integration tests revealed evidence of 2 co-integrating equation for the model, which pointed to a possible existence of long-run equilibrium in the estimated regression equation. However, carrying out further confirmatory test disproved the suspicion of the existence of a long-run equilibrium, thus necessitating the estimation under the short-run ordinary least square multiple regression analysis.

Table 2: Unit Root Test

Series: LPSC LCRR LLDR LLR LMPR LTBR

Lags interval (in first differences): 1 to 1

Unrestricted Co-integration Rank Test (Trace)

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.739079	120.7138	95.75366	0.0003
At most 1 *	0.582750	72.34651	69.81889	0.0310
At most 2	0.396085	40.87998	47.85613	0.1925
At most 3	0.264209	22.72439	29.79707	0.2599
At most 4	0.237452	11.67927	15.49471	0.1730
At most 5	0.051937	1.920030	3.841466	0.1659

Trace test indicates 2 co-integrating eqn(s) at the 0.05 level

* denotes rejection of the hypothesis at the 0.05 level

**MacKinnon-Haug-Michelis (1999) p-values

Unrestricted Co-integration Rank Test (Maximum Eigenvalue)

Hypothesized No. of CE(s)	Eigenvalue	Max-Eigen Statistic	0.05 Critical Value	Prob.**
None *	0.739079	48.36731	40.07757	0.0047
At most 1	0.582750	31.46652	33.87687	0.0944
At most 2	0.396085	18.15559	27.58434	0.4823
At most 3	0.264209	11.04512	21.13162	0.6428
At most 4	0.237452	9.759242	14.26460	0.2282
At most 5	0.051937	1.920030	3.841466	0.1659

Source: E-views 10.0 Econometric Package.

Furthermore, table 3, also, indicates only one case of causal effect from commercial bank credit to the private sector (PSC) to the monetary policy rate (MPR).

Table 3: Granger Causality Test Results

Null Hypothesis:	Obs	F-Statistic	Prob.
LCRR does not Granger Cause LPSC	36	0.17227	0.8426
LPSC does not Granger Cause LCRR		0.22436	0.8003
LLDR does not Granger Cause LPSC	36	0.42148	0.6598
LPSC does not Granger Cause LLDR		0.73504	0.4877
LLR does not Granger Cause LPSC	36	1.06297	0.3577
LPSC does not Granger Cause LLR		0.26450	0.7693
LMPR does not Granger Cause LPSC	36	0.62354	0.5426
LPSC does not Granger Cause LMPR		4.90454	0.0141
LTBR does not Granger Cause LPSC	36	1.08128	0.3516
LPSC does not Granger Cause LTBR		2.43079	0.1046

Source: E-views 10.0 Econometric Package.

4.3. The Influence of Regulatory Framework on Bank Operation in Nigeria

In order to determine the relationship between regulatory framework and bank operations, proxied by the level of commercial bank credit to the private sector, the Ordinary Least Square (OLS) multiple regression analysis was carried, since the vector error correction model failed to confirm the existence of a long-run equilibrium. From table 4, since the F-ratio calculated of 241.8895 has a P-value < 0.01 or 1%, we therefore reject the null hypothesis and accept the alternate and thus conclude that there is a significant relationship between regulatory framework and bank operation in Nigeria, at least within the period under study, 1981-2018. Simply put, the model was statistically significant at 1% with good fit and Durbin-Watson value of 2.52 attesting to the robustness of the model for prediction purposes. Generally, the model also indicate that the changes in the explanatory variables taken together have been able to explain the variations in the dependent variables to very high extents; at least 97.4% and 97% after adjusting for possible errors in the estimates. Also, the model indicated that two out of the regulatory framework variables namely, monetary policy rate, MPR and the treasury policy rate, TBR were statistically significant with only the treasury policy rate, TBR failing to meet the a priori expectation with its positive coefficient.

Table 4: Analysis of variance (ANOVA) Result

Dependent Variable: LPSC
Method: Least Squares
Date: 02/26/21 Time: 11:04
Sample: 1981 2018
Included observations: 38

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	3.062134	2.862583	1.069710	0.2928
LCRR	-0.165143	0.116222	-1.420926	0.1650
LLDR	-0.000151	0.459884	-0.000329	0.9997
LLR	-0.368772	0.384632	-0.958766	0.3449
LMPR	-1.087824	0.266164	-4.087049	0.0003
LTBR	1.386100	0.042306	32.76381	0.0000

R-squared	0.974224	Mean dependent var	6.230885
Adjusted R-squared	0.970196	S.D. dependent var	2.702099
S.E. of regression	0.466485	Akaike info criterion	1.456758
Sum squared resid	6.963471	Schwarz criterion	1.715325
Log likelihood	-21.67841	Hannan-Quinn criter.	1.548754
F-statistic	241.8895	Durbin-Watson stat	2.522967
Prob(F-statistic)	0.000000		

Source: E-views 10.0 Econometric Package.

The estimated regression regression result is presented thus;

$$\mathbf{PSC_t = 3.062134 - 0.165143CRR_t - 0.000151LDR_t - 0.0368772LR_t - 1.087824MPR_t + 1.386100TBR_t \ldots\ldots\ldots\ldots..4.1}$$

5.0 Conclusion

From the findings of this study, regulatory framework exerts a significant effect on commercial bank operation in Nigeria within the study period, 1981-2018. Also, with most of the included explanatory variables bearing the expected signs, except the treasury bills rate, and only two out of the five explanatory variables being statistically significant, the study therefore concludes that there is the existence of possible poor regulatory/supervisory role by the Central Bank of Nigeria.

