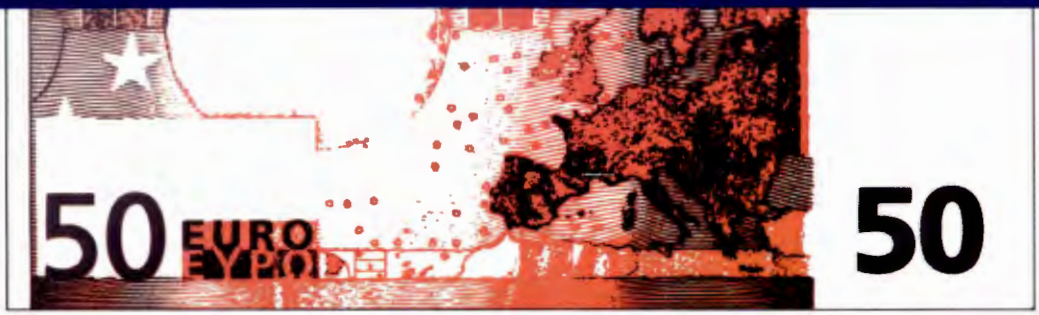

Ochei Ailemen Ikpefan

Bank Capitalisation, Management and Performance:

A case study of Nigerian Banking Industry (Commerical Bank 1986-2006)

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DEDICATION

To God the Father, God the Son and God the Holy Spirit, without whose help, power and authority it would have been impossible to complete this work; I give him all the glory. I also dedicate this study to my parents Sir, James Asikoko Ikpefan and Lady Christiania Ikpefan of Sabongida-Ora, Edo State for bringing up in a decent way. This work is especially dedicated to Dr. David O. Oyedepo whose obedience to God gave birth to Covenant University and gave me the privilege to be one of the pioneer staff and also to study for my Ph.D.

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As Usual, I want to state that I am responsible for whatever errors or imperfections that may be contained in this work.

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CHAPTER ONE

INTRODUCTION

1.1 GENERAL ISSUES IN THE AREA OF STUDY

The financial system in any country is the framework within which capital formation takes place. This is made possible by the intermediation role of financial institutions like commercial banks and insurance companies. The Nigerian financial system consists of three levels of banking institutions such as: A-(i) Central Bank (ii) Nigerian Deposit Insurance Corporation (iii) Deposit Money Banks – DMB (iv) Microfinance Banks (v) Saving Institutions e.g. Federal Mortgage Bank (B) Development Banks (C) Money and Capital markets. The focus of this study is on the Deposit Money banks (Hitherto called Commercial banks by the apex bank), which had been the target of recapitalization. With the implementation of Universal banking by the Central Bank of Nigeria (CBN) on January 2001 a level playing ground was created for all banks in Nigeria. Adequate capital is regarded as the bedrock of safe banking system. A sound bank capital base gives a competitive edge and enables it to provide better services and ultimately increase its earnings.

Bank capitalization is the act of supplying long-term funds to a bank in order to place the bank in a good position to carry out the business of banking. Bank recapitalization is the act of beefing up the long-term capital of a bank to the level at least required by the monetary authorities and to ensure the security of shareholders fund (equity plus reserve).

On the other side, capital cannot perform without good management from those at the top echelons of the organization. Capitalization in this study refers to a concept and not a variable for measurement per se. Rather; it refers to a number of variables of interest which are produced from the existence of funds for use in the process of intermediation. From these funds, obviously concepts such as rate of Return on Assets (ROA), Return on Capital (ROC) and Shareholders Fund (SHF) are derivatives from the use of funds. Management need to employ the assets and capital of the bank judiciously for positive results. Absence of corporate governance has been attributed to the distress experienced in the banking industry in the past. The recapitalization policy is just one of about 13 issues announced in

July 2004 by the Central Bank of Nigeria (CBN) in order to sanitize the banking industry. The CBN Governor noted that the vision or prospect of the CBN and the Federal Government of Nigeria is a banking system that is part of the global change, and which is strong and reliable. It is a banking system which must be efficient, depositors can trust and investors can rely upon. This is the Consolidation era (2004- till date). It is the era of "13-point Reform Agenda for Repositioning the CBN and the Financial System for the Century". To achieve this prospect, the following framework (13 issues) was put in place.

i. Requirement that the minimum capitalization for banks should be N25 billion with full compliance before the end of December 2005 (that is, 18 months rather than 12 months normally given in many countries) for example, South Korea, Malayia, Indonesia, Japan. Only banks that met with the requirement above were licensed to undertake banking business. Others that failed to meet up either merged or were liquidated. For the first time, the Nigerian banking industry witnessed merger between the small and big banks as shown in **table 1 below**.

ii. Phased withdrawal of public sector funds from banks from July, 2004.

iii. Consolidation of banking institutions through mergers and acquisitions.

iv. Adoption of zero tolerance in the regulatory framework; especially in the area of data/information rendition/reporting, where all returns by banks must be signed by the Managing Directors of the banks. Hiding of information under other assets/liabilities, off-balance sheets will henceforth attract serious sanctions.

v. The automation process for rendition of returns by banks and other financial institutions through the electronic Financial Analysis and Surveillance System (e-FASS) will now be emphasized.

vi. Adoption of a risk-focused and rule-based regulatory framework.

vii. Establishment of a Hotline, Confidential internet Address (@cebank.) for all Nigerians wishing to share any confidential information with the Governor of the Central Bank on the operations of any bank or the financial system.

TABLE 1 : THE EMERGING BANKS IN THE NIGERIAN BANKING INDUSTRY AS AT DECEMBER, 2005

N/S	GROUP	MEMBERS	SHARE-HOLDERS FUNDS N	TOTAL ASSETS N	TOTAL DEPOSITS N
1	Access Bank	AB, Marina Int' Bank & Capital Bank	28.6BN	174bn	110bn
2	Afribank	Afribank Inter (Merchant Bankers)	27.1bn	129 bn	94bn
3	Bank PHB Plc	Platinum Bank & Habib Bank	28bn	156bn	109bn
4	Diamond Bank	Diamond Bank and Lion Bank	34.9bn	223bn	144bn
5	ETB	Equatorial Trust Bank & Devcom Bank	28.4bn	109.7bn	72.7bn
6	Ecobank	Ecobank alone	35.3bn	132.0bn	84.0bn
7	FCMB	FCMB,Coop. Bank, Nigeria-America Merchant Bank	25.2bn	106bn	70.3bn
8	Fidelity Bank	Fidelity Bank, FSB International Bank &Manny Bank	25.6bn	120bn	78bn
9	First Bank	First Bank Plc and MBC International Bank Plc	58.9bn	538.1bn	391.2bn
10	First Inland Bank	FTB, Inland Bank, IMB,& NUB Bank	29.4bn	130bn	80bn
11	Guaranty Trust	GTB alone	36.4bn	305.1bn	212.8bn
12	IBTC – Stanbic bank		Over 60bn	100bn	Over 63bn
13	Intercontinental Bank	Intercontinental Bank, Equity Bank, Global Bank and Gate way Bank	53bn	360bn	252.2bn
14	NIB	NIB alone	35.2bn	112.2bn	61bn
15	Oceanic Bank	Oceanic Bank, Stanbic & Int'Trust Bank	37.1bn	371.6bn	310.3bn
16	Skye Bank	Prudent Bank, EIB Inter, Bond Bank, Reliance & Coop. Ban k	37.7bn	176bn	70bn
17	Spring Bank	Citizens Inter' bank, Guardian Express Bank, ACB Inter' bank, Omegabank,, Fountain Trust Bank &Trans Inter' bank.	Over 25b	131 bn	N/A
18	Standard Chartered	Standard Chartered alone	26bn	34.72	23.5bn
19	Sterling Bank	Trust Bank of Africa, Magnum Trust Bank, NBM Bank, NAL Bank & Indo-Nigeria Bank	35bn	111.2bn	75.0bn
20	UBA	UBA & STB	47bn	851.2bn	757.4bn
21	Union Bank	UBN, Universal Trust Bank, Hallmark Bank	95.6bn	517.5 bn	275.5bn
22	Unity Bank	Intercity Bank, First Inter State Bank, Tropical Commercial Bank, Centre Point Bank, Bank of the North, Societte Bancaire,New Africa Bank & Pacific Bank,NNB Inter'	30bn	100bn	N/A
23	Wema	Lead bank, National Bank, Wema Bank	34.8 bn	127.7bn	78bn
24	Zenith Bank	Zenith Bank Plc	93bn	608.5bn	392.8bn

Source: Compiled from Annual Financial Statement of Banks and CBN Banking Supervision Annual Report 2006/2007

viii. Strict enforcement of the contingency planning framework for systemic banking distress.

ix. Establishment of an Asset Management Company as an important element of distress resolution.

x. Promotion of the enforcement of dormant laws, especially those relating to the issuance of dud cheques, and the law relating to vicarious liabilities of the Board members of banks in cases of failings by banks.

xi. Close collaboration with Economic and Financial Crimes Commission (EFCC) in the establishment of the Financial Intelligence Unit (FIU), and the enforcement of the anti-money laundering laws.

xii. Revision and updating of relevant laws, and drafting of new ones relating to the effective operations of the banking system.

xiii. Single obligor limit of 10% of shareholders' funds as opposed to the present 25%, with aggregate borrowing pegged at 800% of shareholders' funds. This was actually stated by the CBN director of banking supervision.

CBN conditions for banks for mergers/takeovers are contained in the CBN guidelines and incentives on Banking Sector Consolidation issued on August 2004, and the Procedures Manual for Processing Applications for Bank Mergers/Takeover issued in December, but revised in March 30, 2005 among others (Soludo, 2004).

According to Sanni (2007), *"The numbers of distress banks rose from 9 in 1990 to 60 in 1995 and later dropped to 9 in 2001.Those that could not be salvaged were allowed to go under. Between 1994 and 2002, a total of 33 banks were closed. The situation continued to worsen. As at end-December 2003, the asset quality of the banking sector further deteriorated as the total non-performing credit increased from billion in 2000 to billion in 2003. Thus the ratio of non-performing credit to total credit also increased from 17.64 percent to 25.79 percent. This was below the trigger level of 35 percent for setting on the Crisis Management Unit as stipulated in the Framework for contingency Planning for Systemic Distress and Crisis…". The precarious scenario was further compounded by the structural weaknesses in the banking sector, particularly the high*

incidence of insider lending activities, dominance of inefficient state-owned banks, political interference and the general economic environment arising from deteriorating macroeconomic conditions".

The issue of bank capitalization in most economies today has been how to resolve the problem of unsound bank, enhance efficient management of the banking system, provide better funding for banks lending activities, reduce non-performing loans and advances, increase profitability, reduce risk, to ensure quality asset management and to put banks in a strong liquid position to meet customers obligation at all times. For instance, the distress that was pervasive in the Nigerian banking system in the mid-1990s was due to amongst others, illiquidity in the banking system which led to the loss of customers' confidence in the banking industry. The move by the CBN to raise the minimum paid up capital of banks to billion was aimed at strengthening the Nigerian banking industry. It is imperative for banks to meet up the required level of capital for sound and safe banking. Capital adequacy is important for banks to absorb risks till banks are able to generate profit. However, banks that are able to exceed the capital requirement stand a better chance of luring customers and instilling confidence in the system.

In contemporary Nigerian banking system, bank capital has attracted more attention from the regulatory authorities because of the expected role they play within the domestic and external economy. Today, banks are still going to the capital market to solicit for funds irrespective of the fact that they have met the capital requirement because they want to be relevant globally. In this study, bank capital is not considered in isolation to performance but other specific variables would be used to explain the relationship between bank capital, management and performance in Nigeria. Performance is not also a matter of only profit. Investment, loan extension and efficient use of assets etc. are performance criteria. For example capital/deposit ratio would affect the capital investment and profitability of banks positively. Other bank capital variables are explained in chapter 3 of this study. There is no doubt that a Nigerian bank that has billion which is about billion beyond the capital requirement will not keep such fund idle but need to generate income from it through capital investment. Several research studies revealed that the motive for consolidation/capitalization is to maximize shareholders' value, make financial institutions

more efficient, profitable and lessen non-performing loan ratios, as well as enhance the recapitalization efforts of the players in the industry. Many countries of the world are now involved in the consolidation drive in order to avert marginalization tendencies arising from financial re-engineering. The current financial reforms in Nigerian banking industry has become imperative, owing to the need to resolve the problem of distress; reverse the declining trend in the domestic economy; reinvigorate the role of the banking sector; and possibly refocus the ownership structure of the sub sector.

Some analysts are of the view that the main motivation behind bank capitalization/consolidation is to maximize shareholders value which is best achieved through Mergers and Acquisitions (M&A) and that is the experience in Nigeria. Others are of the view that capitalization via consolidation will not only bring about increase shareholders' worth but will also contribute to the exploitation of economies of scale, investment and employment opportunities. Apart from the benefits, it has its costs (direct and indirect). Its consequences include not only the direct effects of increased market power or improved efficiency, but also indirect effects. One potential indirect consequence may be a reduction in the availability of financial services to small customers, though it is a contentious issue in most literature. The potential systemic consequences of capitalization include changes in the safety and soundness of the financial system. However, the changes in competitive conditions created by the M&A may evoke significant reactions by rival firms in terms of their own organizational focus or managerial behaviour that may either augment or offset the actions of the consolidating firms. For example, if consolidating institutions reduce their availability of credit to some small businesses, other institutions may pick up some of the reduced credits, if it is value maximizing for them to do so. Before 1986 which has been christened Pre Sap Era the Nigerian banking industry was highly regulated and was subjected to many forms of restrictions such as products and activities. Banks were made to play development role for which they were ill-equipped (due to insufficient capital).This led to mismatch in assets and liabilities. After 1986, the monetary authorities introduced some reforms to sanitize the operations of banks in a deregulated environment. One of such policies was the Prudential Guidelines of 1991 which standardized the reporting of loans and advances into

performing and non-performing accounts. There was also the introduction of Statement of Accounting Standard, the use of Stabilization securities by the Central Bank of Nigeria (CBN) to mop up excess liquidity in the system as well the withdrawal of public sector deposits from deposit money banks to Central Bank of Nigeria (CBN).

All these measures affected banks profitability and their capital base. In some occasions they had to borrow money in the interbank at exorbitant rates. While the banking industry was growing at a geometric progression the real sector was growing at an arithmetic progression. The reason that can be adduced for this was the fact that the banks generated majority of their income from import finance. The impetus for the banks to support the real sectors of the economy was eroded since the import finance business has shorter turn-around, and reduced risk with the potential to deliver the required profitability. Added to this was the fact that the banking sector concentrated lending on state-owned institutions to finance fiscal deficit of the government and the losses of enterprises in which the state held majority shares coupled with unproductive public sector projects weakened their capital base. The precarious scenario was further compounded by the structural weaknesses in the banking sector, particularly the high incidence of insider lending activities, dominance of inefficient state-owned banks, political interference, and the general economic environment arising from deteriorating macroeconomic conditions.CBN (2006) stated that the objectives of the last recapitalization of Nigerian banks in 2005 were as follows:

i. To reduce the number of banks operating in the country from the current 89 to a minimum of about 12 and a maximum of 18 where resources can be fully maximized. At the close of December 2005 twenty five (25) banks where registered by CBN **(See Table 1 above p.3)**. The number of commercial banks in Nigeria has reduced to twenty-four (24) with the merger of IBTC and Stanbic Bank in 2008 (now IBTC-Stanbic bank).

ii. To make supervision less cumbersome, efficient and to bring about greater professionalism into the sector;

iii. To move the Nigerian economy forward, and to productively position the banking system to become a sound and reliable catalyst of development. According to Soludo (2004), most Nigerian banks pre-2005 recapitalization in Nigeria were not better than outposts for foreign exchange touting and many of

the Chief Executive Officers (CEO's) were indeed not better than some Nigerian in banking halls soliciting for foreign exchange;

iv. It will help to reduce the cost of maintaining bank directors and that will invariably drive down cost of funds to some extent. As more and more capital is being made available by the process of financial intermediation (labour being held constant) and has productivity increases, the capital/output ratio is expected to rise.

The objective of bank capitalization is quite similar with the firm and its objectives which according to Baumol (1977) are to maximize sales, maximize profits, to minimize costs. The firm must settle for one of the three objectives or some compromise among them. Baumol (1977) also posited that other objectives of the firm include to stimulate the growth of the firm and to satisfy the interest of shareholders. The measure put in place by the CBN is meant to shore up output, maximize return on capital, and reduce waste by enthroning good governance. In the views of Samuel and Oduniyi (2004):

> "*Prior to the billion bank recapitalization, a systemic crisis had crept into banking industry where the capital of all the 89 banks put together happened to be less than that of one bank in South Africa; the most capitalized bank in Nigeria has less than 50% of the capital base of the least capitalized bank in Malaysia; where indeed none of our banks was big enough to finance a major project that may transform the economy*".

