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Banking Sector Development And Capital Formation In Nigeria: A Multivariate Analysis



Henry Waleru Akani¹, Lucky Anyike Lucky², Anyamaobi Chukwuemeka³

Department of Banking and Finance, Rivers State University of Science and Technology Nkpolu-Port Harcourt, Rivers State Nigeria.

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This study is formulated to examine the effect of banking sector development on Nigerian capital formation. The objective is to investigate the extent to which various banking sector reforms affect Nigerian capital formation. Time series data was collected from the publications of Central Bank of Nigeria statistical bulletin from 1980-2014. The study has Nigerian Capital Formation (CF) as the function of Percentage of Bank credit to Gross Domestic Product (BC_GDP), Percentage of Bank investment to Gross Domestic Product (BI_GDP), Percentage of Bank deposit to Gross Domestic Product (BD_GDP), Percentage of Bank Total Assets to Gross Domestic Product (BTA_GDP) and Prime Lending Rate (PLR). The study used the Ordinary Least Square (OLS) Method of cointegration test, Augmented Dickey Fuller Unit Root Test, Granger causality test in a Vector Error Correction Model setting to examine the relationship between the dependant and the independent variables. The study revealed that in the static regression result that all the independent variables have positive relationship with the dependent variable except prime lending rate. The Unit Root Test shows that the variables are non stationary at level but stationary at difference. The cointergration result indicates long run relationship between the dependent and the independent variables. The granger causality test shows multivariate relationship running from the independent variables to the dependent variable and from the dependent variable to the independent variables while the vector error correction result shows adequate speed of adjustment to equilibrium. The study conclude that banking sector development have significant effect on Nigerian capital formation. The study recommends that the Nigerian banking sector should further be reformed and its operational efficiency deepened to enhance capital formation in Nigeria.

KEYWORDS: Banking Sector, Capital Formation, Co-integration and Causality Tests.

INTRODUCTION

corresponding Author:

Henry Waleru Akani¹,

The conventional thought that banking sector functions can affect macro-economic indicators can be traced to the classical theory of monetary policy and the early economists such as the Schumpeter in 1911 which identified banks role in facilitating technologies innovation through the intermediate functions. Schumpeter believed that efficient allocation of savings through identification and funding of entrepreneurs with the best chances of successfully implementing

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innovative products and production process are the way to achieving the monetary policy objective of economic growth (Anyanwu, 2010). The Banking industry is the transmission mechanism for the realization of government macroeconomic goals of growth in output, full employment, price stability and External balance. It intermediary functions between the deficit and surplus economic units and bridge the financial disequilibrium that exists among the various economic units (Ezurim, 2005). Banking sector functions such as bank credit can be seen as a factor input to the realization of the macroeconomic and monetary policy objectives.

In the works Schumpeters, the banking industry plays a vital role in capital formation and as such savings is the engine of growth, Rowsto in the theory of economic development and the Keynesians in marginal efficiency of capital, marginal propensity to consume and to marginal propensity to save were also investment is accord great respect. Capital formation determines the national capacity to produce, which is turn affects economic growth according to Wolde-Rufael (2009). Zingales (2000) noted that inability of the banking industry to perform its intermediate function effectively lead to deficiencies in capital formation which has been cited as the most constraint to economic growth.

Jihgan (2004) noted that the process of capital formation involves the existence of real savings, an effective financial intermediation between the deficit and the surplus economic units and resource allocation through investment from the commercial banks. (Adebiyi and Babatope, 2004) noted that relationship between commercial banks and capital formation is that banking activities such as savings and deposit mobilization, credit creation, increases the accumulation of capital formation which affect the growth of the economy.

However, the relationship between the financial sector and economic development has long been subjected to debate. While some scholars believe

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that finance lead to economic development, Gurley and Shaw (1955), Goldsmith (1969), McKinnon (1973), Shaw (1973), and Beck et al. (2000) all suggest that financial development can foster economic growth by raising saving, improving allocative efficiency of loanable funds, and promoting capital accumulation. Others believe that economic growth lead to financial development. (Oldhiambo, 2011) (Leang and Eng, 2006) Eggoh (2011), granger cause finance (Osinobi (2010). The basis of this argument has been on the financial market of the developing countries as such research in the developing country like Nigeria is scanty. This study will also examine the effect of Nigerian Banking Sector Development on capital formation using percentage of capital formation to Gross Domestic Product (CF/GDP) as our dependent variable and percentage of bank credit to Gross Domestic Product (BC/GDP), percentage of bank investment to Gross Domestic Product (BI/GDP), percentage of bank deposit to Gross Domestic Product (BD/GDP), percentage of Bank Total Assets to Gross Domestic Product (BTA/GDP) and Prime Lending Rate (PLR) were used as our independent variables.

Thus, the exact and definite impact and direction of causality of Banking Sector Development and Capital formation is mixed and yet unresolved. It is in the light of the above controversy that this study attempts to investigate the nature of the relationship between Banking Sector Development and capital formation as well as the direction of causality between the two variables using a multivariate analysis.

SECTION II: LITERATURE REVIEW

Banking in Nigeria went through phases and covers a wide span of time from an era of free banking or virtually absolute freedom in tune with the dictate of the economies of classical liberalism, to era of rigid or strict potential regulations. According to Jimmy (2008) and Alao (2010), the history of banking in Nigeria is divided into four phases: the embryonic,

consolidation/reform expansion, and post consolidation phases. The embryonic phase of banking evolution dates back to 1892 when the African Banking Corporation of South Africa, established a branch in Lagos followed by the British Bank of West Africa in 1894 while Barclays Bank DCO (Dominion, Colonial and Overseas) and the British and French Bank for commerce and industry were established in 1925 and 1949, respectively (Appah and John, 2011). Banking in Nigeria started with the establishment of National Bank of Nigeria Limited in 1933, Agbonmagbe Bank Limited in 1945 and the African Development Bank Limited in 1948. The expansion of banking evolution was the establishment of Rural Banking Scheme in 1977, People's Bank in 1989 and Community Banks in 1990. The consolidation phase started with the 2004 and 2005 mergers and acquisitions of banks where 89 banks were reduced to 25. The postconsolidation phase is the clamouring and calling for mega banks in the country through Bank penetration from the United States and Europe, respectively. Nzotta (2004) reported that the evolution of banking in Nigeria is divided into nine phases as shown below: Table 1 shows the evolution of banking in Nigeria according to Nzotta (2004). The free banking era (up to 1952) was characterized by the absence of legislation and this resulted in a banking boom. The precentral banking era (1952-1959), commenced with the enactment of the Banking Ordinance in 1952. The establishment of the Central Bank of Nigeria (CBN) in 1959 gave impetus to the era of banking legislation. The era of indigenization (1970-1976), marked the indigenization of expatriate banks operating in the country. The post Okigbo era (1977-1985), saw the implementation of the recommendations of the Okigbo panel on the review of the financial system. The de-regulation era (1986-1992), saw the privatization of government interests in various banks and the entry of more banks into the financial system. The era of banks distress (1993-2001), saw the emergence of illiquid and terminally distressed

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banks in the system. The era of universal banking (2002-2004), marked the commencement of universal banking in Nigeria and finally, the era of bank consolidation (2004- date), was characterized by the consolidation of banks through mergers and acquisitions.

