ASSESSMENT OF THE IMPACT OF BANKING SECTOR CONSOLIDATION ON THE REAL SECTOR OF THE NIGERIAN ECONOMY

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Abstract
The banking sector plays a crucial role in the economic development of countries while the real sector is regarded as the backbone of the economy. This study examines the relationship between bank capitalization and lending capacity on one hand, and growth and development of the real sector for the period 2002-2007. A non-probabilistic sampling technique was adopted. The data used for the study were collected purely from secondary sources. Using the Raw Score Computational Method of Correlation Coefficient, test of significance at 95% confidence level, the study established that there is a very strong positive relationship exists between size of Bank capitalization and Bank Lending. The study also established a strong positive relationship exists between size of Bank Lending and real sector growth in particular and Economic Growth in general. Consequently, it is recommended that the minimum capital base of banks should be further increased so as to have a more robust real sector. This will increase the intermediate money supply (M4) which would no doubt reflect positively on the cost of borrowing thereby reducing interest rate and stimulate investment and growth.

Keywords: Bank consolidation, Real sector, lending capacity and Growth

Introduction

The financial system all over the world plays very important roles in the development and growth of the economy. The effectiveness and efficiency of the system as well as the scope and capacity of the system in its role varies quite considerably among economies. This is partly because of the varied level of development of the system and partly because of the level of development of economy. Various researchers have shown that there is somewhat strong correlation between the financial system and the economy. More developed financial systems tend to be associated with more developed economies. In developing economies the financial systems are found to be less developed and characterized with inefficiencies.

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This relationship has led to a view that the financial system responds to the developments in the economy. The response could be passive or active depending on whether the financial system adjusts to the changes in the economy or is able to create disturbances to which the economy adjusts. According to Revell (1973) the financial system is a superstructure created on the basis of the wealth of an economy. The real economy provides the basis for the financial system. If the economy is weak and fragile as observable in most developing economies, then the financial system cannot but be repressed, weak and fragile thus intercepting and destroying impulses of development. Support for this assertion can be found in the works of McKinnon (1973) Curley and Shaw (1967), Shaw (1973). The empirical results of these studies have shown that there is a strong positive correlation between real economic development and financial development. In fact Sethness (1988) argued that strong economic growth and developments are closely associated with vibrant financial system developments.

It is widely acclaimed that the banking system in particular, plays crucial role in economic development. By mobilizing savings and channeling them for productive purposes through efficient investments especially in to the real sectors, the banking system, increases the quantum of goods and services produced in the economy thus, national output increases and the level of employment improves. At a broad level of generalization, empirical studies have established strong evidence of a positive correlation between real growth of output and bank assets (Goldsmith, 1969; Cameron, 1972; McKinnon, 1973; Gurley and Shaw, 1976; among others).

The relevance of banks in particular and the financial system in general to the growth and development of the private sector and public institutions cannot be overemphasized. Needless to say that, the banking system is only able to play the positive role if it is functioning efficiently. However, if it is repressed or distressed, in efficient and incapable of providing timely and quality services, the banking system could become a major hindrance to economic growth and development as observed by Cameron (1972) and McKinnon (1973). It is for this reason that people are perturbed by unpleasant and foul-tasting comments and reports on the health conditions of Banks and also governments the world over take keen interest in the performance of their banking system and would like to see the system being "supply-leading" and therefore catalystic for industrialization and development.

Balogun (2007) asserts that the financial sector needed to play a key role in pricing and trading risks and implementing monetary and fiscal

policies as part of the process of "a shirt in emphasis to a private sector led economy". It has further been argued that there is a strong case for ensuring the efficiency of the financial system and for dealing with the contradictions inherent in the fact that despite high profit levels the sectors does not appear to be playing the catalytic role in the real sector. In addition the NEEDS document (2004) identified the policy thrust of the financial sector reforms as: to build and foster a competitive and health financial system to support development and to avoid systematic stress. This is to be achieved by deepening the financial system in terms of asset volume and instrument diversity; drastic reduction and ultimate elimination of financing of government deficit by the financial system, in other to free up resources for lending to the private sector. Towards this, a review of the capitalization of financial institutions and the development of a structure of financial sector incentives that would support the real sector financing is quite imperative.

The importance and significant role of the Real Sector since the Industrial age in achieving sustainable growth and development cannot be over-emphasized. This no doubt explains why different nations have been committing huge resources towards industrialization by growing their Real Sector. Unfortunately, the African continent has been experiencing gross under growth and development of the Real Sector primarily due to poor access to funding as well as low capital efficiency ratio. This necessitated the creation of agencies such as African Development Bank (ADB) and very recently, the formation of the African Finance Corporation (AFC) to provide the needed finance.

In Nigeria, government had decided to be more pragmatic and proactive by strengthening the financial sector through Bank Consolidation and recapitalization. The reasons often adduced for the increase in capital base include the need to protect banks against losses; enable them lend to various economic units as well as strengthen their ability to attract funds at lower cost. With the increase in capital base and the concomitant rise in single obligor limits, banks are supposedly better placed to grant facilities to finance huge projects both locally and internationally.

However, in spite of the unimagined enormous size of aggregate bank capitalization in excess of over 1 trillion naira and sky high aggregate bank profit in excess of ten billion naira annually since the Consolidation exercise began, the Real sector's growth rate does not appear to be commensurate with that of the financial sector. This development raises a number of fundamental questions such as; has bank

consolidation had any impact on the real sector of the Nigerian economy? Does the financial sector contribute to the Gross Domestic Product (GDP)? Does the size of a bank's capital influence its ability to lend? Does bank lending bear any direct impact in real sector growth? These questions are at the heart of the problem of this study.

