

# Commercial Banks and Real Sector Credit: A Comparative Study of Pre and Post Consolidation Reforms in Nigeria

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## **ABSTRACT**

*This study examined the effect of banking sector reforms on real sector credit in Nigeria. Panel data were sourced from Central Bank of Nigeria Statistical Bulletin and financial statement of the commercial banks in the pre consolidation and post consolidation reforms. Multiple regression models were formulated to examined and compare the effect of post consolidation reforms on demand side financial intermediation. Nine commercial banks that bear the same name in the pre and post consolidation reforms were used as sample size. Real sector credit was proxies for dependent variables while capital reforms, interest rate reforms, Central bank policy reforms, bank competition, management quality, assets quality, market risk and liquidity reforms were proxies for independent variables. The study employed panel data regression models of pooled effect, fixed effect and random effect models. After cross examination of the models using the Hausman test, the fixed effect models were used. The study found that 53.4 percent of the systematic variation in the real sector credit in the pre consolidation reforms and market risk has positive and significant effect on real sector credit while management quality, bank liquidity reforms and assets quality have negative effect on real sector credit in the pre consolidation reforms. The estimated model found that 78.1 percent of the systematic variation in the real sector credit in the post consolidation reforms while bank liquidity have negative and no significant effect on real sector credit while management quality, market risk and assets quality have positive effect on real sector credit in the post consolidation reforms. The study concludes that post consolidation reforms have significant effect on real sector credit. The study recommended that the Central Bank of Nigeria should continue with its banking sector reforms such as increase capital base as this can encourage substantial credit allocation to the prioritized activity sectors, build and enhance financial intermediation functions of the banking sector.*

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*Keywords: Commercial Banks, Real Sector Credit, Pre- consolidation, Post Consolidation Reforms*

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## INTRODUCTION

The importance of finance to business organizations cannot be over-emphasized. Business finance is however, not easy to source especially in respect of small and medium scale enterprises. Yet they require funds from every source available to meet their asset needs, working capital needs, and for expansion. Accordig to Ekpenyong and Nyong (1992) there is wide consensus in Nigeria that government policies are skewed in favour of the formal sector to the detriment of the informal sector. This skewness is to the great disadvantage of small and medium scale enterprises in Nigeria since they are more disposed to the funds of the informal sector (Ohanga, 2005).

The commercial banks constitute the formal sources of finance to small and medium scale enterprises. The financial system in Nigeria is not in short supply of liquidity, but banks have been very reluctant to grant loans to small and medium scale enterprises, which they regard as a high-risk sector. Most of these banks would rather pay the penalty imposed for not meeting the minimum credit requirement to this preferred sector of the economy than actually run the risk of exposure to the risk. According to Ojo (1984) the sources of investment fund for small and medium scale enterprises include owner's savings and assistance from banks, government institutions, local authorities, co-operative societies, relatives and friends, and money lenders.

The strength of a bank depends on the capital funds available to the bank. According Soludo (2004), banks have not played their expected role in the development of the economy because of their weak capital base and as such, the decision to raise capital base of banks was with the aim of strengthening and consolidating banking system. The strengthening and consolidation of the banking system was the first phase of reforms designed to ensure a diversified, strong and reliable banking sector which will ensure the safety of depositors' money, play active development roles in the Nigeria economy and also become competent and competitive in the financial system. Consolidation of banking firms involves either a combination of existing bank growth among the leading banks. The capital of bank is to serve as a symbol of confidence in banking institutions. Therefore, the strong capital base prescribed under the recapitalization programme is consistent with corporate mandate of promoting public confidence in the banking system. The increase in the minimum capitalization requirement for banks will, to a large extent, engender public confidence in the banking system as it will enhance banks capacities to absorb operating losses and minimize recourse to depositors' funds protection agency. Bank consolidation stems from the need to resolve problem of financial distress in order to avoid systematic crises as well as to restrict inefficient banks because of inadequate capital cover to wipe out or at least reduce losses sustained from failed investments. The presence of weak, unhealthy and undercapitalized banks increased the need for a high level of consolidated banks through mergers and acquisitions. This has necessitated the work to see how bank consolidated in Nigeria in the past years have led to increase in real sector credit.

The importance of the real sector cannot be over emphasized in achieving economic growth. It has been named preferred sector of the economy by the regulatory authorities and attract various reforms to attract foreign investors and domestic credits. The sector comprises the agricultural, manufacturing, building, construction and service industries Anyanwu (2011). The sector is important for variety of reasons. First, it produces and distributes tangible goods required to satisfy aggregate demand in the economy Adegbite (2005). Second, performance of the sector can be used to measure the effectiveness of macroeconomic policies. And third, a vibrant real sector is capable of generating income, create employment, absorb idle resources and increase

capacity utilization which is prerequisite for economic growth. The growth of the non-oil sector can be qualitatively measured as the contribution of the sector to the gross domestic product.

Banking sector reforms were designed to enable the banking system to develop the required resilience to support the economic development of the nation by efficiently performing its function as the fulcrum of financial intermediation. The banking sector reforms are fundamentally to improve the scope and potentials of the sector and enhance its ability to perform developmental roles in the economy. The scope of banking sector reforms in Nigeria include bank recapitalization, bank consolidation, deregulation of interest rate, increase branch banking, liquidity reforms management reforms

Banking sector reforms refers to measures or series of measures taken to correct distortions in the banking system. Mainly, banking reforms usually set to achieve macroeconomic goals of price stability, full employment, high economic growth and internal and external balances the reforms in Nigeria, according to CBN (2012) have been directed towards financial intermediation, financial stability and confidence in the system. The banking sector reforms are fundamentally to improve the scope and potentials of the sector and enhance its ability to perform developmental roles in the economy. The reforms are designed to enable the banking system to develop the required resilience to support the economic development of the nation by efficiently performing its function as the fulcrum of financial intermediation. The government aimed to establish a reliable and efficient banking sector so as to guarantee the safety of the depositors' money and become major players in the sub-region, regional and global financial market.

The deregulation of the Nigerian financial system since 1986 resulted to high interest rates, persisting liquidity crisis and credit rationing in favour of large companies. The policy somersault that characterized the post-deregulation period left Nigerian small and medium scale enterprises under severe financial stress and extreme financing gaps. A good business environment or investment climate will encourage private firms to be well managed and efficient, be profitable to grow, create jobs, increase the rate of economic growth and reduce poverty.

Aberejio and Fayomi (2005) argued that the challenges which Nigerian banks have to tackle before a successful implementation of Medium Industries Equity Investment Scheme include those that relate to cash flows, investment structuring, monitoring/value enhancement, liquidity and exit strategies. Small and Medium Industries Equity Investment Scheme is a voluntary initiative of bankers committee which requires all licensed banks to set aside 10 percent of their profit before tax for equity investment in, and promotion of small and medium scale enterprises. Despite the existence of programmes and policies on financial support for small and medium scale enterprises in Nigeria, very few small and medium scale businesses receive financial assistance (credit) when they need it. This has constrained the development of their businesses and hence their performance. Mambula (2002) found that 75 percent of small firms he studied in Nigeria considered lack of financial support as a major constraint militating against the growth of small business. The study found that small business owners consider procedures for securing credit from banks cumbersome and the acceptable collateral for such loans excessive.

On the other hand, banks argued that most small business owners that apply for loans do not present acceptable investment or business plan and feasibility study. In the light of the un-credit worthiness of most small and medium scale enterprises as viewed by the banking system while there are many studies on the effect of banking sector reforms, the effect of banking sector

reforms on financing of small and medium scale enterprises is lacking in literature, therefore this examined the effect of consolidation reforms and bank credit to small and medium scale enterprises.