THE FIRST PHASE OF BANKING SECTOR REFORM

The first phase of bank reforms in Nigeria (1952 – 1959) bordered on definition of banking business, prescription of minimum capital requirements for the expatriate and indigenous banks, maintenance of a reserved funds, adequate liquidity and inculcating of examination, supervision and control habit into the banking management in Nigeria Adegbite (2005). Following the Paton Report in 1948, the first banking ordinance was enacted in 1952. The ordinance defined a bank as any company carrying on banking business or using bank or banking as part of the title under which it carries on business Ebong (2006).

Banking is also defined as the business of receiving from the public on current account money which is to be repayable on demand by cheque and of making capital requirements for expatriate and indigenous banks. Each banking candidate must obtain a license on paying a nominal capital of L 25,000 with at least a paid up of capital of L 12, 500 while expatriate banks must have a paid – up capital of L100, 000. Banks were required to maintain a reserve fund into which 20 per cent of the profit would be paid annually until the reserve fund equaled the paidup capital and all capitalized expenditure must have been retired before any dividend pay-out. They were also expected to maintain adequate liquidity Okpara (2010b). No bank was allowed to make unsecured loans against its own shares for more than L300 to any of its directors or to a company associated with any of its directors. Thus, the ordinance made mandatory the supervision, examination and control of banks in the country by the government but failed to

provide for the liquidation of banks or bank examiner (Okpara 1997).

THE SECOND PHASE OF BANK REFORM

The second phase of the reform (1959-1986) came with the commencement of operations of the central bank of Nigeria in June 1959. The CBN actually took off on July 27, 1958 with Mr. R.P. Fenton of the bank of England as the first governor. The preceding CBN Act of 1958 incorporated all the requirements in the 1952 ordinance and introduced mandatory liquidity ratio in the banking business. The CBN Act of 1958 marked the turning point in government's efforts and desire to harmonize the activities of the banks for national development and growth through the issue and regulation of currency, credit and foreign exchange control and the supervision of the financial system of the country Wilson (2005). Another banking act, in 1969 which has remained the pillar and base of banking laws in Nigeria to date was an addition to the companies Act of 1968 which made it mandatory for all banks, like other business operating in Nigeria to register as Nigerian companies. The 1969 Act increased minimum capital requirement for both indigenous and foreign banks; raised the maximum lending to any single borrower to 331/2per cent of the sum of the paid-up capital and statutory reserves of bank from the former 20 per cent level in 1958; provided that no bank should own any subsidiary company and clients, and gave the apex bank extensive supervisory and regulatory power over all banks (Akinmoladun, 1992). The major amendments to the 1969, Banking Act were made in 1970, 1972 and 1979 to fortify the CBN to cater for recent developments in the banking system (Okpara, 1997).

THE THIRD PHASE OF BANK REFORMS

The third financial system reforms (1987-1993) led to deregulation of the banking industry that hitherto was dominated by indigenized banks that had over 60 per cent Federal and State governments' stakes, in addition to credit, interest rate and foreign exchange policy reforms Balogun (2007). Though the deregulation reforms in Nigeria started in the fourth quarter of 1986 with the setting up of a foreign exchange market in September 1986, the reforms pertaining to the banking industry proper did not commence until January 1987 (Asogwa 2005). The reform took the form of deregulation of the rate of interest both on loans and on deposits. Market mechanism was left to determine the rate of interest any bank would charge. Government also brought out new rules for setting up banks and issuing licenses that favoured new entrants most. This consequently led to a sudden upsurge in the number of banks which invariably increased from 56 in 1986 to 120 in 1993 (Okpara, 2010a). Banks were also accommodated in trading in the exchange rate sector as the exchange rate was partially freed from government administration and paved way for auctioning forex system Kama (2006). Initially, the forex was divided into official and unofficial windows. While government sourced forex in the official market at administratively controlled rates, the licensed foreign exchange dealers usually banks, bid foreign exchange at the instance of market mechanism on behalf of their clients in the unofficial window. This trading also appeal to the interest of the banking system and coupled with the favorable licensing issues, led to increase in the number of banks Ajavi (2005).

The phenomenal growth in the number of banking institutions overstretched the regulatory capacity of the CBN while the growing sophistication in the design and use of financial instruments heightened the risks of malpractices and fraud in the industry. In particular, mismanagement such as insiders' abuse and poor credit appraisal systems, resulted in the accumulation of unpaid loans and advances, which eventually contributed to the distress situation experienced in the banking system in the early 1980's and mid 1990's and the revocation of the licenses of 26 banks in 1997 (Wilson, 2005).

Everant

To ensure the healthy platform for the system, Nigerian Deposit Insurance Corporation was established in 1988 and commenced operation in January 1989. In 1991 two new decrees were put in place to enhance the powers of the regulatory and supervisory authorities of the financial system to enable them manage the reform- packages well. The first is, the Central Bank of Nigeria Decree 24 of 1991 and the, Banks and Other Financial Institution Decree (BOFID), 25 of 1991. The new - banking - sector regulatory reforms gave the CBN power to issue banking licenses and to revoke them. It gave the CBN power to apply any type of measures to handle ailing financial system. By 1991 some of the reform measure of 1987 were reversed, a cap was replaced on interest rates standing at 21% for lending rates and 13.5% for deposit rates. Also a maximum interest rate spread was specified at 4%.

By 1992 government divested itself from the seven banks where it had 60% equity holding in line with the new private sector - driven development and privatization. In 1993 the Open Market Operations as an indirect instrument of monetary control was introduced. The first discount house took off in 1993 known as Associated Discount House, subsequently others followed, and by 2003 there were 5 discount houses. The discount houses intermediate between the central bank and the other banks, off loading government treasury securities from the CBN and auctioning same to the banks. Where the banks cannot pick – up all of the treasury securities, the discount houses warehouse them (Adegbite, 2005).

