PERIOD BASED CAUSALITY TEST OF EFFECT OF NIGERIAN BANKING REFORMATION VARIABLES ON THE ECONOMIC GROWTH (1986-2015)

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Abstract
This study tried to evaluate and compare the effect of various Banking reformation variables within the reformation periods considered on the economic growth of Nigeria using empirical literature to establish the gap existing in the various research work carried out on the area, granger causality test is used to describe and evaluate the contributions of these various reformation variables within the periods studied on the Economy, specifically considered are different banking repositioning that started from 1892 with free banking era, the regulated period that ended 1985, the deregulated period of 1986 to 1994, the policy reversal period that started 1994, Universal Banking (UB) model adopted in 2001, and Consolidation period that started 2004 and Payment Reform period introduced in 2008. There are other reforms in the banking sector that took place in recent period like:- Asset Management Corporation of Nigeria (AMCON) introduced in 2010, introduction of the Non-Interest Banking in Nigeria in 2012, Woman Empowerment in Banking industry introduced in 2012 and many others. Secondary data were sourced from CBN Statistical Bulletin and related research papers. The research design adopted in this study falls within the paradigm of an export fact design type. The data collected from the secondary records were analyzed using Granger Causality Test, while examined the effect of the independent variables on the dependent variables. The study revealed that all the variables studied (DIR, LIR, LQR, CPS, FID, EXR, NLMMI and NLM2) jointly do not granger cause GDP under Deregulation period, Reversal of Deregulation period, Universal Banking period and they do not significantly related to dependent variable(GDP). But they jointly Granger Cause GDP under Consolidated Banking period and they also jointly have significant relationship with dependent variable (GDP). The researcher, therefore recommend that policymakers should be designing proactive micro and macroeconomic measures for solving emerging economic problems in Nigeria. The regulatory bodies should ensure continuity of policies made, mostly those ones that are effective like bank consolidation policy. Nigerian policy makers should not be copying expatriates and developed economies in promulgation of Nigerian banking laws because they do not succeed here, instead, they should originate our own Banking laws, considering Nigerian economic factors, background and environment.

Key Words: Free Banking Era, Regulated Banking, Deregulated Banking, Deregulated Reversal Banking, Universal Banking, Consolidated Banking, Segmented Banking, Asset Management Corporation, Non-Interest Banking, Women Empowerment Banking, Cashless Policy, Financial Liberalization, Economic Growth, Granger Causality.

INTRODUCTION

Background of Study
Modern banking industry before the inception of Central Bank of Nigeria (CBN) experienced free or unregulated banking era 1892-1952. The history of this modern banking in Nigeria was traced to when the Africa banking Co-operation Based in South Africa opened a branch in Lagos in 1892 and later recognized...
as the bank of British West Africa (BBWA) for the fact that, there were neither CBN nor banking regulation. The Colonial Masters established many other banks. As the banks were more interested in caring for the financial needs of their owners at the expenses of the financial problem of the indigenes, in reacting to this, some indigenes in 1933 started the first indigenous banks called National Bank of Nigeria limited. This brought about banking racism which led to first experienced banking problem in Nigeria. According to Igweike (2005), some of the pioneer problems that beset these banks included, under capitalization, too rapid expansion, dishonesty, incompetence and inefficiency and there was no existence of banking legislation or regulation in country. These problems necessitated the need for banking repositioning in Nigeria. The quest for the reformation of the banking industry led to promulgation of the first banking ordinance of 1952, which was the first phase of Nigeria banking reform, Ituwe (1983), stated as follows “the government as a result of its concern over the menace and potential danger posed for the nation’s economy by the unregulated banking industry as evidenced by crop of mushroom banks issued by first banking ordinance in may 1952. After several amendments, the 1952 ordinance was repealed by another banking ordinance of 1958. Thereafter, a period of meaningful legislator followed which laid the foundation for the establishment of banking and the Other Financial Institution in the country and the Central Bank of Nigeria (CBN) was established by the Central Bank of Nigeria Act of 1958, which enabled the bank to commence business on 1st July, 1959 and this was the starting point of financial system Reformation continue by amending the CBN. Act of 1958 in 1962, 1967, 1968 through 1970 in line with changing economic trends and to strengthen the bank ineffective performance of its statutory functions. The enactment of Lagos Stock Exchange Act of 1961 and Exchange Act of 1962, and its subsequent amendments regulated the movement of funds in and out of the country. In trying to influence the feature of expatriate banks and make them to be considering Nigeria economy in most of their dealing, Decree of 1968 was enacted which required all the companies to register in Nigeria. The enactment of the Banking act in 1969 and the Security and the Exchange Commission Act of 1979 clearly stated the conditions governing the establishment and operation of banking business, with these enactments, strict controls were imposed on the granting of license, opening and closing of branches, amalgation, requirement of minimum paid up capital, maintenance of reserve fund and certain other activities of the bank especially the management of foreign and stock exchange. The CBN was used as agent for this control, with this, banks were required to render to CBN periodic return in a standard form, the return includes monthly statement of assets and liability, a report on loan and advances. In 1969/1970, the Central Bank also decide to start direct control of commercial banks by initiating sectorial distribution of credit, issuing monetary policy and circulars at the beginning of each fiscal year. In 1973, the government made a decision to intervene more directly in commercial banking activities by acquiring 40% of the equity of the largest expatriate banks. In 1976, the federal government acquired enough shares in all licensed banks to bring the indigenous participation to 60% with the right to appoint the chairman of the banks and certain number of board members. We should also notice that the 1958 Act was repealed by the banking act of 1969. The 1969 banking act was amended in 1972, 1975 and 1979.