The recent recapitalization in the Nigeria banking industry resulted in mergers and acquisition especially for banks that could not raise the billion. The capital base of banks is reviewed by regulators from time to time to meet with international standard. The experience of recapitalization of banks varies from country to country because the economies are affected differently by macro economic variables. According to David (2004), banks are financial intermediaries and must ensure that deposits held with them are paid as at when due while also investing surplus funds in order to maximize their shareholders wealth. Pre -December 2005, which was the cut-off date of recapitalization, Soludo (2004) posited that:

> "*Nigeria with 89 banks has capital base of less than US$10 million and about 3300 branches, compared to 8 banks in South Korea with about 4500 branches or one bank in South Africa with larger assets than all our 89 banks. He concluded that Nigerian banks need to be proactive and strategically positioned to be active players and not spectators in the emerging world."*

In the wake of deregulation and financial liberalization of the financial sector in Nigeria, a number of financial institutions had emerged. For banks to play their proper role in financial services delivery locally and internationally, the regulators need to improve on the framework for the operation of bank and non-bank financial intermediaries. This implies that CBN needs to be given greater powers to ensure the soundness and financial health of the financial system while efficiently using their current power so as to sustain the confidence and loyalty of the public. Pre-2005 bank recapitalization, the small size of most of Nigerian banks, each with expensive headquarters, separate investment in software and hardware, heavy fixed costs and operating expenses, and with bunching of branches in few commercial centers led to an increase in the cost of funding the industry.

The increasing wave of bank distress globally and especially Nigeria in the past has been a source of worry to regulators on how much banks should hold as capital. How much banks should actually hold has been one of the most controversial topics in the history of the banking industry. Stokes (2001) posited that bank should hold excess of reserve requirements to meet the standard set by the regulatory authority that is CBN, to meet customers' cash withdrawal on demand, to provide a buffer against future and unexpected losses. Such losses are brought about by credit, market, and operational risks inherent in the business of lending money. Capital is expensive for many banks and, therefore, they often seek to minimize the amount of capital they hold. On the other hand, regulators operating in the public interest are more concerned about the safety of depositors' funds hence they continually request for upward review of capital of the banks they supervise.

The Structural Adjustment Programme (SAP) of 1986 introduced in Nigeria, as an economic reform measure was designed to radically transform the structure of the Nigerian economy, which between 1982 and 1985 suffered a major structural imbalance especially

in its patterns of trade. The consequence of this resulted in an adverse balance of payments in the Nigeria's external trade and a grossly depleted foreign reserves position that was unable to cover one month's imports. Preceding SAP in 1986, the number of operating commercial and merchant banks in the country was less than sixty but trade liberalization and financial deregulation which were major policy issues of SAP, facilitated a phenomenal growth in the number of licensed banks, which peaked at 120 by 1990 while Community Banks (now renamed Microfinance Banks) rose to 158 as at May 1992. While the growth in the financial services sector was experiencing geometric progression and a boom, the other sectors of the economy, such as the productive sector were contracting and the whole economy continued to plunge deeper into recession. To gain a fair share of the market in a highly competitive environment, the financial services sector especially the banks need to be innova*tiv*e. In the 1990s, the financial sector witnessed the development of some innovative products and services, massive investment in information technology and a continuously re-engineering of financial instruments to meet the needs of discerning customers by banks that wanted to maintain their leading position and competitive edge.

On the other hand, the increase in the number of operators was not matched by a commensurate increase in the level of manpower and expertise needed to man and supervise the emergent banks as the industry human resource capability and expertise were overstretched. This led to increase in the number/volume of bad debts, fraud and other sharp malpractices in the banks. Added to this was a poor and inadequate monitoring control by the regulatory authorities and lack of continuity in government monetary and fiscal policies. The industry, by 1993, became seriously afflicted with a very severe crisis of confidence that led to terminal distress of 54 banks by 1994 which subsequently increased to 60 at the end of 1995. This abnormality in the financial services sector led to six upward reviews of capital post-SAP to adjust for inflationary impact of the SAP induced policies. The recent being the billion recapitalization which took effect on December 2005 reduced the number of banks from eighty-nine(89) to twenty- four **(**24) as a result of merger. In the Nigerian Banking Industry, bank capital requirement has been reviewed several times between 1952 and 2006 – (**See table 1-1 below**).

TABLE 1-1: TREND IN THE CAPITAL STRUCTURE OF NIGERIAN BANKS (1952 – 2006)

YEAR	FOREIGN (Commercial)	INDIGENOUS (Commercial)	MERCHANT
1952	£200,000	£25,000	--
1958	£400,000	£25,000	--
1969	£1,500,000	£600,000	--
1979	N1,500,000	N600,000	N2,000,000
FEB. 1988	--	N5,000,000	N3,000,000
OCT.1988	--	N10,000,000	N6,000,000
OCT.1989	--	N20,000,000	N12,000,000
FEB.1991	--	N50,000,000	N40,000,000
1998	--	N500,000,000	N500,000,000
2001-Universal Banking	--	N1 billion (old banks) N2 (new bank)	N1 billion (old bank) N2 billion (new bank)
January, 2006	--	N25,000,000,000	--

SOURCE: CBN Annual Report (Various issues)

Capital constitutes an important part of any business. It serves as a measure of the degree of financial commitment of the owners in that business/project and also serves as a veritable loss absorber. Capital becomes imperative when reserves of the business are not sufficient to cushion or cover operational losses. The persistent devaluation of Naira against major foreign currencies (US Dollar, Pound Sterling, e.t.c) had informed the various reviews witnessed during the post SAP era. Another reason that informed these was the need to comply with the internationally accepted standard (Basel Accord of 1988 and 1992 to which Nigeria subscribes). Capital adequacy measures capital vis-à-vis risk-weighted assets of banks. The increase in the number of banks between 1987 and 1990 led to an unprecedented increase in the number of loans and advances of banks which subsequently resulted in delinquency in banks and deterioration in the quality of banks' risk assets. CBN was compelled to introduce the Prudential Guidelines in 1990, which

made it mandatory for banks to recognize early and to provide for non-performing assets. The effect of these was the erosion of the capital base of quite a sizeable number of operators as their accumulated reserves were not sufficient to absorb the huge losses. Consequently, the last upward review, which became effective on December 2005 fixed the statutory minimum capital deposit money banks to billion from billion with a view to strengthening the already eroded capital base of banks. This was occasioned by the devaluation of the naira from against $1.00, which soon rendered the old minimum paid up capital of billion inadequate.

The inflationary impact also led to an astronomical jump in the Naira working capital requirements of industries (major users of bank loans) which depend on imported inputs, effectively reduced the real value of bank capital base. In nominal terms, it limited the financial support that the banks could give to their borrowing customers particularly against the background of statutory lending limits. In the wake of this, companies strengthen their relationships with multiplicity of banks to ensure that their working capital requirements are adequately met. The continuing deterioration in the quality of bank risk assets worsened the distress systems that started to manifest between 1989 to mid-1990 and early 2000. It is in this light that this research would attempt to study the relationship between bank capitalization, management and performance in the Nigerian banking industry with a view to filling gaps in the literature and proffering recommendations.

1.2 STATEMENT OF THE PROBLEM

The above have shown us precisely that the problem of this study can be attributed to inadequate capitalization, poor management and supervision and consequent poor performance in the banking industry, which has affected the growth of the economy. Existing literature on bank capitalization and performance are not settled. There are evidences that capital of Nigerian banks has been inadequate and this has affected the stakeholders, performance of banking firms and contribution to the economy. The stakeholders also consider the management, supervision and regulation of banks inadequate. Hence, the spate of bank distress witnessed in the recent past.

While the loan interest rate structure has been rising, the deposit interest rate has been nose-diving. This disproportionate loan interest-deposit interest rate structure has affected

ability of banks to mobilize deposit, capital and has affected extension of loans. While interest rate on deposit is about 2%, lending rate ranges between 16-20%. Banks derive over 90% of its income from lending and when this is affected, outcomes of capitalization such as return on assets (ROA), return on capital (ROC) and shareholders fund (SHF) will be affected. Also bank internal determinants of performance such as bank loans and advances to deposit (LA/D), ratio of liquid assets to deposits (LA/BD), ratio of operating expenses to total assets (OE/TA), ratio of shareholders funds to total assets (SHF/TA) and ratio of bank's loans to total assets (L/TA) will also be affected. Banking industry is the engine of any economy and it is expected to influence performance of other sectors. In Nigeria, the naira is noted for its depreciation than appreciation and this affects the interest rates, inflation, cost of doing business and the real sectors.

Management can be viewed from two perspectives. As a process and another as a structure. Management as a process refers to the design and maintenance of an internal environment in which individuals working together in groups can effectively and efficiently contribute to the achievement of accomplishment of preselected group missions and objectives. We are concerned with the structure in this study. That is how bank management has directed the efforts and activities of other people (controlling function) towards achieving common objectives. According to Thakur and Burton (1995), efficiency involves doing things right that is using resources wisely and with minimum waste. The epileptic power supply has affected the cost of doing business in Nigeria and the banking industry is not an exception. Bank management has resorted to the use of diesel to carry banking operations. How has management control of operating expenses affected profits of the deposit money banks? Besides, Nigerian banking industry has been faced with a dearth of qualified bankers to implement the objectives of the organization. The few qualified bankers hardly stay long in one bank because they are in high demand. Hence, the managerial efficiency of banking operations has been a concern to bank management. The selection of bank management has not been taken seriously and the performance of the system is a function of the inputs. Management is not evaluated on the basis of objective criteria such as capital adequacy, liquidity, and profitability, instead subjective criteria such as competence, compliance with regulations and leadership ability are employed (Adewunmi, 1992). While capital

adequacy, liquidity, risk exposure, profitability and efficiency of banks have been affected by the quality of management, bank management failed in their responsibility to determine if the rate of growth of operating expenses exceeded revenue and this may have affected bank performance. The several boardroom squabbles, technical incompetence, poor leadership, administrative inability, increased level of risk, in-fighting, management divisions that sprouted in the new generation banks in the early 1990s contributed to the general malaise and pervasive distress in the system.

The inability to manage the systemic distress in the past in the Nigerian banking industry had affected deposit mobilization, quality of assets and credit extension to customers. It can be mentioned here that correct capital base is necessary but not sufficient condition for a bank's continued state of good health. These challenges witnessed in the past in the banking industry could be traceable to inadequate capital, liquidity crisis, managerial inefficiency and inability of the regulators to monitor and perform their oversight function. The Nigerian banking industry has been affected by inconsistent monetary policies, unstable macroeconomic variables such as exchange rate, interest rate and general inflation some of which have led to increase in prices of capital and consumer goods thus, lowering effective purchasing power of people and reduced aggregate demand.

Financial performance especially relating to deposit money banks is based on performance dimensions comprising: capital adequacy, asset quality, earnings and liquidity which are deeply rooted in the expectations of stakeholders which is in turn based on financial transparency. In the past, the Nigerian banking industry had been plagued with small size banks with low capital and high cost of operations. This weakness inhibits bank management in the performance of its development roles in the economy, thus hindering the achievement of government objectives such as price stability, macroeconomic stability, provision of employment and increased output. It also affects the ability to compete effectively in the international market. Since the banking sector is the hub around which all other economic activities revolves, the health and prosperity of the bank is a major source of concern to Nigerians especially the regulators. According to the Governor of Central Bank of Nigeria cited in Egene (2009), of the ten (10) banks audited so far as at August 2009, the banks' balance sheets of five banks (Union bank, Finbank, Oceanic bank, Afrique bank and Intercontinental bank) had shrunken, shareholders' funds impaired and they now have

liquidity problems. Their huge exposure to non-performing loans (margin loans) has affected the banks. These banks had spent length of time at the expanded discount window (EDW) introduced in September, 2008 by the apex bank. These five banks accounted for 90% of transactions at the EDW. The remaining banks accounted for 10%. According to the apex banks, these banks took money from the inter-bank to repay their exposure to the discount window. It is an indication that their balance sheets had shrunk. The management teams had acted in a manner that was detrimental to the interest of their depositors and creditors. According to the apex bank, the temporary capital injection of N420 billion into the banks in the form of Convertible Tier 11 Debt, is expected to be repaid to the CBN once the banks are recapitalized. Considering the fact that ownership of banks has moved from family to private, existing shareholders have not been informed how these funds would be converted when the bailout fund is fully repaid. The measure adopted by CBN to bail out the banks is adjudged as misuse of taxpayers' money and may eventually displace existing shareholders. Like other sectors, this sub-sector is also faced with poor infrastructural facilities which add to cost of doing business and poor performance of regulatory authorities. According to Ajekigbe (2009: 2-8), from the classical and historical perspective, "Several factors led to the failure of banks between 1977 and earlier 2000. Some of the reasons advanced are poor asset quality, under capitalization, inexperienced personnel, illiquidity, inconsistent regulatory policies and supervision".

The evolving competition in the banking industry as a result of globalization has made it difficult for deposit money banks to play their major role of financing economic activities arising from inadequate capital. Inadequate bank capital has led to a crisis of confidence in the banks to the extent that the original functions which is to support the volume, type and character of a bank's business, to provide for the possibilities of losses that may arise there from and to enable the bank to meet a reasonable credit need of the community have been eroded. Losses suffered by banks as a result of non-performing accounts led to bank failure especially in the areas of lending. The soundness, safety and profitability of a bank affect the quality of its loan portfolio. The last few years have both been traumatic and revolutionary for the Nigerian banking system. According to Eke (1999:1-14):

"Since the introduction of structural adjustment programme (SAP) in 1986 and the deregulation of the nation's financial system, banking business has raised a variety of performance questions. Although insured banks had recorded an appreciable increase in the volume of assets and deposits, their overall financial condition had deteriorated tremendously"…

The entry of the new generation banks from 1989 witnessed competition amongst banks. New generation banks introduced aggressive marketing for deposits, new technology etc. Between 1977 when rural banking was introduced and 2006 the cut-off date of this study, the deposit money banks opened branches across the rural areas and cities of Nigeria. This was facilitated and enhanced by the liberalization of banking license and changes in the capital structure of Nigerian banking by the regulatory authority (apex bank) between 1977 and 2006 **(See table 1-1, Chapter one, p.11)**. Before 1989, the Nigerian banking industry was dominated by the four big banks (United Bank for Africa, Union Bank of Nigeria, First Bank of Nigeria and Afrique bank) in terms of market share (deposits, loans and advances etc). Has this really changed? What is the present state of market concentration in the banking industry vis-à-vis bank capital (shareholders fund)? Are banks performance influenced by shareholders fund? This study will also examine the impact of bank capital on industry/market concentration. Based on the forgoing, this study sought to examine empirically/ investigate the relationship between bank capitalization, management and performance in the Nigerian banking industry.

1.3 SCOPE OF THE STUDY

The period covered in this research is from (1986-2006). Cross-sectional and time series data will form the focus of our study. The study will cover the period from SAP in 1986 using sample of fourteen deposit money banks and a cut-off date of 2006. The sample of fourteen out of the twenty four deposit money banks was employed in the study. The sample (the fourteen deposit money banks) was drawn from both the old and new generation banks which are quoted on the Nigerian stock exchange before the commencement of this study. The Stratified sampling technique and random sampling method is adopted.

I.4 OBJECTIVES OF THE STUDY

The study will focus on the following main/broad objective:

To determine the extent of relationship between bank capitalization, management and performance. The specific objectives are:

(i) To determine the effect of growth of bank deposit, bank loan and liquidity on bank capitalization;

(ii) To examine how the determinants of bank capital; assets and liquidity ratios affect return on assets;

(iii) To determine to what extent management control of operating expenses has impacted on the return on capital (profit);

(iv) To determine the extent to which macroeconomic variables such as interest, inflation and exchange rates have affected capitalization in the banks;

(v) To determine the relationship between bank capitalization and market concentration (market share) in order to find out if it has enhanced competition;

(vi) To test the relationship between profitability/return on capital and bank characteristic indicators.

The measures of capitalization used in this research is the outcome from the use of fund such as return on assets (ROA), return on capital (ROC) and actual capital; that is Shareholders funds (SHF). Five bank's characteristics indicators are used as internal determinants of performance. They are ratio of bank loans and advances to total deposit (B DEPOSIT), ratio of liquid assets to total deposits (LAD), ratio of operating expenses to total assets (EOM), ratio of shareholders funds to total assets (CAP) and the ratio of bank's loans to total assets (B LOAN). Bank capitalization/consolidation, management and performance need to be established both theoretically and empirically in order to predict to a reasonable extent the determinants of the performance and behaviour of banks in Nigeria. Most of the studies on bank capitalization and performance were conducted in the United States of America and emerging markets of Asia, Africa, South America and Europe. Few studies exist in developing countries including Nigeria. This study is inspired by the

inadequacy of existing empirical studies on capital adequacy and performance for the less developed countries. Developing a model, using time-series, cross-sectional and panel data of Nigerian banks, would provide evidences to determine the factors of bank capitalization, management and performance as well as the behaviour of banks in relation to capital adequacy and the impact on the economy.

1.5 RESEARCH QUESTIONS

This research study was initiated by a series of questions. The research study will attempt to provide answer to the following research questions:

i. How does growth of bank deposit, bank loan and liquidity influence bank capital?
ii To what extent does capitalization lead to increase in market concentration so that banks can control sizeable market share and compete effectively?
iii. To what extent does the determinant of bank capital impact on Profitability/return on capital?
iv. To what extent do macroeconomic variables impact the financial performance of Nigerian banks and the economy?
v. What are the variable (s) involved in bank performance?
vi. How does capitalization of the banking industry help to boost bank performance?
vii. To what extent does bank management control operational expenses impacted return on capital? Are discrepancies in bank's profitability/return on capital due to variation in endogenous factors under the control of bank management?
viii. Does increase capitalization reduce the operational risk and bank failure?

1.6 STATEMENT OF HYPOTHESES

The study will be carried out in three consistent groups of models and are specified in Chapter five.

A. Return on Assets (indicator of capital) and bank capital ratios (Efficiency of Management, Liquidity and Capital Adequacy).
B. Return on Capital (indicator of capital), Management and Performance variables.