The Forth Phase of Bank reform

The forth phase began in the late 1993 (1994-1998), with the re-introduction of regulations. During this period, the banking sector suffered deep financial distress which necessitated another round of reforms, designed to manage the distress. 1993 recorded 33 distressed banks for the first time since the establishment of the central bank;

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and in 1995, the number peaked to 60 (Okpara, 2010a).

By 1994 another reform measure was introduced. Hitherto banks in Nigeria which had not been paying interest on demand deposits (current account) were then granted permission to do so. The cash reserve ratio which before the reforms had been virtually stagnant was revised, to now begin to work as an indirect instrument of credit control and granting of loans on the strength of foreign exchange held in foreign accounts was prohibited. All government deposits held by the commercial and merchant banks were withdrawn, so that the banks could function without undue government interference (Adegbite, 2005).

The Fifth Phase of Bank Reforms

The fifth phase began with the advent of civilian democracy in 1999(1999-2003) which saw the return to liberalization of the financial sector, accompanied with the adoption of distress resolution programmes. This era also saw the introduction of universal banking which empowered the banks to operate in all aspect of retail banking and non-bank financial markets (Balogun, 2007).

The sixth Phase of Banking Sector reform

The sixth phase began in 2004 to date and it is informed by the Nigerian monetary authorities who asserted that the financial system was characterized by structural and operational weaknesses and that their catalytic role in promoting private sector led-growth could be further enhanced through a more pragmatic reform (Balogun, 2007). Prior to this reform, the banking system was characterized by low capital base, high non performing loans, insolvency and illiquidity, over dependence on public sector deposits and foreign exchange trading, poor asset quality, weak corporate governance, a system with low depositors' confidence and a banking sector that could not support the real sector of the economy at 25% of GDP compared to African

average of 78% and 272% for developed countries (Ebong 2006).

In his contribution, Lemo (2005) noted that the industry had remarkable features of market concentration and documented that the top ten out of eighty-nine banks controlled.

- More than 50% of the aggregate assets
- More than 51% of the total deposit liabilities
- More than 45% of the aggregate credits.

Soludo (2004), the then governor of the CBN described the industry as being generally characterized by small-sized and marginal players with very high overhead cost. The primary objective of the reform is to guarantee an efficient and sound financial system. The reforms are designed to enable the banking system develop the required resilience to support the economic development of the nation by efficiently performing its functions as the fulcrum of financial intermediation (Lemo, 2005). Thus, the reforms were to ensure the safety of depositors' position banks to play money, active developmental roles in the Nigerian economy, and become major players in the sub-regional, regional and global financial markets (Adeyemi 2007). The components of the 13-points reform agenda announced by Governor of the CBN on July 6, 2004 were Minimum capital base from N2 billion to N25 billion with a deadline of 31st December 2005; Consolidation of banks through mergers and acquisitions; Phased withdrawal of public sector funds from banks, beginning from July, 2004; Adoption of a risk-focused and rulebased regulatory framework; Adoption of Zero tolerance for weak corporate governance, misconduct and lack of transparency; The automation of the rendition process of returns by banks and other financial institutions through the electronic financial analysis and surveillance system (e-FASS); Establishment of a hotline and confidential internet address for all Nigerians wishing to share any confidential information with the Governor of the CBN. Strict enforcement of

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the contingency planning framework for systemic banking distress;

- Establishment of an asset management company as an important element of distress resolution;
- Promotion of the enforcement of dormant laws, especially those relating to the issuance of due cheques and the law relating to the vicarious liability of the Board of banks in the case of bank failure;
- Revision and updating of relevant laws and drafting of new ones relating to effective operations of the banking system;
- Closer collaboration with the economic and financial crimes commission (EFCC) in the establishment of the financial intelligence unit (FIU) and the enforcement of the antimony laundering and other economic crime measures; and
- Rehabilitation and effective management of the mint. Ebong (2006) noted that of the thirteen elements, public discourse on the subject has focused largely on two.

These are the increase in the minimum capital base of banks from $\mathbb{N}2$ billion to $\mathbb{N}25$ billion and mergers and acquisitions. In the bid to comply with this minimum capital requirement, banks adopted the following strategies namely:

- Right issues for existing shareholders and capitalization of profits
- Public offers through the capital market and/or private placement
- Mergers and acquisitions; and
- A combination of the above mentioned strategies.

Bank Consolidation 2004-2009

There has been a wave of restructuring and consolidation of the banking sector around the globe, particularly in the developed and the emerging market economies. This has been driven mainly by globalization, structuraland technological changes, as well as the integration of financial markets. Banking sector consolidation has become prominent in most of the emerging markets, as

financial institutions strive to become more competitive and resilient to shocks. It is also promoted by the desire to reposition corporate operations to cope with the challenges of an increasingly globalized banking system. It was based on the above premise that banking sector consolidation, through mergers and acquisitions, was embarked upon in Nigeria from 2004. The Bank consolidation was focused on further liberalization of banking business: ensuring competition and safety of the system; and proactively positioning the industry to perform the role of intermediation and playing a catalytic role in economic development. The reform was designed to ensure a diversified, strong and reliable banking sector which will ensure the safety of depositors' money, play active developmental roles in the Nigerian economy, and be competent and competitive players in the African, regional and global financial system Wilson (2005).

Following the banking sector consolidation, notable achievements were recorded in the financial sector among which was the emergence of 25 well capitalized banks from the former 89 banks. The banks raised N406.4 billion from the capital market. In addition, the process attracted foreign capital inflow of US\$652 million and £162,000 pound sterling. The liquidity engendered by the inflow of funds into the banks induced interest rate to fall significantly, while an unprecedented 30.8 per cent increase was recorded in lending to the real sector in 2005.

With a higher single obligor limit, Nigerian banks now had a greater potential to finance large value transactions. More banks now have access to credit from foreign banks, while the capital market deepened and consciousness about it increased significantly among the populace. The and market became active total market capitalization increased markedly. Ownership structure has been positively affected such that the problems of insider abuse and corporate governance have been reduced. Depositor confidence has improved due to safety in bigness, perception by depositors. With virtually all banks now publicly quoted, there is wider regulatory oversight. With the inclusion of the Securities and Exchange Commission and the Nigerian Stock Exchange in the regulatory team, resources have been committed to the regulation of few and more stable banks in an efficient and effective manner. The banks have begun to enjoy economies of scale and, consequently, are passing on the benefit in the form of reduced cost of banking transactions. In general, the reform efforts had engendered stable macroeconomic environment evidenced by low inflation and relative stable exchange rates.