Statement of Problems.
Following the argument of Mc Kinnon-shaw (MS) 1973 which posits that regulations in the financial markets are not only repressive in the market but also disturb incentives of savers and investors in the economy, though so may authors and researchers had been in support of this opinion like in Gibson and Tsakalofos (1994), Montel(1995) etc while some others are seriously criticizing the idea of financial reformation like the Keynes- Tobin- Stieglitz (also called the structuralism and Neostructuralist school) in Keynes(1936) Tobin(1965) and Stieglitz(1981). There are also others that are encouraging the combination of both regulating and deregulatory financial system at a time like (Ahmed & Islam,2010). In different periods, the Nigerian Government had tried all and experienced different challenges. This paper “period Based Causality effect of Nigerian Banking Reformation Variables on the Economic Growth seeks to find out the causal effect of these reformation variables based on different reformation period.

Objectives of the Study.
To determine if the various variables under consideration in the Banking reformation period do Granger Cause Economic Growth:- in different periods of reformation considered.

Research Question.
Do the banking reformation variables (M₂, DIR, LIR, LQR, MMI, FID, EXR, CPS) granger cause Economic Growth.

**Research Hypothesis.**
Nigeria banking reformation variables (M₂, DIR, LIR, LQR, MMI, FID, EXR, CPS), do not granger cause economic growth: considering different reformation policy periods studying.

**LITERATURE REVIEW**

**Theoretical Framework.**

**Deregulation (Introduced in 1986)**

Mc Kinnon (1973) and Shaw (1973) coincidentally raised arguments against policies of financial repression. They emphasized the role of financial sector in increasing the volume of savings by creating appropriate incentives. Hypothesis posits that they cited regulations such as deposit, interest rate ceiling, minimum/maximum lending rates and quantitative restrictive on lending, high reserve requirement as caused of negative and unstable real interest rates especially in the presence of high inflation in an economy. Many governments in development countries followed their policy advice and achieved significant accelerations in growth rate. In following the trend, Nigeria financial system in 1986 adopted Structural Adjustment Program (SAP), although the policy planks of SAP in Nigeria were the prototype prescriptions of the Bretton woods institutions, the program was sold to Nigeria by government as Nigeria alternative to IMF loan based adjustment. This reform saw the privatization of government interest in the older and large government control banks and to make way for new generation banks to come in, the Community Bank was evolved in 1990/1991 and later reform to Micro Finance Bank in 2005 and Nigeria People’s Bank was introduced in 1989 and later changed to Nigeria Agricultural Corporative and Rural Development Bank (NACRDB) in 2000, the Nigeria Deposit Insurance Corporation (NDIC) was also established through the NDIC decree of 1988.

According to Umujiaku (2011) Deregulation led to astronomical increase in the number of banks from 34 in 1987 to 90 in 2003 before the recapitalization policy of 2004 that reduced the number of banks to 24 bigger banks compared to what they were earlier in size, management, organizational structure, balance sheet and the nature of the market served.

During this period of deregulation, there was positive effects on the intermediation roles of the money market, level of savings and investment profiles in the economy. It also have various effects on the money quality of money in circulation.

According to Nzotta (2014) some of the deregulatory measures over the years include:

1) Liberalization of banking license and establishment of finance houses. 2) Suspension of rural banking with the creation of community banks and then the micro of prudential guidelines and new accounting standards for bank. 3) Interest rate deregulation and the introduction of monetary policy rate. 4) Deregulation of the foreign exchange market. 5) Privatizing state and federal government interest in banks and Insurances Companies. 6) Establishment of a discount market. 7) Shift from direct control of credit growth to the market oriented approach 8) Equity participation of banks in small and medium scale Companies, and specification of prohibited activities 9) Introduction of the Bank and other Financial Institution Act 1991 and CBN Act 2007 is amended 10) Increased capitalization of banks 11) Suspension of retail banking by Central Bank of Nigeria 12) Introduction of the auction based system for dealing in treasury bills 13) Introduction of new market instruments to broaden the scope of market securities 14) Introduction of universal banking scheme and later the segregated banking 15) Restructuring of the CBN to enable it concentrate on its core function. 16) Establishment of the institutional structure for the operation of an inter-bank settlement (settlement of inter –bank claims arising from over-night and inter-bank fund placements). The 1986 reformation equally affected the quality of money in circulation.

According to Onoh (2007), Between 1970-2003 QM reached its highest peaks in 1987 and 1988, respectively, in response to the deregulation of the economy in the last quarter of 1986. With the deregulation of the economy, interest rate was no longer determined by fiat but by market forces. Onoh also opined that since 1976, demand deposit has continued to outpace currency as the main component of M₁ as currency ratio for M₁ began a declining run, reaching its lowest point of 32.2 by the end of 1987, a year after the Nigeria economy was deregulated. In the same period demand deposit ratio for M₁ rose relatively and inversely to currency ratio and reaching its highest peak 63.0 in 1985 before the decline set in. Actually, the changes in the financial system have been most dramatic especially in terms of the member and ownership structure of financial institutions in the system, the level of organization, the nature of competition and services delivery, the efficiency, breadth and depth of the market and the instruments employed. Not minding the positivity of the reform, its poor implementation created problems for the Nigeria financial system like...
solvent and safety problems of most of the financial institutions, general death of instruments at the market, distress in the system affected the depth and breadth of the market, high level of inefficiency in financial intermediation, large extent, the cost and pricing of securities have not been positively affected by the market mechanism, various distortion are still prevalent, both in the cost of short-term and long-term funds and instruments. The level of interest rates at the money market does not sustain efficiency in resource use (optimum use of resources) and the allocation process (Nozoha, 2014).