The basic aim of this study is to determine whether the banking consolidation of 2005 has had any impact on the real sector of the Nigerian economy. However, the specific objectives of the study are to:

(i) Determine whether the financial sector contributes to the Gross Domestic Product (GDP).
(ii) Establish whether indeed the size of a bank's capital influences its lending capability.
(iii) Examine the impact of bank lending on the real sector growth.
(iv) Determine the impact of 2005 bank consolidation on the real sector of the Nigeria economy.

The following hypotheses were formulated and tested:

Ho_1: *The size of Bank's Lending is not significantly influenced by the size of its Capitalization.*

Ho_2: *An economy's Real Sector Growth Rate has no significant relationship with Aggregate Bank Lending.*

The Consolidation Era in Nigerian Banking Industry

The Nigerian banking arena had prior to the 2005 reform witnessed several forms of mergers and acquisition (consolidation) which was market driven rather than government led. They include for example, in 1995 Union Bank of Nigeria acquired 75% equity in City Trust Merchant Bank then Union merchant Bank, Guaranty Trust Bank acquiring of Magnum Trust Bank and Intercontinental Bank acquiring of 70% equity in then Meridian Equity Bank of Nigeria in 1996. also the acquisition of Nigerian Arab Bank and Stanbic Merchant Bank by National Insurance Corporation of Nigeria and SBIC Africa holdings limited respectively. In 2003, Standard Trust Bank acquired 51% share in Continental Trust Bank CBN (2004). Bello (2005) asserts that banking sector has undergone significant transformation both in terms of number and product creativity, and the level of operation, which was as a result of the economic reform embodied in the Structural Adjustment Program me (SAP) in 1986.

Aderibegbe (2004) maintained that the financial deregulation in Nigeria that started in 1986 and the associated financial innovations generated unprecedented degree of competition in the banking industry. However, since the deregulation of the Nigerian banking system its blessing has been chequered with both booms and busts.

Bank consolidation exercise is usually informed by a myriad of factors. Berger et al (1999) asserted that bank consolidation is motivated by technological innovations, deregulation financial services, enhancing intermediation and increased emphasis on shareholder value, privatization and international competition. Imala (2005) stated that consolidation exercise are usually motivated either by market forces as in the case in developed nations or by government intervention as the case of developing nations.

In Nigeria the reasons are not far fetched, Bello (2005) stated that the banking sector consolidation was aimed at fostering development of domestic financial institutions towards sustainable development and at the same time competes on a wider regional and international basis. Uchendu (2005) on his part asserted that the bank consolidation drive of the Nigeria resulted form deliberate policy response to correct perceived or impending banking sector crises and subsequent failures. He adds that the Nigerian banking crisis was triggered by the preponderance of weak banks characterized by persistent illiquidity, insolvency, undercapitalization, high level of non-performing loans and weak corporate governance.

CBN (2004) established that the goal of the bank consolidation exercise was to create a sound and secure banking system that depositors can trust, build banks that investors can rely upon to finance investments in Nigeria, drive down cost structure of banks, improving bank efficiency and encouraging competition with the aim of lowering interest rates and providing affordable credit to the economy. Uchendu (2005) agreed with the CBN's line of thought when he stated that ultimately the foal of bank consolidation is to strengthen the intermediation role of banks and to ensure that they are able to perform their developmental role of enhancing economic growth which subsequently will lead to improved overall economic performance and social welfare.

Though few cases of market driven Bank Consolidation existed in the mid 1990s, the consolidation exercise of 2004 which was government driven had a more staggering effect. Balogun (2007) posited that prior to the consolidation period in Nigeria, 89 banks were in operation made up of about 5-10 banks, whose capital base were already above ₦25 billion

mark, another regroup of 11-30 banks, whose capital base were already above ₦25 billion mark, another group of 11-30 banks, within the ₦10 to ₦20 billion mark, while the remaining 50 to 60 banks were quite below the ₦10 billion mark.

Bello (2005) maintained that the consolidation of the Nigerian banking system started after the announcement on July 6, 2004 by the Governor of the Central Bank of Nigeria to the Bankers Committee on banking sector reforms. In order to encourage and assist banks to meet the requirements, some incentives were promoted by the by the Central Bank of Nigeria. The incentives included:

(i) Banks that consolidate will be allowed to participate in foreign exchange market.
(ii) Permission to collect public sector deposits and government revenue.
(iii) Prospect to manage part of Nigerian foreign reserves holdings
(iv) Tax incentives
(v) Reduction in transaction cost.
(vi) Provision of technical assistance by the central bank
(vii) Leadership award by the Governor of the central bank and
(viii) Provision of help desk by the CBN to fast track approvals.

Further to the above incentives, the CBN management re-emphasized its commitment towards the consolidation process by approving forbearance package for weaker and distress banks. They included:

(i) A write-off of 80% debt owned the CBN by banks, subject to:
(ii) The recovery of all non-performing loans belonging to owner/insider related within two months.
(iii) Injection of any shortfall in the banks capitalization to solvency stage within two months;
(iv) The conversion of the balance of 0% of debt to CBN to long term loan of a maximum of 7 years at 3% per annum including two years moratorium.
(v) A further forbearance on the balance of 20% of the debt, that is (b) above, could be extended to the new owners after its acquisition and meeting the N25 billion capital base.