However, not long after, the global financial and economic crises came in 2007, leading to the collapse of many financial institutions across the globe. The financial crisis reduced the gains made in the Nigerian financial services sector from the banking sector consolidation exercise. The experience in the industry however, followed global trends. Following from the impact of the global financial crises, a section of the banking industry was badly affected as some banks were in grave condition and faced liquidity problems, owing to their significant exposure to the capital market in the form of margin trading loans, which stood at about N900.0 billion as at end-December 2008. The amount represented about 12.0 per cent of the aggregate credit of the industry or 31.9 per cent of shareholders' funds. Furthermore, in the wake of the high oil prices, a section of the industry that was excessively exposed to the oil and gas sector was also badly affected. As at end-December 2008, banks'total exposure to the oil industry stood at over N754.0 billion, representing over 10.0 per cent of the industry total and over 27.0 per cent of the shareholders' funds.

The excessive exposures resulted in serious liquidity problems exhibited by some of the banks towards the end of 2008. As part of its liquidity support, the CBN Discount Window was expanded in October 2008 to accommodate

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money market instrument, such as Banker's Acceptances and Commercial Papers. As at June 2009, the bank's total commitment under the Expanded Discount Window(EDW) was over N2, 688.84 billion, while the outstanding commitments was over N256.0 billion, most of which was owed by less than half of the banks in operation. When the CBN closed down the EDW and, in its place, guaranteed inter-bank placements, it was observed that the same banks were the main net-takers under the guarantee arrangement, indicating that they had deep-rooted liquidity problems. Further investigation by the CBN identified eight interdependent factors as the main origin of the crisis in the banking sector.

These include:

- Sudden capital inflows and macroeconomic instability
- Poor corporate governance and character failure
- Lack of investor and consumer sophistication
- Inadequate disclosure and lack of transparency
- Critical gaps in regulatory framework and regulation
- Uneven supervision and enforcement
- Weaknesses within the CBN
- Weaknesses in the business environment

On-going Banking Sector Reform

It was against this background that the CBN moved decisively to strengthen the industry, protect depositors and creditors funds, safeguard the integrity of the industry and restore public confidence.

In that regard, the CBN replaced the chief executives/executives directors of the banks identified as the source of instability in the industry and injected the sum of $\mathbb{N}620.0$ billion into the banks in an effort to prevent a systemic crisis.

Furthermore, the Bank proposed the establishment of the Asset Management Corporation of Nigerian (AMCON). The AMCON Bill has already been passed by the National Assembly and signed into law by the President. The AMCON as a resolution vehicle is expected to soak the toxic assets of troubled banks. Members of the Board of Directors of AMCON have also been cleared by the Senate and inaugurated.

Savings and Capital Formation

Savings, which we define as the part of incomes not immediately, consumed, but reserved for future consumption, investment or for unforeseen contingencies is considered as an indispensable weapon for economic growth and development. Its role is reflected in capital formation through increased capital stock and the impact it makes on the capacity for an economy to generate more and higher incomes.

Rose (1986) sees the importance of savings beyond capital formation. To her, savings are a catalyst for capital formation but equally, a major determinant of the cost of credits based on the law of scarcity, which holds that 'when the former is low and scarce, it becomes more costly to obtain'. The classics 5 as well as modern growth models hold that savings constitute the principal parameter, and determinant of economic growth. This idea is upheld by which showed that on the average, third world countries with higher growth rates incidentally are those with higher saving rates. Capital mobilized from domestic sources is very fundamental for a country's development not only because it has a low cost, but also due to the fact that it is durable and permanent. Adam (1985) considers that most of this domestic savings will come from the rural areas especially in countries with a dominant rural because there is a greater saving capacity and growth potentials. Thillairajah (1994) and Padmanabhan (1988) sharing the same opinion, explain the high marginal propensity to save by the unstable economic conditions that generally prevails in these areas (unstable incomes, fluctuations in harvest etc).

But unfortunately, in spite of these advantages, most of the saving potentials of rural communities

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in developing economies remain not mobilised especially in respect to the formal financial system on which an economy depends for growth. To permit an efficient and sustainable mobilisation of savings in general and rural savings in particular, a number of factors must be fulfilled. These, according to classified into the capacity to save and the willingness to save. Whereas the capacity to save is influenced by the level of per capita income, growth of these incomes, population age structure and income distribution; the willingness to save on the other hand depends more on the country's financial system through variables such as the level of financial deepening, and inflation.

They however concludes that the number, proximity and diversity of financial institutions (willingness to save factor) serving the various needs of savers play a dominant influence over the primeval factor of the capacity to save. But there appear to be a strong link between the rates of growth of financial circuits and how develop and efficient a country's financial system can sustainably mobilize domestic savings.

Bomda (1998) stressed on the influence of certain factors on the supply of savings and empirically showed the existence of a negative correlation between the rate of savings and the costs/risks incurred bv customers. These include transportation cost and risk involve in moving with large sums of money through long distances. Whatever motive an individual may have for savings, the rate of savings in any given community according to Schmidt & Kropp, 1988, depends on the available savings institutions which themselves must fulfill conditions like an efficient number, diversity, accessibility, attractive terms of operations, perfect knowledge on their existence and the usefulness and trust people have on them.

Thus, an efficient and sustainable savings mobilization will certainly depend on the availability and or number of financial variables, their accessibility and nature of and the way such services are rendered to customers. Unfortunately, Cameroon's formal financial system seems poorly developed, poorly diversified and inefficient. It is also fragmented and records a low financial deepening ratio (M2/GDP) which witnessed a decline from 22 percent in 1989 down to 17 percent in 1995 according to (Heidhue and Weinschenck, 1989; Kammogne, 1988). Due to this low financial deepening ratio, Cameroon was ranked behind countries like Gambia, Ghana, Nigeria, Senegal and South Africa whose respective per capita incomes were far lower than hers during the same period. But to ensure that the banking industry is efficiently spread equally requires financial soundness of these institutions.

Empirical Review

The manufacturing sector of any economy is seen as critical in the development process.

Onoja et al (2012) using the Kaldor's first law as: 'manufacturing is the engine of growth.' A lot has been reviewed in terms of lending activities of various deposit money banks. Some opinions deliberated on the factor responsible for banks willingness to extend much credit to some sector of the economy, while some discussed effect of such extension of credits on productivity and output.