Reversal of Deregulation (Introduced in 1993)
Considering the ill effects of the SAP and deregulation era, in 1994 there was a policy reversal which introduced some measures of regulation into the financial system. The failed Banks and Financial Malpractices Decree of 1994 was promulgated and largely succeeded in restoring some level of sanity and public confidence in the banks, which had earlier declined with the large number of distress banks. Based on the theoretical works of Keynes (1936) and Tobin (1965), who advocated government interference in the credit markets. In the early 1980’s the Neo structuralists also criticized the Mc Kinnon-Shaw school and predicted that financial liberalization would slow down growth. Their arguments were in the vein of those put forward by Keynes and Tobin. Joseph Stightz (1989) criticizes financial liberalization on the theoretical ground and market failures in financial market. The provisions of the failed bank decree was strictly enforced and the NDIC made frantic efforts to reducing the level of non-performing loans, bad lending, outright fraud and inside abuses in the banking system. During this period, some of the banks were acquired by the CBN/NDIC, if banks had their licenses revoked by the CBN in 1994, and 26 distress banks also had their licenses revoked in 1998 (Okonkwo and Bankoli 2016).

The research of Kanayo and Obichilu (2011) opined that in 1994, the gradual market based depreciation in the official exchange rate was truncated by a sharp devaluation in a bid to close the widening gap between the official and the autonomous exchange rates, government outlawed the autonomous foreign exchange market was brought back1995 to co-exist with the fixed official exchange rate.

According to Omole and Falokun (1999), the deposit interest rates were once again set at 12-15% per annum while cling of 21% per annum was fixed for lending. The cap on interest rate introduced in 1994 was rerated in 1995 with a little modification for flexibility but was lifted to October 1996 to pursue a flexible interest rate require. Indirect movement in structure (Open Market Operation), have been initiated since 1993, some other measures of control such as sectorial credit allocation guidelines, have continued to be applied. Open Market Operation in treasury bills was launched in order to regulate the flow of money and credit through market based auction mechanism of government securities. In order to facilitate the activities of OMO, discount houses were also licensed is from 1993.

The redefinition of quasi money, by the CBN, to include all deposits held with the Merchants banks obviously helped in the growth of quasi money. Although quasi money grew in absolute terms in the period; it declined slightly between 1992 and 1998 relative to M2, whole currency and demand deposit rose in the same period. The distress in the banking system contributed to the consequent decline in the volume of quasi money. The eventual collars of many banks in the 90s accelerated the slow growth of quasi money between 1992 and 1998. However, since 1998, Qm has continued to exercise dominance over currency and demand deposit, and to constitute a good proportion of M2 (Onoh 2013).

Universal Banking (UB) (Introduced in 2011)
This reform period was initiated by the advent of civilian democracy in 1999 which saw the return to liberalization of the financial sectors, accompanied with the adoption of distress resolution programmers (Balogun 2007). The universal Banking (UB) model was adopted in 2001, the system allowed banks mostly the Merchant/Investment banks and Commercial/Deposit money banks to diversify into Non bank financial business, and to dismantle the restrictions between investment and deposit money banking activities. Fashioned after the Financial Service Modernization Act of 1999. The Universal Banking System made it possible for banks to operate both banking securities and insurance business, delivery of all financial services so as to ensure efficient reduced cost and also improve bank risk-return profit through diversification (Asogw 2005). The guidelines of universal Banking specified that all licensed banks were free to choose activity or set of activity to undertake (money, capital market activities or insurance marketing service or a combination there of). As a result, a bank would be regulated based on the type of the activities it engaged in. In addition to carrying out the conventional primary functions, they could also choose from one, or a combination of the following; 1) Clearing house activities 2) Capital market activities 3) Marketing of insurance service.
The Banks and Other Financial Institutions Act 1991 were amended to reflect the change to Universal Banking. During this era, the government restructured the Development banks to make them more functional (Nzotta2014). He goes further to list down the restructuring as follows:
The bank of Industry was established through a merge between the former Nigeria Industrial Development Banks (NIDB), the Nigeria Banks for Commerce and Industry (NBC) and the NERFUND. Also the Peoples Banks, Family Economic Advancement programmed and the Nigeria Agricultural and Cooperation Bank merged to form the Nigeria Agricultural, cooperation and Rural Development Bank (NACRDB). A new system of cheque clearing under the Nigeria Automated clearing system is introduced by CBN and seven (7) banks were designed as a lead banks that conducted direct clearing at the clearing system, and in return maintained clearing deposits with the CBN, while other banks are agent banks. According to Sanusi (2012), some operation abused the laudable objectives of the UB model with a view to directing banks to focus on their core banking business only. Under the new model licensed banks will be authorized to carry the following types of business.