## LITERATURE REVIEW

### Banking Sector Reform

The chequered history of Banking Sector Reforms in Nigeria had its roots in the quest for repositioning of the financial institutions to meet the challenges in the competitive global market. Much as the Central Bank of Nigeria tried to evolve a seamless system capable of enthroning a regime of stability in the monetary policy, the results have created need for further reforms, to meet the challenges of the time. It is important to note that the reforms of the 'Banking Consolidation Era' which began in 2004 with the consolidation programme were necessitated by the need to strengthen the banks. 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, banks were consolidated through mergers and acquisitions, raising the capital base from N2 billion to a minimum of N25 billion, which reduced the number of banks from 89 to 25 in 2005, as earlier mentioned. But beyond the need to recapitalize the banks, the regulatory reforms also focused on the following:

Revision and updating of relevant laws for effective corporate governance and ensuring greater transparency and accountability in the implementation of banking laws and regulations, as well as; the introduction of a flexible interest rate based framework that made the monetary policy rate the operating target. The framework has enabled the bank to be proactive in countering inflationary pressures. The corridor regime has helped to check wide fluctuations in the interbank rates and also engendered orderly development of the money market segment and payments system reforms, among others.

Mallam Sanusi Lamido Sanusi took over in 2009 and barely two months in office, had he empaneled a special joint committee of the Central Bank of Nigeria and the Nigerian Deposit Insurance Corporation to conduct a special examination of all 24 universal banks in Nigeria. The result showed weak corporate governance, operational indiscipline and global financial crisis as the major causes of the weakness and prescribed further decisive Banking Sector Reforms to forestall total collapse of the sector. There are strong indications that another banking reforms is being muted by the current CBN Governor, Mr. Godwin Emiefele, before the end of 2023

### Recapitalization

The Nigerian banking industry witness another era in 2005 with the banking sector reform tagged consolidation by recapitalization through Bank Consolidation. It was a strategy of meeting the 115 percent increase in capital base from N2 billion to N25 billion. The economic objective was to reposition and restructure the banking sector for effective intermediation function and leverage the deteriorating market value of Nigerian banks. It was expected to increase the market value, increase return on investment, maximize shareholders wealth, increase return on assets and capital employed (Nandi, 2009). The policy can said to have a two way effect on the market value of Nigerian banks. For instance the reduction of number of Nigerian banks from 89 to 25 and now to 20 while some banks Deposit Money Banks. While some banks merge others were wholly taken over by other banks. The consequences is the high rates of

competition in banking system which tend to move Nigerian banking system into monopoly where few banks dominate the banking industry.

According to the agency theory by Jensen and Meekling (1976) the agency problems arise when institutions merged and served to reduce agency costs borne by the majority of the owners. However the challenges in the deteriorating market value of Nigerian banks can be said to be that of management quality rather than Bank Consolidation. In the CAMELS analysis of banking system soundness, it can be considered that management quality is more important as other variable depend on management quality. For instance, less than five years after Bank Consolidation, market value of many banks are still very poor. The banking crisis of the 1980s and 1990s that damaged the market value of Nigerian banks was traced to poor management quality. The 2010 CBN banking examination revealed over N1trillion non-performing banks facilities. This will impact negatively to the market value of DMB in Nigeria.

The banking sector consolidation is an integral policy to strategically position Nigerian banks to be active player and not spectators in the emerging financial market. This was by the poor performance, poor rating and the Nigerian banking crisis of the 1980s and 1990s. Prior to the consolidation through Bank Consolidation most Nigerian banks have capitalization of less than US\$10 million, the largest bank in Nigeria has capital base of US\$240 million compared to US\$526 million for the smallest bank in Malaysia. South Korea has eight banks with 4,500 branches compared to 89 banks in Nigeria with 3,225 branches. One bank in South African has assets base larger than the 89 banks in Nigeria. No Nigerian bank was among the first 1000 in the world and the first 100 in Africa. Nigerian banks were packet size banks (Toby, 2006).

#### **Commercial Banks Capital Adequacy**

The "Basel Committee" established in 1974, is a committee that represents central banks and financial supervisory authorities of the major industrialized countries (the G10 countries). The committee concerns itself with ensuring the effective supervision of banks on a global basis by setting and promoting international standards. Its principal interest has been in the area of capital adequacy ratios. In 1988 the committee issued a statement of principles (Basel Capital Accord) dealing with capital adequacy ratios. The statement contains a recommended approach for calculating capital adequacy ratios and recommended minimum capital adequacy ratios for international banks. The Accord was developed in order to improve capital adequacy ratios (which were considered to be too low in some banks) and to help 12 standardize international regulatory practice. This Accord has been adopted by the OECD countries and many developing countries (Basel Committee on Banking Supervision, 2003). Minimum capital adequacy ratios and its limitations The minimum CAR that supervisory authorities are encouraged to apply according to the Basel Capital Accord are: one, that tier 1 capital to total risk weighted credit exposures should not be less than 4 percent; and: two, that total capital (i.e. tier 1 plus tier 2 less certain deductions) to total risk weighted credit exposures should not be less than 8 percent.

#### **Interest Rate Deregulation**

Deregulation of interest rate provides a platform for greater competitiveness in mobilization and utilization of fund, an efficient financial industry and more productive organizations within the financial industry. It has been advocated by many economists that interest rate deregulation helps to enhance savings, boost investment and consequently help to enhance economic growth. However, the road of complete deregulation of interest rate in Nigeria has not been devoid of wide variations and unnecessarily high rate. The removal of the maximum lending rate ceiling in 1993 saw interest rates rising to unprecedented levels in sympathy with rising inflation rate

which rendered banks' high lending rates negative in real terms. In 1994, direct interest rate controls were restored. As these and other controls introduced in 1994 and 1995 had negative economic effects, total deregulation of interest rates was again adopted since October, 1996 (Adofu, Abula and Audu, 2010). This total deregulation remains the status quo. Even though many economists have argued that the deregulation of interest rate has led to a trudge in the real interest rate (interest rate that has been adjusted for changes in price level) which has induced savings and investment in general (Amassoma, Nwosa and Ofere, 2011).

### **Financial Intermediation**

Financial intermediation relates to intermediate functions of financial institutions in mobilizing savings and allocating resources. The importance of financial institutions especially banks in generating growth within the economy has been widely discussed in literature (Nwaeze et al, 2014). Several economists have argued that the role of intermediation which banks play help in providing linkages for different sectors of the economy as well as encouraging high level of specialization, expertise, economies of scale and creating a conducive environment for the implementation of various economic policies of government.

Finance is required for different purposes by different organizations, individuals and other economic agents. In order to provide the needed finance, there are varieties of institutions rendering financial services. Such institutions are called financial institutions. Commercial banks are among such institutions that render financial services. They are mainly involved in financial intermediation, which involves channeling funds from the surplus unit to the deficit unit of the economy, thus transforming bank deposits into loans or credits.

### **Demand Side Financial Intermediation**

The level of the deposit portfolio is postulated to depend on the rates of interest paid on each type of deposit ( $R^D$ ) and other macroeconomic factors. A notable factor that affects the ability of economic agents to save, and hence the level of deposits among the financial institutions is the disposable income ( $Y^d$ ) of the economic agents. This is the remainder of income after applying tax to the total income of the agents. A proxy for the income of economic agents in a country is the per capita income ( $Y^p$ ). By implication, the income tax rate ( $R^{yt}$ ) prevailing in the country is also an important factor of influence. Perhaps a much more influencing factor in the realm of taxes as argued in Ezirim (1999) is the withholding tax ( $R^{Wt}$ ) on interest rates paid by banks to their depositors.

It is reasoned that higher withholding tax rates reduce the willingness of relevant agents in depositing money with banks. Economic units are naturally averse to taxation generally. Apart from these, it is postulated that the aggregate level of economic activity (GDP), which determines the standard of living and welfare of the citizenry, would go a long way to determining the ability of economic units to make deposit with the financial institutions. A buoyant economy with high GDP has a promise of boosting deposits than a poor one. If the level of economic activity grows, it is expected that savings would generally grow.