C. Shareholders fund and Performance variables.

From the theoretical perspective and the research questions the following hypotheses are postulated for us to justify and validate our models:

1. : Bank capital ratios (Capital adequacy, Liquidity and Efficiency/Quality of Management) have no significant impact on Return on Assets.

   : Bank capital ratios (Capital adequacy, Liquidity and Efficiency/Quality of Management) have significant impact on Return on Assets.

2. : Operating Expenses have no significant impact on return on capital.

   : Operating Expenses have significant impact on return on capital.

3. : Banks' liquidity, bank loans and growth of bank deposits have no significant impact on Shareholders fund.

   : Banks' liquidity, bank loans and growth of bank deposits have significant impact on Shareholders fund.

4. : Shareholders' funds have no significant relationship to banks control of market share (total deposit: TD, loans and advances: LA, total assets: TA)

   : Shareholders' funds have significant relationship to banks control of market share (total deposit: TD, loans and advances: LA, total assets: TA)

Answer to these questions will follow the footsteps of Abreu and Mendes (2002), Demerguc-Kunt and Huizingha (1999) and Ben Naceur Samy (2003) and Goaied (2001) stated in chapter 3. It will also extend the existing literature. The research will use regression analysis to find the underlying relationship between bank capitalization, management and performance. A comprehensive set of internal characteristics is included as determinants of bank's capitalization. These internal factors include shareholders fund, operational expenses and interest bearing assets e.g. deposits, loans and advances, liquid assets etc. While studying the relationship between bank capital, management and performance, we shall include macroeconomic variables (inflation, interest and exchange rates) and financial structure indicators (concentration, bank and market size) not included in Ben Naceur Samy (2003) and Goaied, 2001).

1.7 METHODOLOGY

This research deals with the bank capitalization, management and performance in the Nigeria banking industry. This section tries to capture empirically how bank capitalization and management affect bank performance and to what extent. The method used consists of the data sources and the analysis.

1.7.1 Data Sources

Secondary data will be needed for the entire work. In order to carry out this study, data (1986-2006) were collected from various issues of the Statement of Accounts and Annual Reports of deposit money banks, Central Bank of Nigeria Statistical Bulletin (various issues), CBN Banking Supervision Annual Report and the Nigerian Stock Exchange Fact book. The data include time series, cross section and panel data on variables adopted, **(See table 4-2, chapter 4)**.

1.7.2 Analysis

This study uses panel data to investigate the hypotheses composed in various single – equation econometric models. The e-view software package is then employed to obtain the various solutions. A sample of the deposit money banks population has been used and the sample method adopted is the probability sampling technique, particularly the simple random sampling in the context of stratified random sampling. The study cannot possibly cover the entire population hence, a sampling method is adopted. The probability sampling technique is used to select the sample size. The Stratified Random Sampling method is used to categorize the banks into groups. The study of bank capitalization, management and performance thus covers the period from the structural adjustment program of 1986 to 2006. The period of 1986 was the beginning of bank deregulation and liberalization (more banks were licensed) while we projected from 2005 the commencement year of the study to a cut-off date of 2006 (one year after bank consolidation) when all financial statements of deposit money banks will be available. Audited bank financial statements most time fall in arrears. As stated earlier, this study employed the Stratified Sampling Technique **(See detail in Chapter 4, Section 4.3)**.

1.8 SIGNIFICANCE OF THE STUDY

Capital requirement has become an important tool in determining how much risk exposure a bank can accept. In the literature, empirical evidence suggests that capital plays a key role in rapid growth of bank mergers. Ross (2002) found that hundreds of smaller banks have disappeared via merger because of the burgeoning growth in large business loans, which can only be made by bigger banks with strong capital position. While there have been several studies on bank capitalization and performance, very few of them have focused on bank capitalization, management and performance of the Nigerian banking industry. Several studies about bank capitalization exist in United Kingdom (UK), United States (US) and Asia, Africa, South Africa and Tunisia. In the literature, scholars have written on determinants of capital adequacy, determinants of bank profitability, financial conditions of bank performance, determinants of bank capital ratios, effects of bank capitalization on financial performance, merger and acquisition, bank consolidation and performance. However, the extent to which such research findings can be applied to Nigerian banking industry should be studied.

Given the fundamental nature of banking as the hub around which economic activities revolve, any study that will unearth and confirm the problems, issues on bank capitalization, management and performance in the Nigerian banking industry will be of immense benefit value to banks, regulatory bodies, government and society. The study will fill the gap in the existing literature especially as it relates to variables that affects bank performance. In summary, this study hopes to establish the relationship that exists between bank capitalization, management and performance in the Nigerian banking industry. Therefore, in this section, issues that will engender interest of stakeholders in the Nigerian banking industry are adequately addressed in this study. Therefore, this study is significant in the following areas:

i. The study is significant because it present adequately the problems of the Nigerian banking industry (deposit money banks) in proper perspective.

ii. The study will serve as a pathfinder/guide to international investors who are interested in the fortunes available in the Nigerian banking industry (deposit money banks).

iii. Shareholders' will find in this study the underlining issues that have characterized profitability, return on assets, capitalization (shareholders fund) and market share in the Nigerian banking industry (deposit money banks).

iv. Bank capital provides funds for bank's growth and the development of other sectors. For growth to take place in an economy, the financial and real sectors should move in the same direction that is, they should be linearly related. This study is significant because it shows that apart from the issue of profit, expenses and non-performing loans that have bedeviled the deposit money banks, there is the issue of lack of good corporate governance. A study that investigates these issues or would do this is certainly significant in Nigeria.

v. The study will provide an insight to bank authorities on regulation with respect to indices affecting capitalization in view of the systemic distress witnessed in the banking industry in the mid-1990, early 2000 and January 2006. It also will also help ensure that the regulatory authorities drive individual banks to keep pace with capital adequacy to assist performance and to curb risk exposure of the banks.

1.9 OUTLINE OF CHAPTERS

Chapter one study contains the following: introduction, statement of the problem, scope of the study, objective of the study, research questions, hypothesis, methodology, data sources, and significance of the study. **Chapter two** will discuss the development of the banking industry and banking regulation in Nigeria categorize into nine phases. **Chapter three** provides the conceptual framework and literature review. It reviews theories of capitalization and literature on bank capitalization/consolidation, management and corporate performance. **Chapter four** provides the methodology and covers the model specification; model estimation and data sources and collection while **Chapters five** and **six** will provide the data presentation and analysis (Results and Discussion); findings, conclusion, recommendations, contribution to knowledge, limitations and recommendation for future study.

CHAPTER TWO

DEVELOPMENT OF BANKING, BANK REGULATION AND CURRENT ISSUES IN THE NIGERIAN MACROECONOMY

2.1 Development of Banking

The institutional behaviour in Nigerian banking that has guided the development of banking, management and banking regulation in Nigeria will be discussed in this chapter. This will include an analogy of the nine phases (for convenience) in banking, the legal framework governing bank management, why banks are heavily regulated and the relevance. It will discuss the pre and post consolidation challenges in the Nigerian banking system. Despite the change in the capital structure from 1952-2005 **(See table 1-1 Chapter 1)** systemic distress has been so pervasive from pre and post colonial rule in the Nigerian banking industry. It will also afford us the opportunity to compare the trend in bank development and results of the study.

Phase 1 (1891-1928)
Phase 11 (1929 -1951)
Phase 111 (1952-1958)
Phase IV (1959- 1968)
Phase V (1969-1976)
Phase VI (1977-1985)
Phase VII (1986 - 1998)
Phase VIII (1999 -2003)
Phase IX (2004 - 2008)

According to First Bank Plc Report (1998) the development of banking and regulation in Nigeria can be discussed under the following phases (for convenience):1891-1928, 1929-1951,1952-1958, 1959-1968,1969-1976, 1977-1985 and 1986-1998,1999-2003 and 2004-2008. Ajekigbe (2009) divided the phases of the banking industry into five. These are Indigenization era (1977-1985), Market deregulation (1986-1993), Guided deregulation (1994-1998), Universal Banking era (1999-2003) and the Consolidation era (2004-2008).

In this study the development of banking and banking regulation in Nigeria will be discussed under nine phases (for convenience).

Phase 1 (1891 – 1928)

This first phase saw the emergency of the first set of banks. Prominent among the foreign banks were African Banking Corporation in 1892 which was absorbed by British Bank of West African (B.B.W.A) now First Bank of Nigeria Plc in 1894, and the Colonial Bank in 1916 which was absorbed by Barclays Bank DCO in 1917 (now Union Bank of Nigeria Plc). These foreign Banks were found to be discriminatory against Nigerian indigenes in their credit operations.

Phase 11 (1929 -1951)

This period witnesses the emergence of the first set of indigenous banks because of the discrimination of foreign banks against Nigerian entrepreneurs. Also the coming of Nationalistic movements resulted in the opening of more indigenous banks. Unfortunately, this era that could be regarded as the era of free banking, also witnessed the failure of these indigenous banks with the same rapidity with which they sprang up. By 1954, 21 out of the 25 indigenous banks operating in Nigeria had collapsed. The only three survivors out of all the indigenous banks are National Bank (dissolved) established in 1933 and Agbonmagbe Bank in 1945 (now Wema Bank) and African Continental Bank in 1947 now dissolved into Spring Bank in recent recapitalization on January 2006 . Another important foreign bank, British and French Bank (now United Bank for Africa) was also established in 1947.Several reasons were advanced as the cause of the failure of the indigenous banks. Poor assets quality, under capitalization, inexperience personnel, overtrading, illiquidity, and the complete absence of any form of regulation and supervision were responsible for their failure.

Phase 111 (1952 – 1958)

This era saw the beginning of banking regulation in Nigeria. The first banking ordinance in Nigeria was enacted in 1952, which provided for a system of licensing, minimum capitalization, liquidity ratio, maintenance of reserve and bank supervision and regulation.

As a result of the bank failures in the early 1950's, the banking ordinance of 1952 vested the power of control of banking in the Financial Secretary. Subsequent acts were passed to strengthen the authorities' regulatory control. These include the CBN Act of 1958 and Bills of Exchange in 1958.

Phase IV (1959 – 1968)

This period witnessed the establishment of Central Bank of Nigeria and its commencement of operations on July 1, 1959. A number of foreign banks were also established during this period, prominent among which were Bank of America (later changed to Savannah Bank now defunct) in 1960 and Arab Bank (later changed to Nigeria-Arab Bank) now merged in the new recapitalization on January, 2006. It was also during this period that Bank Examination began with the setting up of a Bank Examiners Unit at the Federal Ministry

Phase V (1969 – 1976)

This period witnessed a significant milestone with the promulgation of the Banking Decree of 1969, as amended in 1979. Most of the collapsed State/ merged State Government banks were set up during this period. The New Nigeria Bank owned by the former Bendel State was founded in 1970 just like the Rivers state Pan African Bank, which was established in 1970. The Mercantile Bank of Cross River State was set up in 1971. Following the promulgation of the Nigerian Enterprises Promotion Decree (NEPD), the Federal Government indicated its intention to acquire forty percent (40%) equity participation in the erstwhile foreign banks. When the scheme became operational, all those banks complied except City bank of New York, which left the country because of its belief in free market enterprises. This period also witnessed the setting up of a Financial System Review Committee in 1976 by the Federal Government. The Committee under the chairmanship of Dr.Pius Okigbo made recommendations, most of which the Federal Government accepted, to streamline the structure and improve the operations of the banks in particular and the entire financial system in general. This era could be regarded as the finest hour of glory for the banking system in particular and the financial system in general.

Phase VI (1977– 1985)

The NEPD that is the Nigerian Enterprises Promotion Decree was amended in 1977 with banking business categorized under schedule 11. The Federal Government therefore increased its ownership in these expatriate Banks from 40 to 60 percent. This period therefore witnessed the indigenization of the top management of these former expatriate banks. Another major development during this period was the initiation and establishment of the rural bank schemes (phases 1, 11, and 111) by the C.B.N. There was also the establishment of the Agricultural Credit Guarantee Scheme in 1977. The Scheme was then managed by the Department for Agricultural Finance of the C.B.N. Many more State Government banks came into being during this period in 1982 and 1983, such as Owena Bank (Ondo) now defunct, Progress Bank (Imo) liquidated and Lobi bank (Benue) already liquidated. All these raised the number of commercial banks in the country from 14 in 1970 to 29 in 1980. Three years later the number increased to 25.

Phase VII (1986-1998)

This was the inception of the Structural Adjustment Program (SAP) era, which brought about the deregulation of the financial system to allow for market-determined pricing system. However, SAP came on the heels of economic and financial crises which characterized the nation's life when the favourable trends in resource profile in the 1970s changed dramatically to dwindling fortunes in the 1980s. There was the deregulation of exchange control with the introduction of the second-tier foreign exchange market (FEM) in September, 1986 (Changed to FEM and now IFEM). There was also Liberalization in the granting of banking license from 1986 and by the end of December, 1990, 107 (58 commercial and 49 merchant) licensed banks were operating in Nigeria from 40 (28 commercial and 12 merchant) licensed banks as at the end of December, 1985 (CBN, 1988). This was to allow for competition, creativity and efficiency in banking services delivery. In August 1987 came the deregulation of interest rates to assist banks maximize their deposit mobilization. This was seen as an integral part of the deregulation process of freeing the financial system for market forces to prevail, and motivate the banks to mobilize the reservoir of idle funds in the economy. The promulgation of Decree No. 22 of June, 1988 led to the establishment of Nigeria Deposit Insurance Corporation (NDIC).

The NDIC insures bank deposits in order to promote stability, confidence, safety and sound banking system in Nigeria.

Phase VII1 (1999-2003)

This was the era of Universal banking. With the return to civilian rule in May 1999, there was an apparent return to the path of economic reforms. Universal Banking was adopted in January 2000 in response to unprecedented pressure from merchant banks clamouring for a level playing field due to their disadvantage position especially with respect to cost of funds. In the five years to 2004, the CBN stepped up its supervisory role over banks while making concerted efforts to shut down arbitrage windows in the foreign exchange markets. In addition to the above, CBN undertook an internal reform programme tagged project EAGLE, which was designed to improve its regulatory efficiency and effectiveness.

Phase IX (2004 - 2008)

The consolidation era/Soludo era has been discussed in chapter 1. According to Soludo (2004), this is the era tagged "the 13 point reform Agenda for Repositioning the CBN and the Financial System for the Century".

2.2 LEGAL FRAMEWORK GOVERNING BANK MANAGEMENT

The Central Bank Act, 1958 (as amended) and the Banking Act 1969 and Bank and Other Financial Institution Act (BOFIA as amended) constituted the legal framework within which the CBN operates and regulates banks. Overtime, these laws became grossly inadequate to cope with challenges in the banking and other financial services industry. The wide range of economic liberalization and deregulation measures following the adoption, in 1986, of a Structural Adjustment Programme (SAP) resulted in the appearance of more banks and other financial intermediaries. Decrees 24 and 25 of 1991 were, therefore, enacted to strengthen and extend the powers of the CBN to cover the new institutions in order to enhance the effectiveness of monetary policy, regulation and supervision of banks as well as non-banking financial institutions. Unfortunately in 1997, the Federal Government of Nigeria enacted the CBN (Amendment Decree No. 3 and Banks and Other Financial Institutions [BOFID (amended)] Decree No.4 to remove

completely the limited autonomy, which the bank enjoyed since 1991.The 1997 amendments brought the CBN back under the supervision of the Ministry of Finance. The composition of the Board was also changed to comprise a part-time Chairman, the CBN Governor. The Deputy Governors of CBN, the Director-General, Federal Ministry of Finance, the Managing Director, Nigerian Deposit Insurance Corporation (NDIC), and four other part-time members. The Board was empowered to approve, among others, the Bank's annual Budget, audited accounts, the formulation of monetary and credit policy, as well as devise suitable mechanism for the determination of exchange rate.

The Act made CBN directly responsible to the Minister of Finance with respect to the supervision and control of banks and other financial institutions, while extending the supervisory role of the bank to other specialized banks and financial institutions. The amendment placed enormous powers on the Ministry of Finance while leaving the CBN with a subjugated role in the monitoring of the financial institutions with little room for the Bank to exercise discretionary powers. Similarly, in 1997, the NDIC Decree No.22 of 1988 was reviewed and amended to give more powers to the NDIC as well as autonomy from the CBN. The corporation was given power to assume supervisory responsibility over insured banks. The legal framework within which the CBN operates is the CBN (amendment) Decree No. 37 of 1998, which repealed the CBN (Amended) Decree No. 3 of 1997. The Decree provides a measure of operational autonomy for the CBN to carry out its traditional functions and enhances its versatility. Specifically section 2 of the 1998 Decree contains the amendments to the membership of the Board of Directors of the Bank, which restores its chairmanship to the CBN Governor. Other members of the Board are the Deputy Governors, the Permanent Secretary, Ministry of Finance and five part-time Directors. The Decree also reconstituted the Financial Services Regulation Committee (FRSC) for the purpose of co-coordinating the supervision of financial institutions in the country.