Consolidated Banking (Introduced in 2004)
The meeting of bankers committee under the chairmanship of Professor C.Soludo, the governor of CBN held on July 6th 2004 at the CBN headquarters, Abuja is a clear indication that not minding all the existing rules and regulations guiding the banking sector, that there still exist problems in the system. He announced a major policy shift regarding the banking sector. The policy’s agenda was to reposition the CBN and the financial system for the 21st century with the goal to consolidate and build upon the achievements of the sector in the past decade and take the system to greater heights. The first phase of the policy was to consolidate and strengthen the Nigeria banking system through re-capitalization with an option of merger and acquisition while the second phase will address the issue of diversification which will include programme to encourage the emergence of regional and units/ specialized banks. These however, are targeting ensuring that Nigerian banking industry meets the development challenges of 21st century was received with great skepticism and agitation against it by most stakeholders. They saw it as means of folding up, end or closure of their business. Though the policy thrust at inception, was to grow the banks and position them to play pivotal roles in driving development across the sectors of the economy. As a result bank where consolidated through merger and acquisition, raising the capital base from N2 billion to a minimum of N25 billion, which reduced the number of banks from 81 to 25 in 2005, and later to 24(Sanusi 2012). The implication of consolidation is that a highly capitalized bank will not have problems in carrying out its payments and clearing obligations. The requirement for lead banks and settlement of banks in the clearing system became unnecessary since a highly capitalized bank is required to be a solid clearly and settlement bank (Nzotta 1014). In the research of Okonkwo and Bankoli (2016), they opined that CBN provided some incentives for the banks so that they could achieve the N25 billion naira minimum capital base before the implementation period of Dec.31st 2005. These includes: - giving the banks freedom to deal through the foreign exchange, accepting of deposit from public sector, fiscal authorities and collection of revenue from the public sector, some tax incentives were provided for the banks in the area of stamp duty and caption allowance. Transaction costs had been minimized, an expert team was inaugurated by the government to provide technical support to the banks when needed, the establishment of web portal for all the citizens to share any confidential information with the Central Bank regarding the banking systems. An automated process was developed to report the banks return and the CBN revised and updated all necessary banking rules and regulations to make the banking system move flexible, effective and transparent. The introduction of the monetary base as a policy target appears to have had some salutary effects on the targets of GDP, increased credit to the private sector reduce credit to public sector and encouraging impact on inflation rate. Monetary base also started having some impacts on M1 and M2 in 2004 and 2005 respectively. The monetary base which is a key determinant of money supply is on the decline ( Ono 2013). It is this period that Nigeria payment is reformed subsequently. The CBN introduced a number of reformations including the payment system reformation in 2006.

Segmented Banking. (Introduced in 2009)
Before 2009, most banks had serious liquidity problems, level of Non-performing loans and lack of proper procedures and credit policies led to segmented banking which commenced in Nigeria in 2009. The consolidation era witnessed a good number of malpractices arising from insider abuses, large non-performing loans, and huge losses from margin trading and petroleum sector credit. According to Nzotta(2014) the recession in the world economy and the global finance meltd own that occurred between 2008-2009, had adverse consequences on the Nigeria economy in general and the Nigeria banking system in particular. The deposit money banks posted huge losses between 2008 and 2009 as a result. The major factor that led to the reform are listed as macro economic instability caused by large and sudden capital inflows, major failure in corporate governance at banks, lack of investment and consumer protection, inadequate disclosure and transparency about the financial position of banks, critical gaps in regulatory framework and regulations, uneven supervision and management process at the CBN and weakness in the business environment in the country. Expanded Discount windows (EDW) was introduced as a support facility through which the CBN provides liquidity to the ailing banks, for short-term funds. At the commencement of the reforms of 2009, nine bailed out banks were using the EDW for long term borrowing instead of short term and majority of other banks could not pay back due to illiquidity problem. The Central Banks of Nigeria (CBN) in response to the above problems, unveiled ten year reform blue print anchored on four cardinal reform programmes for the stabilization of the banking sector and the financial sector (Kenayo and Obiellius 2011).The four pillars of the 2009 segmented banking reform are; 1) Enhancing the quality of Bank 2) Enhancing financial stability 3) Enhancing healthy financial sector evolution. 4) Ensuring that financial sector contributes to the real economy.


To strengthen the reform measures, the Central bank took some additional measures;
(1)Banks were made to fully implement their 2006 CBN code of corporate governance. (2) Full disclosure in financial reporting and the adoption of common year end for all banks in the system.(3) Ten years maximum tenor for bank directors and CEO, was introduced for banks.(4) Adaption of the international financial reporting standards (IFRS) for banks which commenced effectively by 2012. New rules on margin lending were introduced by the monetary authorities during this period. The rules barred banks from the use of a banks share in margin.

The Asset Management Corporation of Nigeria (AMCON) was introduced in 2010, following its enabling Act promulgation by the National Assembly. It is a special purpose vehicle of banking sector. According to Sanusi(2012) in line with AMCON mandate, it recently acquired the non-performing risk assets of some banks worth over #1.7 trillion, which is expected to boost their liquidity as well as enhanced their safety and soundness. According to him, with AMCON, the banking industry ratio of non-performing loans to total credit has significantly reduced from 34.4 percent in November 2010 to 4.95 percent as at December 2011. The CBN and all the Deposit Money Banks have signed MOU on the financing of AMCON while the CBN contributes #50 billion annually to AMCON, while each of the participating banks shall contribute an amount equivalent to 0.3 percent of its total asset annually into a sinking fund as at the date of their audited financial statement for the immediate proceeding financial year. Another bold step the CBN has taken within this period is adoption of the international financial reporting standard (IPAS) in Nigeria banking sector by the end of 2010. This is to integrate the banking system into global best practice in financial reporting and disclosure. This should also help the bank to enhance market discipline, and reduce uncertainties and risks. Some other important policies of the CBN within this period are;
(1)Introduction of Non-Interest Banking system in Nigeria which the first fully licensed Non-Interest banking in the country (Jaiz bank PLC) started business on Friday January 6 2012. (2) Women empowerment in the banking industry which was declared in 2012 bankers’ committee. In follow up, a sub-committee on women empowerment has been formed, with the CEO of Standard Chartered Bank Nigeria as Chairperson. (3) Introduction of cash less policy in order to address currency management problems in the country and to enhance the national payment system.