At the end of the consolidation exercise on December 31, 2005 the CBN announced that out of the 89 banks operating then, 75 of them had successfully been consolidated into 25 banks and the remaining 14 were declared distressed and were either to be bought over by any of the 25 consolidated banks or be liquidated.

The Impact of Banking Sector Consolidation

Balogun (2007) quoting Soludo (2007) noted that significant progress had been achieved in the area of financial and payment systems reforms which began in 2005. The CBN (2007) also reported that the wave of the banking reform and consolidation reduced the number of Nigerian banks from 86 in 2005 to 25 in 2006 and 24 in 2008, with greatly strengthened capital positions. Financial soundness was bolstered by the reforms, which compares Nigeria to other emerging market countries. Nigeria's capital adequacy ratio (CAR) was second only to Indonesia's. It increased from 15.2% to 21.6%, an increase of 42.6%. The ratio of non-performing loans to total loan portfolio significantly improved by decreasing from 19.2% in 2004 to 9.5% in 2006, a decrease of about 51.3%.

CBN (2007) also posited that a period of explosive growth followed the 2005 consolidation. Between June 2006 and June 2008, the number of branches grew by 54 percent, the number of deposit accounts by 39 percent and total loans and advances by 197 percent. In 2005, the total assets base of the banking sector increased by 104.37 percent from N3.393 trillion in 2004 to N6.555 trillion in 2006. The number of depositors has increased from 13 million in 2003 to 24 million in 2007. Total bank deposits have equally risen from N1.4 trillion in 2003 to N4.5 trillion in 2007, while bank credits have also soared from N1.9 trillion in 2003 to N4.6 trillion in 2007 (Soludo, 2008). We know from experience that such a rapid rate of credit growth could spur a rise in non-performing loans. Banks sourced 58.01 percent and 24.85 percent of their funds from deposits and other liabilities, respectively (Banking supervision Annual Report, CBN 2007).

It has also been observed that the surviving 25 banks are stronger and more reliable now and compares more favourably with the size of first and second largest banks in South Africa. The banking sector has also become the dominant sector in the Nigerian Stock Exchange and indeed the driver of the recent phenomenal growth of the Exchange. Shareholders as well as customers have also benefited in many several ways including higher dividends and improved service delivery respectively. Banks that met the consolidation deadline benefited from certain incentives e.g. participating in management of the country's foreign reserves. In addition, $50 million was awarded to both United Bank for Africa and Unity Bank for been the first bank to consolidate and the consolidated bank with the largest number of banks respectively.

In financing the productive sector, in October 2007, 21 banks came together to raise a whooping ₦256billion to finance the nations foremost

GSM telephone service provider to upgrade its facilities and service delivery to serve customers better. 80% of the loan stock was provided by 12 Nigerian banks and the remaining 20% was provided by 10 other Financial Institutions. Elumelu (2007) said that this would not have been realized if not for the 2005 bank recapitalization programme which has given banks a large capacity to finance larger transactions.

Ezeku (2007) stated that since the Consolidation, Banks have intensified efforts towards small and medium scale enterprises improvement in Nigeria, which is a subset of the real sector. He asserted that this would help in improving the growth from the grassroots. Akama (2007) identified other benefits to include efficiency in the payment system through electronic banking, adding that the use of banks cards accessed through electronic machines and money transfer via mobile phones had speed up the rate at which business is transacted. The list is endless. However, that is not without some flaws.

The Concept of Economic Growth and Development

Economic growth is the increase in value of the goods and services produced by an economy. It is conventionally measured as the percent rate of increase in real gross domestic product, or real GDP. Growth is usually calculated in real terms i.e. inflation-adjusted terms, in order to net out the effect of inflation on the price of the goods ad services produced. In economics, "economic growth" or "economic growth theory" typically refers to growth of potential output, i.e., production at "full employment", which is caused by growth in aggregate demand or observed output.

Todaro (1997) defined economic growth as is the steady process by which the productive capacity of the economy is increased over time to bring about rising levels of national income. He adds further that economic growth is comprised of Capital accumulation, Growth in population and Technological progress. Kuznet (1971) defined a country's economic growth as a long term rise in capacity to supply increasingly diverse economic goods to its population, this growing capacity based on advancing technology and the institutional and ideological adjustments that it demands on the other hand.

Economic Development is the development of economic wealth of countries or regions for the well-being of their inhabitants. From a policy perspective, economic development can be defined as efforts that seek to improve the economic well-being and quality of life for a community by creating and/or retaining jobs and supporting or growing incomes and the tax base. It typically refers to improvements in a

variety of indicators such as literacy rates, life expectancy, and poverty rates. GDP is a specific measure of economic welfare that does not take into account important aspects such as leisure time, environmental quality, freedom, or social justice. Economic growth of any specific measure is not a sufficient definition of economic development. (http://en.wikipedia.org/wiki/wealth_(economic)

As an area of study, economic growth is generally distinguished from development economics. The former is primarily the study of how rich countries can advance their economies. The latter is the study of how poor countries can catch up with rich ones.

Nigeria's Economic Growth and the Banking Sector Reform

According to 1994 United Nations and the World Bank economic classification, Nigeria was one of the low-income developing countries. The United Nations and World Bank categorized the international community into three economic classes.

- (i) Low-income developing countries with GDP per capita of $725 or less.
- (ii) Middle-income developing countries with GDP per capita above $725 but below $8,995.
- (iii) The high income developing countries with GDP per capita above 8,995.