### **The Perfect Theory of Financial Intermediary**

Three pillars are at the basis of the modern theory of finance: optimality, arbitrage, and equilibrium. Optimality refers to the notion that rational investors aim at optimal returns. Arbitrage implies that the same asset has the same price in each single period in the absence of restrictions. Equilibrium means that markets are cleared by price adjustment through arbitrage at each moment in time (Levine et al, 2000). In the neoclassical model of a perfect market, e.g. the

perfect market for capital, or the Arrow-Debreu world, the following criteria usually must be met:

- i. No individual party on the market can influence prices
- ii. Conditions for borrowing/lending are equal for all parties under equal circumstances
- iii. There are no discriminatory taxes
- iv. Absence of scale and scope economies
- v. All financial titles are homogeneous, divisible and tradable
- vi. There are no information costs, no transaction costs and no insolvency costs
- vii. All market parties have ex ante and ex post immediate and full information on all factors and events relevant for the (future) value of the traded financial instruments.

The Arrow-Debreu world is based on the paradigm of complete markets. In the case of complete markets, present value prices of investment projects are well defined. Savers and investors find each other because they have perfect information on each other's preferences at no cost in order to exchange savings against readily available financial instruments. These instruments are constructed and traded Costless and they fully and simultaneously meet the needs of both savers and investors. Thus, each possible future state of the world is fully covered by a so-called Arrow-Debreu security (state contingent claim). Also important is that the supply of capital instruments is sufficiently diversified as to provide the possibility of full risk diversification and, thanks to complete information, market parties have homogenous expectations and act rationally. In so far as this does not occur naturally, intermediaries are useful to bring savers and investors together and to create instruments that meet their needs. They do so with reimbursement of costs, but costs are by definition an element or rather, characteristic of market imperfection.

### **Supply Leading Hypothesis**

This theory was authored by Schumpeter (1911) and later adopted by scholars such as McKinnon (1973); Shaw (1973); Gupta (1984); Fry (1988); Greenwood and Jovanovich (1990) and Bencivenga and Smith (1991). This theory postulates that financial development in any country causes economic growth. In an economy with no friction in the transaction, information and monitoring costs, no financial intermediaries are needed. According to the theory, if transaction, information and monitoring costs are sufficiently high, then, no exchange among economic agents is necessary. These desires led to the emergence of financial institutions and markets that make up the financial sector. According to this theory, a well-developed financial sector will ensure reduced transaction, information and monitoring costs thereby increasing the efficiency of intermediation. The theory postulates that a well-developed financial intermediary facilitates the development of the economy through mobilization of savings, facilitation of trading and the diversification of risks among others.

### **Demand Following Hypothesis**

Moving away from the neo-classical state equilibrium analysis, to a highly developed financial system, consisting of financial intermediaries, leads to a demand following phenomena (Patrick, 1960). Under this, in response to the demand from real economy, there are the development of modern financial institutions, their financial assets and liabilities, and related financial services. This model postulates that the developments of the real economy will in itself induce increase in demand for financial services. The increase demand for financial services will spontaneously generate or lead to the introduction of new financial institutions and markets which will satisfy that increased demand for financial services. This Theory is important to this study as it provides a different view that the developments in financial deepening does not necessarily lead to

economic growth. It also provides an alternative explanation suggesting that economic growth drives deepening of the financial sector.

### **Empirical Review**

Ali, Clems, Ikeotuonye and Yua (2020) examined the effect of banking sector reforms on the growth of manufacturing sector in developing economies: a study of Nigeria. The specific objectives of this study is to investigate the relationship between aggregate credit to the manufacturing sectors (ACM), commercial banks' reserve requirement (CBR), commercial banks' investment (CBI), loan-to-deposits ratio (LDR), lending rate (LR), real effective exchange rate index (EXR) and manufacturing sector output growth (MGDP), anchored on financial liberalization theory and Keynesian theory of finance and economic growth. The study used secondary data obtained from the publications of NBS and CBN and subjected them to Co-integrating and Serial Correlation CM Test to ascertain the long run and short run relationship between ACM, CBR, CBI, LDR, LR and MGDP at 5% level of significance. The findings show that banking sector reforms did not have significant effect on growth of the manufacturing sectors for the period 1986 to 2018 in Nigeria.

Anigbogu, Okoli and Nwakoby (2015) investigated the effect of financial intermediation on small and medium enterprises performance in Nigeria between 1980-2013. Using an econometric model of the Ordinary Least Square (OLS). Findings revealed that with the exception of bank interest rate to SMEs, all other variables namely bank lending rate to SMEs, exchange rate and monetary policy have a positive and significant influence on small and medium enterprises performance in Nigeria. The study recommends that the regulatory authority should design an accessible and a well supervised SMEs credit scheme for the development of the sector.

Aruomoaghe and Olugbenga (2014) investigated the capital investments financing in Nigeria using annualized data of 32 years from 1981. The study employed regression model as the analysis tool. It found that banks have contributed much in financing capital investment and stock market development in Nigeria. It recommends that financial institutions should be encouraged to mobilize more deposit for lending that will aid capital investment and that the apex bank should reduce its minimum rediscounting rate.

Avinash and Mitchell-Ryan (2019) investigated the impact of the sectoral distribution of commercial bank credit on economic growth and development in Trinidad and Tobago. The study employs Vector Error Correction Model to ascertain the relationship that exists between credit and investment. The study found that credit and growth tends to demonstrate a demand following relationship, while further analysis revealed a 'supply leading relationship between credit and growth within key sectors of the non-oil economy.

Bernhard (2017) investigated banking sector reforms and economic growth using time series data from 1970 to 2013 for the Nigerian economy. Autoregressive Distributed Lags (ARDL) Bounds test was applied for the specific determination of the long and short-run relationships between banking sector reforms and economic growth. The research finds that the interest rate margin is more significant than other variables in the model in explaining the banking sector reforms and economic growth. Banking sector credit to the private sector was negative and statistically insignificant to economic growth in Nigeria. This means that the size of the banking sector does not enhance economic growth. Meanwhile, inflation is negatively and statistically significant to

economic growth. The duration of banking sector reforms should be defined and strictly adhered to, irrespective changes in the political administration of the country.

Dada (2015) examined the effect of financial sector reform on the growth of manufacturing sector. Utilizing manufacturing output and financial sector reforms variables including credit to manufacturing sector, real rate of interest to manufacturing sector, market capitalization and total deposit from 2001 to 2011 with the aid of co-integration and granger-causality techniques. The result indicates that financial sector reform had a direct effect on the growth of the manufacturing sector in Nigeria. He called on the government to create a more conducive and enabling environment by improving on infrastructures, security as well as protecting indigenous industries in order to build-up the manufacturing sector of the economy.

Ebele and Iorember (2016) x-rayed the effect of commercial bank credit on the manufacturing sector output in Nigeria from 1980 to 2015 using Cochrane-Orcutt method. Five variables of manufacturing sector output, inflation rate, interest rate, loans and advances and broad money supply were used for the study. They found that, inflation rate and interest rate have negative effect on manufacturing sector output while loans/advances and broad money supply have positive effect with manufacturing sector output in Nigeria. The study therefore recommended economy growth, though not significant in specified parsimonious error correction model. Bank credits were both positive and significant signifying that the availability of finance can have favorable and immediate impact on real sector growth. Also natural resource rent was positive and highly significant. Both human capital and prime lending rate were positive and significant, while domestic investment was not significant. They finally opined that given the low level of industrial sector growth in Nigeria, there is need to speed up financial sector reform to enhance intermediating efficiency, promote robust institutional quality and prudent use of scarce resources.

Frank and Rotimi (2016) study the impact of domestic financial reform on manufacturing sector performance in Nigeria using time series from 1981 to 2014. Result showed that, the coefficient

Gidigbi (2017) assessed the impact of banking reforms on banks' performance and economic growth for the period 1981 to 2015 by fitting an ANOVA model into Stepwise Regression. Using dummy variables to isolate reform periods, results show that banking reforms contribute positively to economic growth, especially in the period 1999 to 2004. Also, banking reforms are found to contribute negatively to banks' performance, following the 1993 reforms. The study confirms that banking system reforms in Nigeria have dual impact on the economy and banks' performance. The banking reforms are capable of promoting growth in the economy. Thus, the study recommends pre-crisis reforms testing by the apex bank.