Webometric Analysis
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<tr>
<th>Author</th>
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<th>Topic</th>
<th>Country</th>
<th>Variable</th>
<th>Methodology</th>
<th>Finding</th>
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<tbody>
<tr>
<td>Okonkwo, N.O and Bankoli B.</td>
<td>2016</td>
<td>Banking sector reform and the Nigeria Economy: An approval.</td>
<td>Nigeria</td>
<td>1. Nigeria Economic Variable. 2. Bank reform variables.</td>
<td>Literature Review</td>
<td>It was observed that while the various banking reforms had actually recorded huge success vis-à-vis the reforms, each reform tent to throw up further challenge not to be holistic</td>
</tr>
<tr>
<td>Umejiaku, R.I</td>
<td>2011</td>
<td>Financial reforms and economic development in Nigeria: A graphical Analysis</td>
<td>Nigeria</td>
<td>1. Ratio of domestic credit to income (DOM/GDP) as a proxy for financial development. 2. Ratio of bank deposit liabilities to income (Bank/GDP) 3. Ratio of private sector credit to GDP (priv/GDP)</td>
<td>Graphical Analysis</td>
<td>This puts Nigeria in the league of Nations that failed to achieve their objectives of the reform</td>
</tr>
<tr>
<td>Dada, O.D</td>
<td>2015</td>
<td>Effect of Financial sector Reforms on the Growth of</td>
<td>Nigeria</td>
<td>1. Real Manufacturing output 2. Credit to private sector</td>
<td>Co-integration and granger-causality techniques were used.</td>
<td>The result indicated that financial sector reform has a direct effects on the growth of the manufacturing sector in Nigeria.</td>
</tr>
<tr>
<td>Babajide, F</td>
<td>2011</td>
<td>Financial sector reforms and private investment in sub-Saharan African Countries.</td>
<td>Nigeria</td>
<td>1. Ratio of gross private investment to GDP</td>
<td>The result revealed that both the banking sector reforms and credit supply to agricultural sector have positively affected agricultural output in Nigeria; however the impact of agricultural output proved to be very weak and insignificant.</td>
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<tr>
<td>Nicholas, M.O</td>
<td>2010</td>
<td>Interest Rate reforms and credit Allocation of the ARDL Bound testing Approved Tanzania</td>
<td>Tanzania</td>
<td>1. Invest mental output capital ratio.</td>
<td>Econometric Estimations’</td>
<td></td>
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2. Real rate of interest 3. Real market Capitalization 4. Real Total deposit.

2. Percentage Ratio of Broad Money to Gross Domestic Product 3. Private Sector Credit 4. Loans and Advanced to the Agricultural Sector

METHODOLOGY:
In order to attain the objective of this study, period based causality effect of Nigeria banking reformation variables on the economic growth; ex-post facto research design is used. This is influenced by the nature of the data which is in time series. The variables are tested and analyzed based on different banking reformation period as follow.
Note: the ten (10) years interval does not indicate when the reformation period ends rather chosen by the researcher as a yardstick. Then, the last period that ends by 2015 do not have enough data for the subsequent years. The secondary data was used and were gathered from CBN statistical bulletin and the Granger Causality test is used to estimate the hypothesis formulated in line with the objectives of the study.

Model Specification.
The model of study is a modification of the model stated in the empirical framework analysis in this work like the work of Yushau (2011) who used reformation variables (commercial Bank loan, Cooperative Society loan and Personal Saving loan), Credit allocation, investment rate and price lending rate. The work of Oriji (2012) used GDP, Total Private Domestic Saving, GDP Per Capital, Real Interest Rate, Financial Deepening, Interest Rate spread and Inflation Rate were used as variables and Emmanuel (2007) used GDP, Money Supply, Private Sector Credit, Banking Sector Credit to Government and Exchange Rate were used and others that were stated in the empirical frame work. The modified Econometric model used in this work is specified mathematically as
\[ GDP = F(M_2, DIR, LIR, LQR, MMI, FID, EXR, CPS). \] This model is used for all the periods considered.
Econometric specification of the model would be specified thus:
NLGD\(P = \beta_0 + \beta_1 NL M_2 + \beta_2 DIR + \beta_3 LI R + \beta_4 L Q R + \beta_5 NL M M I + \beta_6 F I D + \beta_7 E X R + \beta_8 C P S \)

**Apriori Expectation**

The expected result based on economic theory is as follows. M\(2\) Granger cause GDP, D\(IR\) Granger cause GDP, L\(IR\) Granger cause GDP, L\(QR\) Granger cause GDP, M\(MI\) Granger cause GDP, F\(ID\) Granger cause GDP, E\(XP\) Granger cause GDP, C\(PS\) Granger cause GDP.