Nigeria's GDP was at ₦593.57billion as at 2006, while in 2007 according to the international monetary fund, world bank, central intelligence agency fact book the nations GDP was ranked 41 with $166,778 of million, 47 with $114,686 of million, 49 with $126,700 of million respectively as indicated by table 1.

Nigeria's growth rate has continuously fluctuated between 4.63% and 9.57% and is yet to stabilize at the prescribed minimum 7%. Juuko (2004) asserted that Sub-Saharan African countries ought to grow at an average rate of 7% the level required in order to achieve the international community's target for reducing poverty. Below is Nigeria's economic growth rate.

Real assets are the major factors in this sector. Abdullahi (2008) asserted that the real assets constitute the material wealth of any society because they determine the productive capacity of any nation in terms of good and service they produce. The productive capacity is always a function of the real assets of economy which include land, building and machinery etc. In Nigeria, this sector is comprised of:

i) Agriculture (crop production, livestock, forestry, fishing).
ii) Industry (crude petroleum, mining and quarrying, manufacturing)
iii) Building and construction.
iv) Wholesale and retail trade.
v) Services (transport communication, utilities, hotel and restaurant, finance and insurance, real estate).

Using the World Bank classification, the economic activity of nations is divided into three (3). They include Industry, Agriculture, and Services. In Nigeria, in 2006 agriculture contributed 47.2% to the GDP while industry (manufacturing) contributed 4.43% and services 17.63% as shown by table 2.

Table 2: GDP Contribution by Sector 2002 - 2006

SECTOR	2002	2003	2004	2005	2006
Agriculture	42.14	41.01	40.98	43.87	47.02
Industry	27.43	30.35	29.66	30.17	29.38
Services	16.04	14.70	15.01	16.20	17.63

Source: National Bureau of Statistics (NBS) December, 2006

In addition to the above, the World Bank in January, 2008 provided a ranking of the international community by nominal GDP sector composition. Below is an extract of 55 - 59 countries where Nigeria belongs.

Table 3: Classification of countries by Nominal GDP Sector Composition

Rank	Country	GDP	Agric	Indus.	Service	Agric	Indus	Service
55	Phill	98480	14.3%	32.1%	53.7%	14083	31612	52884
56	ALG	92220	9.4%	58.1%	32.5%	8669	53580	29972
57	Egypt	84510	14.7%	35.5%	49.8%	12423	30001	42086
58	Nig	83360	17.3%	53.2%	29.5%	14421	44348	24591
59	Roma	79170	10.1%	34.7%	55.6%	7996	27472	43702

Source: wikipedia.org/wiki/list.of.countries.gdp

Theoretical Justification for Banking Sector Consolidation

The bank consolidation exercise in Nigeria appeared to have been guided by a school of thought whose views emanates from the relationship between the financial intermediation and economic growth. The intricate relationship that exists between the financial sector and economic sector cannot be deemphasized. Several works have attempted to establish the relationship.

Beck et al. (2000) asserted that financial intermediaries exert a large positive impact on the total factors productivity growth. He further added that the long links between financial intermediary development and physical capital growth and private savings rate are tenuous. Levin (1997) maintained that the exogenous components of financial intermediary developments are positively associated with growth. He asserts that the reforms that strengthen creditor's rights, contract enforcement and accounting practices can boost financial development and accelerate development.

De Gregorio and Guidotti (1992) asserted that the relationship between long-run growth and the degree of financial development, which was proxies by the ratio of bank credit to the private sector. They further argued that this proxy enters positively at a significant level in growth repression on a large cross section sample. The question then, is does financial development come before economic growth and development or vice versa?

Robinson (1952) argued that financial markets are essentially handmaidens to domestic industry, and respond passively to other factors that produce cross-country differences in growth. He believes that economic growth will lead to the expansion of the financial sector. His hypothesis regards financial development as endogenously determined by the real economy or its needs. This he asserts is consistent with the coarse theorem which states that "institutions adjust to market imperfections in a way that maximizes individual utilities". This implies that financial activities are highly dependent on the direction of market activities and the financial system's

development depends on whether or not the real sector is experiencing some level of development. Blum et al (2002) posited that this relationship is said to be 'Demand-Following.'

McKinnon (1973) posited a 'Supply-Leading' view, arguing that the Real Growth is dependent on the level of finance in an economy and proposed that the financial system pushes any growth achievable in the real sector. Based on her complimentary hypothesis, she argued that there is a complimentary between money and physical capital, which is reflected in money demand. She asserts that complimentary links the demand for money directly and positively with the process of physical capital accumulation.

Patrick (1966) provided a more incisive view of the supply-leading finance he asserts that the supply-leading finance is the creation of financial institutions and instruments in advance of demand for them in an effort to stimulate economic growth. This strategy seeks to make the allocation of capital more efficient and to provide incentives for growth through the financial system. In establishing the position of capital - finances in either the demand -following and supply-leading schools of thought, Cairncross (1963) posited that we cannot assume that capital - finance plays the same part at the outset of industrialization as it does once industry is well established or in countries that are already fully industrialized. He further maintained that nearly all industrialized nations were industrialized after they had been equipped with main institutions of capitalist society.

Blum (2000) asserted that the casual link between finance and real growth is not a one way street. Blum posits that the casual link flows in both directions i.e. both systems are dependent on each other. He clearly explains that increase in finance would lead to real growth and growth in the real sector would lead to increase in finance. Both systems have to work jointly for the overall benefit of the economy. This agrees with Patrick (1966) line of thought when he asserted that underdeveloped countries gain significantly in real terms from their financial sector (supply-leading) while developed countries gain from real growth effect on finance (demand-following).