Okwo et al (2011) used regression analysis to investigate the determinants of commercial banks lending behaviour in Nigeria. The study discovered that commercial banks deposits have the greatest impacts on their lending behaviour.

Eyo (2008) used non-parametric method in his study of the relationship between interest rates and other macro-economic variables, including savings and investment. In his study he grouped (64) Sixty-Four developing countries including Nigeria into three bases on the level of their real interest rate. He then computed economic rate among which were gross savings, income and investment for countries. Applying the Mann -Whitny test, he found that the impact of real interest was not significant for the three groups.



Obamuyi, et al (2012) used ordinary least square method to ascertain the assessment of the effects of interest rate deregulation in enhancing agricultural productivity in Nigeria. The study found out that interest rate play a significant role in enhancing economic activities and as such, monetary authorities.

Guirkinger and Baurcher (2007) used error correction model (ECM) to investigate interest rates determination in Nigeria. The study found out that as the Nigerian financial sector integrates more with global markets, returns on foreign assets will play a significant role in the determination of domestic interest rates.

Ikenna (2012) has employed time series data from 1970-2009 on an Autoregressive Distributed Lag (ARDL) – Based Test Model to test for the long and short run impact of financial deregulation and the possibility of a credit crunch in the real sector. The results suggest that deregulating the Nigerian financial system had an adverse boomerang effect on the credits allocated to the real sectors in the long run, and in the short run financial liberalization was in all insignificant and negative. Ikenna (2012) also concludes that Deposit Money Banks (DMBs) in Nigeria have a strong discriminatory credit behaviour towards the real sector (agriculture and manufacturing) and the SMEs as credit crunch is found to be present in these sectors both in the short and long run.

Izhar and Tariq (2009) have shown that during the post-reform period in India, institutional credit is not a significant determinant of agricultural production. Udah and Obafemi (2012) have shown that, although banking development is correlated highly with agriculture and manufacturing growth, the contribution of these sectors to the economic growth of Indonesia is relatively small. Acha (2012) has found that a significant relationship exists between non-bank financial institutions' (NBFIs) credit and the manufacturing/agricultural GDP in Nigeria.

Olokyo (2011) ran a co-integration test on energy and its relationship with economic growth in 150 Pakistan, a developing nation like Nigeria and found that increase in electricity consumption leads to economic growth.

Rahji and Adeoti (2010) re-echoed that electricity consumption is positively related to economic growth and that it is the nucleus of operations and subsequently the engine of growth for the manufacturing sector. They concluded by saying that electricity consumption has a diverse impact on the range of socio-economic activities and consequently the living standards of Nigerians.

Olurunsola (2001) in his study of human capital development in Nigeria posits that the level of available human capital is low and there is need for more emphasis on training to enhance its potential to contribute to economic development.

Obilor (2013) in his empirical study investigated the role of structural dynamics and transformation in the form of manufacturing share in aggregate output. He used data from 36 African countries and also examined the key determinants of manufacturing share in aggregate output and its relationship with real GDP growth and growth volatility. The analysis indicated that an increased share of manufacturing in total output has the potential to raise GDP growth and reduce growth volatility through accelerated growth given the strong backward and forward linkages between the manufacturing sector and other sectors. The design and implementation of effective industrial policies to promote manufacturing can act as a means to boost economic transformation and achieve economic and social development goals including employment creation and poverty reduction.

However, in Nigeria, the role of institution and other macroeconomic variables in development of the Nigerian manufacturing sub-sector has not been fully addressed and impact has not been fully felt. Nwanyanwu (2011), the study empirically reveals that apart from institutions o the rmacroeconomic variables affect the manufacturing-subsector performance in Nigeria, using Augmented



Dickey Fuller (ADF) test and error correction mechanism (ECM) model.

Mike (2010) used the cointegration technique in analyzing interest rate policy and the financing of the manufacturing sub sector. Their analysis however suggests cointegration or an acceptance of the alternative hypothesis among the variables CMS (Credit Manufacturing Sub-sector), ER (Exchange Rate), IMP (Index of Manufacturing Production), INF (Inflation), IRS (Interest Rate DGF (Deficit Spread) and Government Financing). This study however adopts the method used by Muftau (2003), but this analysis is unique in the sense that instead of interest rate spread (IRS), prime/nominal lending interest rate was used, because it reflects a better picture of true cost of funds, more also most borrowings by manufacturing sub-sector is based on prime/nominal lending rate. Also, instead of the rate of inflation (INF) this model adopts the Consumer Price Index (CPI), because CPI has performed better overtime in similar studies with regression analysis and it generally reflects the true picture of consumers demand visa-visa the general price level. In summary, the evidence from both the theoretical and empirical literature emphasizes technological advancement as being an important factor in the growth of the manufacturing sector and by extension, the Nigeria Economy. Accumulation of capital and the increase in labour productivity can only go so far without the input of technology.

Iheanyi (2012) reports of oligopolistic competitions in the Nigerian banking industry for the period 1997 - 2001, using a conjectural variation analysis. The general evidence from this study shows that the entry of new banks has not substantially improved both operational and allocative efficiency in the banking industry.

Anyanwu (2000) rather point out that the limited competition despite the proliferation of banks following financial liberalization is a testimony of the fact that competition does not simply come from numbers, but is largely dependent on market structure.

Adediran and Obasan, (2010) employs the endogenous growth model to explore the impact of financial liberalization on economic performance in Nigeria. He used annual data from 1970 - 2002 and 1970-2006 respectively and finds that following financial liberalization. the economy has failed to experience any impressive performance such as attracting foreign direct and/or indirect investment or reduce capital flight. He observed that neither domestic savings nor investment have appreciably improved since the introduction of the reform programme. More so, banking sector has remained largely the oligopolistic and uncompetitive.

Acha (2012) in its first round of the Nigerian Enterprise Manufacturing Survey (NMES) 2001 conducted in to collect both contemporaneous and retrospective data on the performance of Nigerian manufacturing sector, in comparism to other studies African of manufacturing firms, observes that about 81% of the manufacturing firms admitted facing liquidity/cash flow problem; 27% of larger firms applied for bank loans between 2001 and 2003; the majority of manufacturing firms were deterred from applying for bank loans due to high interest rates and inadequate collateral; banks are not interested in advancing long-term loans due to high incidence of non-performing loan (NPL).