**Definition and Justification of Model Variables**

**Liquidity Ratio (LQR)**

Liquidity ratio is the percentage of deposit liabilities, which the commercial deposit bank must hold in the form of liquid assets. This is one of the indirect measures the CBN uses to control other banks. The liquidity ratio was fixed by the CBN (Amendment) Act of 1962.

Broad money supply (M\(2\)). The money supply (M\(2\)) is categorized as broad money which is the total money in circulation in a particular economy. Mathematically, it is

\[ M^2 = M^1 + QM + OL \]

This is also

M\(2\)=currency(C) + demand deposit(DD) + Savings Deposit(SD) + Time Deposit(TD) + Other Liability (OL)

**Interest Rate (IR)**

This is the cost of borrowing for investment purpose. It is another core variable that affects the GDP which the government through the CBN uses to manipulate the activities of money market. This is usually expressed as a percent of the total amount loaned (fisher 1930). Interest is dynamic in nature and this is when the market force plays its role. According to Okuma (2004), time value of money makes the value of money to be dynamic and this is always caused by some factors like inflation and deflation, the dynamic nature of the value of money makes it to have cost (interest) when borrow and to have income (interest) when lent. Examples of interest rate are; Deposit interest rate (DIR): This is when interest is paid by the bank on the customer deposit and Lending interest rate (LIR): This is the value of money paid by the investors (borower/customer of the bank) on the money borrowed from the bank.

**Financial Deepening (FID)**

This is captured by broad money (M\(2\)) as ratio of GDP. It is the increase in volume of all monies in circulation. The ratio of broad measure of money stock M\(2\) to the level of nominal income (M\(2\)/GDP) seems to be the most commonly used (Berthekerly and Varonkis 1995) in the work of (Umejiaku 2011)

**Exchange Rate**

This is the rate one can offer one currency for another. According to Barth (1992), exchange rate policy involves choosing an exchange rate at which foreign transaction will take place. Exchange rate is the rate of transaction of one currency is another or the rate of which one currency is exchanged for another (Nzotta 2014).

**Money Market Instrument.**

These are those instrument the CBN uses in controlling the money in circulating and also the activities of other banks. According to Nzotta (2014), money market instrument are short-term debt claims that are readily marketable or convertible into cash (Nzotta 2014). The major instrument CBN uses are Treasury Bills, money at call. Commercial papers, certificate of Deposits, Bankers unit funds, eligible development stock and Bankers acceptance.

**Presentation of Analysis of Results.**

**Deregulation Policy Period.**

The period model is

\[ NLGD\(P = \beta_0 + \beta_1 NL M_2 + \beta_2 DIR + \beta_3 LI R + \beta_4 L Q R + \beta_5 NL M M I + \beta_6 F I D + \beta_7 E X R + \beta_8 C P S \]

From the result of regression for deregulation period, we have Ln GDP= \( \beta_0 +0.333010NL M_2 + (-0.032182) \)

\[ DIR + 0.023072LI R + 0.007510L Q R + (-0.001802) NL M M I 0.020768FI D +(-0.033066) E X R (-0.041461) C P S + \mu \]

All the independent variables have no significant relationship with the GDP since all their probability values are more that 5%. The value of adjusted R\(^2\) at 0.895715 statistics’ the requirement for goodness of fit R\(^2\)-squared value at 0.988413 is indicating that 98% changes in the dependent variable are influenced by
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independent variables and the other 20% is by those variables not included in the model. The Prob. (F-statistics) at the value of 0.232761 indicates that all the variables put together will have no significant relationship, Therefore, the Alternative hypothesis is not accepted. Finally, Durbin-Watson Stat. (DW) at 2.852599 also indicates the absence of auto correlation which shows the absent of positive first order series correlation.

Table 1:
Pairwise Granger Causality Tests
Date: 03/17/17  Time: 09:31
Sample: 1986 1995
Lags: 2

<table>
<thead>
<tr>
<th>Null Hypothesis:</th>
<th>Obs</th>
<th>F-Statistic</th>
<th>Prob.</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIR does not Granger Cause NLGDP</td>
<td>8</td>
<td>0.10231</td>
<td>0.9058</td>
<td>Not significant</td>
</tr>
<tr>
<td>NLGDP does not Granger Cause DIR</td>
<td></td>
<td>0.50818</td>
<td>0.6456</td>
<td>Not significant</td>
</tr>
<tr>
<td>LIR does not Granger Cause NLGDP</td>
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<td>0.02608</td>
<td>0.9745</td>
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</tr>
<tr>
<td>NLGDP does not Granger Cause LIR</td>
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<td>2.51280</td>
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<td>Not significant</td>
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<tr>
<td>LQR does not Granger Cause NLGDP</td>
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<td>0.49522</td>
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<td>Not significant</td>
</tr>
<tr>
<td>NLGDP does not Granger Cause LQR</td>
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<td>3.12439</td>
<td>0.1847</td>
<td>Not significant</td>
</tr>
<tr>
<td>FID does not Granger Cause NLGDP</td>
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<td>0.06238</td>
<td>0.9407</td>
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</tr>
<tr>
<td>NLGDP does not Granger Cause FID</td>
<td></td>
<td>0.15118</td>
<td>0.8659</td>
<td>Not significant</td>
</tr>
<tr>
<td>CPS does not Granger Cause NLGDP</td>
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<td>0.30370</td>
<td>0.7584</td>
<td>Not significant</td>
</tr>
<tr>
<td>NLGDP does not Granger Cause CPS</td>
<td></td>
<td>0.34581</td>
<td>0.7326</td>
<td>Not significant</td>
</tr>
<tr>
<td>EXR does not Granger Cause NLGDP</td>
<td>8</td>
<td>0.03130</td>
<td>0.9695</td>
<td>Not significant</td>
</tr>
<tr>
<td>NLGDP does not Granger Cause EXR</td>
<td></td>
<td>4.60893</td>
<td>0.1217</td>
<td>Not significant</td>
</tr>
<tr>
<td>NLM2 does not Granger Cause NLGDP</td>
<td>8</td>
<td>4.76478</td>
<td>0.1172</td>
<td>Not significant</td>
</tr>
<tr>
<td>NLGDP does not Granger Cause NLM2</td>
<td></td>
<td>11.8720</td>
<td>0.0376</td>
<td>Significant</td>
</tr>
<tr>
<td>NLM2 does not Granger Cause NLGDP</td>
<td>8</td>
<td>0.06638</td>
<td>0.9371</td>
<td>Not significant</td>
</tr>
<tr>
<td>NLGDP does not Granger Cause NLM2</td>
<td></td>
<td>2.37920</td>
<td>0.2404</td>
<td>Not significant</td>
</tr>
</tbody>
</table>