Membership of the committee comprises the CBN Governor who is the Chairman, Director General, Security and Exchange Commission, the Commissioner for Insurance, the Registrar General, Corporate Affairs Commission and a representative of the Federal Ministry of Finance not below the rank of Director. Furthermore, the regulatory power of

the CBN was strengthened by the Banks and other Financial Institutions (Amendment) Decree No. 38 of 1998 which repealed BOFID (Amendments) Decree No.4 1997. Through the amendments, the CBN may vary or revoke any condition subject to which a license was granted or may impose fresh or additional condition to the granting of a license to transact banking business in the country. The Decree also empowered the bank to examine the books of specialized banks and other financial institutions, including Development Banks plus all Primary Mortgage Institutions, Community Banks (Now Microfinance bank), Peoples Banks (already scrapped), Bureau De Change and Discount Houses. By the Decree, the CBN's power on banks, specifically those relating to withdrawal of licenses of distressed banks and appointment of liquidators of these banks, including the NDIC was restored. Thus the inconsistency in bank regulation has affected performance of bank management since they could not sustain the gains from frequent change of policies.

2.2.1 Law Regulating the Financial Environment

Law refers to those statutes, Decree, Act, edict that guide and regulate the operations and activities of individual and companies operating within the financial environment. The financial environment consists of both banks and non-bank financial institutions. These laws include: banking laws, insurance law, money laundering law as well as economic and financial crime edicts. Banking laws regulates the banking environment.

Nigerian Financial Environment

The Nigerian financial environment consists of financial market (that is capital and money market), banks and other non-banks financial institutions as well as regulatory agencies regulating the activities of individuals operating within the financial environment. The banks are regulated by the Central Bank and the NDIC. SEC regulates the capital market and various bodies constituted to regulate their affairs regulate the non-banks.

2.2.2 Banks Regulatory Agencies and Why Banks are Heavily Regulated

Banks operating in Nigeria and in most other countries of the world must contend with heavy regulations as well as rules enforced by federal and state agencies governing their

operations, type of service offered, capital reserve, quality of their loan and advances, the way and manner in which they grow and expand their facilities for better services.
As bankers work within the financial system to supply loans, accept deposits, and provide other services to their customers, they must do so within a climate of extensive regulation, designed primarily to protect the public. The regulatory agencies include the Central Bank of Nigeria and the Nigeria Deposit Insurance Corporation regulating the banking system.

Duties of the regulatory agencies

- They are ever demanding for more capital, more reports, and more transparency on the bank management.
- They approve new entrant into the banking industry.
- They also approve types of deposits and other financial instruments banks sell to the public to raise funds.
- They review quality of a bank's loans and the adequacy of its capital.
- They approve construction of bank building, merger with other bank, setting up a branch office, acquiring or starting a non-bank business for existing banks.
- They give approval in case of voluntary liquidation from the government agency that are granted license for operation.

Why banks are heavily regulated

According to the bank and other financial institutions act (BOFIA), banks are regulated for the following reasons:

Leading repositories of public savings

Individual, families, corporation and organization place their saving in bank in form of short or long term deposit of highly liquid instruments. Banks also hold large amounts of long-term savings in retirement accounts. The loss of these funds due to bank failure or bank crime would be catastrophic to many individuals and families. Many depositors lack the financial expertise and depth of information needed to correctly evaluate the riskiness of a bank therefore, the regulatory agencies are charged with the responsibility of gathering and evaluating the information needed to assess the true financial condition of banks in

order to protect the public against loss.

Power to create money

Banks are also closely watched because of their power to create money in the form of readily spendable deposit by making loans and investments. Money created by banks' has significant impact on the economy, it could bring about creation of jobs as well as presence or absence of inflation that is why they are regulated.

Non- selective credit

Banks provide individuals and businesses with loans that support consumption and investment spending. The public has a keen interest in an adequate supply of loans flowing from the banking system where discrimination in the granting of loans is not present. If access to loan is denied because of irrelevant factors, it deters progress in the nation. Government could eliminate discrimination by enforcing non-selective credit.

Taxation and financing of government project—

Banks have a long history of involvement with government. Government rely on banks to finance project embarked upon by the government and the bank tax form a large portion of the company income tax.

Protection of depositors and bank solvency

Banks are heavily regulated because of the creation of NDIC who bears the cost of failures. This is to preventing banks from taking excessive risks that would impair the solvency of the bank. Excessive risk taking can be controlled by the imposition of risk – related insurance premiums and close supervision.

2.2.3 Role of Central Bank in Monitoring the System Through Bank Supervision, Examination and Inspection

Bank supervision – section 30 (1) -- (8) (BOFIA) provides guidelines for bank supervision. The supervisory function of the CBN is structured into three departments;

- Bank Examination, which carries out on- site supervision,
- Banking supervision, which carries out off-site supervision and,
- Other financial institutions department (OFID) which supervises the non- bank financial institutions under the purview of CBN supervision

The directors of this departments report to the deputy governor, financial sector surveillance bank examination. The on -site supervision department provides independent assessment of banks' corporate governance, internal control system, reliability of information provided, etc. The field examinations is carried out within six month of commencement of the operation by a new bank and addresses specific areas of operation of a bank e.g. credit and special examination which is carried out as the need may arise as provided in **section 32** of the Banks and Other Financial Institutions Act. The Off-site supervision reviews and analyses the financial conditions of banks using prudential reports, statutory returns and other relevant information. The Bank Analysis System (BAS) is software developed for analyzing the data provided by banks. It also monitors trends and developments for the banking sector as a whole. Industry reports are generated on monthly and quarterly basis. Off-site supervisors also conduct spot-checks for quick confirmations/verification.

The supervisory departments operate a team-based structure in which supervisors are organized into teams. In the off-site department, individual supervisors within each team are attached to the banks as relationship managers. With this arrangement, the supervisor is able to have a complete picture of the condition of the institution he supervises. For on-site, each team also has a set of banks attached to it for examination. In distributing the banks, related banks are grouped together as much as possible. That way, a supervisor would have a complete picture of the condition of the institution he supervises. Other Financial Institutions Department (OFID) handles the supervision of community banks (CBs) now Microfinance banks (MFBs), Primary Mortgage Institutions (PMIs), Finance Companies and Bureau de Change. The department carries out both on-site and off-site supervision of these institutions. OFID also operates a team-based structure like the other departments.

Section 30 - (BOFIA) expressly specify as follows;

1. There shall be an officer of the Bank who shall be appointed by the Governor known as the Director of Banking Supervision or by such other titles as the Governor may specify.
2. The Director of Banking Supervision shall have power to carry out supervisory duty in respect of banks and for that purpose shall-
    a. Under condition of confidential, examine periodically the books and affairs of bank;
    b. Have a right of access at all times to the books, accounts and vouchers of banks;
    c. Have power to require from all directors, managers and officers of banks such information and explanation as he deems necessary for the performance of his duties under this section.
3. The Governor shall appoint to assist the Director of Banking Supervision such other officer of the bank as the Governor may, from time to time, decide.
4. The officers may be designated examiners or have such other title as the Governor specify.
5. For the purpose of this section, references to examiners; refers to the Director of banking supervision and any officer of the Bank appointed pursuant to subsection (3)
6. In examining the affairs of any bank under this decree, it shall be the duty of the examiner to avoid unreasonable hindrance to the daily business of the bank.
7. Every bank shall produce to the examiners at such times as the examiners may specify books, accounts, documents and information which they may require.
8. If any book, document or information is not produced in accordance with the requirement, examiner may under this section or what is produced or furnished to an examiner is false in material particularly, the bank is guilty of an offence and liable on conviction to a fine of and in addition, to a fine of ,000 for each day during which the offence continues.

2.3 BANK SUPERVISION

Section 30 (1) empowers the Governor of the CBN to appoint an officer who shall be known as the director of banking supervision. The director of banking supervision shall have power to carry out supervisory duties in respect of banks for this purpose. He shall examine periodically the book and affairs of each bank, access at all times to the book and accounts and have power to require from the officers of bank such information and explanation as he deems necessary for the performance of his duties.

Section 32 (i) empower the Governor to order a special examination or investigation of the books and affairs of the bank where he is satisfied that:

(a) It is in the public interest to do so.

(b) The bank has been carrying on its business in a manner detrimental to the interest of the depositor and creditors.

(c) The bank has insufficient assets to cover its liabilities to the public.

(d) The bank has been contravening the provision of this decree.

(e) An application made therefore by-

(i) A director or shareholder of the bank

(ii) A depositor or creditor of the bank.

Section 32 (4) permits the governor of the CBN to order that the bank examined pay all expenses or an incidental to an examination or investigation or investigate.

2.3.1 Supervisory Power the Central Bank of Nigeria

Section 59 confers on the CBN power to supervise and regulate the activities of non-bank financial institutions. The bank appoints examiners and any other person to carry on regular examination of the books and affairs of other financial institutions. Where it is in the public interest to do so, the CBN governor may also order special examination of any non-bank financial institution and for that purpose, appoint one or more qualified persons to conduct such special examination and under condition of confidentiality.

2.3.2 Importance of Adequate Financial Condition and Supervision of the Safety and Soundness of Nigerian Banks

Maintenance of stability and confidence in the financial system

The key objective of prudential supervision is to maintain stability and confidence in the nation's financial system, by reducing risk of loss to depositors and other creditors. Also, supervision is often directed towards verifying compliance with laws governing banks and their activities.

Control of entry into the banking system

Banking supervision is based on a system of licensing, which allows supervisors to identify the population to be supervised and to control entry into the banking system. In order to qualify for and retain a banking license, entities must observe certain prudential requirements. In addition to licensing new banks, they also have the authority to review and reject any proposal to transfer significant ownership or a controlling interest in existing bank to other parties.

Timely corrective action – Bank supervisors have at their disposal recourse to legal power to bring about timely corrective action when a bank fails to meet prudential requirements, when there are violation of laws or regulations, or when depositors are faced with a substantial risk of loss. In extreme circumstances, the supervisor may have the authority to revoke the bank's license.

Ensure high standard of bank audit

Supervisors have a clear interest in ensuring high standards of bank auditing. Moreover, an important concern of supervisors is the independence of the external auditor who performs the audit of a bank, particularly when the auditor also provides certain types of non-audit services to the bank.

Source of information

Effective supervision involves collection and analysis of information about supervised banks. For example, supervisors collect, review and analyze prudential reports and statistical returns from banks. These include basic financial statements as well as supporting schedules that provide greater detail.

The Prudential guideline issued by CBN in November 1990 was aimed at ensuring a stable, safe and sound banking system. It is meant to serve as a guide to banks to:

i. Ensure a more prudent approach in their portfolio classification, provisioning for non-performing facilities, credit portfolio disclosure and interest accrual on non-performing assets.
ii. Ensure uniformity of their approach in (i) above and ensure the reliability of published accounting information and operations.

The change in Nigeria's banking environment occasioned by the economy's new philosophy of deregulation and the introduction of a Deposit Insurance Scheme made the need for such guidelines more operative. Deregulation makes the industry to be more competitive and therefore there is the likelihood for depositors to get into more risky and unfamiliar undertakings. The overstatement of unearned profits by banks, which enables them to declare dividends thereby eroding their capital base, is a serious concern to the supervisory and regulatory authorities. The international nature of banking reinforces the need to strive to attain internationally acceptable prudential standards. In 1991, the Bank and Other Financial Institutions Decree (BOFID) No. 25 was issued which till date remains the statute governing the formation, administration, powers and duties of licensed banks and the supervisory and regulatory role of CBN over the licensed banks.

2.4 PRE AND POST CONSOLIDATION CHALLENGES IN THE NIGERIAN BANKING SYSTEM

In a bid to raise the N25 Billion, banks that were unable had to merge with stronger banks through the process of consolidation. Nigerian banks were faced with both pre and post consolidation challenges. The pre-consolidation challenges experienced in the Nigeria case include the following:

Raising of Bank Capital using Laundered Financial Resources

All banks that were in the capital market to source funds reported over subscription. The regulatory challenge here relates to how the Regulatory Authorities prevent money laundering in banks during consolidation period, especially when the instruments for payments might have been 'coloured' beyond recognition by the various issuing houses and receiving agent? To what extent are co- investors compatible? The present ownership structures may make management of emerging banks very complex as it may be difficult to identify 'fit and proper person' Therefore, all banks should adopt the Know Your Customer (KYC) principle in pursuing the consolidation programme.

Raising Capital Using Depositors' Fund

There are indications that depositors' funds have been utilized to grant loans for share acquisition in the pursuit of the consolidation programme. Such a practice, apart from being a violation of CBN guidelines, may lead to asset/liability mismatch if depositors' funds are locked into equity investment.

Increased Level of Risk during the Integration Process

During the consolidation process, the overall risk profile of the new entity could increase because of the integration risk and the complexity of the rationalization process. Common reasons for possible escalation of the risk profile of the merged entity, especially initially, include failure of control system, lack of management focus and poor understanding of 'adopted' risk. This situation poses a challenge to the NDIC to the extent that the safety of depositors' funds could be adversely affected.

2.4.1 Post-Consolidation Challenges in the Nigerian Banking System

Most of the empirical literature suggests that bank consolidations do not significantly improve the performance or efficiency of the participating banks, Berger et al. (1999).

The following are the possible post consolidation challenges in the Nigerian case:

Possibility of bank failure

The possibility of multiple bank failure would inevitable task the financial resources and executive capacity of NDIC. The challenge of multiple bank failure becomes an issue of concern when account is taken of the impending review of the maximum deposit insurance from ,000 to ,000 before the National Assembly and the clamour for downward review of the premium rate paid by insured institutions The upward review has the effect of increasing the liability of the Corporation when a bank fails, a downward review of the premium rate has the effect of reducing the premium collectible from insured institutions (the major source of the deposit insurance fund, from where the obligation of payment of insured deposits is met).

Weak Corporate Governance

Responsive corporate governance is always an aspect that is closely monitored by the regulatory authority in order to ensure the transparency and accountability of management of banking institutions and the curtailment of their risk taking. Responsive corporate governance involves the enthronement of mechanisms, processes and systems for ensuring that there is appropriate direction and oversight by directors and senior management; there is transparency and accountability to the various shareholders; the organization complies with the applicable legal and regulatory requirements; there is disclosure of all material information to stakeholders such as investors, depositors, regulatory authorities and the organization viability and solvency is sustainable through adequate internal controls and audits as well as appropriate risk management framework. With the emergence of mega banks, weak or poor corporate governance becomes an issue as it can cause rapid collapse of an institution. In view of the fact that the systemic repercussion of the failure of a big banking institution is grievous, the regulatory authorities would therefore, continue to encourage the enthronement of responsive corporate governance structure for effective risk management both during and post consolidation.

Inadequate Executive Capacity

The ability of executive management to build and mould a management team that is able to lead the merged banking entity in the process of merging IT systems, business lines and

products, cultures and people should be of critical importance and of particular concern to NDIC. In that regard, the management of the merged entity needs to have the ability to identify the integration risks at an early stage and manage them effectively.

Supervisory Approach

The current supervisory approach in Nigeria, which is transaction and compliance based, is narrow in scope and uniformly applied to all supervised institutions. The adoption of a robust, proactive and sophisticated supervisory process, which is based on risk profiling of the emerging big banks is imperative with consolidation. Consolidation requires consolidated supervision that will involve consultation and cooperation amongst the various regulatory; supervisory institutions in the system. It is imperative that the present reporting format of banks be reviewed so as to incorporate all possible activities that banks undertake under the present dispensation. Therefore, it is necessary for supervisors to obtain a global view of the bank's operation. The current efforts of the CBN and NDIC in the development of electronic Financial Analysis Surveillance Regulation System (e FASS) and the activities of the Financial Service Regulation Coordinating Committee (FSRCC) would go a long way to assist in this regard.

Information Asymmetry between banks and Investing Public

There is need to bridge the current information disclosure requirements in the industry such that information asymmetry between banks and investing public that consolidation creates will be minimized. Some of the information asymmetry between banks and investing public in respect of Initial Public Offers (IPOs) are misleading. Adequate information disclosure requirement will force banks to pay greater attention to reputational risk that could result in loss of confidence as well as patronage.

2.5 RISK EXPOSURE AND MEASUREMENT OF CAPITAL ADEQUACY

The findings of Modigliani and Miller (1958), Berger, Herring and Szego, (1995) as reported in White and Morrison (2001) posited that in a world with perfect financial markets, capital structure and hence capital regulation are irrelevant. In White and Morrison (2001), Rochet (1992) stated that capital adequacy help to reduce risk

– shifting by bankers whose assets are insured while Diamond and Dybvig (1983), Diamond and Rajan (2000) posited that capital adequacy helps in preventing destructive bank runs. Ross (2002) used selected capital ratios to measure capital adequacy such as: total capital / total deposits, total capital /total assets.

Where risk assets include all bank assets, if a bank has excessive asset quality and earning problems, more capital will likely be necessary. The idea of minimum capital on all banks actually began in the United States in December 1981. Prior to that date subjective approach was used and it relied on peer group comparisons to decide if a bank had enough capital. The judgment method for assessing the adequacy of a bank's capital looks at the following: Management quality, Asset liquidity, Earnings history, Quality of ownership, Occupancy costs, Quality of operating procedures, Deposit volatility and Local market conditions. It was reported by Nwude (2005):

> *"That the amount of capital funds a bank needs should be related to the risks it assumes. The greater the risks, the more the capital funds. It can increase its capital as the risk it assumes increases, or invest in assets that are relatively free of risk. He opined that capital adequacy is the relationship between the degree of risk a bank takes and the amount invested by its owners".*

Ross (2002), Macdonald and Koch (2003) explained that banks are faced with several risks, such as credit risk, liquidity risk, interest rate risk, operating risk, exchange and crime risk all of which affect shareholders funds. Credit risk occurs when the customers fail to pay interest and principal payments on due date which eventually erode bank's capital. Liquidity risk is the danger of not being able to meet credit request of customers due to shortage of cash. Interest rate risk is the probability that fluctuating interest rates will result in significant appreciation or depreciation in banks assets. Operating risk results from fluctuations in economic conditions that could adversely affect the bank's performance. Exchange risk results from adverse movements in currency prices while the bank is trading for itself or for its customers. Crime risk is the danger that a bank will lose funds as a result of robbery.