Ifonu and Keremah (2016) investigated the effect of the reforms on the performance and profitability of deposit money banks in Nigeria from 1995 to 2012 using Bank Performance as the dependent variable and ROA, ROE as the independent variables. Based on their findings from the test for equality between means technique used, they recommended that banks should improve their total asset turnover and diversify in such a way that they can generate more income on their assets. Ikenna (2012) studied the long and short run impact of financial deregulation and the possibility of a credit crunch in the real sector, using Autoregressive Distributed Lag (ARDL), and time series data ranging from 1970 –2009. The study found that deregulating the Nigerian financial system had an adverse effect on the credit allocation to the real sector in the long run and in the short run. The study suggested mandatory credit allocation even in the long run as of utmost necessity as it had started with the latest banking reform. Ikeora et al. (2015)

investigated the effect of the reforms on the performance of the Nigerian economy from 1998 to 2013. Using vector error correction model (VECM) and Ordinary Least Square (OLS) regression techniques, they found a positive relationship between the reforms and the performance of Nigerian economy.

Ikeora, Igbodika and Andabai, (2016) evaluate the relationship between banking sector reforms and performance of Nigerian economy using Secondary data spanning from 1998- 2013 with the aid of Vector Error Correction Model (VECM), the result showed that there is a long-run equilibrium relationship between banking sector reforms and performance of Nigerian economy. Also, the coefficient of determination indicates that about 55% of variation in the performance of Nigerian economy can be explained by changes in banking sector reforms variables. The study also found that there is causality between banking sector reforms and performance of Nigerian economy. The study then sued monetary authorities to be more proactive in bank supervision and pursue the supervisory framework based on prudence and professionalism. Also that, monetary and fiscal policy should be properly aligned towards stimulating and deepening the economy while ensuring that banks effectively managed their resources by focusing on risk management and corporate governance tenets.

Lawal (2016) examined the effect of exchange rate fluctuations on manufacturing sector output in Nigeria from 1986 to 2014. Data for the study was sourced from (CBN) statistical Bulletin and World Development Indicators (WDI) on manufacturing output, Consumer Price Index (CPI), Government Capital Expenditure (GCE), Real Effective Exchange Rate (EXC) and analyzed through the multiple regression analysis using Autoregressive Distribution Lag (ARDL). The ARDL result showed that exchange rate fluctuations have long run and short run relationship insignificant effect on the manufacturing sector output. Also that government expenditure has a positive relationship on manufacturing sector output but not significant. The study recommended that government should implement the policies on export strategies to encourage exports and discourage imports in order to achieve a favourable balance of payment; government should encourage the use of domestic materials in production in order to encourage international competitiveness and also increase expenditures on economic services such as manufacturing so as to increase their output.

Lucky and Bruno (2018) examines the effect of financial reforms on banking sector efficiency in Nigeria from 1986- 2016. The study employed exchange rate, interest rate and liquidity variables. Using OLS regression the findings indicate that financial reform targets have significantly affected banking sector efficiency in Nigeria in the long run. The study recommends that the regulatory and supervisory framework should be strengthened while interest rate policy should be made to stimulate savings through high real deposit rate and lending rate so as to promote financial deepening and thus banking efficiency.

Mitku (2018) intended to determine the effect of cash required reserve on commercial bank lending in Ethiopia using panel data of eight purposively chosen commercial banks over the period of eleven years (2005 to 2015). The investigation tested the relationship between commercial bank lending and cash required reserve. Eleven years' financial data of eight purposively chosen commercial banks were used for analysis purpose. Ordinary least square model was applied to test the impact of predictor variable on commercial bank lending. The result suggests that, there is no significant relationship between commercial bank lending and cash required reserve in Ethiopian commercial banks. Nathanael (2014) investigated the effect of

the reforms on Nigeria's economic growth process from 1980 to 2012. He found that the reform enhanced Nigeria's economic progress. He therefore recommended among others, further increase the minimum capital base by the monetary authorities as well as perpetuation of the expansionary monetary policy.

Nazmi (2015) studies the impact of deregulation and financial deepening on the real sector, using general equilibrium model to analyze data from four (4) Latin America countries, for the period covering 1960 –1995. The study found that deregulation and a more developed banking sector prompt firms to increase the capital intensity of production, mostly, portends rapid economic growth. Ndebbio (2014) using an Ordinary Least Square Regression framework, finds that banking sector development weakly affect per capita growth of output. He attributed the result to shallow finance and the absence of well-functioning capital markets.

Okoi, Ocheni and Akaninyene (2019) examined the impact of bank in g sector reforms on economic growth in Nigeria using the annual time series data for forty six years (1970-2015). The major objective of the study was to examine how banking sector reforms impact on economic growth in Nigeria. The design of the study was ex-post facto and desk research design. Data for the study were sourced from Central Bank of Nigeria (CBN) statistical bulletin and International Monetary Fund (IMF) journals. The study was based on Financial Repression Hypothesis (FRH) by Mckinnon and Shaw (1973). The data were analyzed using Johansen cointegration test and Granger-causality test for the period 1970 – 2015. Autoregressive Distributive Lag (ARDL) test was adopted in the study. From the ARDL test results, it was found that interest rate spread (INRS) was correctly signed in the model and adequately predictive of economic growth indicator studied while other exogenous variables {exchange rate (EXR), bank capital base (BCAB) and corporate governance disclosure index (CGDI)} studied did not impact positively on gross domestic product growth in Nigeria. The ARDL bound test revealed the existence of a long-run relationship among these variables. The speed of adjustment parameter as indicated by the coefficient of the Error Correction Mechanism (ECM) was significant with appropriate negative sign. The study concluded by recommending that, the policy of deposit and lending rate should be made reasonable as smaller spread between savings and deposits rates influences efficient financial intermediation. Finally, since corporate governance disclosure is seen as an indicator of the company's openness index, companies should always make full disclosure; thereby not withhold in g any relevant information to external stakeholders.

Olanrewaju, Aremo, and Aiyegbusi (2015) investigated the effect of banking sector reforms on the output of manufacturing sector of the Nigerian economy from 1970 to 2011. Using cointegration analysis and Error Correction Mechanism (ECM), the result showed that the effects of Bank assets, Lending rate, Exchange rate and real rate of interest on manufacturing output were positively significant although with very low impact. On the other hand, the financial deepening and interest rate spread negatively and significantly impacted on the output growth of manufacturing sector in Nigeria. The study submits that, the effect of banking sector reforms on the output growth of manufacturing sector were significantly low in the Nigerian economy within the study period.

Ranciere and Tornell (2016) investigate the financial liberation, debt mismatch, allocative efficiency, and growth in the United States (US) using a two-sector model. The model comprises Schneider and Tornell (2004) elements of credit market game with a two-sector endogenous

growth model. The study found that financial liberalization increases growth, but leads to more crises and costly bailouts. The study further asserts that liberalization preserves financial discipline and may increase allocative efficiency, growth, and consumption possibilities.

Simon-Oke and Jolaosho (2016) investigated the impact of financial reforms on industrial productivity growth in Nigeria. Using a time series data between the period of 1986 to 2013 with the aid of vector auto-regression analysis, impulse-response and variance decomposition, the study established that the various financial sector reforms put in place since the introduction of the Structural Adjustment Programme (SAP) in Nigeria have not significantly brought about the needed improvement on the level of industrial productivity growth in the country. They however laid credence to the to the essence of the financial reform operations to specifically target the industrial sector of the economy through a growth engendering reform policy capable of ensuring a sizeable and economically viable lending rates regimes.

Sunday (2018) examined the impact of bank credits on manufacturing sector outputs in the deregulated Nigerian economy for a period of 1986-2016. The data collected were analyzed using Autoregressive Distributed Lag (ARDL) models. It was found out that banks credits contributed positively to manufacturing sector output in both short-run and long-run. For causality relationship, EXR, SAV and LR granger cause manufacturing sector outputs. Hence, the main determinants of MSO are EXR, SAV and LR. The study recommended amongst other things, that the Central Bank and other monetary authorities alike should make policy that will lead to increase in bank credit to the manufacturing sector.