The granger causality test shows evidence of unidirectional causality running from GDP and MMI and all other independent variables do not have any evidence to support the existence causal relationship between them and GDP and they do not have significant relationship with the dependant variable. This is evidence from the value of the probability (F-start) which is 0.232761>5% level of significant. This indicates the acceptance of Null hypothesis which states that: Nigeria Baking reformation variables (DIR, LIR, LQR, CPS, FID, EXP, NLM2, NLM2) do not granger cause economic growth.

Reversal of Deregulation Policy Period.
Using the result of OLS regulation, the period model is

\[ NLGDP = \beta_0 + 0.002010 \text{DIR} + 0.014911 + 0.001449 \text{LQR} + 0.036167 \text{FID} + (-0.057196) \text{CPS} + (-0.002782) \text{EXR} + 0.005156 \text{LMMI} + 0.272551 \text{NLM2} + \mu \]

The OLS regression is showing that all independent variables were not significant at 5% level of significance. The value of Adjusted R-Square at 0.992329 satisfies the requirement for goodness of fit. R-Square value of 0.999148 is indicating that 99% changes in the dependent variable are caused by the independent variables. The Prob. (F-statistic) of 0.063810 shows that if all the variables added together will still have no significant relationship with the GDP. Finally, the value of Durbin-Watson (DW) 2.368570 also indicates the absence of auto correlation which shows the absent of positive first order series correlation.

Table 2:
Under deregulation reversal period, the result shows evidence of unidirectional causality running from GDP to FID and CPS and all other independent variables do not have evidence to support the existence of causal relationship with GDP. This is evidenced from the value of Pro (F-statistics) 0.63810 which is greater than 5% level of significance. We therefore, reject the alternative hypothesis and accept the null which states that Nigeria banking reformation variables (DIR, LIR, LDR, CPS, FID, EXR, NLMNI, and NLM2) do not granger cause the dependent variable (GDP).

**Universal Banking Policy Period.**

Using OLS regression result, the model is

$$NLGDP = \beta_0 + (-0.03104)\text{ DIR} + (-0.003456)\text{ LIR} + 0.010590 (LQR) + (-0.012415)\text{ FID} + 0.014657 \text{ CPS} + 0.004159 \text{ EXR} + 0.5000\text{ NLMMI} + (-0.141603)\text{ NLM2} + \mu$$

The OLS regression result is showing that all the individual independent variables are not significantly related to the dependent variable. The value of adjusted $R^2 = 0.976321$ satisfies the requirement for goodness of fit. R-square value of 0.997369 is indicating that 99% of the changes in the dependent variable are caused by the independent variables. The Pro (F-statistics) of 0.111909 shows that all the variables put together, will still have insignificant relationship with the dependent variable (GDP). Finally, the value of Durbin-Watson (DW) 2.282465 also indicates the absence of auto correlation which shows the absent of positive first order series correlation.
Under this period, FID, EXR and NLM2 have evidence of unidirectional causal relationship with NLGDP while other independent variables do not have evidence of causal relationship with GDP. This is evidenced from the value of the Pro (F-Statistics) value of 0.111909 which is greater than 5% level of significance. We therefore, reject the alternative hypothesis and accept the null hypothesis which states that Nigeria Banking Reformation variables (DIR, LIR, LQR, CPS, FID, EXR, NLMMI, NLM2) do not granger cause the dependent variable (NLGDP)

Consolidated Banking Policy Period.
Using OLS regression result, the model is NLGDP = β₀ + (0.010594) DIR + (0.000210) LIR + (0.000776) LQR + (-0.001350) FID + (-0.000590) CPS + (0.001822) EXR + (0.112608) NLMMI + (0.175207) NLM2 + μ

The OLS regression result is showing that all the independent variables individually are not significantly related to the dependent variable (NLGDP). The value of the adjusted R-square 0.996953 satisfies the requirement for goodness of fit. R-square value of 0.999661 shows that 99% of the variations in the dependent variable are caused by the changes in the independent variables. The Probability (F-Statistics) of 0.040237 is then indicating that all independent variables put together will have a significant relationship with the dependent variable (NLGDP). Finally, the value of Durbin-Watson (DW) 2.697560 also indicates the absence of auto correlation which shows absence of positive first order correlation.
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Pairwise Granger Causality Tests  
Date: 03/17/17   Time: 09:14  
Sample: 2004 2013  
Lags: 2  