SECTION III: METHODOLOGY AND DATA

For the purpose of achieving the objectives of this paper, we adopt the co-integration and Error Correction Model (ECM) approaches in addition to the Granger causality tests. This is necessary in order to test the stationarity properties of our time series data. Non-stationarity has become common as many economic and financial time series data so much so that empirical results obtained from using such non-stationary data could lea to very high estimation errors and bias. (Brooks,2008). Therefore, to overcome the incidence of non-

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stationarity in the data series, we employ the augmented Dickey fuller (ADF) unit roots tests as well as the Johnansen (1990) co-integration techniques to examine whether the time series are co-integrated in the establishing a long run relationship between the variables in the model. The first step in the co-integration approach is to estimate the co-integration equation.

And then calculate the residual

 $u_t = Y_t - \sigma_o - \sigma_1 X_t \dots 2$

and then examine the stationarity of the residuals. If Y_t and X_t are co-integrated, the error term will be stationary. This is established by testing the residuals of co-integrating regression for stationarity by performing the ADF unit roots tests.

The pair-wise Granger test on the other hand establishes the direction of the causality between the variables. According to Granger (1969), X Granger cause Y if past values of X can be used to predict Y more accurately than simply using the

past values of Y. The test is based on the following regressions:

$$Y_{t} = \pi_{o} + \sum_{i=1}^{n} \pi_{i}^{y} Y_{t-1} \sum_{i=1}^{n} \overline{x}_{i}^{x} X_{t-1} + U_{t} \dots \dots \dots 3$$

and

Where X_t and Y_t are the variable to be tested U_t and Y_t are the white noise disturbance terms otherwise known as the stochastic terms. The null hypothesis $\pi_i^x = \varphi_i^y = 0$ for all i's is tested against the alternative hypothesis $\pi_i^x \neq 0$ and $\varphi_i^y \neq 0$. If the co-efficient of π_i^x are statistically significant but that of φ_i^y are not, then X causes Y. if the reverse is true then Y causes X. However, where both co-efficient is π_i^x and φ_i^y are significant then causality is bi-directional.

THE MODEL SPECIFICATION

For the purpose of examining the functional relationship between banking sector development and capital formation, we employ the multiple regression analysis as follows:

CF/GDP = *f*(BC/GDP, BI/GDP, BD/GDP,

BTA/GDP, PLR).....5

Transforming equation 1 into a testable form, we obtain;

$$CF/GDP = \beta_0 + \beta_{1BC/GDP} + \beta_{2BI/GDP} + \beta_{3BD/GDP} +$$

 $\beta_{4BTA/GDP} + \beta_{5PLR} + \mu......6$

Where;

CF/GDP = Percentage of capital formation to Gross Domestic Product

BC/GDP = Percentage of bank credit to Gross Domestic product

BI/GDP = Percentage of bank investment to Gross Domestic product

BD/GDP = Percentage of bank deposit to Gross Domestic Product

BTA/GDP= Percentage of bank total assets to Gross Domestic Product

PLR = Prime Lending Rate

 μ = Error term

 β_0 = Multivariate Regression intercept

 $\beta_1 - \beta_5 =$ Multivariate Regression slope

DATA

The study employed secondary data sources from statistical bulletin (various issues), Central Bank of Nigeria (CBN), Annual Report as well as the Annual Reports of National Bureau Statistics (NBS). The sample period chosen on account of availability of data is between 1980 – 2014.



Year	CF_GDP	BC_GDP	BI_GDP	BD_GDP	BTA_GD	PLR
					Р	
1980	14.809	6.438	13.280	2.265	3.154	7.28
1981	19.317	9.099	24.872	3.544	2.157	7.75
1982	16.974	10.172	27.481	4.564	5.817	10.25
1983	12.116	10.079	13.197	5.263	4.947	10.00
1984	7.869	9.894	10.773	4.235	6.350	12.50
1985	6.538	9.043	17.641	4.152	3.321	9.25
1986	8.433	11.665	17.546	3.251	1.809	10.50
1987	7.885	9.078	17.412	9.101	4.594	17.50
1988	6.670	7.429	13.499	6.125	5.481	16.50
1989	7.018	5.757	24.374	4.15	4.212	26.80
1990	8.489	5.501	12.125	4.906	6.273	25.50
1991	8.282	5.737	9.015	5.564	6.916	20.01
1992	8.089	4.882	9.135	4.773	6.297	29.80
1993	8.894	6.026	7.462	5.555	7.803	18.32
1994	7.543	6.729	6.741	5.515	7.928	21.00
1995	4.881	4.973	6.061	3.422	3.732	20.18
1996	5.060	4.202	5.784	2.938	3.336	19.74
1997	5.798	9.203	5.094	3.382	4.241	13.54
1998	6.072	6.840	5.744	4.313	5.015	18.29
1999	7.829	6.898	4.112	5.860	5.934	21.32
2000	4.931	7.571	2.167	5.319	5.737	17.98
2001	5.397	11.547	4.645	7.239	7.078	18.29
2002	6.410	12.245	4.648	8.379	7.595	24.85
2003	8.734	12.206	5.501	7.663	6.615	20.71
2004	7.563	13.314	6.488	8.176	6.989	19.18
2005	5.505	13.529	7.085	7.456	9.014	17.95
2006	8.331	13.597	5.694	9.412	9.371	17.26
2007	9.377	23.302	4.398	13.039	13.039	16.94
2008	8.450	32.101	3.288	17.737	16.950	15.14
2009	12.304	35.944	2.985	23.245	23.245	18.99
2010	11.808	22.676	4.605	17.520	17.520	17.59
2011	10.447	20.088	5.733	16.651	17.460	16.02
2012	8.281	17.724	7.397	16.644	19.887	16.79
2013	9.064	6.438	19.280	4.906	6.273	15.00
2014	9.847	17.724	31.163	16.644	19.887	18.58

Table 1: Annual Time Series Data Of The Variables: 1980-2014

Source: Central bank of Nigeria Statistical Bulletin various issues

Key

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CF/GDP = Percentage of capital formation to Gross Domestic Product BC/GDP = Percentage of bank credit to gross Domestic product



BI/GDP = Percentage of bank investment to Gross Domestic product

BD/GDP = Percentage of bank deposit to Gross Domestic Product

BTA/GDP= Percentage of bank total assets to Gross Domestic Product

PLR = Prime Lending Rate

SECTION IV: EMPIRICAL RESULTS

The empirical results of the multiple regressions estimated on the level series data are as presented in table 2 below. The estimated model shows R^2 , the co-efficient of determination is 86.4% while the adjusted R^2 is 83.0% implying that 86.4% of the variations in percentage of Capital Formation to Gross Domestic Product (CF/GDP) are explained by changes in other independent variables