Toby and Zaagha (2020) empirically examined the effect of Central Bank policy rates on private sector funding in Nigeria. The purpose of the study was to examine the extent to which monetary policy affect private sector funding in Nigeria. Time series data were sourced from Central Bank of Nigeria Statistical Bulletin from 1985-2018. The study employed multiple regression models to estimate the relationship that exists between monetary transmission channels and private sector funding in Nigeria. Ordinary Least Square (OLS), Augmented Dickey Fuller Test, Johansen Co-integration test, normalized co-integrating equations, parsimonious vector error correction model and pair-wise causality tests were used to conduct the investigations and analysis. Empirical findings that Central Bank Policy rates has significant relationship with credit to private sector, credit to core private sector and no significant relationship with credit to small and medium scale enterprise sector.

William, Zehou, and Hazimi (2019) investigated the factors that influence domestic credit to the private sector in Ghana. The study uses the Johansen cointegration and vector auto-regression model to analyze panel data spanning the period from 1961 to 2016. Findings from the study revealed that though there is no long-run association among the variables, there exist significant short-run relationship between domestic credit to the private sector, broad money and gross capital formation. Further diagnostic tests showed that gross capital formation Granger causes both domestic credit to the private sector and broad money, and domestic credit to the private sector Granger-causes broad money. They concluded that money supply and gross capital formation are necessary factors to address in the quest for developing the financial strength of domestic banks in providing credit facilities to the private sector for economic growth.

Yua, Upaa, Adiga & Haruna, (2020) examined commercial banks' credit and manufacturing sector performance in emerging economies: evidence from Nigeria. The specific objectives of the study were to investigate the effect of commercial bank loans and advances (CBLA), commercial banks' lending rates (CBLR), inflation (INFL) and aggregate savings (ASAV) on manufacturing performance in the emerging economies. The study was anchored on loan pricing theory and the neo-classical theory of interest rate. The study used secondary data obtained from the Central Bank of Nigeria statistical bulletin and used for the analysis. The variables for the study were tested for unit root using the Augmented Dickey Fuller test and the test of Johansen cointegration within the framework of vector error correction was applied to test for the short-run and long-run effect. The findings of the study revealed that commercial banks' credit had significant effect on the manufacturing sector performance. The study concluded that commercial banks' credit enhanced manufacturing performance in emerging economies. This paper also suggests some measures in order to boost employment and manufacturing performance in Nigeria.

Zaagha (2020) examined the effect of money supply on private sector funding in Nigeria. The purpose of the study was to examine the extent to which monetary policy affect private sector funding in Nigeria. Time series data was sourced from Central Bank of Nigeria Statistical Bulletin from 1985-2018. Credit to private sector, credit to core private sector and credit to small and medium scale enterprises sector was used as dependent variables while narrow money supply, broad money supply, large money supply, private sector demand deposit was used as independent variables. Ordinary Least Square (OLS), Augmented Dickey Fuller Test, Johansen Co-integration test, normalized co-integrating equations, parsimonious vector error correction model and pair-wise causality tests were used to conduct the investigations and analysis. The empirical findings revealed that money supply explains 82.1 percent variation on credit to core private sector, 85.2 percent and 23.4 percent of the variation in credit to private sector and credit to small and medium scale enterprises sector. The study conclude that money supply has significant relationship with credit to private sector, credit to core private sector and credit to small and medium scale enterprises sector. From the findings, the study recommends that Central Bank of Nigeria should induce the variations of the amount of money changes through the nominal interest rates. That the monetary authorities should ensure adequate quantity of money supply that positively affect private sector funding in Nigeria.

Zaagha and Murray (2020) examined the effect of deposit money banks policy on private sector funding in Nigeria. Time series data was sourced from Central Bank of Nigeria Statistical Bulletin from 1985-2018. Credit to private sector, credit to core private sector and credit to small and medium scale enterprises was used as dependent variables while liquidity ratio and loan to deposit ratio was used as independent variables. Ordinary Least Square (OLS), Augmented Dickey Fuller Test, Johansen Co-integration test, normalized co-integrating equations, parsimonious vector error correction model and pair-wise causality tests were used to conduct the investigations and analysis. The empirical findings revealed that deposit money banks policy explains 40.8 percent variation on credit to core private sector, 28.1 percent and 58.9 percent of the variation in credit to core private sector and credit to small and medium scale enterprises sector. The study conclude that deposit money banks policy has no significant relationship with credit to private sector and credit to core private sector but has significant relation with credit to small and medium scale enterprises sector. From the findings, the study recommends compliance

to deposit money banks policies; this will enhance effective financial intermediation and increase funding of the private sector. There is also need for the regulatory authorities to harmonize the various deposit money banks policies with the objective of enhancing private sector funding. There is need to decentralize the operation of the deposit money banks in the urban cities. Policies should be formulated to extend the operation of the deposit money banks to the rural communities, this will enable the institutions to mobilize much deposit and increase credit to the private sector.

Echekoba and Ubesie (2018) did an assessment of financial deepening on the growth of Nigerian -economy 1990-2016 using ordinary least square regression (OLS). The main objective of this study is to evaluate the effect of private sector credit, money supply and market capitalization on economic growth in Nigeria. Findings showed that the three independent variables of the study all have significant effect on Nigerian financial deepening. It was therefore recommended that policies aimed to reduce the high incidence of non performing credits to ensure that private sector credits are channel to the real sector of the economy. The monetary authorities should implement policies that increase the flow of investible funds and improves the capacity of banks to extend credit to the economy as this will make broad money supply and private sector, to significantly impact on economic growth in Nigeria.

Adelegan, (2018) examined the dynamic linkages between domestic investment, domestic credit to the private sector and gross domestic product (GDP) in Nigeria over the period of 1970 to 2015. The Vector Autoregressive (VAR) model, its accessories of impulse response functions (IRFs) and variance decomposition composition (VDC) were use. Findings indicate that the relationship between growth and domestic credit to the private sector is positive and insignificant. Also, the results show that increase in PLR reduces output for the period under study, but this was not statistically significant. In addition, the relationship between PDI and PDI is positive but statistically insignificant. Finally, the negative relationship between exchange rate and private domestic investment suggests that the appreciation of the real exchange rate discourages domestic private investment. The study recommends among others that monetary and fiscal policies should be better coordinated to ensure that macroeconomic fundamentals are moving in the right direction.

Adeniyi et al. (2018) investigated the relationship that exists between monetary policy instruments and Deposit Money Banks Loans and Advances in Nigeria. Annual time series data covering a period from 1981-2016 were used and the Toda and Yamamoto granger non-causality model was employ to examine the relationship existing between Deposit Money Banks loan and advances and monetary policy variables in Nigeria. Findings revealed that structural changes in monetary policy system exerted positive significant impact on loan and advances of Deposit Money Banks in Nigeria. Findings also revealed bidirectional relationship existing between MPR and loan and advances of Deposit Money Banks in Nigeria. Precisely, MPR proved to be a significant variable which causes Deposit Money Bank loans and advances in Nigeria. Other explanatory variables (broad money supply, liquidity ratio, inflation rate and cash reserve ratio does not granger cause loan and advances of Deposit Money Banks in Nigeria within the study period. It concluded that the structural change in monetary policy system and monetary policy rate have significant impact on loan and advances of deposit money banks in Nigeria. Hence, the study recommended that monetary authority should formulate policies that will stabilize interest rate so as to boost the investors' confidence.

William, Zehou, and Hazimi (2019) investigated the factors that influence domestic credit to the private sector in Ghana. The study uses the Johansen cointegration and vector auto-regression model to analyze panel data spanning the period from 1961 to 2016. Findings from the study revealed that though there is no long-run association among the variables, there exist significant short-run relationship between domestic credit to the private sector, broad money and gross capital formation. Further diagnostic tests showed that gross capital formation Granger causes both domestic credit to the private sector and broad money, and domestic credit to the private sector Granger-causes broad money. They concluded that money supply and gross capital formation are necessary factors to address in the quest for developing the financial strength of domestic banks in providing credit facilities to the private sector for economic growth.