<table>
<thead>
<tr>
<th>Null Hypothesis:</th>
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<th>F-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIR does not Granger Cause NLGDP</td>
<td>8</td>
<td>0.21216</td>
<td>0.8200</td>
</tr>
<tr>
<td>NLM2 does not Granger Cause DIR</td>
<td>8</td>
<td>5.25442</td>
<td>0.1047</td>
</tr>
</tbody>
</table>

| LIR does not Granger Cause NLGDP | 8 | 29.0441 | 0.0109 |
| NLM2 does not Granger Cause LIR | 8 | 2.82562 | 0.2042 |

| LQR does not Granger Cause NLGDP | 8 | 3.79828 | 0.1506 |
| NLGDP does not Granger Cause LQR | 8 | 0.06653 | 0.9370 |

| FID does not Granger Cause NLGDP | 8 | 23.6067 | 0.0146 |
| NLGDP does not Granger Cause FID | 8 | 0.93392 | 0.4838 |

| CPS does not Granger Cause NLGDP | 8 | 16.3573 | 0.0243 |
| NLGDP does not Granger Cause CPS | 8 | 1.98046 | 0.2829 |

| EXR does not Granger Cause NLGDP | 8 | 9.98129 | 0.0472 |
| NLGDP does not Granger Cause EXR | 8 | 1.92419 | 0.2899 |

| NLMMI does not Granger Cause NLGDP | 8 | 7.70744 | 0.0658 |
| NLGDP does not Granger Cause NLMMI | 8 | 1.18601 | 0.4173 |

| NLM2 does not Granger Cause NLGDP | 8 | 6.03417 | 0.0888 |
| NLGDP does not Granger Cause NLM2 | 8 | 0.07278 | 0.9314 |

**Results**  
Not significant  
Not significant  
Significant  
Not significant  
Significant  
Not significant  
Significant  
Not significant  
Not significant  
Not significant  
Not significant  
Not significant  
Not significant  
Not significant  
Not significant

Under this period, LIR, FID, CPS and EXR have evidence of unidirectional causal relationship running to NLGDP while other independent variables do not have evidence of causal relationship to GDP. This period of Banking Consolidation has more of independent variables that have positive values and also more that granger causes the independent variable (NLGDP). This is evidenced from the value of the Prob (F-Statistics) 0.040237 which is less than 5% level of significance, indicating that if all independent variable are put together, they will have significant relationship with the dependent variable (NLGDP). We therefore reject the null hypothesis and accept the alternative which states that Nigerian banking reformation variables (DIR, LIR, LQR, CPS, FID, EXP, NLMM1, and NLM2) Granger causes the dependent variable (NLGDP).

**Findings, Conclusion and Recommendations**  
**Summary of findings**  

**Under Deregulation Policy Period.**  
The granger causality test shows evidence of unidirectional causality running from GDP and MM1, while DIR, LIR, LQR, FID, CPS, EXP and M2 shows no evidence of causal relationship with GDP. This is in agreement with the result of Prob. (F-Statistics) which reveals that Deregulation policy has no significant relationship with GDP.

**Under Reversal of Deregulation Policy Period.**  
The granger causality test shows evidence of unidirectional causality running from FID, CPS and GDP, while DIR, LIR, LQR, EXR, MMI, and M2 are not showing any evidence of causality relationship with GDP. This is in agreement with the result of Prob.(F-Statistics) which shows that deregulation reversal has no significant relationship with the GDP.

**Universal Banking Policy Period.**  
The granger causality test shows evidence of unidirectional causality running from EXR, M2 and GDP, while DIR, LIR, LQR, FID, CPS, MM1 are not showing any evidence of causality relationship with GDP. This confirms the result of Prob. (F-Statistics) which indicates that universal banking policy has no significant relationship with the GDP.

**Consolidation Policy Period**

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The granger causality test shows evidence of unidirectional causality running from LIR, FID, CPS, EXR, and GDP, while DIR, LQR, MMI, M2, are not showing any evidence of causality relationship with GDP. This is the period with highest number of independent variables that granger causes dependent variable, and it is in conformity with the result of Prob. (F-Statistics) which reveals that consolidation policy is significantly related to Nigerian economic growth.

Conclusion
The study has clearly shown that most of the measures used by the Nigerian government/CBN and other Banking regulatory bodies in controlling the activities of the banking sector towards achievement of macroeconomic goals of price stability, full employment, high economic growth and internal and external balances do not have significant effect on the GDP. The banking reformation variables under deregulation policy period, deregulation reversal policy period, and universal banking policy period were all not significantly related to GDP and equally do not granger causes GDP. It is only under the banking consolidation policy period that analysis shows that there is a significant relationship between the independent variables and the dependent variable (GDP), and that the variables put together do granger cause GDP. The researcher therefore recommends that policy makers should be designing proactive micro and macroeconomic measures for solving emerging economic problems in Nigeria as a peculiar nation. The regulatory bodies should ensure continuity of policies made, mostly those ones that are effective like banking consolidation policy. Nigerian policy makers should not be copying expatriate and developed economies in promulgation of Nigerian banking laws because they do not work here, instead, they should originate our own Banking laws, considering Nigerian economic factors and environment.

REFERENCES