Also in the CBN Banking and Supervision Annual Report (2003), the practice of specifying the minimum paid up capital for banks is in line with the provisions of section 9 (1) of Bank and Other Financial Institutions Act (BOFIA). According to the Basel Committee of the Bank for International Settlement of 1988 and 1992, banks are to maintain, as capital funds, not less than 8 percent of their total risk-weighted assets with effect from January 1992. Also 50% of the bank's capital must comprise of primary or Tier 1 capital defined as paid –up capital and undisbursed reserves of statutory and general nature. The model used in evaluating performance of banks by CBN is the acronym CAMEL. According to CBN (2003), this stands for Capital, Asset, Management, Earnings and Liquidity. In the literature, MacDonald and Koch (2003) reported that Financial Institutions Rating System encompasses six general categories of performance labeled CAMELS: C = Capital Adequacy, A = Asset Quality, M= Management Quality, E =Earnings, L= Liquidity, S = Sensitivity to Market. The Federal Deposit Insurance Corporation in America (FDIC) as reported in Macdonald and Koch (2003) numerically rates every bank on each factor, ranging from the highest quality (1) to the lowest quality (5). A composite ranking of 1 or 2 indicates a fundamentally sound bank, while a ranking of 3, 4 or 5 signifies a problem bank with some near term potential for failure. A bank must adhere strictly to all capital adequacy guidelines issued by the CBN. According to CBN Bullion editorial comment (2004), capital adequacy can be measured amongst others by the following:

*Equity/Total Asset Ratio

Equity/*Risk Asset Ratio

Equity/Fixed Asset Ratio

Equity/Total Deposit Ratio

Debt/Equity Ratio

Where *Equity = Unimpaired or Adjusted Bank Funds and *Risk Assets = Adjusted loans & Advances. Where these ratios of our banks are below the industry average and as recommended by Basel Accord 1 and 2, the need for recapitalization becomes imperative. In finance literature, some of the identified weaknesses that led to bank recapitalization in Nigeria and the world over are size of banks and degree of soundness, stunted growth in the real sector, high lending rate and shunning of real sector, over-dependence on public

sector deposits, unprofessional and unethical conducts, illiquidity and insolvency (Soludo, 2004). Like the CBN, the Nigeria Deposit Insurance Corporation (NDIC) also oversees the activities of insured banks registered with it. One of the greatest risk facing banks is the inability to meet depositors request for demand deposit at the appropriate time. This form of risk is usually due to bank failure. As a result, the NDIC was set by Decree No. 21 of 1988 to pay bank depositors on liquidation of any bank provided such bank as paid 1% of 15/16 of its deposit liabilities to NDIC.

2.6 BANK AND RISK MANAGEMENT

Risk Management is a discipline at the core of banking business and encompasses all activities that affect a bank's risk profile. It involves identification, measurement, monitoring and controlling of risks by ensuring that: the risk exposure is within statutory requirement; sufficient capital is available to serve as buffer in taking risk; risk taking decisions are in line with the business strategy and objectives set by the board; the individuals who take or manage risk clearly understand it and the expected pay offs compensate for any risks taken.

Risk Management is the process whereby organizations methodically address the risk exposure of their activities with the aim of achieving sustained benefits. This is imperative now, more than any other time in the history of the Nigerian banking sector, considering the array of business activities Nigerian banks now engage in, post – consolidation. Banking is bed-rocked on risks; hence, the acceptance and management of risk remain an integral part of the business. Banking institutions should neither engage in any business in a manner that unnecessarily imposes risk upon it, nor absorb risks that can be transferred to other parties. It should rather accept those risks that are uniquely part of the array of bank's services. Zero tolerance of risk is certainly not good banking business just as one hundred per cent tolerance is also not good banking. Risk management requires the involvement of all key stakeholders including the Board, Management and Staff. For effectiveness, the risk management process requires: commitment from the Chief Executive and Executive Management of the organization; assignment of responsibilities within the organization; allocation of appropriate resources for training and development of enhanced risk awareness by all stakeholders.

2.6.1 Consequences of Not Managing Risk in Banks

Banking business thrives on public confidence and such confidence is bed-rock on everything about a bank being seen to be going in the positive direction. Any negative development usually sends wrong signals to the banking public. That makes banking wide risk management imperative especially in this post-consolidation era in Nigeria. Failure to effectively manage risks in banks can therefore lead to such adverse consequences such as: Capital losses, losses of business opportunities; runs on banks; loss of professional standing; loss of public confidence; loss of reputation; possible financial distress. Risk management requires that management should know the severity of the consequences and that management respond accordingly and promptly.

The issue of bank capitalization which often metamorphose into consolidation of banks around the globe has fuelled an active policy debate on the impact of consolidation on financial stability, Beck, Demirguc-Kunt and Levine (2003), Boyd and Graham (1991 and 1998). They concluded banks capitalization/consolidation exercise was designed to improve Nigerian banking system efficiency through the enhancement of the composite units. In the literature, concentration levels have been a major determinant of banking system performance by way of efficiency. The just concluded banks consolidation exercise at the end of 2005, mainly through mergers and acquisitions (M&A) in order to attain a minimum capital base of N25 billion (approx $250 million), is an aspect of the first phase of the reforms. It resulted in the compression of 74 banks, which accounted for about 93 percent of the industry's total deposit liabilities, into 25 new banks (Komolafe and Ujah, 2006). The recent merger of IBTC and Stanbic banks in 2008 has reduced the number of banks in Nigeria to 24. The greater subsidy for large banks may in turn intensify risk-taking incentives beyond and diversification advantages enjoyed by them, thereby increasing the fragility of concentrated banking system. Berger, et al (1995) find evidence that the increase in the proportion of banking industry assets controlled by the largest banking organizations in the 1990s, due to the liberalization of geographic restrictions on banking in the United States, may have been responsible for part of the credit crunch observed in 1989-1992.

Berger and Udell (1996) and Canonero (1997) find that large banks not only tend to have a smaller proportion of their loans made to small borrowers, but also tend to charge lower prices than other banks to small borrowers, indicating that large banks only issue business loans to higher-quality credits. It has also been argued that the higher the concentration in the local banking market, the higher the prices for financial services and that may lead to increase in the banks profit. This is because banks in less competitive environments charge higher interest rates to firms. If concentration is positively associated with banks having market power, then concentration will increase both expected rate of return on bank assets and the standard deviation of those returns (Beck, Demirguc-Kunt and Levine, 2004). One can infer that the policy implication is that higher market concentration is associated with lower socio-economic welfare and therefore is undesirable. As a consequence of the above, Holden and El-Bannany (2006) opined that in the United Kingdom the Monopolies and Mergers Commission (1996) became wary of a concentration ration that is 25 percent or more of the banking market in terms of total assets or deposits. According to Ebhodaghe (1994), reported in Oluitan (2004):

> *"Capital inadequacy has affected the financial health of banks. He explained that an analysis of bank capitalization revealed that as at the end of 1992, almost all banks (120) operating in Nigeria required additional capital totaling N0.6billion to support their volume of trading. This amount was the variance between the amount stipulated by the monetary authorities for prudential minimum capital and the aggregate capital outlay. By 1993, this variance further deteriorated to .1 billion".*

No one wish to see a bank collapse inspite of the leverage provided by Deposit Insurance Corporation to customers when it occurs. To instill confidence in bank customers and other stakeholders', safety, soundness and financial condition of banks are crucial. Sachs, et al (1995) reported in Oluitan (2004) in his study of 20 emerging banks, observed low reserves as one of the crisis plaguing banks. Oluitan concludes that these anomalies have led to erosion of public confidence in the banking sub-sector as a result of the growing number of distressed banks experienced in the past, which affected the liquidity position of banks. In recent years, a wave of bank consolidations has spread across the world.

According to Amel et al (2002), “more than 8000 bank consolidations occurred between 1990 and 2001 and the total value of the deals reached about $1,800 billion”. It is notable that one of the major driving forces of the recent wave of bank consolidations has been government policy. For example, since the Asian Financial Crisis in 1997, the financial authorities of Asian countries have been promoting bank consolidations and the Japanese government initiated a policy of promoting consolidations among regional financial institutions on the grounds that this policy would contribute to the stabilization of the banking system Berger et al. (1999); Shih (2003). The idea underlying the use of a consolidation promotion policy during a financial crisis is that bank consolidations would assist in risk asset diversification, Shih (2003).

2.7 PROTECTING OF BANK DEPOSITORS AND COLLECTION OF INSURED SUMS

The Nigeria Deposit Insurance Corporation (NDIC) protects bank depositors against loss. Firstly, the NDIC guarantees the payment of deposits up to a maximum of ,000 but ,000 has been proposed in the NDIC Amendment Act before the National Assembly to a depositor in the event of the failure of a participating financial institution. Balances in all deposit accounts held in the same right and capacity by a depositor in all branches of the closed insured institution, net of outstanding debts, are aggregated to determine the maximum insured amount. Secondly, the Corporation is empowered to provide financial and technical assistance to failing or distressed banks in the interest of depositors. The financial assistance can take the form of loans, guarantee for loan taken by the bank or acceptance of accommodation bills. On the other hand, the technical assistance may take the following forms: take-over of management and control of the bank; change in management; and/or assisted merger with another viable institution.

Thirdly, the corporation supervises banks so as to protect depositors, ensure monetary stability, and effective/efficient payment system as well as promote competition and innovation in the banking system. Banking supervision seeks to reduce the potential risk of failure and ensures that unsafe and unsound banking practices do not go completely unchecked. It also provides the oversight functions required to preserve the integrity of and promote public confidence in the banking system. Insured sums are collected by depositors

filing their claims through the completion of relevant forms provided by the corporation. In addition, they have to furnish the Liquidator with account documents such as unused chequebooks, old cheque stubs, passbooks, fixed deposit certificates e.g. the depositor would also be required to identify him/ herself with a valid identification document like driver's license or International Passport. After verification of ownership of the account as well as the account balance, the depositor would be duly paid the insured sum by a designated Pay Centre which is usually not far from the branch where he/she maintains the account. However, where claims are filed later but within the statutory period of 18 months, agent banks duly appointed by the Corporation would make such payments.

If a depositor loses his/her passbook or saving documents, a police report along with a sworn affidavit duly certified by the court must be presented. The depositor will also be required to identify him/herself with a valid Identification document like driver's license or International Passport. The primary mandate of the NDIC is to protect depositors. However, through supervision to ensure safety and soundness of banking institutions, the interests of creditors and shareholder are also protected. In the event of bank failure, creditors and shareholders could be paid liquidation dividends after depositors have been fully reimbursed.

NDIC pays depositors liquidation dividend in case of bank failure. Liquidation payments are payments made to depositors of failed institutions in excess of the insured sum. While the insured sums are paid from the Corporation's Deposit Insurance Fund (DIF), liquidation dividends are paid from funds realized from the sale of the assets and recoveries from debtors of the failed institutions. However, the system is designed to protect small depositors since they are generally more in number and less informed about the safety and soundness of depository institutions. Unlimited coverage could induce excessive risk-taking, promote moral hazard and weaken market discipline.

The Deposit Insurance limit is not increased merely by dividing funds owned in same right and capacity among different types of deposits in the same bank. For example, current and saving accounts owned by the same depositor, in the same right and capacity, in the same bank are added together and insured up to the maximum. The maximum insurance limit is applicable to deposit in each of the participating banks. In the case of a bank having one or

more branches, the main office and all branch offices are considered as one bank. Therefore, if a person has many accounts in one bank, all the deposits are taken together as one account even if the deposits are in various branches of the same bank. However, if a depositor has accounts in more than one bank, they are insured independently up to the maximum insured sum per bank.

2.8 CURRENT ISSUES IN THE NIGERIAN MACRO-ECONOMY

Despite the recent recapitalization of banks, the Nigerian government needs to address the drawbacks plaguing the system or else the economy will continue to experience negative indices. Ige (2006) posited that the country could go into the doldrums if:

i. The current socio-economic reforms fail to addressed the desired objectives of National Economic Empowerment and Development Strategy (see NEEDS);
ii. Corrupt leaders continue to have their way without being confronted and brought to justice;
iii. The neglect of rural transformation continues or intensifies;
iv. The current democratic dispensation turns out to be incongruous with economic realities
v. The international community fails to tighten the noose on Nigerian politicians who have illegal accounts in foreign banks.

The economy has suffered neglect in many sectors such National Electric Power Authority (NEPA) now commercialized and called Power Holding Company of Nigeria (PHCN), privatized Nigerian Telecommunications (NITEL). Competition, technology and innovation constitute the game of industrial progress, in a world that is in the grip of globalization. In the past, government had simply announced a new petrol price and faced the wrath of hostile citizenry. Despite the frequency of increases, the government discovered that this did not make things work. This can be traced from the 1970's and it goes to show that only a backward economy government fixes the prices of goods that should be available freely in the market. That was the route Soviet Union took which led to its ruinous end and subsequent disintegration. Reform is an endless matter in a dynamic world. Besides PHCN and NITEL, reforms are ongoing in various sectors of the economy such as:

i. Privatization of public enterprises and government holdings in banks and oil marketing companies.

ii. Establishing of Petroleum Products Price Regulatory Agency (PPPRA);

Government is seeking to achieve the following;

i. Ensuring additional financial resources which government itself cannot afford;

ii. Encouraging additional financial resources which government itself cannot afford.

iii. Establishing a culture of management and cutting edge for excellence;

iv. Prioritizing the use of resources rather than dissipating a large chunk on unproductive ventures thereby encouraging corruption.

2.8.1 Bank Performance and Macroeconomic Variables and Some Theoretical Perspectives

McConnel and Brue (2001) argued that the rate of interest, the exchange rate, and the general price level play an important but complex and interdependent role in any economy. Nyong (1996) in his study included interest rate and exchange rate, bank resources, banking structure, unit labour costs and size of banks as dominant factors affecting the behaviour and performance of commercial banks. It is important to note that the spread between deposit rate and lending rate is a significant explanation of the profit while black market premium on exchange rate plays the same role. Other factors include management efficiency, labour cost, bank reserves, capital investment and operating efficiency. Neither the effect of capitalization nor the structure of the capital base feature in Nyong and other studies till date.

Macroeconomic indicators such as interest rate and exchange began to gain importance in macroeconomic models in Nigeria after the Structural Adjustment Programme in 1986. Before then; there was a lid on interest and exchange rate as these were usually fixed by government fiat. Olofin and Iyoha (1999) confirmed in their studies that exchange rate and interest are hardly statistically significant because they were fixed variables and not because they were inconsequential. Molyneux and Tornton (1992) were the first to explore thoroughly the determinants of bank profitability on a set of countries. They used a sample of 18 determinants of European countries during the 1986 – 1989.They find a significant

positive association between return on equity and level of interest rates in each country, bank concentration and government ownership. Abreu and Mendes (2002), investigate the determinants of bank's interest margins and profitability for some European countries in the last decade. They find that well capitalized banks face lower expected bankruptcy costs and this advantage translates into better profitability.

Bashir (2000) examines the determinants of Islamic bank's performance across Middle Eastern countries for 1993-1998 periods using a number of internal and external factors there to predict profitability and efficiencies. The results show that higher leverage and large loans to asset ratios, lead to higher profitability. The study also showed that foreign owned banks are more profitable than domestic one. There is also evidence that taxation impact negatively on bank profitability.

Corporate performance evaluation compares actual outcome on designated criteria with some notional standard in order to ascertain the extent to which expectations have been met or other-wise (e.g. ROA, ROE, Capital, profit and its derivatives). Essentially, performance, as measured by profitability, is a function of cost and revenue given the constraint imposed by economic, social, political and technological situations often dictated by government policies. Baumol's (1959), Marris's (1963) and Williamson's cited in Ade Ojo (1992), have as one of their facts, the profitability of business organizations, is a function of cost and revenue generated in course of production.

Shepherd (1979) stated in his proposition that performance goals for market activity can be of efficiency, equity and other criteria. Our main concern here is the issue of efficiency. He classified efficiency into three main categories. Firstly, there is internal efficiency (X-efficiency) and can be attained in well-managed firms which minimize costs for any given level of output. Secondly, there is allocative efficiency in which all firms and consumers reach equimarginal conditions of price equal to marginal cost including marginal rates of substitution and transformation equal to price ratios. Allocation cannot be altered so as to raise the total value of output. Thirdly, there is the dynamic efficiency which deals on how present resources for future inventions and innovation are allocated efficiently. For instance, the X-efficieny is an excess of actual costs over minimum costs (excess

cost/actual cost). Where excess cost exceeds actual cost, bank management need to employ innovative ways of curtailing it so as not to erode profit of the organization.