.Table 2: Level Series multiple regression summary results

Method: Least Squares

Dependent Variable: CF_GDP

Variable	Coefficient	Std. Error	t-Statistic	Prob.
BC_GDP	0.301024	9.32145	4.236547	0.0000
BI_GDP	0.362201	10.21457	4.147856	0.0000
BD_GDP	0.145789	17.36925	3.639847	0.0015
BTA_G	0.723655	22.13245	2.784526	0.0038
PLR	-33.32145	19.96329	-0.782365	0.7214
С	38.73126	66.98314	10.963251	0.0000
R-squared	0.864215	Mean dep	endent var	681.9478
Adjusted R-squared	0.826931	S.D. depe	ndent var	318.3162
S.E. of regression	301.7214	Akaike info criterion		32.34812
Sum squared resid	90235867	Schwarz criterion		20.14015
Log likelihood	-330.7445	F-statistic		19.23591
Durbin-Watson stat	1.001466	Prob(F-sta	atistic)	0.000025

Source: Author's Computation

Furthermore, the estimated model shows that 86.4% variations in Nigeria capital formation can be explained by changes in the independent variables examined in the model. The remaining 14.6% is traced to variables not captured in the model. Also, Durbin-Watson statistics of 1.00 prove the presence of negative serial correlation in the time series. The F-statistic of 19.23 proves that the overall fit of the multiple regressions on the level series is good and significant. The co-154





examine more rigorously the stationarity properties of the level series data.

at the level and first difference series of the results of the ADF tests (table 2). The model follows an integrating 1(0) and 1(1) process and is therefore a stationary process.

UNIT ROOT TESTS

Given the non stationary features of the level series data, the ADF unit root test was concluded

Table 3:	Unit Roc	t Test Re	sults at Level
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Variables	ADF	Critical Value at	5%	10%	Order of
	Statistics	1%			Integratio
					n
CF_GDP	-1.659	-2.955	-3.649	-2.616	1(1)
BC_GDP	-1.321	-2.955	-3.649	-2.616	1(1)
BI_GDP	0.487	-2.955	-3.649	-2.616	1(0)
BD_GDP	-1.201	-2.955	-3.649	-2.616	1(1)
BTA_GDP	-1.354	-2.955	-3.649	-2.616	1(1)
PLR	0.458	-2.955	-3.649	-2.616	1(0)
RESIDUAL	1.254	-	-	-	1(0)

Critical value: (ADF): 1% = -2.955; 5% = -3.649; 10% = -2.616

Source: Author's Computation

The results of the unit root will shows that all the variables are stationary at level, except BI_GDP and PLR. This leads to the rejection of null hypotheses of non-stationarity.

Table 4: Unit Root Test Results at Difference

Variables	ADF Statistics	Critical Value at	5%	10%	Order of
		1%			Integration
CF_GDP	-4.369	-3.657	-	-2.618	1(1)
			2.959		
BC_GDP	-5.947	-3.657	-	-2.618	1(1)
			2.959		
BI_GDP	-7.164	-3.657	-	-2.618	1(1)
			2.959		
BD_GDP	-6.351	-3.657	-	-2.618	1(1)
			2.959		
BTA_GDP	-4.130	-3.657	-	-2.618	1(1)
			2.959		
PLR	-4.709	-3.657	-	-2.618	1(1)
			2.959		
RESIDUAL	-6.061	-	-	-	1(0)

Critical value: (ADF): 1% = -3.657; 5% = -2.959; 10% = -2.618 **Source:** Author's Computation

The results of the unit root at difference indicate that all the variables are stationary at difference.

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Co-integration Test

Having established that all the variables in the model are integrated of order 1(0) at the level difference and order 1(1) at first differencing, we employed the Johansen co-integration test is presented in table 4 below and indicate the existence of one co-integrating equation between the dependent and independent variables at the 5% level of significance. This suggests that there is a long run steady states relationship between Banking sector development and capital formation in Nigeria within the sample period. The cointegration test assumes a linear deterministic trend-in-the-data

Table 5: Johansen Co-integration Test

Sample: 1980 2014

Included observations: 33

Test assumption: Linear deterministic trend in the data Series: CF_GDP BC_GDP BI_GDP BD_GDP BTA_GDP PLR Lags interval: 1 to 1

Likelihood	5 Percent	1 Percent	Hypothesized
Ratio	Critical	Critical	No. of CE(s)
	Value	Value	
75.12457	31.32	23.23	None *
24.40268	22.69	16.16	At most 1**
30.34789	26.02	49.49	At most 2*
94.36148	49.64	25.26	At most 3**
2.321455	85.34	64.73	At most 4
6.698745	5.72	16.34	At most 5*
	Likelihood Ratio 75.12457 24.40268 30.34789 94.36148 2.321455 6.698745	Likelihood 5 Percent Ratio Critical Value 75.12457 31.32 24.40268 22.69 30.34789 26.02 94.36148 49.64 2.321455 85.34 6.698745 5.72	Likelihood5 Percent1 PercentRatioCriticalCriticalValueValue75.1245731.3223.2324.4026822.6916.1630.3478926.0249.4994.3614849.6425.262.32145585.3464.736.6987455.7216.34

*(**) denotes rejection of the hypothesis at 5%(1%) significance level

L.R. test indicates 1 co-integrating equation(s) at 5% significance level

Source: Author's Computation

The results of the co-integration test shows at least one co-integration equation

Table 6: Presentation of Normalized cointegration results

		-						
Normal	Normalized Cointegrating Coefficients: 1 Cointegrating Equation(s)							
CF_GDP	BC_GDP	BI_GDP	BD_GDP	BTA_GDP	PLR	С		
1.000000	15.12456	146.6457	5914568	2.456920	-324.4856	6395.4		
						75		
	(36.9845)	(16.1459	(45.6321)	(4.16823)	(59.6234)			
)						
Log	-113.9648							
likelihood								

Source: Author's Computation

The normalized result shows that all the independent variables have long-run relationship

VECTOR ERROR CORRECTION MODEL (VECM)

To further our analysis, the capital formation – Banking sector development relationship is now 156 with the dependent variable except prime lending rate.