Olorunmade, Samuel, and Adewole, (2019) examined the determinant of private sector credit and its implication on economic growth in Nigeria. The fluctuation in the supply of money and credit is the basic causal factor at work in cyclical process; when money supply falls, prices decrease, profit decrease, production activities become sluggish and production falls and when money supply expands, price rise, profit increase and the total output increases and finally growth takes place. Sample regression analysis were used to analyse data obtained from Central Bank of Nigeria statistical bulletin from 2000 to 2017. It was revealed in the determinant of credit supply that there was significant relationship between Total credits to private sector and money supply in Nigeria. The study also findsthat there was significant relationship between private sector credit and economic growth in Nigeria. They recommend that there should be persistence increase of money supply to Nigerian economy in order to increase the flow of credit to the real sector of the Nigerian economy, financial institutions should distribute more credit to the real sector for productive purposes in order to increase Gross domestic product.

### METHODOLOGY

This study used quasi experimental research design approach for the data analysis. It therefore implies an empirical study used to estimate the relationship and impact of explanatory variables. The design is deemed appropriate for the current study because it will enhance uniform data collection and comparison across many respondents at one point in time. The population for this study includes the 22 licensed commercial banks in Nigeria as at December, 2019 (CBN, 2019). The nine quoted commercial banks that were in existence in the pre and post consolidation reforms. This study employed secondary data to be sourced from Nigerian Deposit Insurance Corporate (NDIC), Central Bank of Nigeria (CBN) and the Nigerian Stock Exchange (NSE) publications from 1995-2005 for pre-consolidation 2006 to 2020 for post consolidation reforms.

#### Model Specification

From theories, principles and empirical findings, the model below is specified in this study.

$$RSC = f(CR, INR, CBPR, BC) \quad (1)$$

$$RSC = f(AQ, MQ, MR, BLR) \quad (2)$$

It is empirically stated as

$$RSC = \alpha_0 + \alpha_1 CR + \alpha_2 INR + \alpha_3 CBPR + \alpha_4 BC + \varepsilon \quad (3)$$

$$RSC = \chi_0 + \chi_1 AQ + \chi_2 MQ + \chi_3 MR + \chi_4 BLR + \vartheta \quad (4)$$

RSC = Real sector credit

CR = Capital reforms

INR = Interest rate reforms

CBPR = Central bank Policy reform

BC = Bank competition

AQ = Assets quality

MQ = Management quality

MR = Market risk

BLR = Bank liquidity reforms proxy by loan to deposit ratio

$\beta_0$  = Regression Intercept

$\beta_1 - \beta_4$  = Coefficient of the independent variables to the Dependent variable

$\mu, \varepsilon, \varphi$  and  $\vartheta$  = Error term

### Methods of Data Analysis

The main tool of analysis is the Ordinary Least Squares (OLS) using the multiple regression method for the pre-consolidation periods of 1995 to 2005 and post consolidation periods of 2006 to 2020.

### Description of Some Regression Statistics

- (i) **Coefficient of Determination ( $r^2$ ) Test:** This measure the explanatory power of the independent variables on the dependent variables.  $R^2$  gives the proportion or percentage of the total variation in the dependent variable Y that is accounted for by the single explanatory variable X. The higher the  $R^2$  value the better. For example, to determine the proportion of monetary policy to private sector funding in our model, we used the coefficient of determination. The coefficient of determination varies between 0.0 and 1.0. A coefficient of determination says 0.20 means that 20% of changes in the dependent variable is explained by the independent variable(s). Therefore, we shall use the  $R^2$  to determine the extent to which variation in monetary policy variables are explained by variations in private sector funding variables over the periods covered in this study.
- (ii) **Correlation Co-Efficient (R):** This measures the degree of the relationship between two variables x and y in a regression equation. That is, it tries to establish the nature and magnitude of the relationship when two variables are been analyzed. Thus correlation co-efficient show whether two variables are positively or negatively correlated. That is, it takes the value ranging from  $-1$ , to  $+1$ .
- (iii) **F-Test:** This measures the overall significance. The extent to which the statistic of the coefficient of determination is statistically significant is measured by the F-test. The F-test can be done using the F-statistic or by the probability estimate. We use the F-statistic estimate for this analysis.
- (iv) **Student T-test:** measures the individual statistical significance of the estimated independent variables. This is a test of significance used to test the significance of regression coefficients (Gujurati, 2003). Generally speaking, the test of significance approach is one of the methods used to test statistical hypothesis. A test of significance is

a procedure by sample results are used to verify the truth or falsity of a null hypothesis (Ho) at 5% level of significance.

- (v) **Durbin Watson Statistics:** This measures the collinearity and autocorrelation between the variables in the time series. It is expected that a ratio of close to 2.00 is not auto correlated while ratio above 2.00 assumed the presence of autocorrelation.
- (vi) **Regression coefficient:** This measures the extent in which the independent variables affect the dependent variables in the study.
- (vii) **Probability ratio:** It measures also the extent in which the independent variables can explain change to the dependent variables given a percentage level of significant.

### ANALYSIS AND DISCUSSION OF FINDINGS

**Table 4.1: Presentation of Hausman Test Results**

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.	Description	Summary	Conclusion
Pre-Reform	31.18357	4	0.0000	0.0000 < 0.05	Reject null	Fixed effect model
Post-Reform	15.50931	4	0.0035	0.0035 < 0.05	Reject null	Random effect model

**Source: Extract from E-Views 9.0 Window 2022**

Table 1 summaries the results of the Hausman test for the models formulated in chapter three of this study. The results show that the fixed effect model is most appropriate except for post reform in models.

**Table 2: Presentation of Regression Results**

Variable	Pooled Effect			Fixed effect			Random effect		
	$\beta$ coefficient	T. stat	P. value	$\beta$ coefficient	T. stat	P. value	$\beta$ coefficient	T. stat	P. value

#### The Pre- Consolidation Reform

		-						-	
MR	-0.146768	0.71106	0.477	2.060736	2.48700	0.013	-0.146768	3.69946	0.000
		4	9		4	8		4	0
		-						-	
MQ	-0.092983	0.98360	0.326	-0.058379	3.11404	0.009	-0.092983	0.96756	0.334
		8	5		1	3		2	5
		-						-	
BLR	0.000913	0.05924	0.952	-0.366310	1.05244	0.294	0.000913	4.05828	0.000
		9	8		2	0		2	0
		-						-	
AQ	0.198531	1.61613	0.107	-0.051830	2.96635	0.043	0.198531	1.58976	0.113
		1	7		4	6		6	5

		5.25586	0.000		0.25757	0.797		5.17011	0.000
C	1.658518	1	0	0.077718	8	0	1.658518	9	0
R-squared	0.019053			0.685023			0.819053		
AdjR <sup>2</sup>	0.001069			0.534548			0.701069		
F-statistic	0.946863			5.711064			7.946863		
F- Prob	0.437985			0.000535			0.000000		
D W	1.872011			1.972286			1.872011		
<b>The Post- Consolidation Reform</b>									
		2.10404	0.037		1.29806	0.196		1.46150	0.146
MR	0.252207	8	3	0.141667	7	7	0.156192	9	3
		9.45399	0.000		2.06464	0.041		2.86455	0.004
MQ	0.522838	5	0	0.160783	7	1	0.210239	3	9
		-			-			-	
		1.19731	0.233		2.14428	0.034		2.06431	0.041
BLR	-0.004515	8	4	-0.004947	0	0	-0.004756	9	0
		-							
		0.01404	0.988		0.81963	0.414		0.76593	0.445
AQ	-0.004899	0	8	0.199377	4	0	0.185154	5	1
		1.77342	0.078		4.53806	0.000		4.11839	0.000
C	1.751565	1	5	4.779039	6	0	4.354753	2	1
R-squared	0.419705			0.801294			0.110067		
AdjR <sup>2</sup>	0.401849			0.781749			0.082685		
F-statistic	23.50596			40.99778			4.019606		
F- Prob	0.000000			0.000000			0.004165		
D W	0.495222			1.007320			0.960117		

**Source: Extract from E-Views 9.0, 2022**

Table 2 presents the regression results on the effect of banking sector reforms and the real sector credit in the pre and post consolidation reforms. The result shows that the adjusted R<sup>2</sup> is 0.534548 indicating that the independent variables explained 53.4 percent of the systematic variation in the real sector credit in the pre consolidation reforms of the quoted commercial banks over the observed years, while the remaining 46.4 percent is explained outside the unspecified variables, thus, exogenously explained. The F-statistic and probability informs that the model is significant while the Durbin Watson statistic informed that the results are free from autocorrelation. The regression results informed us that if the variables are hold constant, real sector credit in the pre consolidation reforms of the commercial banks can increase by 0.07. The beta coefficient informed that market risk have positive and significant effect on real sector credit while management quality, bank liquidity reforms and assets quality have negative effect on real sector credit in the pre consolidation reforms.