Recommendations

The study recommends that there is an urgent need for the CBN to pay more attention to the use of these regulatory instruments in controlling the banking system and maintain sanity in the banking industry in Nigeria.

References

Anyawu, C. M., (2010). "An overview of current banking sector reforms and the real sector of the Nigerian economy" *Economic and Financial Review,* 48(4): 31-63.

Bennouri, M., Nagati, H., Chtioui, T. and Nekhili, M. (2018). Female board dictatorship and firm performance; What really matters? *Journal of Banking and Finance*, 88: 267-291

Central Bank of Nigeria (2018). *Financial Statistical Bulletin*.

Chris 0. (2003). Financial regulation in Nigeria and challenges of the West African monetary zone. *Seminar on the Issues in Financial Institutions Surveillance in Nigeria, Publication of CBN Training Centre,* Lagos.No.3, pp.100-111.

Cucculelli, M. and Bettinelli, C. (2016). Corporate governance in family firms, learning and reaction to recession: Evidence from Italy futures, 750

Currie, C.V.,(2004). Towards a general theory of financial regulation: Predicting, measuring and preventing financial crises. WP No. 132.

Das, S. U., Quintyn, M. and Kina C., (2004). Does regulatory governance matter for financial system stability? An empirical analysis. *IMF Working Paper*, WP/04/89.

Davis, K. and Harper, I., (Ed.), (1991). *Risk management in financial institutions,* Allen and Unwin, Melbourne.

Dincer, O.C. and Fredriksson, P.G. (2013). Does trust matter? Corruption and environmental regulatory policy in United States, *SSRN 54 (2013*), pp 2101-225

Huang, X. and Kang, J.K. (2017). Geographic concentration of institutions, corporate governance and firm value, *Journal of Corporate finance*, 47: 191-218.

Idowu, A. and Babatunde, M. A, (2010): Effect of financial reform on capital market development in Nigeria. *Asian Journal of Business and Management Science*, 1(8): 44-52.

Iganiga, B. O. (2010). "Evaluation of the Nigerian financial sector reforms using behavioral models", *Journal of Economics*, 1(2): 65-75.

Iyade, A I (2006). "The impact of regulation and supervision on the activities of banks in Nigeria: An assessment of the role of CBN and NDIC" PhD Thesis at the St. Clements University.

Kama, I. U. (2003). "The constraints and prospects of effective financial surveillance in Nigeria", *Publication of CBN Training Centre*, Lagos. No.3, pp. 60-67.

Kane E. J., (1981). Accelerating inflation, technological innovation and the decreasing effectiveness of banking regulation, *Journal of Finance*, 8(36): 355-67.

Klomp, J. and De Haan, J.(2015). Bank regulation and financial fragility in developing countries: Does bank? *Journal of Advanced Research* 5: 1-9.

Kofo, D.F. (2019). Corruption perception, institutional quality and performance of listed companies. *Heliyon*, 5, Issue 10 October, 2019.

Long, U. and Vittas, D., (1992). Impact of regulation on financial internalization in financial regulation (ed.). *EDI World Bank.*

Mukhtar, A., (2010). "Effective financial regulation structures: Issues and challenges", *Zenith Economic Quarterly*, 5(2): 25-35.

Ningi, S. I. and Dutse, A. Y., (2008). The impact of bank consolidation strategy on the Nigerian economy. *African Economic and Business Review*, 6(2): 56-67.

Nwoha, S., (2003). Operational requirement of banking supervision and examination in Nigeria, Publication of CBN Training Centre Lagos, No.3, pp.26-36.

Nyber, I.S., Gerhart, B. and Carpenter,M,(2010). Agency theory revised: CEO returns and shareholder interest alignment, *Academic Management Journal*, 5(53): 1029 - 1049.

Oino,I. (2017) Impact of regulatory capital on European banks' financial performance: A review of post global financial crisis. Research in International Business and Finance, 44(2017): 308 - 318

Olorunshola, A. J. (2003). Financial system regulation in Nigeria: Theoretical framework and institutional arrangements. *Publication of CBN Training Centre, Lagos*. No.3, pp. 18-25.

Ozili, P.K. (2019). Bank income smoothing, institutions and corporation, *Research Journal of International Business and Finance*, 49: 82 - 89.

Pasiouras, F. (2008). International evidence on the impact of regulations and supervision on banks' technical efficiency: An application of two-stage data development analysis. *Review of Quantitative Finance and Accounting*, 30: 187 - 223

Sinkey, Jr. (1992). *Commercial banks financial management*. Maxwell MacMillan.

Stiglitz, J. (1981). "Financial market and development", *Oxford Review of Economic Policy*, 5(5): 55-68.

Suleyman K. Mehrnet, H. E. and Husey in Selimler (2015). "The effects of regulations on the performance of banks: Evidence from the Turkish banking industry", *Journal of Centrum Cathedra: The Business and Economics Research Journal*, 8(Issue 2): 109-145

Uffot, L. (2003). "The Nigerian financial system and the role of CBN", *Publication of CBN Training Centre*, Lagos. No3, pp.6-22.