Caincross (1963) supported this argument he states that comparatively rich countries that were industrialized in the 19th century had an active bond market, chiefly in government debts had been in existence before the take-off and banks and other financial intermediaries were already lending considerable sums to commerce and industry. He further adds that the "so-called" dual economies Africa, Asia, capital accumulation

cannot be expected to trace the same path as it did in Europe and North America.

This argument further supports the supply-leading finance which is a product of the both the Keynesian economic thinking and for the postwar view that developing countries must pass through a series stages to achieve the status of developed nations. Therefore, for the Nigeria to achieve the objective of the 2004 economic reform enunciated in the Needs document, recapitalization became expedient in its banking sector.

Llewellyn (1995) posited that a bank's capital is the ultimate determinant of a bank's lending capacity. He argues further that the capital base of the banks was the determinant of the intermediated credit supply i.e. (M4 sometimes called the money supply). This argument supports the neo-classical supply-side economics, rooted in says law that supply creates its own demand (Jhinghan, 2003). Moder (2002) in his study on real growth emphasizes the capital accumulation and other factor productivity is the main channels of stimulating real growth. Balogun (2007) stated that:

"it is my conjecture that these reforms that anchored it on banking sector recapitalization believes that increased capital base may imply increased availability of loanable funds. This should lead to a fall in interest rate and should be capable of stimulating or eliciting a demand following response as envisaged by Say's Law of market."

These supply-leading finance arguments may have informed Nigeria's drive for increased capitalization of its bank. As this argument encourages the provision of loans in advance of the demand for credit, for the purpose of inducing economic growth.

Methodology

This research adopted the survey method based on a sample of the studied population which consisted of the five (5) Activity Sectors of the Nigerian Real Sector and twenty five (25) Deposit Money Banks (DMB's) that constitute the Nigerian banking industry. The sample chosen for this study was arrived at through a non-probability sampling arrangement. Specifically, convenient sampling technique was employed in order to ensure that specific elements relevant to the study are included. Agriculture and Manufacturing were selected to represent the Real Sector. The selection of Agriculture and Manufacturing sub sectors to represent the real sector was informed by the fact that they are at the heart of the real sector and they constitute the nucleus of the

productive capacity of any nation's economy. In addition the World Bank and the International Monetary Fund classify national economies using such variables as Agriculture, Manufacturing and Service contribution to Gross Domestic Product (GDP).

The study made use of purely secondary data. The validity and reliability of the data collected is based on the sameness of the facts and figures collected from multiple data sources. The data collected from this study were used to test the hypotheses using the statistical technique of Correlation as a measure of association or relationship, with the values of correlation coefficient ranging from -1.0 through 0, to +1.0. The correlation coefficient is calculated using the formula:

$$r = \frac{n\sum xy - \sum x \sum y}{\sqrt{n\sum x^2 - (\sum x^2)} * \sqrt{n\sum y^2 - (\sum y^2)}}$$

Where:
n = Number of periods being considered
x = Aggregate Bank Capitalization (Independent variable)
y = Aggregate Bank Lending to real Sector (Dependent variable)
Source: Ibanga (1992)

The value of r lies between -1 to +1 inclusive. If the value of r is equal to one (+1) or minus one (-1) there is a perfect correlation in same or opposite directions respectively. A positive coefficient indicates a direct relationship. A negative coefficient indicates an inverse relationship. If the value of r is equal to zero, then there is no correlation between the two variables. Ibanga (1992) adopted the following criteria for interpreting the value of r which he conveniently put in table below.

Table 4: Showing criteria for interpreting r value

Value of r	Interpretation
Between 0 and ± 0.25	Zero or weak correlation
Between ± 0.25 and ± 0.50	Moderately weak correlation
Between ± 0.50 and ± 0.75	Moderately strong correlation
Between ± 0.76 and ± 1.00	Strong to perfect correlation

Source: Ibanga (1992)

For the purpose of this study, we adopted these criteria for interpreting r. In order to form and establish the significance of the computed r, we used the t-test for the significant difference of correlation and this enabled the substantiation of the computed r under each data of the

study. According to Gupta (1996), in order to further substantiate the results of correlation (value of r), there is need to perform a t-test for the significance of an observed correlation coefficient. This test is performed using:

$$t = \frac{r \quad n - 2}{\sqrt{1 - r^2}}$$

Where:
r = Coefficient of correlation
n = Number of periods
Source: Ibanga (1992)

This study performed this test using level of significance of $\alpha = 0.05$ and the degree of freedom of n = 3. The critical value for the t-test was obtained from tabulated values for the purpose of acceptance or rejection of the hypothesis.

Decision Rule
We would reject the null hypothesis where the calculated value is greater than critical value, while we accept the hull hypothesis if our calculated value is less than critical value.

Results and Discussion
Bank capitalization has been on an upward trend since 2002. However, it has continued to more than double since the 2005 consolidation exercise as shown in table 5. The year by year growth of bank capital 2002 to 2006 ranged from 51.69% to 87.13%. This geometric growth in Bank Capitalization from N233.472 billion in 2002 to N2142.745 billion in 2006 represents an 818% growth in Bank Capitalization from 2002 to 2006. This laudable achievement in Bank Capitalization growth is attributed to the Bank Consolidation exercise initiated in 2004 by the Central Bank of Nigeria (CBN). The development is also indicative of the fact that the Nigerian investing public has renewed confidence in the Banking system.