The result also shows that the adjusted R<sup>2</sup> is 0.781749 indicating that the independent variables explained 78.1 percent of the systematic variation in the real sector credit in the post consolidation reforms of the quoted commercial banks over the observed years, while the

remaining 21.9 percent is explained outside the unspecified variables, thus, exogenously explained. The F-statistic and probability informs that the model is significant while the Durbin Watson statistic informed that the results are free from autocorrelation. The regression results informed us that if the variables are hold constant, real sector credit in the pre consolidation reforms of the commercial banks can increase by 4.7. The beta coefficient informed that bank liquidity have negative and no significant effect on real sector credit while management quality, market risk and assets quality have positive effect on real sector credit in the post consolidation reforms. The finding is supported by the findings of William, Zehou, and Hazimi (2019) that though there is no long-run association among the variables, there exist significant short-run relationship between domestic credit to the private sector, broad money and gross capital formation. Xuezhong and Benson (2013) that there was a strong positive association between the financial services and the economic growth, and also there was two-way Granger causality between them and Yua, Upaa, Adiga & Haruna, (2020) that commercial banks' credit had significant effect on the manufacturing sector performance.

## CONCLUSION AND RECOMMENDATIONS

### Conclusion

The study found that 53.4 percent of the systematic variation in the real sector credit in the pre consolidation reforms and market risk has positive and significant effect on real sector credit while management quality, bank liquidity reforms and assets quality have negative effect on real sector credit in the pre consolidation reforms. The estimated model found that 78.1 percent of the systematic variation in the real sector credit in the post consolidation reforms while bank liquidity have negative and no significant effect on real sector credit while management quality, market risk and assets quality have positive effect on real sector credit in the post consolidation reforms.

The study conclude from the findings that interest rate and central bank policy have positive and no significant effect on real sector credit while capital reforms and bank competition have negative and no significant effect on the real sector credit in the pre-consolidation reforms. Market risk have positive and significant effect on real sector credit while management quality, bank liquidity reforms and assets quality have negative effect on real sector credit in the pre consolidation reforms. The study conclude that bank liquidity have negative and no significant effect on real sector credit while management quality, market risk and assets quality have positive effect on real sector credit in the post consolidation reforms.

### Recommendations

1. The regulating body such as Central Bank of Nigeria should adopt a direct credit control and ensure increase in assets quality of the commercial banks to enhance effective financial intermediation in Nigeria.
2. There is need for the decentralization of banks operation from urban cities and encourage rural banking scheme. Policies should be advanced such that will encourage banking habit and reduce banking density as this will enhance deposit mobilization and credit allocation.

3. The regulatory authorities and commercial banks should study the operating environment to manage the market risk and better manage their liquidity ratio because these variables prevent affect financial intermediation and the need for more financial banking sector reforms that enhances effective financial sector intermediation.
4. The regulatory authorities should harmonize liquidity policy with the financial intermediation function of commercial banks and management of the commercial banks should give more emphasis to liquidity reforms as it affect bank financial intermediation.
5. The study recommended an improvement in financial intermediation, monetary policy intervention and consistent regulations as necessary ingredients for effective financial intermediation and that a more structured reform programme with identifiable and specific objectives that prioritizes commercial banks financial intermediation.

## REFERENCES

- Abata, M.A., (2014). Asset quality and bank performance: a study of commercial banks in Nigeria. *Research Journal of Finance and Accounting*, 5(18), 39-44.
- Abubakar, A., & Gani, I. M. (2013). Impact of banking sector development on economic growth: Another look at the evidence from Nigeria. *Journal of Business Management & Social Sciences Research (JBM & SSR)*, 2(4), 47-57.
- Adesanya, B., & Obademi, O. E (2016). Banking sector reforms and economic growth: Evidence from Nigeria. *International Journal of Social Science and Economic Research*, 1(10), 1705-1717.
- Agbonkhese, O. & Asekome, O. (2013). The impact of monetary policy on bank credit creation in Nigeria: (1980 – 2010). *International Journal of Business and Social Science*, 4(15), 160 – 165.
- Agu, D., & Chukwu, G. (2014). *Nigerian banking structure and performance: the banking system contribution to economic development*. Onitsha , Africana FEP Publishers.
- Aiyetan, I.R., & Aremo A.G. (2015). Effect of financial sector development on manufacturing output growth in Nigeria (1986-2012): A Vector Auto Regression Approach. *Journal of Applied Economics and Business Research JAEBR*, 5(1), 38-55.
- Akinlo, A.E., & Olufisayo, A (2011). Financial development, money, public expenditure and national income in Nigeria. *Journal of Social and Economic Development*, 5(4)90-100.
- Akinmulegun, S.O., & Oluwole, F.O. (2014). An assessment of the Nigerian manufacturing sector in the era of globalization. *American Journal of Social and Management Sciences*, 5(1), 27-32.
- Aliero, H. M., Abdullahi, Y. Z. & Adamu, N. (2013). Private sector credit and economic growth nexus in Nigeria: An Autoregressive Distributed Lag Bound Approach, *Mediterranean Journal of Social Sciences*, 4(1),89-100.
- Andries, A. M., & Capraru, B. (2013). Impact of financial liberalization on banking sectors performance from central and eastern European countries. *Plos One*, 8(3), 1 - 9.

- Anyanwu, C.M.(2010). An overview of current banking sector reforms and the real sector of the Nigerian economy central bank of Nigeria. *Economic and Financial Review*, 48(4),51-56.
- Aruomoaghe, J. A. & Olugbenga, E. (2014). Financing capital investment in Nigeria: The role of the banking industry. *Asian Economic and Financial Review*, 4(8), 1123 - 1130.
- Asekome, M.O. & Aihie, J.A. (2014). Challenges of banking sector reforms in Nigeria: An Appraisal. *International Journal of Business and Social Science*, 7(1), 224-230.
- Avinash, R., & Mitchell-Ryan, T. (2019). An assessment of the impact of the sectoral distribution of commercial bank credit on economic growth and development in Trinidad and Tobago. CBB Working Paper, 2010.
- Bada, O.T. (2017). The effect of banks' credits on the development of manufacturing and agricultural sectors of Nigeria's economy. *International journal of advanced studies in economics and public sector management*, 5(1), 114-130.
- Balogun, E. D, (2013). A review of Soludo's perspective of banking sector reforms in Nigeria. MPRA Paper 3803, University Library of Munich, Germany. *International Journal of Management Science and Entrepreneurship*, 19(7)90-100.
- Balogun, E. D. (2007). Banking sector reforms and the Nigerian economy: Growth, pitfalls and future policy options. Munich Personal RePEc Archive MPRA Paper No.3804. <http://mpra.ub.uni-muenchen.de/3804> . : 1-26
- Balogun, E. D. & Out, M. F. (1991). Credit policies and agricultural development in Nigeria. *CBN Economic and Financial Review*, 29(2), 138-155.
- Beck, .K, Cull .R., & Jerome .H (2012). Bank privatization and performance: Empirical evidence from Nigeria. *Journal of Banking and Finance, Elsevier*, 29 (8-9), 2355- 2379.
- Bhusal, B. P. (2012). Impact of financial policy reforms on financial development and economic growth in Nepal. *International Journal of Business and Social Sciences*, 3(14), 33-45.
- Campbell, O. & Asaley, A.J. (2016). Financial sector reforms and output growth in manufacturing: Empirical Evidence from Nigeria. *American International Journal of Contemporary Research*, 6(3), 112-125.
- Chima, O. (2019). Why Nigeria Needs Another Banking Sector Recapitalization. THISDAY, 27 JUNE, 2019.
- Choong, C. K. & Chan, S.-G. (2011). Financial Development and Economic Growth: A Review. *African Journal of Business Management*, 5(6), 2017 - 2027.
- Coert, E. & Daniel, M. (2014). An Empirical Study of Bank Efficiency in South Africa Using the Standard and Alternative Approaches to Data Envelopment Analysis. *Journal of Economics and Behavioral Studies*,6(4), 310-317
- Dada, O.D. (2015). Effect of Financial Sector Reforms on the Growth of Manufacturing Sector in Nigeria. *International Journal of Banking, Finance, Management & Development Studies*,3(1), 12-20.