Ojo (1992) and Oluyemi (1995), cited in Eke (1999) opined that the financial condition of banks can be assessed using some basic indicators and trend analysis such as Capital Adequacy, Asset Quality, Earnings and Liquidity. Apart from quantitative factors, qualitative factors such as quality of management, the degree of compliance by banks with applicable banking laws and regulations (e.g Monetary and Credit policy Guidelines), as well as banking services to the local economy are relevant. We shall use the CAMEL parameter- Capital Adequacy, Asset Quality, Management, Earnings and Liquidity as one of the tools in the study. The measures of ascertaining a bank's financial condition and Performance by the regulatory authority are encapsulated in the acronym CAMEL, which stands for:

Capital Adequacy (Owners fund to total risk-weighted assets): Capital Adequacy, a quantitative factor is one of the important indicators of the strength and performance of a bank. The best management cannot turn around an ailing bank if it does not have adequate capital. Assets Quality (Non-performing assets to total loan and advances portfolio): the incidence of large amounts of non-performing loans (bad debts) can put bank management under severe stress. Management (in terms of quality, competence and depth of experiences): the quality of management can make an important difference between sound and unsound banks. Poor management often manifests itself in the form of excessive operating expenses, inadequate administration of loan portfolio, overly aggressive policies to attract deposits. Earnings/Profitability (adequacy and sustainability of earnings over the long term): continued build-up of non-performing assets, would seriously affect banks in generating adequate income on their loan portfolio. The implementation of CBN Prudential Guidelines in 1991 for licensed banks has reduced the paper profit formerly reported by some banks. Liquidity (in terms of adequacy to meet maturing obligations and demand for new credits: inadequate liquidity damages banks' reputation while excess liquidity will retard their earnings.

Where a bank management fails to pay close watch to any of these indices, it could have adverse effect on bank performance. Where a bank is distressed or healthy it would ultimately have recourse to new prospective investor, both local and foreign. Any attempt aimed at successfully recapitalizing any bank must focus on the bank's assets quality, management competence and experience, level of earnings, adequacy of liquidity and image/perception among other factors outside the control of the banks themselves. Healthy banks that intend to attract potential investors should start getting their overall business strategies and focus right.

2.8.2 Shareholders Indicators of Performance

Shareholders expectations of bank performance are mainly centered on the investor's returns and they are used for their analysis. They are: earnings per share, dividend per share, price-earnings ratio, dividend yield and earning yield. Investor's use a combination of these ratios to evaluate bank capitalization, management and performance.

2.8.3 Bank Performance Indicators for the Study

This study is an attempt to investigate the relationship between bank capitalization (dependent or explained variable) bank management and performance in Nigerian banking industry (independent variables) on the other hand. The following variables are used as indicators for gauging bank capitalization: return on assets (ROA) and return on capital (ROC) are outcome from the use of bank capital and actual capital that is shareholders fund (SHF). The following bank characteristic indicators are used as internal determinants of bank management and performance. They are: Liquidity (BL/BD) ratio of bank loans and advances to total deposit (B DEPOSIT) and (LA/BD) ratio of liquid assets to bank deposits (LAD). There is also (EOM i..e Efficiency of Management) that is (OE/TA) ratio of operating expenses to total assets and (BL/BA) ratio of bank loans to Bank assets (B LOAN) and Capital Adequacy (SHF/TA) ratio of Shareholders Fund to total assets, (CAP).

Demerguc-Kunt and Huizingha (1999) examine the determinants of bank interest margins and profitability using a bank level data for 80 countries in the 1988-1995 periods. They used set of variables such as bank characteristics, macroeconomic conditions, taxation,

regulations, financial structure and legal indicators. They find that a larger ratio of bank assets to GDP and a lower market concentration ratio lead to lower margins and profits. Foreign banks also have higher margins and profits than domestic banks in developing countries, while the opposite prevail in developed countries. In a similar study, Demerguc-Kunt and Huizingha (2001) investigated the impact of financial development and structure on bank profitability using bank level data for a large number of developed and developing countries over the 1990-1997 period. The study showed that higher bank development is related to lower bank performance resulting from tougher competition and explains the decrease of profitability.

2.9 MERGERS/CONSOLIDATION THAT HAS TAKEN PLACE IN NIGERIAN FINANCIAL INSTITUTIONS

Until recently, while deposit money banks avoided merger; significant progress was achieved in the merger of various development finance institutions (DFIs), which had overlapping roles. The process, which commenced in the year 2000, was an attempt to give the institutions a better focus and to promote socio-economic development of the country. The Bank of Industry Limited came into being in October 2001, by the merger of the Nigerian Industrial Development Bank (NIDB), Nigerian Bank for Commerce and Industry (NBCI) and the National Economic Reconstruction Fund (NERFUND). Nigeria Agricultural Cooperative and Rural Development Bank (NACRDB) were formed from the merger of Nigeria Agricultural and Cooperative Bank (NACB), Peoples Bank of Nigeria (PBN) and the Family Economic Advancement Programme (FEAP). The Nigerian National Mortgage Bank (NinamBank) originated from the merger of Federal Mortgage Bank of Nigeria (FMBN) and the Federal Mortgage Finance Limited (FMFL).

Lemo (2005) opined that consolidation of banks will stimulate overall investment climate and enhance growth and development. He expatiated that post consolidation would enable banking institutions to support public and private sector partnership in the financing of projects hitherto the exclusive reserve for the public sector, particularly in the areas of infrastructure and social services. Consolidation would help in no small way in meeting the long-term vision of National Economic Empowerment and Development Strategy

(NEEDS), the New Partnership for African Development (NEPAD) and also to meet the target of the Millennium Development Goals intended at creating wealth and reducing poverty.

As stated in Ross (2002), the representative of the United States and representatives from 11 other leading industrialized countries (Belgium, Canada, France, Germany, Italy, Japan, the Netherlands, Sweden, Switzerland, the United Kingdom, and Luxembourg) agreed on new capital standards-often referred to as the Basel Agreement. Banks were required to consider the off-balance sheet commitments in determining their capital position. Nwagwu (2000) opined that adequacy of capital structure has remained a major concern in the administration of indigenous commercial banks in Nigeria. One of the reasons for the collapse of indigenous commercial banks in the 1930's, 1940's 1950's 1990's was due to inadequate capital structure. Hempel and Simonson (1999) carried out a study on the effect of bank size on the acceptable and permissible levels of financial leverage. The result showed that small banks usually have a higher return on assets and a higher percentage of equity to asset The large banks usually have lower than average return on assets and a lower than average percentage of equity to assets, which produces a higher leverage multiplier (assets/equity), and a close to average return on equity because of the greater leverage. Nwude (2005) posited that recapitalization has both positive and negative implications:

"*The positive implications are strong, sound, competitive and reliable big banks, quality management and best practice in corporate governance, improvement in profitability, improvement in credit availability and enlargement of areas of operations, improved professionalism and ethical practices, diluted ownership structure giving rise to professionalism, improved capacity to finance projects, improved depositors/investors confidence, healthy competition, reduction in regulatory abuses, reduced lending rate, higher economic growth rate, deepened level of the Nigerian capital market, attractive investors returns, attractive concessions and creation of new entrepreneurs. The large banks have greater management depth. The negative implications of recapitalization include amongst others are loss of identity, sanction on erring banks, downsizing the*

workforce, flight to safety by depositors, higher shareholders expectation, collusion to form monopoly, business failure, dilution of ownership control, merger and acquisitions, excessive pricing of assets and insufficient attention and follow-up efforts to post-merger implementation".

A vibrant banking sector and an equally vibrant real sector would enhance capacity utilization, which will in turn boost employment and growth in the economy. However, this would be possible if there is good corporate governance. Chukwudire (2004) posited, that in the immediate past two decades the financial services industry has experienced fluctuating fortunes leading to high profile cases of corporate failure and consequent near loss of public confidence. The industry's problems are consequences (directly or indirectly) of bad corporate governance. Good corporate governance leads to public confidence, market efficiency, integrity, financial stability and growth and a fair share of global capital flow to the economy. Unegbu (2004) opined that the crisis witnessed in the Nigerian financial system, especially in the nineties could essential be linked to non-compliance with the principles of sound management which therefore underscores the need to continually raise the awareness of the Nigerian private sector, especially the banking sector, in the area of good corporate governance. According to CBN Banking Supervision and Annual Report (2002) reported by Oyewale (2004); it stated that the twin evil that is distress and eventual liquidation experienced in Nigerian banks in the last one-and –a half decades can be traced to ineffective corporate governance when it declared as follows: "A unique feature of banking business is the overwhelming dominance of depositors' fund in comparison with the shareholders equity". Therefore to check excessive insider lending, among other abuses, which characterized banking business there is need for institutionalization of good corporate governance practices. The issue of corporate governance requires purposeful leadership/management in the financial services industry. According to Ogubunka (2004,

"the leadership we desire is one that breed's positive influence…it is about transformation of "value into actions, vision into realities, obstacles into innovations, separateness into solidarity, and risks into reward".

2.10 CONSEQUENCES OF BANK CAPITALIZATION

The consequences of the recent bank capitalization which culminated in consolidation of banks are as follows:

Market power consequences of consolidation

It is argued in the literature that lending to small and medium enterprises may be adversely affected because banks with market power will tend to reduce lending volumes and increase loan interest rates. In the short run, it might be difficult for banks to make the require profit in the short-run but in the long run, as the bank wax strong, profit will rise beyond the optimal. Studies have also shown that return on assets (ROA) or return on equity (ROE) tend to improve where M&A occur, and the Nigeria banking sector will not be an exception.

Efficiency consequences of consolidation

It could also be a means to change organizational focus or managerial behaviour towards improving efficiency through achieving risk-expected return trade off. Studies have shown that large organizations take the benefits of an improved risk-expected return trade off after consolidation. Such big organizations are able to diversify their risks through increased efficiency which in turn help to lower incidence of insolvency.

Efficient payments system consequences of consolidation

With fewer players in the banking industry, it is possible to agree on payment standards. The operation of payments system exposes banks and participants to various forms of risks, including credit risk, liquidity risk, operational risk, and systemic risk. It is expected that operations of the payments system would be further modernized and standard for realization of desired efficiency.

Safety and Soundness effects

The assumption is that not many large institutions with substantial capital base will have bank run, rather they will experience some degree of soundness in the money market. The larger the institution, the higher the probability of having higher asset base which has the

effect of boosting the image and confidence of the banking public. On the other hand, if the risk of an institution is high, this could raise the probability that the institution will fail or become illiquid before settling some of its payments obligations, thereby exposing other institutions directly to risks as payees or indirectly contributing to panic runs.

Financial Safety consideration

The Nigerian Deposit Insurance Corporation (NDIC) would have to create a formal safety net which involves additional cost to the corporation though; the premium payable by individual institutions might need to be reviewed. The safety net may give additional protection to institutions considered "too big to fail", which may be created by the capitalization/consolidation.

Supervisory effects of consolidation

There is need for the supervisory body (CBN) to improve the level of transparency, good governance and the degree of supervision of risk management systems. Transparency has been a recurring problem in the financial industry in Nigeria, and unless, it is improved upon, it has the potential of making nonsense of the efforts of the supervisors in the present dispensation (New Capital Accord).

Service availability consequence of consolidation

With few players in the banking industry giving rise to additional market power will lead to unavailability of services through shut down of unviable branch offices, as well as avoiding not so profitable business loans. It is also possible to increase the supply of services to customers because better and dynamic banks are able to serve their customers more profitable. Although this does not mean that large, complex financial institutions associated with M&As would reduce services to all small customers, but for those with strong financial statements and valuable collateral, they may receive essentially the same transactions based services as large customers.

Employment effects of consolidation

It is argued in the literature that safety of bank deposits rather than high retrenchment costs (job cuts) should be the concern of policy makers. There is no doubt that the recent capitalization of the Nigerian Banking industry would bring about a change in the nature and quality of employment. Bankers with traditional banking skills and information technology (IT) knowledge may not be seriously affected. The capitalized banks (mega banks) will require management and IT skills as well as other specializes knowledge.

Promotion of depositors' confidence in the system

There is no doubt that in the recent past the banking industry in Nigeria was characterized by failure and loss of depositors' fund, which led to lost of confidence. Thus, Soludo noted in his July 2004 address to the Bankers Committee that the capitalization/consolidation in Nigerian banking industry is expected to promote depositors confidence. Increase in capital base of the banks will make the banks stronger. Financial Commentators in the banking industry have noted that lower capital makes the bank to be weak. For instance, in December 2003, aggregate paid up capital of the banks had increased by 18% from 2002 to .3 billion. Similarly, at December 2003, the aggregate shareholders funds stood at billion (CBN, 2004). These figures compare unfavourably with the scenario for banks in South East Asia and even South Africa. Similarly, the share capital requirement was a low million (US$140,000), in 1989, billion in 2003 (US$14.6 million) which are rather low by international standards. The raising of the shareholders funds unimpaired by losses to a minimum of billion (US$180m), is expected to put the banks in a better position to fund the economy.

Better Funding of the Economy

The above point as outlined by the CBN Governor is expected to hold a priori. However, studies elsewhere have found mixed results. For instance, Studart (2004) notes that the World Bank's forecast that consolidation in Latin American countries would increase access to credit did not materialize. Also in a similar vein, Peek and Rosengreen (1997) reported that there was no conclusive evidence that consolidated banks will discriminate against small business. Rather they found that the position shifts from sticking to their pre-

consolidation portfolio to liberalization towards SMEs. Specifically, they noted that first in roughly half of the commercial and savings bank mergers, the portfolio share of SMEs loans of the acquirer rise rather than fell after the merger. In slightly less than half of the cases, the acquirer had a larger portfolio share of SMEs loans than its target. Finally, it is only when the acquirer is large and less active in SMEs lending, that its loan portfolio share of the consolidated bank is much more likely to decline than to rise after the merger, (Peek and Rosengreen,1997).

Furthermore, consolidation should improve the capacity of Nigerian banks for cross-border businesses.

The fast track integration framework for ECOWAS has been on for some time. However, weak and under-capitalized banks are ill-prepared to participate in the post integration era. Mailafia (2004) and Ekaete (2004 have all pointed to the prospects for increase inter-regional businesses post-consolidation. In South East Asia, they found that the level of cross-border transactions rose following the consolidation of the 1990s and the beginning of this century. Weak banks cannot participate in the mega-dollar businesses. Apart from the **benefits** discussed above, Mailafia (2004) also pointed out that consolidation/bank capitalization involves geographic diversification as a bank can expand into new areas where it was not well represented. This increases its deposit base and enhances the profitability potentials. The result will be some synergy in terms of the composition/types of loans, maturity structure, risks, etc. The prospects of higher returns on the investors is also worthy of mention as we consider the benefits of banks consolidation. Traditionally, it is realized that returns are often directly correlated with the level of investment. Consolidated banks are expected ab initio, to have access to more capital and as they invest large sums, they would also receive higher returns. This is facilitated by the improvement in the pressure put on them by the expanded shareholders. Moreover, the reduction in inter-bank borrowing would cut cost and enhance profit margins. Also, the availability of more funds should reduce the level and magnitude of unethical practices with their attendant adverse impact on profitability.

Another area where consolidation can be beneficial is cost reduction

While there is evidence on cost reduction potentials of consolidation, there is also opposing evidence. For instance, Linder and Crane (1992) investigated the cost profile of merged and non-merged banks in the USA and concluded that there was no significant difference between the two groups in regard to results that bank mergers raise profits by reducing cost. The evidence from their study of Bank of America and Security Pacific, Chemical and Manufacturers Hanover, etc, showed that reduced operational costs rarely translated into higher profits because of increased loan losses, among other reasons. Later, Kwan and Wilcox (2001) studied a sample of 1,134 bank mergers between 1987 and 1995; employing a change in relative operating costs for the bank merger. They measured the variables of the ratio of total non-interest expenses to total assets, ratio of labour expenses to total assets and ratio of premise to total assets. The main finding was that "bank mergers reduced operating costs … both labour cost and occupancy expense are found to decline significantly after the merger" (Kwan and Wilcox, 2001). Finally, the issue of cost-reduction in mergers/consolidation is a controversial and an empirical one.

On the flip side of the benefits of capitalization/consolidation are the costs. Since consolidation started, costs have been incurred and the trend is likely to continue. An aspect of the costs is the necessity of the process undertaken in the exercise. The merger entails legal expenses such as those on issuing houses, stock brokers, reporting accountants, etc. These are expenses that are avoidable in the absence of consolidation. Of course, this would include security and exchange commission (SEC) fees as well as consultants' fees. Ibrahim (2004) notes that the CBN had pledged to underwrite all these expense and provide a team of technical experts in this regard.

A cause for worry about in the recent bank capitalization/consolidation in the Nigerian banking industry is the future fear of job losses. Already some bank staff have lost their jobs in the processes leading to the merger as the weak banks downsized in the bid to meet the conditions for absorption by the healthy banks. The consequent job loss would swell the unemployment market (Kwan and Wilcox, 2001). One of the cost saving areas is in job reduction.

Empirical work across the areas where capitalization/consolidation had taken place indicated that it resulted in concentration of banking and the consequent reduction in the number of banks in the post consolidation era. There is the implication that the rural areas could be marginalized in the service delivery. Indeed, Shields, et al (2004) found that in rural Pennsylvania State, USA, "the results show that consolidation is dramatically reducing the number of banks in rural areas", they submit that "should the trend continue, then there would be no banks headquartered in rural Pennsylvania by 2005".

In addition, consolidation has triggered off runs on some banks as customers move to prevent their funds being trapped in the banks, coupled with a lull in the interbank market. This arises from corporate customers making massive withdrawals as that of the Oyo State Government (pre recapitalization in 2005) from Trans International Bank Plc. Consequently, the bank was unable to pay its numerous customers and it was barred from the clearing system. While the appropriate authorities (CBN and NDIC) responded by extension of financial assistance to the banks, this will need to be intensified in order to calm down nerves and curb the anxiety that usually accompanied capitalization/consolidation.