Table5: Bank Market capitalization (in Naira Billion)

Year	Capitalization
2002	233.472
2003	354.146
2004	662.712
2005	1212.128
2006	2142.745

Source: CBN Annual Report for the year ended 31st December 2006

An analysis of the sectoral distribution of loans and advances signifies an upward growth in the aggregate loans and advances to Agriculture and Manufacturing (table 6). From 2002 to 2006 aggregate lending to these two sensitive sectors grew by 61.6%. Likewise the year by year growth in Aggregate Bank lending to Agriculture and manufacturing ranged from 5.4% to 26.66%. The growth in Sectoral Loans and Advances grew only by 5.4% in 2005 over 2004 and 8.69% in 2005. The significant portion of loans to manufacturing was probably to finance import of raw materials, machineries and component assembly activities. Note that Agriculture contributes a major share to GDP even under condition of no new funding. The picture shows that growth may likely flatten if lending to these sectors drops.

Table 6: Sectoral Distribution of Commercial Loans & Advances in Naira Billion (Agriculture and Manufacturing)

Year	*Agriculture (Billion Naira)*	*Manufacturing (Billion Naira)*	*Total (Billion Naira)*
2002	227.6176	888.0825	1115.7001
2003	242.1857	997.6726	1239.8583
2004	261.5586	1308.832	1570.3906
2005	262.0055	1392.8392	1654.8447
2006	239.7523	1563.4028	1803.1551

Source: CBN Annual Report & Statement of Account for the year ended 31st December 2006

The contribution of Finance (Banking) and Insurance to GDP is also worthy of note. Table 8 indicates a steady increase in the sector's contribution. Contribution of the sector to GDP moved from ₦79.42 billion in 2002 to ₦296.70 billion in 2006, this represents a credible upward growth of 273.58%. The yearly growth range from 126.9%, this exceptional growth can be linked to the Bank Consolidation exercise of 2004. 2006 witnessed an exceptional growth of 126.9% over 2005; this shape upward slope from 2005 to 2006 is graphically represented below. Without doubt this performance is attributable to the Recapitalization drive under the Consolidation programme of the CBN. The growth in contribution of the Real Sector (Agriculture and Manufacturing) to GDP has been regular though not consistent as represented by table 7. The growth level of real sector contribution to GDP since 2002 has grown by 89% as at 2006. The growth ranged from 10.2% to 22.3% yearly.

Table 7: Real Sector (Agriculture and Manufacturing) contribution to Gross Domestic product (Naira billion)

Year	*Agriculture (Billion Naira)*	*Manufacturing (Billion Naira)*	*Total (Billion Naira)*
2002	2847.11	507.84	3354.95
2003	3231.44	465.81	3697.25
2004	3903.76	349.32	4253.08
2005	4773.2	412.71	5185.91
2006	5794.31	548.35	6342.66

Source: CBN Annual Report & Statement of Account for the year ended 31st December 2006

The high contribution of agriculture to GDP is supported by favourable weather conditions and government efforts to increase farmers' access to credit and fertilizers. One of the factors that may have accounted for this commendable growth is increased bank funding to the sector.

Table 8: Contribution of Finance and Insurance to Gross Domestic Product (Naira billion)

Year	Naira Billion
2002	79.42
2003	81.08
2004	102.95
2005	130.75
2006	296.70

Source: CBN Annual Report & Statement of Account for the year ended 31st December 2006

Test of Hypotheses One:

Ho_1: The size of Bank Lending is not significantly influenced by the size of Bank Capitalization.

x = Aggregate Bank Capitalization

y = Aggregate Bank Lending to Real Sector

Year	x	y	x^2	y^2	xy
2002	233.472	1115.7	54509.17	1244786.49	260484.71
2003	354.146	1239.858	125419.39	1537247.86	439090.75
2004	662.712	1570.391	439187.19	2466127.89	1040716.96
2005	1212.128	1654.845	1469254.29	2738511.97	2005883.96
2006	2142.745	1803.155	4591356.135	3251367.95	3863701.36
($\sum$) Total	$\sum x$ 4605.203	$\sum y$ 7383.944	$\sum x^2$ 6679726.175	$\sum y^2$ 11238042.16	$\sum xy$ 7609877.74

$n = 5$
$\sum x = 4605.203$
$\sum y = 7383.944$
$\sum x^2 = 6679726.175$
$\sum y^2 = 11238042.16$
$\sum xy = 7609877.74$
Substituting these values in the Raw Score Formula above, we obtain:
r = 0.89

Test of Significance of (R)
Under the assumption that the variables X and Y have a joint Normal Distribution
T = 0.89 x

Decision rule:
Ho: is accepted at the 5% significance level if {t} <t $\alpha/2$ (n-2)
Other wise the null hypothesis is rejected in favour of the alternative Ha.

Degree of freedom = n-2 = 5-2 = 3
The critical value of t for a/2 = 0.025 and at 3 degrees of freedom is 3.1825

Therefore: T = 0.89 x
= 0.89 x
= 0.89 x3.79868
= 3.380
Since the value of t= 3.380 is greater than $t_{(0.975)}$ 3, =3.1825 we reject the null hypothesis

Test of Hypotheses Two:
Ho_3: An economy's Real Sector Growth Rate has no significant relationship with Aggregate Bank Lending.

x = Aggregate bank lending (to Agriculture and Manufacturing)
x = Real Sector (Agriculture and Manufacturing) contribution to Gross Domestic product.