- Ebele, E.J.& Iorember P.T. (2016). Commercial Bank Credit and Manufacturing Sector Output In Nigeria. *Journal Of Economics and Sustainable Development*Www.liste.Org (Online) (7)16.
- Ezirim, C.B. & Emenyonu E.N., (1998). Bank Lending and Credit Administration. A Lenders Perspective with Problems, Cases and Solution. *Markowitz Centre for Research and Development. 3(1), 34-56.*
- Frank, I.O. & Rotimi, J. (2016). Can Financial Reform Drive Manufacturing Sector Performance? Evidence From a Developing Economy.*JORIND, 14(2), 1-11*
- Hanumanthappa K. M. (2014). A Clarification of the Concept of Agricultural Productivity in Karnataka, *International Journal Innovative Research and Development, (3)7, 395-397*
- Ikenna, O. D. (2012). Financial deregulation in bounding to credit mobilisation in Nigeria: A Case for the Real Sectors and SMEs. *IOSR Journal of Humanities and Social Science, 5(5), 40-9.*
- Imoughele, Ehikioya, L., Ismaila, & Mohammed. (2013). Commercial bank credit accessibility and sectoral output performance in a deregulated financial market economy: Empirical evidence from Nigeria. *Journal of Finance and Bank Management, 1(2), 36-59.*
- Lucky, U. & Bruno, O.O.(2018).Banking Sector Reforms and the Performance of Banking Business in Nigeria. An Econometric Analysis. *International Journal of Business and Management review. 6(6), 40-45.*
- Mitku, M. Y. (2018). Lending and cash required reserve: Empirical evidence from Ethiopian commercial bank. *European Scientific Journal.14, (13), 179-189.*
- Ndebbio, J.E.U. (2014). Financial Deepening, Economic Growth and Development: Evidence from Selected Sub-Sahara African Countries, AERC Research Papers No. 142 African Economic Research Consortium, Naira.
- Nzotta, S. M. (2014). Money, Banking and Finance: *Theory and Practice, Revised Edition*, Hudson-Jude Nigeria Publisher Owerri; Imo State.
- Obilor, S. I. (2013). The impact of commercial banks' credit to agriculture on agricultural development in Nigeria: An econometric analysis. *International Journal of Business, Humanities and Technology, 3(1), 85-95*
- Ogar, A. Nkamare, S.E. & Charles, E. (2014).Commercial Bank Credit and Its Contributions on Manufacturing Sector In Nigeria. *Research Journal of Finance and Accounting, (5)22, 188-196.*
- Okafor F.O. (2011). *50 Years of Banking Sector Reforms in Nigeria (1960 - 2011): Past Lessons - Future Imperatives.* Enugu: Ezu Books Ltd.
- Okonkwo, N. O. & Bankoli, B. (2016). Banking Sector Reform and the Nigerian Economy: An Appraisal. *International Journal of Innovative Finance and Economics Research 4(1), 13-18.*
- Ongore, V. O. & Kusa, G. B. (2013). Determinants of Financial Performance of Commercial Banks in Kenya. *International Journal of Economics and Financial Issues, 3(1), 237 – 252*

- Onwioduokit E (2012). Financial Liberalization and Savings Mobilization in Nigeria. *CBN Bullion*, 30(1): 52 – 62.
- Robinson, J. (2012). *The Generalization of the General Theory in the Rate of Interest and Other Essays*, London: MacMillan Publishing Co.,
- Ranciere, R. & Tornell, A. (2016). Financial Liberalization, Debt Mismatch, Allocative Efficiency, and Growth. *American Economic Journal*, 8(2), 1 - 44.
- Samargandi, N., Fidrmuc, J. & Ghosh, S. (2013, July). Is the Relationship between Financial Development and Economic Growth Monotonic for Middle Income Countries? *Economics and Finance Working Paper Series, Working Paper No. 13 - 21*, 1 - 52.
- Sani U. G, & Ali J.I. (2017). Effect of Corporate Governance on Asset Quality: Performance Evaluation of the Nigerian Banking Sector in the Post Consolidation Era. *International Journal of Accounting, Finance and Risk Management*, 2(1), 1-9.
- Sundararajan, V. and Balino. T. (2013). Issues in recent banking crises. In V. Sundararajan and T. Balino, eds., *Banking Crises: Cases and Issues*.
- Toby, A. J., & Peterside, D. (2014). Monetary policy, bank management and real sector finance in Nigeria: Who is to blame? *Proceedings of the First Middle Conference on Global Business, Economics, Finance and Banking (ME 14 Dubai Conferences) Dubai*.
- Toby, A. J., & Zaagha, A.S, (2020). Central Bank Policy and Private Sector Funding in Nigeria: A Multi-Variant Study. *Journal of Strategic and Internet Business*. 4 (2), 899-923.
- Toby, A.J., (2008). Monetary policy, capital adequacy regulation and banking system soundness in Nigeria: Empirical Research Findings. *Journal of Financial Management and Analysis* 21 (1), 32 – 46.
- Tomola, M. O., Adebisi, T. E., & Olawale, F. K. (2010). Bank lending, economic growth and the performance of the manufacturing sector in Nigeria. *European Scientific Journal*, 8(3), 19-36.
- Tsenkwo, B.J., & Longdu D.T. (2013). The Relationship between monetary policy rates (MPR) and banking rates: Evidence from regression and multivariate causality analysis. An international *journal of Arts and Humanities*, 2(3) 111-121.
- William, O., Zehou, S. and Hazimi, B.H., (2019). Determinants of domestic credit to the private sector in Ghana: application of vector auto regressive method. *Advances in Social Science, Education and Humanities Research*, volume 309.
- Yua, H., Jocelyn, U.U, Adiga, D.L., & Haruna, H.A (2020) Commercial Bank Credit and Manufacturing Sector Performance in Emerging Economies: Evidence from Nigeria, *The International Journal Of Business Management* 8(5) 155-161.
- Yua, H. (2017). Effect of deposit money banks' credit on the manufacturing output in Nigeria. M.sc thesis submitted to the department of Accounting and Finance university of Agriculture Makurdi.

- Zaagha, A. S., & Murray, M. E. (2020). Deposit money bank policy and private sector funding: a multi-dimensional study from Nigeria. *Australian Finance & Banking Review*; 4(1), 18-36.
- Zaagha, A. S. (2020). Money Supply and Private Sector Funding in Nigeria: A Multi-Variant Study. *Asian Finance & Banking Review*; 4(2), 24-41.
- Zuzana, F., Riikka, N. and Laurent, W. (2015). Reserve requirements and the bank lending channel in china (september 21, 2015). *BOFIT Discussion Paper No. 26/2015*.