In spite of all the efforts of the CBN and NDIC, all unsound banks were unable to meet the requirements for merger or acquisition (M&A). Those that failed impose losses on the depositors, on the one hand, and the shareholders, on the other. We have found that in some of the countries that have undergone capitalization/consolidation of their banking sectors, not all banks succeeded. Some inevitably failed. It was therefore not surprising that the CBN allowed some to fail partly in order to sanitize the system and partly as lessons for those who had mismanaged their banks before the advent of the consolidation policy. According to Ige (2006), the reasons for the CBN decision to recapitalize the Nigerian banking industry are not unconnected with the following, among others:

Bad management was rampant in many of them as they were unable to afford the desirable skills and technology, the uncompetitive and distress banks were better acquired or merged with successful banks, or else liquidate a spectre of gloom for depositors, the owners and the economy, the high interest rates for money borrowed, which were far beyond any internal rate of return in Nigeria, could suggest given the appalling management capacity, a good number of them derived a sizeable proportion of their profit from illegal practices,

encouraging bunkering, foreign exchange malpractices e.t.c and many of the banks at their previous levels could not compete globally with their foreign counterparts in the developed and emerging industrial countries of South East Asia and South America. The recapitalization of Nigerian banks until recently in 2006 was very infinitesimal.

Many of them lacked the resources, ingenuity and besides, they were unable to utilize business opportunities in Nigeria let alone those in other countries. Bribery, over-invoicing, illegal deals in foreign exchange and corruption were the modus operandi of Nigerian banks. Sharp banking practices such as high interest rate, exchange rate, inflation stunted the development of a credible macro- economic framework in Nigeria. Therefore, in this research, we look back into the past of these banks using macro-econometric models with aggregate data, draw and extrapolate conclusions about the likely consequences of bank capitalization, management and performance and the effect on the economy. The major variables of interest include shareholders' funds of the banks, interest rate, inflation, bank capital, liquidity and asset ratios exchange rate and change in the growth rate of the economy over a period of 20 years (1986– 2006). This study is an addition and extension of past studies such as Nyong (1996), Uchendu (1995) and Ben Samy (2003). The study attempts to unravel questions that continue to emerge in enlightened discussions of the Nigerian deposit money banks regarding the role they played or failed to play in the evolution of the Nigerian economy and whether they will continue to behave the same way. For instance, the trend in the capital base of banks coupled with manifold expansion of the recent capitalization, could translate to lower rates of interest to the industrial sector if well managed. It may also result in an increase in the return to ordinary shareholders.

2.11 CONDITIONS INFLUENCING CAPITAL ADEQUACY

According to CBN Bullion (2005), the following should be considered along with capital ratios as conditions influencing capital adequacy: the quality of management influences outsider' perception of capital adequacy because, if management is good the bank will be profitably, and efficiently operated and there will be no need to rely unduly on capital to cushion disaster; a bank carrying good quality and adequate liquid assets will not be in danger of prolonged and damaging illiquidity. Consequently, the need for capital will be

minimized; the history of earnings and retention thereof: good earnings and write-back policy will continually enhance the capital adequacy of a bank. A bank that allows itself to be politicised and which put ethnic consideration before business prudence can only contribute to the failure of the bank and increase its need for capital; the potential volatility of deposit structure will affect the liquidity of a bank which will in turn affect the profitability and need for capital; the quality of management will impact on the efficiency of operation and consequently the need for capital; the restrictions placed on the maintenance between capital funds and loans and advances, the higher a bank's capacity to meet the potential credit needs of its environment. With Central Bank of Nigeria (CBN) and Nigeria Deposit Insurance Corporation (NDIC), technical and financial support traditionally given to banks in Nigeria, it is easy to tolerate temporary and relative inadequacy of bank capital in our banking system.

2.12 IMPLICATION OF RECAPITALIZATION OF BANKS

The introduction of Universal Banking in 2000 in Nigeria created a level playing field for all the operators (commercial and merchant). The recapitalization of banks resulted to: contraction in the number of operating banks to twenty-five (25) in 2006 and further to 24 in 2008; a temporary resolution of the distress problem in the system; emergence of a few super strong and efficient banks; local capital flight from perceived distress banks to those adjudged safe and sound by depositors; and increase and severe competition among the surviving banks for both deposits and available business opportunities. The recent review of bank capital requirement in Nigeria became effective on January; 2006.This led to the reduction in the number of banks from eighty-nine to twenty-four in 2008. For the first time, the Nigerian banking industry witnessed merger between the small and big banks (See table 1 in chapter 1).

2. 12.1 Options Open to Banks for Meeting New Minimum Paid-Up Capital

From the Security and Exchange Commission Report (various issues), the following options can be used by banks to meet new minimum paid-up capital:

i. Capitalization of general reserve;

ii. Conversion of deposits to shares by willing and interested depositors;

iii. Rights Issue by existing shareholders;
iv. Private placement by those banks that wish to remain private;
v. Conversion to a Public limited liability company and raising funds by way of a public offer for subscription;
vi. A combination of any of the above options; and/or
vii. Mergers of suitable and compatible banks or outright acquisition

The most straight forward and easy to implement is the capitalization of reserves other than statutory requirement. Banks with robust balances in their general reserves accounts exercised this option. All they need to do is to obtain the statutory approval of their shareholders to capitalize by issuing bonus shares to members. Banks with some level of reserves can take this window to bridge the gap or reduce the short fall that would have to be raised through one or a combination of available routes. The decision as to which option to adopt will, however, to a large extent, depend on the perception of existing shareholders and the bank's long term corporate objectives vis-à-vis expected return. Conversion of deposits may not be too attractive given the not-so-pleasant experience of depositors in the past. A lot of high net-worth individuals with sizeable deposits running into billions of naira may decide to move their funds "in flight to safety" to the big banks which they consider quite safe and sound. The big banks did not look at this option given their huge general reserves. What may likely hamper the success rate of this option is the statutory constraint of a maximum of fifty (50) shareholders for a private company.

Banks can also use the rights issue. The success of a rights issue to existing shareholders will depend on the quantum of the shortfall and the preparedness of the shareholders to undertake additional investment. Where the shortfall runs into hundreds of millions of naira as is usually the case the shareholder may not be in a position to provide the entire requirement.

Private placement can also be used to widen its ownership base (subject to the maximum number of fifty (50) shareholders) by inviting prospective private investors to subscribe to the new shares to be issued. To do this, the existing shareholders would need to first waive their presumptive rights as required under the Companies and Allied Matters Act CAMA of 1990 so as to facilitate a smooth offering. With the present liberalized foreign

investment environment, foreign portfolio investors could be invited to participate in such a share issues exercise. Bank capitalization is an on going process; foreign investor avail themselves of this opportunity, as it will go a long way in assisting recapitalization efforts.

Conversion to a public limited liability company is another feasible option. Banks should consider if existing shareholders are unable or unwilling (or both) to come up with the shortfall. In order to avail itself of this option and raise the required financing through the capital market, Securities and Exchange Commission provide conditions that should be met by a private owned company or any aspiring private company must possess the following attributes:

a. it must convert to a public company and be prepared to divest (leave) 25% of its outstanding shares to the investing public;
b. It must have operated for not less than five years to qualify for listing on the first-tier market of the Nigerian Stock Exchange (or three years on the second-tier market) unless waived by the council of the Exchange;
c. It must give full and maximum disclosure of all relevant information pertaining to its operations and in particular, its financial circumstances; and
d. It must imbibe strict financial discipline and prudent management practices as part of its basic operating system and procedures.

The only snag with this method is that if many banks are involved in this process of raising finance, it may overstretch the absorptive capacity of the market. Also the manpower capability of the regulatory authorities of the capital market that is Securities and Exchange Commission (SEC) and Nigerian Stock Exchange (NSE) in mid-wifing the exercise within the stipulated time frame was equally tasked. The introduction of information technology in the Nigerian Stock Exchange as, however, taken care of this drawback, and even then the limitation will still be there.

The last of the options open to banks is mergers and acquisition (M&A). This is when two or more compatible banks come together in merger exercise under a Scheme of Arrangement that would entail the approval of the Federal High Court, Nigerian Stock Exchange and Securities and Exchange Commission. Before a consensus is reached in M & A, there may be several boardroom squabbles, in-fighting and management divisions

that may occur. The Central Bank of Nigeria did not increase the paid-up capital of banks from billion to billion. What the CBN raised to billion was the minimum capital base of banks defined as paid-up capital and reserves. It is also important to note that whereas there are several ways of achieving the minimum paid up capital in banking consolidation, only mergers and acquisition/takeover are the acceptable legal modes of consolidation under the Soludo solution. **Table one (Chapter 1, p.3) shows** the banks that form alliance to consolidate into one entity in the last billion recapitalization in Nigeria, which came into effect on December 2005. For M&A to succeed incompatible bedfellows should be avoided. Outright acquisition is also possible where existing owners of weak banks permit themselves to be acquired by the big banks. The issue that, however, needs to be contended with in either a merger or acquisition option is the typical giant size ego of the average Nigerian entrepreneur.

2.13 CORPORATE GOVERNANCE FOR BANKS

Bank capitalization, management and performance cannot be sustained without good corporate governance. Management inefficiency in the banking industry according to Ebhodaghe (1994) is poor bank management, which had resulted in excessive operating expense, inadequate administration of loan portfolio, an overly aggressive growth policy to attract deposits, interest speculation coupled with other instances of poor judgment that resulted in stress for the banks. Corporate governance is about building credibility, ensuring transparency and accountability as well as maintaining an effective channel of information disclosure that would foster good corporate performance. It is also about how to build trust and sustain confidence among the various interest groups that make up an organization, Mark (2000). Literature on corporate governance comprise of attributes such as financial transparency, disclosure and trust among others.

Etuk (1993) posited that accountability is a process whereby one renders account of its activities to someone who has the power to ask for it and also to evaluate and reward one's performance. For example, the political and financial resources of a nation are entrusted into the hands of those in government. The governments are therefore expected to account for the exploitation and use of the resources so as to enable the citizens evaluate their

performance and exercise their ultimate voting power to retain or remove them from the position of trust.

The Banker's Committee was particular involved in the emergence of the final document on Corporate Governance for Banks in Nigeria which came into effect on April 3, 2006.The document outlines weaknesses and challenges of corporate governance in Nigeria and states best practices that banks are mandated to comply with in order to improve the efficiency and effectiveness in the management of Nigerian banks. Extract from .cenbank. revealed that the weaknesses identified with the banks include: Ineffective Board oversight, overbearing influence of Chairman or MD/CEO, or that of the position of Chairman/CEO combined, especially in family-controlled banks, weak internal controls, non-compliance with rules and regulations, poor risk management practices, technical incompetence, poor leadership and administrative inability and ineffective management information system. The challenges highlighted in the Code include: poor integration and development of information communication technology, inadequate management capacity, insider-related lending, rendition of false returns, and non-disclosure of material information. The provision of the code covers the following main issues:

Equity Owner in Banks

Government equity holding is limited to 10 percent in any bank while individual/corporation private investors require regulatory approval to have more than 10 percent holding. This is necessary to prevent overbearing influence on the resources of the bank by a single individual.

Structures and Composition of Board and Board Committees

Maximum board of 20 members was specified for each bank, two of whom must be independent directors. The positions of Chairman and CEO are not be combined by any one person and two members of the same extended family would not be allowed to hold executive board membership in a bank at same time. Appointments to boards were to be made strictly on merit. This will ensure that the right human capital is employed at the top management where major decisions affecting the future of the bank are taken.

Board Oversight Functions

To enhance board oversight functions, regular training and education of members was institutionalized. Also, the board should have the latitude to hire independent consultants to advise it on certain issues of importance and the cost borne by the bank. This will also facilitate and enhance the internal control measures put in place by the bank.

Tenure of directors

To ensure both continuity and injection of fresh ideas, the tenure of non-executive directors had been limited to a maximum of three terms of four years each.

Code of Conduct for Directors and Conflict of Interest

Adherence to the existing Code of Conduct for directors was emphasized and board members were expected to make full disclosure in respect of companies/entities/persons related to them that are service providers to their banks.

Board Performance Appraisal

To ensure a focused, purposeful and successful board, a performance appraisal of the board's activities is to be carried out by an external consultant on an annual basis.

Management Reporting Relationships

The Code recognized the need for clearly defined lines of responsibility and hierarchy such that officers would be held accountable for duties and responsibilities attached to their offices.

Data Integrity and Disclosure Requirements

Zero tolerance on false rendition of returns was stated while Chief Executive Officers (CEO) and Chief Finance Officers were to be held accountable for infractions. Sanctions including removal from office and blacklisting were specified

Compliance Procedure and Whistle-blowing

Banks should appoint Compliance officers to monitor and report compliance with the code. There should also be dedicated lines for whistle-blowing by all stakeholders with respect to breaches/unethical behavior.

Risk Management Procedures and Internal Controls

The Code emphasized the risk oversight functions of the board and required that the Head of Internal Audit report directly to the Audit Committee rather than the CEO.

Role and Tenure of Auditors

External auditors were excluded from performing non-audit functions such as book-keeping, consultancy and actuarial services for the banks they audit. Also, their tenure was limited to a maximum period of 10 years after which they would not be eligible for appointment by the same bank until after another 10 years. According to the Banking Supervision Annual Report (2006) a verification exercise on the status of compliance showed that much progress had been made by the banks in their compliance status, continuous monitoring would be required to enforce and sustain compliance.

CHAPTER THREE

THEORETICAL FRAMEWORK AND LITERATURE REVIEW

3.1 Introduction

Bank capital can be seen in two ways. Narrowly, it can be seen as the amount contributed by the owners of a bank (paid –up share capital) that gives them the right to enjoy all the future earnings of the bank. More comprehensively, it can be seen as the amount of owners' funds available to support a bank's business (Athanasoglou et al., 2005).The latter definition includes reserves, and is also termed shareholders' funds (Anyanwaokoro, 1996). Adewunmi (1997) gives two connotations of capital in banking. He opines that at the outset, capital in the form of issues and paid-up share is money with which the business of banking is started. Overtime, the capital funds of the bank reflect the accumulated (addition or depletion) capital. The question that at which level can the capital of a bank be said to be adequate is complex. In fact, question as to whether existing levels of capital are considered adequate for the increasing levels of risk has been an issue of debate between bankers and the supervisory authorities. Universally, Basel Committee's specified minimum capital adequacy ratio of eight percent relating to banks' credit is taken as the benchmark of measuring the capital adequacy of a bank. This implies that for every Naira given as credit a bank needs 8 Kobo capital. A bank that has lesser ratio is said to be undercapitalized. No empirical method has been used to determine banks' capital adequacy in Nigeria. This chapter will dwell on review of theoretical issues, review of empirical literature, theoretical framework and a summary of theoretical framework and literature review.

3.2 REVIEW OF THEORETICAL ISSUES

Furlong (1992), Haubrich and Wachtel (1993), and Berger and Udell (1994) investigated whether the 8 percent capital backing for loans to private enterprises required by the 1988 Basle Accord encouraged banks to reallocate their assets from such loans to government securities. With the exception of Berger and Udell, these authors find evidence that the risk-based capital requirement set by the Basle Accord significantly contributed to the credit crunch. No matter the definition adopted, a bank's capital is widely used to analyze

the status of its financial strength (Bobakova, 2003). Positive correlation between returns and capital has been demonstrated by Furlong and keeley (1989), Keeley and Furlong (1990), Berger (1994), Berger (1995b), Demirguc-Kunt and Huizinga (1999), Naceur (2003) and Eisenbeis (2005). Investigating the determinants of Tunisia banks' performances during the period 1980-1995, Naceur and Goaied (2001) indicated that the best performing banks are those who have struggled to improve labour and capital productivity and those who have been able to reinforce equity. Bourke (1989), Abreu and Mendes (2002) and Naceur (2003) agree that well-capitalized banks face lower need to external funding and lower bankruptcy and funding costs; and this advantages translates into profitability. Therefore, researches widely posit that the more capital a bank has, the more resistant it will be to failure e.g Uche (1998). Capital regulation is motivated principally by the concern that a bank may hold less capital than is socially optimal relative to its riskiness as negative externalities resulting from bank default are not reflected in market requirements. In this framework, an unregulated bank will take excessive portfolio and leverage risks in order to maximize its shareholder value at the expense of the deposit insurance (Benson et al., 1986, Furlong and Keeley 1989, and Keeley and Furlong 1990). Capital requirements can reduce these moral hazard incentives by forcing bank shareholders to absorb a larger part of the losses, thereby reducing the value of the deposit insurance put option. With more capital and less risk-taking, the effect is clearly a decrease in the bank's default probability.

Mullins (2005) posits that the primary objectives of the business organization may be seen as: to continue in existence – that is to survive; to maintain growth and development; and to make profit. The attainment of these objectives requires the performance of management. Management is expected to demonstrate efficiency and effectiveness in the application of inputs to generate output. Porter and Lawler performance theory (1968) cited in Onwuchuruba (2003) demonstrated that effort, performance, reward and satisfaction are key variables. The model was initially developed for the purpose of investigating the relationship between manager's attitude towards pay and the performance. The worker is rewarded for performance either through intrinsic factors.

However, the satisfaction the worker gets from the reward will depend on how equitable he receives the reward to be in relation to the amount of efforts he has put in.