Year	X	y	x^2	y^2	xy
2002	1115.7	3354.95	1244786.49	11255689.5	3743117.715
2003	1239.858	3697.25	1537247.86	13669657.6	4584064.991
2004	1570.391	4253.08	2466127.89	18088689.5	6678998.554
2005	1654.845	5185.91	2738511.97	26893662.5	8581877.234
2006	1803.155	6342.66	3251367.95	40229335.9	11436799.09
($\sum$) *Total*	$\sum x$ 7383.944	$\sum y$ 22833.85	$\sum x^2$ 11238042.16	$\sum y^2$ 110137035	$\sum xy$ 35024857.58

$n = 5$
$\sum x = 7383.944$
$\sum y = 22833.85$
$\sum x^2 = 11238042.16$
$\sum y^2 = 110137035$
$\sum xy = 35024857.58$

Substituting these values in the Raw Score Formula above, we obtain:
r = 0.93

Test of Significance of (R)
Under the assumption that the variables X and Y have a join Normal Distribution
T= 0.93 x

Decision rule:
Ho: is accepted at the 5% significance level if $\{t\} < t\ \alpha/2\ (n-2)$
Other wise the null hypothesis is rejected in favour of the alternative Ha.

Degree of freedom = n-2 = 5-2 = 3
The critical value of t for $\alpha/2 = 0.025$ at 3 degrees of freedom is 3.1825
Therefore: T=0.93 x

Since the value of t = 4.3824 is greater than $t_{(0.975)}3$, =3.1825 we reject the null hypothesis.

From the analysis of the data presented and the test of hypotheses revealed the following:

1. A strong positive relationship exists between Bank Capitalization and Bank Lending. The test of hypothesis one (1) confirmed a very high positive relationship as indicated by the correlation coefficient value (r) of 0.89. This value when tested against a critical value of 3.1825 further affirmed the earlier result.

2. A strong positive relationship exists between Bank Lending and Real Sector growth. The test of hypothesis two (2) confirmed a very high positive relationship as indicated by the correlation coefficient value (r) of 0.93. This value when tested against a critical value of 3.1825 further affirmed the earlier result.

3. The Banking sector indeed contributes to the Gross Domestic Product of Nigeria. The increased capitalization of Nigerian banks

has simultaneously increased the lending capability of banks, as this capital provides a cover for the banks loan exposure. The real Sector has had increased funding though this funding may or may not be proportionate to Bank Capital size.

Conclusion and Recommendations

From the findings of the study, it can be concluded that a well developed and capitalized banking sector is a necessary perquisite for the development of the real sector. The Banking Sector and the real Sector are the corner stone of any economy. While the Real Sector may be described as the engine of growth of any economy, the banking Sector provides the fuel needed to turn the productive wheel of the real Sector. Conclusively a nation's journey towards achieving sustainable Economic Growth and Development cannot be devoid of symbiotic relationship between the two sectors.

Based on the finding of this study and the conclusion arising therefrom, the following recommendations are offered:

1. There is need to increase the minimum capital base of banks so as to have a more robust real sector. The positive relation between Capitalization and Bank Lending would naturally imply that increased bank Capitalization would increase the intermediate money supply (M4) which would no doubt reflect positively on the cost of borrowing there by reducing interest rate and ultimately lessen the debt repayment burden on the part of the borrower. This recommendation supports the second phase of banks consolidation being proposed by the Central Bank of Nigeria to increase Deposit Money Banks minimum capital base to N 100 billion.

2. It is also recommended that government should put in place a mechanism that would eliminate forces which repress the financial system such as Directed Credit, Legal Ceilings on Bank Lending and Deposit Rates etc. The allocation of credit should be based on sectoral viability and profitability and not based on government regulation.

3. The Central Bank of Nigeria should institute an award for banks with disbursements of credit to the Real Sector above 50% of their total credit. In addition, they should be offered incentives such as opportunity to participate in the management of foreign reserves and granted yearly tax exemption or holiday etc. We believed that these

motivational incentives would facilitate the granting of credit to the Real Sector.

4. Government should complement the lending by banks to the real sector by instituting a life line, a bailout for companies in financial difficulties that are operating in the real sector. This would no doubt assist the companies in the re-tooling, restructuring and modernization of technology especially in the manufacturing and agricultural sectors to enable them produce competitively.

5. There is urgent need to increased control of financial market fragments. With money in excess of N 400 billion outside the Banking Sector as at 2007, the Central Bank of Nigeria needs to design appropriate instruments and mechanisms to target financial transactions in the Informal Sector. We believe that these huge funds outside the banking sector if effectively mobilized, could serve as a veritable source of bank credit.

References

Abdullahi, S.A. (2008), *Investment Analysis and Portfolio Management* Unpublished Material.

Aderibigbe, J.O. (2002), *The Role of the Financial Sector in poverty Reduction, Central Bank of Nigeria Economic and Financial Review.*Vol 39. No. 4.

Akama, T.R.F. (2007), *An Assessment of the Real Sector Challenges in a Consolidated Financial System. Unpublished Undergraduate Thesis.*

Arrow, K.J. and Debreu, G. (1954), *Theory of Financial Intermediation.* htt://frc.Wharton.upenn.edu/fic/papers/96/9632.pdf.