specified in a VECM incorporating a one-period lag residual to examine the dynamic nature of the Volume 1 Issue 3 2016 DOI: 10.1234.67/afmj.1012 AFMJ 2016, 1, 141-161



model. This is predicated on the robust ability to the VECM to restrict the long run behaviour of the variables to coverage to their co-integrating relationships while allowing for short-term adjustments-dynamics

Table 6:	Vector	Error	Correction	Model

Sample: 1980 2014								
	Include	d observation	s: 32 after adj	justing endpoi	ints			
	Standard errors & t-statistics in parentheses							
Cointegrating	CointEq1							
Eq:								
С	14789.56							
Error	D(CF_GDPI	D(BC_GDP	D(BI_GDP)	D(BD_GDP	D(BTA_GD	D(PLR)		
Correction:)))	P)			
CointEq1	-0.861457	2.478512	6.320145	0.124538	-2.310102	0.235146		
	(0.35214)	(4.601245)	(3.64571)	(0.456123)	(5.56412)	(0.123655)		
	(-8.20265)	(6.601245)	(6.32014)	(0.457123)	(-0.94512)	(1.112451)		
С	45.14789	8.974520	0.356124	-0.478125	0.450126	0.362145		
	(62.12569)	(3.12452)	(0.14522)	(0.12456)	(6.5679)	(0.31248)		
	(0.34786)	(4.34121)	(0.36514)	(-0.12471)	(8.14521)	(0.36954)		
R-squared	0.756147	0.754786	0.567486	0.236589	0.355214	0.36785		
Adj. R-squared	0.465471	0.514571	0.235147	-0.124567	0.254587	-0.215241		
Sum sq. resids	482.5671	226.1427	326.1458	255.1254	21652.25	654.656		
S.E. equation	245.1489	5.146587	7.869423	6.265948	45.01244	2.685442		
F-statistic	65.62357	4.694578	8.436817	2.4789632	4.241536	0.145711		
Log likelihood	-147.6478	-36.14667	-25.32145	-23.36936	-154.1224	-59.52512		
Akaike AIC	15.36974	2.457812	5.145712	6.478962	21.16782	4.252636		
Schwarz SC	12.14785	8.320145	8.265352	8.145698	24.32214	5.925225		
Mean dependent	10.35261	6.489756	5.947566	5.564200	0.358764	0.752218		
S.D. dependent	241.265	2.152401	2.336547	5.693325	14.64544	3.541174		
Determinant	Residual	6.214522						
Covaria	ince							
Log Likel	ihood	-861.3621						
Akaike Informa	tion Criteria	48.8521						
Schwarz C	Criteria	29.5251						

Source: Author's computation

From the above vector error correction results, the model shows that the speed of adjustment to

CAUSALITY TEST

Having established the long run dynamic relationship between the variables, we employ the granger pair- wise causality test to determine the



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equilibrium is 86.1% which confirm the static regression.results

direction of causality test between capital formation and Banking sector development. (Granger 1969) The empirical results of the test

demonstrate vividly, that causality significantly runs bi-directionally from CF/GDP to BC/GDP at 5% level of significance. The results also agrees well the findings of such writers like Akani and Lucy (2015), Granger, et al (2006) but contrary to the results of the studies by Richards and Sampson (2009) in which causality was found to either run from Banking sector to capital formation or being unidirectional.

Pairwise Granger Causality Tests							
Date: 10/07/2014 Time: 11:28							
Sample: 1980 2013							
Lags: 2							
Null Hypothesis:	Obs	F-Statistic	Probability				
BC_GDP does not Granger Cause	32	1.54212	0.96185				
CF_GDP							
CF_GDP does not Granger Cause BC_	GDP	1.2986	0.00021				
BI_GDP does not Granger Cause	32	5.8651	0.21051				
CF_GDP							
CF_GDP does not Granger Cause BI_G	GDP	3.8686	0.00532				
BD_GDP does not Granger Cause	32	1.8632	0.85544				
CF_GDP							
CF_GDP does not Granger Cause BD_	GDP	4.9865	0.44521				
BTA_GDP does not Granger Cause	32	7.0224	2.52111				
CF_GDP							
CF_GDP does not Granger Cause BTA_	GDP	2.24121	0.45241				
PLR does not Granger Cause CF_GDP	32	8.6296	0.75421				
CF_GDP does not Granger Cause PL	R	6.52156	0.00415				

Source: Author's computation

There is bi-directional relationship running through CF_GDP to BC_GDP, there is bidirectional relationship running through CF_GDP to BI_GDP, independent relationship running through BD_GDP and GDP_BD, BTA_GDP and GDP_BTA, bi-directional relationship running through CF_GDP.

CONCLUSION AND RECOMMENDATIONS

This paper set out to investigate the nature of the relationship between banking sector development and capital formation in Nigeria context as well as the direction of causality between the two variables using the Johansen co-integration and the Vector Error Correlation Model (VECM). Given the lingering controversy in financial economics regarding the exact nature of this relationship, the empirical results of this study clearly demonstrate that, within the Nigeria context, the alternative hypothesis that there is a significant long run positive relationship between formation capital Banking Sector and Development is accepted. We also accept the hypotheses that capital formation changes banking sector development. This shows a bi-directional causality running from capital formation to banking sector development variables. Thus, the policy implications of these findings for Nigerian policy-makers is that adequate care should be taking to evolve and initiate appropriate banking

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sector reforms that would guide operations in the money market as well as macroeconomic variables in view of the demonstrated positive and significant long-run relationship between capital formation and banking sector development variables.

The study revealed a static regression result that all the independent variables have positive relationship with the dependent variable except prime lending rate which confirms the expected results in the study. It is expected that the reforms in the banking sector will increase financial intermediation function which will increase capital formation. This finding is in line with the theory of financial intermediation and confirms the objectives of Nigerian banking sector reforms such as the consolidation reforms and the deregulation of the financial sector in 1986. The co-integration result also indicates dynamic longrun relationship between the dependent and the independent variables in the model. However, the findings of this study are supported by other empirical findings such as Olokyo (2011) and Rahji and Adeoti (2010). The study conclude from the findings that the banking sector development have significant effects on Nigerian capital formation. Therefore, the study makes following recommendations:

- 1. Further reforms in the banking sector to increase the operational efficiency.
- 2. That he regulatory cum supervisory authorities should ensure total compliance to all rules and regulations in the banking sector to avert banking sector crises.
- 3. That the management of the banking industry should ensure efficient and effective management of the banking sector assets and liabilities to avoid mismatch.
- 4. That the banking environment should be reformed to fit the macro-economic objectives of the banking sector which will in turn transform the overall development of the economy.

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