Balogun, E.D. (2007). *A Review of Soludo's perspective of Banking Sector Reforms in Nigeria*: http://mpra.ub.uni-munenchen.de/3803/.

Bello, Y.A (2005), *Banking System Consolidation in Nigeria and some Regional Experiences: Challenges and prospects*, CBN Bullion Vol 29 No.2

Blum, D. (2000), *The Financial - Real Sector Nexus: Theory and Empirical Evidence*: Europafragen2@wu-wen.ac.at.

Burnham, J.B. (2002), *A Note on International Financial Markets. For The Global Economy Course.* Unpublished Lecture Note, USA: Duquesne University.

Cairncross, A.K. (1963), Capital Formation in the Take - off, The Economic Take off into Sustained Growth. London: The Macmillan Press Ltd.

CBN/NDIC (1995), *Distress in the Nigerian Financial Service Industry*, CBN/NDIC Publication.

Chambers, F. (1991), Building a Banking System from Scratch - Advice for the Emerging Market Economies. Banking World Vol 10, Num 3

Ezeaku, V. (2007), Consolidation of the Nigerian Banking Sector www.powerstocktrade.com

Goldsmith, R.W. (1969). *Financial Structure and Development*, New Haven: Yale University press.

Gurley, J. and E. Shaw (1995), Financial Aspects of Economic Development, *American Economic Review*, Vol 10.

Gurley, J.G. and E.S. Shaw (1960). *Money in a Theory of Finance*, Washington D.C Brookings Institution.

http://en.wikipedia.org/wiki/gross_domestic_product

http://en.wikipedia.org/wiki/list.of.countries.gdp.

http://en.wikipedia.org/wiki/wealth_(economic)

Imala, I.O. (2005), "Challenges of Banking Sector Reforms and Consolidation in Nigeria." CBN Bullion Vol 29 N0.2

Jhinghan, M.L. (2003), *Macroeconomics Theory* (11th ed). Delhi: Vrinda Publisher Ltd.

Kznet, S. (1971), *Modern Economic Growth: Finding and Reflections*, Nobel Lecture Stockholm.

Levine, R. (1997), Stock Markets, Growth and Tax Policy, *Journal of Finance*.

Llewellyn, D.T. (1995), *The Future Business of Banking, Banking World* Vol. 113 No. 1

Logus, D. (1995), *The W.G. & L Handbook of Financial Markets*. Cincinnati Ohio: Thomson South-Western Publishing Co.

Mankiw, G.N. (2004), *Essentials of Economics*. (3rd ed.) United States and United Kingdom: Thomson South-Western Publishing Co.

McKinnon, R.I. (1973), *Money and Capital in Economic Development*, Washington D.C.: The Brookings Institution.

Merton, R.C. and Z. Bordie (1995), *A Conceptual Framework for Analyzing the Financial Environment, The Global Financial System - a Functional Perspective*, Harvard: Business School Press.

Millman, G.J. (1995), *The Vandals Crown*, New York: The Free Press.

Nkwasibue, F.L. (2005), Financial System in Economic Development: The nature and role of a robust financial system in the economic transformation of Uganda. *Unpublished Master's Thesis*, Duquesne University, U.S.A.

Nwankwo, G.O. (1991), *Money and Capital Markets in Nigeria Today*, Nigeria: University of Lagos Press.

Nwoji, B. (1999), *Corporate Finance*, Lagos Nigeria: Malta House Press Ltd.

Nworgu, B.G. (2006), *Educational Research: Basic Issues and Methodology Nigeria.* Wisdom Publishers Ltd.

Obideyi, G.G. (2002), *A Comparative Study of Commercial Banks Performance in Nigeria under the Regulation and Deregulation,* (gbengaobid@yahoo.com)

Ojo, A.T. (1975), *The Nigerian Financial System.* Cardiff: University of Wales Press.

Ojo, A.T. (1981), *Money and Banking: Analysis and Policy in the Nigerian context*, George Allen & Unwin Publishers Ltd, London.

Okigbo, P.N.C. (1981), *Nigerian Financial System,* Longman, London.

Olorunfemi J.F (2004), Methods of Data Collection in A guide to Research Proposal and Report Writing; H.A. Saliu et'al (2004), Ilorin, Faculty of Business and Social Science, University of Ilorin.

Parkin, M. (2003), *Macroeconomics.* (6th ed.), Boston, New York, London, Paris: Addison Wesley, Pearson Education Inc.

Patrick, H.T. (1966), Financial Development and Economic Growth in Underdeveloped Countries: *Economic Development and Cultural Change* Vol. 15.

Reilly, F.K. and K.C. Brown (2003), *Investment Analysis and Portfolio Management* (7th ed.), USA and Spain: Thomson South-Western Publishing Co.,

Robinson, J. (1952), *The Generalization of the General Theory and other Essays*, St. Martin's Press, New York.

Santomero, A.M. and F. Allen (1996), "The Theory of Financial Intermediation." *Unpublished Manuscripts*

Shaw, E.S. (1973), *Financial Deepening in Economic Development,* Oxford University Press, New York.

Soludo, C.C. (2005), Recent Development in the Banks and the Economy, CBN website: www.cenbank.org

Soludo, C.C. (2007), Macroeconomics, monetary and financial sector development in Nigeria, CBN website: www.cenbank.org

Todaro, M.P. (1977), *Economic Development in the Third World,* New York: Longman Inc.

Uzoaga, O. (1981), *Money and Banking in Nigeria.* Fourth Dimension Publishing, Enugu.