According to Thakur and Burton (1995), efficiency involves doing things right that is using resources wisely and with minimum waste. Effectiveness, on the other hand, involves doing the right things to move the organization closer to its announced objective. Some organizational activities may be viewed as very efficient but not very effective. That is, hiring cheaper, untrained labour might result in short-term savings in labour cost but it might also result in a product of such poor quality that cannot be sold. Organizational effectiveness is the ultimate criterion against which managerial performance is measured. Thus, organization effectiveness may be defined as the ability of the organization to attain and efficiently utilize resources for the attainment of stated organization objectives. Effectiveness is a function of efficiency as it contributes to goal attainment. The need to reduce unnecessary expenditure as stated by CBN in the ongoing restructuring of banks underscored this submission that bank management need to avoid waste. Some of the studies on bank performance conducted in the United States, emerging markets and other related published works are summarized in this section.

The empirical evidence in the US is due to Berger (1995), Neeley and Wheelock (1997) and Angbazo (1997). Berger (1995) examines the relationship between the return on equity and the capital asset ratios for a sample of US banks for the 1983-1992-time period. Using the Granger causality model, he found that the returns of equity and capital to asset ratio are positively related. Neeley and Wheelock (1997) cited in Naceur Ben Samy (2003) explored the profitability of a sample of insured commercial banks in the US for the 1980-1995 period. Their work showed that bank performance is positively related to the annual percentage changes in the states per capita income. Anghazo (1997) investigates the determinants of bank net interest margins for a sample of US banks for 1989 - 2003 period. The results for the pooled sample documents showed that default risk, the opportunity cost of non-interest bearing reserve, leverage and management efficiency are all positively associated with bank interest spread. The main determinants of bank's performance in emerging countries were carried out in the studies of Colombian (Barajas et al., 1999), Brazil (Afanasieff et al., 2002), Malaysia (Guru et al.,) and Tunisia (Ben Naceur and

Goaied, 2001). For instance, Barajas et al (1999) found that there is a significant effect of financial liberalization on bank' interest margins for the Colombian case. His study shows that liberalization process is linked with an increase in the coefficient of loan quality after liberalization. Afanasieff et al. (2002) make use of panel data technique to uncover the main determinants of the bank interest spread in Brazil. Ho and Saunders (1981) cited in Naceur Ben Samy (2003) results suggest that macroeconomic variables are the most relevant elements to explain bank interest spread in Brazil. Ben Naceur and Goaied (2001) investigated the determinants of the Tunisia bank's performances during the period 1980 – 1995.Their finding shows that the best performing banks are those which have struggled to improve labour and capital productivity, maintained a high level of deposit accounts relative to their assets and those who have been able to reinforce their equity. Guro et al. (2002) in their study brought to the fore the main determinant of successful deposit banks that would enhance and improve bank profitability. The study, which was a sample of seventeen Malaysian commercial banks over the 1986-1995, divided the profitability determinants into two main categories, namely the internal determinants (liquidity, capital adequacy and expenses management) and the external determinants (ownership, firm size and external economic conditions).

The findings of this study revealed that efficient expenses management was one of the most significant issues that can be used in explaining bank profitability. The macro indicators showed that high interest ratio was associated with low bank profitability and inflation was found to have a positive effect on bank performance. The importance of managerial performance and effectiveness has long been recognized by major writers such as, for example, Drucker cited in Mullins (2005) who, originally in 1955, propounded that:

> *"The manager is the dynamic, life-giving element in every business. Without their leadership 'the resources of production' remain resources and never become production. In a competitive economy, above all, the quality and performance of the managers determine the success of a business; indeed they determine its survival. For the quality and performance of its managers is the only effective advantage an enterprise in a competitive economy can have".*

The importance of management performance has also been emphasized by Foppen (2000): Management is of pivotal importance for modern society. It is for this reason that, no matter what thinking about management, certainly at university level, is of great relevance to management practice. So apart from the question of whether management's claim that it is indispensable is really valid or not, the fact that practically everyone believes it is, is what counts. Stewart (1999) suggests that effectiveness is more important than efficiency. Managers who want to improve should review both their effectiveness and their efficiency. Effectiveness is doing the right things; Efficiency is making the most economic use of the resources. Effectiveness is more important than efficiency because one must be doing the right kind of work. Only then does it matter whether the work is done efficiently. Managerial effectiveness can also be measured if we ascertain the adherence of managers in keeping within agreed cost or budgetary control limits. This is very critical to bank management who like to expend depositors fund on wasteful investment that may not guarantee any return.

The Management of the banking institution itself is also a prerequisite for achieving profitability and stability of a bank. There is evidence that superior management raise profits and market shares (Berger, 1995a and Athanasoglou et al 2005). On the other hand, Montinola and Moreno (2001) argued that where management quality is low and managerial monitoring is imperfect, some workers will not exert full effort, thereby "free riding" on good workers. Observing that a poor worker next to him is shirking, a good worker may reduce his own effort; so over time average effort falls to that of the poorest worker. From time to time, good workers may be hired, but their effort will eventually drop down to the preexisting level. At other times, workers who are lazier than existing employees may be hired, dragging down performance of current workers. Where management quality is low and the board of directors does not provide honest and effective leadership, being often more concerned with securing credit facilities for themselves, prudent lending practices cannot be followed. This has the net effect of increasing the ratio of substandard credits in the bank's credit portfolio and decreasing the bank's profitability (Mamman and Oluyemi, 1994). But Gambs (1977) argues that extremely bad management may not prove fatal to a bank unless adverse economic conditions take a toll on the bank and lead to unexpected capital outflows or loan losses.

Claessens et al (1997) explained that enterprise restructuring involves depoliticizing management by giving managers more autonomy, adopting new accounting standards and practices, shedding labor and concentrating on activities in which the enterprise has a competitive advantage. The better corporate governance that can result leads to higher market value and profitability. Kolari, Glennon, Shin, Caputo (2002) predicting large U.S commercial bank failure, found evidence that capital deficient banks tended to have lower profitability, higher risk, and higher levels of expenses than other banks. Cost controlling strategy shows the emphasis to minimize cost by relating expenditure to returns and it is measured by the total cost-to-total income (CIR) As a result of economies of scale and scope deriving from the combination of similar skills, a firm competing on the basis of low-cost and operating efficiency is expected to benefit from merging with another organization characterized by a set of similar competencies (Bollenbacher, 1995). Firms characterized by different cost controlling strategies, however, may show a drop in performance if they decide to merge (Prahalad and Bettis, 1986 cited in Altunbas et al., 1997). As a consequence, the cost to income (CIR) is expected to be negatively correlated with overall performance (ROE). On the other hand, this kind of relationship may not be significant in the long term if a cost-efficient bidder manages to implement their cost strategy to the broader merged firm.

The recent bank recapitalization and the option of merger adopted helped in reducing operating cost as a result of economies of scale and scope derived from combination of similar skills. It has been argued that the effect of a growing size on bank profitability is significantly positive to a large extent (Smirlock, 1985). Kwan and Eisenbeis (2005) suggest that the difference in profitability among large and small banks is due to production technologies and outputs, which vary across them. The relative efficiency hypothesis (Clarke et al 1984) presupposes that larger banks (where size is measured by assets) are more efficient than smaller ones, and are more profitable as a result of this superior efficiency. The preceding arguments on the effect of size on bank profitability overlap with the idea that large banks can benefit from economies of scale (Baumol, 1959). However, some researchers suggest that little cost saving can be achieved by increasing the size of a banking firm (Berger et al., 1987). They suggest that eventually very large banks

could face scale inefficiencies, perhaps due to bureaucratic reasons (Athanasoglou et al., 2005). Using data for more than 700 Czech firms that were consistently listed on the Prague Stock Exchange over the period 1992-95, empirical evidence from Classens et al (1997) identifies strong positive relationships between ownership concentration (top five investors' shares as a percentage of total shares outstanding) and firms management/profitability/market value. They explained that concentration ownership gives the owners better incentives to monitor firms and make necessary changes in management. By contrast, in firms with diffuse ownership, no single owner has an incentive to "mind the store" so management is not disciplined for bad performance or rewarded for good performance". Mitton (2002) also shows that firms with concentrated ownership showed better stock market performance during Asian economic crisis.

Capital adequacy levels, which show banks strategy regarding their capital structure, measure as the ratio of equity to total assets (CA/TA). From a prudential regulatory perspective, bank capital has become a focal point of bank regulation as the general trend is to introduce competition in banking and to check risk-taking with capital requirements and appropriate supervision (Vives, 2000).The effect of changes on the capital levels on performance hinges on the recent theory of the banking firm, which is based on the 'specialness' of banks in a setting in which there are asymmetries of information. In this setting, according to the 'signalling hypothesis', commercial banks specialize in lending information to problematic borrowers (Berger et al., 1995). Therefore, banks can signal favourable information by merging with banks with larger capital ratio indicating a positive correlation between capital and earnings, and suggesting a positive relationship between capital structure dissimilarities and performance (Acharya, 1988). Alternatively, Ross (1977) argues that lower, rather than higher, capital ratios signal positive information; since signaling good quality through high leverage would be less onerous for a 'good' bank than for a 'bad' bank. Another argument relating changes in the capital structure and performance relates to agency problems between shareholder and managers. Part of the corporate finance literature suggests that increasing financial leverage could reduce this type of agency problems. The reason is that leverage may increase pressure on bank managers to become more efficient due to short-term pressure derived from the needs of

servicing the debt (Jensen, 1986) In addition, leverage is also reducing the scope for managers to keep the firm going after the point at which shareholders would gain liquidation (Berger et al., 1995). Liquidity risk strategy refers to banks' strategy towards managing liquidity risk measured by the ratio of liquid assets to customer and short-term funding. Credit risk management is a structured approach to managing uncertainties through risk assessment, developing strategies to manage it, and mitigation of risk using managerial resources. The objective of risk management is to reduce the effects of different kinds of risks related to a preselected domain to the level accepted by the society. Banks with little capital of their own (equity capital and retain profits) and many assets that might substantially decline in value (e.g. defaults on loans to companies or on mortgages, declining value of equity, bonds or derivatives investments) obviously face greater risks in terms of their overall viability. To make things worse, the collapse of weaker banks can have systemic repercussions if it sparks bank panics that also undermine economically "healthier" banks. The Asian crisis, the recession in Japan in the 1990s, and the Mexican crisis of 1994, for example, drove several large and many small banks into insolvency (Mishkin, 1997).

Requiring banks to increase their capital-asset ratios seems to be the obvious regulatory response to weaknesses in the banking system; (Berger, Herring and Szego (1995) for the role of capital in financial institutions, Dewatripont and Tirole (1993) and Santos (2000) for bank regulation. This measure rests on two assumptions: first, more capital (or reserves more generally) equip banks with a stronger financial "cushion", should they experience unexpected losses and/or a bank run. Second, increasing equity capital implies that the respective bank's risk-taking has a greater effect on shareholders, motivating the latter to more effectively monitor and if necessary, constrain the management's risk-taking behavior. In addition to pressure from regulators, banks may also have their reasons for increasing capital-asset ratios during recession: for instance, to signal to the market that they are economically strong, which tends to lower funding costs. Regulatory capital requirements may, however, have unintended consequences, notably, a contraction in bank lending (i.e. a credit crunch). Banks can increase their capital-asset ratio either by increasing capital (particularly by issuing new equity), or by reducing their assets (divesting, reducing lending). Because raising new capital is difficult for banks during

recessions, most weak banks are likely to focus more on divesting and loan reduction. This reduction of assets, particularly in the supply of loans, can cause a credit crunch. Hannock and Wilcox (1993), Berger and Udell (1994), and Shrieves and Dahl (1995) investigate whether during the 1990-1991 period US banks made fewer loans to reduce risk. Hancock and Wilcox, and Shrieves and Dahl find that this factor played a role in the reduction of loans. Berger and Udell, on the other hand, find little support for this hypothesis. The conceptual and *th*eoretical framewor*k* of this study so far centers on the buffer theory of capital adequacy, expense theory, deposit insurance, portfolio regulation theory, intermediation theory, diversification and capital structure theories on capital adequacy, concentration theories, performance theory, structure-conduct-performance (SCP) paradigm, efficiency-structure (ES) paradigm and Basel Agreement, which happens to be the known significant model on capital adequacy.

3.2.1 Measuring Market Concentration

Market concentration can be measured through:

(i). Concentration Ratio (CR)

(ii) Concentration Curve

(iii) Hirschman-Herfinderdahl Index (HHI)

(iv) Lorenz curve.

The concentration ratio gives us an idea of the percentage of the total market and how it is controlled by the biggest 3, 4 and 5 firms in an industry. Hence, if for the Nigerian banking industry CR3 = 80, then we can say the three biggest banks in Nigeria control 80% of the market share in Nigeria. A Concentration Curve provides us a visual aid in measuring the concentration. It is a representation of the concentration ratio. The examples below on **Table 3** shows United States aggregate economic concentration of Fortune Magazine's data for 1988 as cited in (Bronfenbremmer e tal:1990). **Table 3** lists the sales of the 10 largest industrial firms in the United States and their cumulative percentage of the sales of the 500 largest U.S industrial firms. General Motors (one-fifth of 1 percent of the 500 largest firms) accounted for 6% of their sales, one percent of these firms (the top five) accounted for nearly 20% of the sales of the top 500, and 2% accounted (of the 10 firms listed) accounted for 29 percent of their sales. Similarly, for **Table 3-1** commercial

banking sector's aggregate concentration, as measured in assets, is quite high. The five firms listed (5 percent of the largest 10 firms) accounted for 26% of their total assets.

Table 3: United States Industrial Sector

Rank (by Sales)	Company	Sales (in millions of dollars)	Cumulative Percentage of 500 largest
1	General Motors	121,085	6.0
2	Ford Motors	92,446	10.6
3	Exxon	79.557	14.5
4	I.B.M	59,681	17.4
5	General Electric	49,414	19.9
6	Mobil	48,198	22.3
7	Chrysler	35,473	24.0
8	Texaco	33,544	25.7
9	E.I. Du Pont de Nemours	32,514	27.3
10	Phillip Morris	25,860	28.6

A Sample of Fortune Magazine's Data for 1988 Cited in Economics (1990) p.6

Table 3-1 U.S Commercial Banking Sector

Rank (by assets)	Company	Assets (in millions of dollars)	Cumulative Percentage of 100 Largest
1	Citicorp	207,666	9.6
2	Chase Manhattan Corp	97,455	14.1
3	Bank America	94,647	18.5
4	J.P Morgan & Co.	83,923	22.4
5	Security Pacific Corp.	77870	26.0

A Sample of Fortune Magazine's Data for 1988 Cited in Economics (1990) p.653

Two common measures of concentration, the four-bank concentration ratio, CR4, and the Herfindahl-Hirschman Index (HERF), are used. CR4 is defined as the ratio of the total deposits of the four largest banks to the total deposits of all the banks in a given year.CR4 should be closed to 0 for a perfectly competitive market and 100 for a monopoly. HERF is defined as the sum of squared market shares of deposits of the sample of banks in a given year. The index is slightly greater than 0 for a perfectly competitive market and 100 for a monopoly. HERF takes into account both the number of banks and the inequality of market shares. Generally, the more banks there are in a market, the lower is the value of HERF, ceteris paribus. HERF increases as the market shares of a given number of banks become less equal (Waldman and Jensen, 2001). However, Hay and Morris (1991) criticized the HERF measures because it uses a particular weighting between the inequality of the firms' market share and the number of firms. Nonetheless, HERF and CR are the most common used in virtually all the published studies. In this study, CR4 and CR10 is employed to depict the market share in the Nigeria banking industry with respect to deposit, asset, loans and advances, capital etc. Bronfenbremmer e tal (1990) stated that HHI is an alternative measure of market concentration, which includes all of the firms in a market and gives proportionately greater weight to the market shares of the larger firms in the market. It takes into cognizance of both the number of firms in the market and their relative size.

Adegbite (2006) stated that HHI is calculated as the sum of the square market shares of all firms in the industry of interest. This means that if a firm controls 10% of the market share, it will be given a weigh of 10 x10 =100 in index while a firm accounting for 20% will have a weight of 20 x 20 = 400.The HHI has benchmarks, the benchmarks are:

HHI > 1800 …….. Highly concentrated market

HHI < 1000…… Low concentrated

1000 < HHI ≤ 1800 ……. Averagely concentrated market.

The third method used to measure market concentration is the Lorenz Curve. The LC is used to measure income inequality and inequalities in the size distribution of firms. The LC cumulates the sales or output of the firms in an industry and cumulates the numbers of firms accounting for that sales volume or output e.t.c. The Lorenz curve measures the extent of deviation from the absolute equality by the diagonal line. Where all firms are

equally sized, then the Lorenz curve will lie on the diagonal line. If the LC lie below the diagonal line, the greater the inequality. The bigger the shaded area the larger the size inequality among firms in the market.

3.2.2 Bank Concentration

In the literature of finance there are cases that link concentration with bank capitalization/consolidation. There are those by Berger et al (1999); Shih (2003); Studart (2003, 2001); Yacaman (2001). For instance, Studart (2001, 2003) found that four Latin American countries' effort towards instituting an efficient and competitive banking system pushed for a policy of concentration in the period (1997-98). This was facilitated by more effective supervision by the apex banks. The tightening of the regulatory environment resulted in "more international and more concentrated banking sector" (Studart 2003).The world bank (2002) noted that the features of market concentration in the Latin American countries (Argentina, brazil, Chile, Mexico and Venezuela) could lead to greater competition and efficiency, which would also result in a higher supply of credit at lower spread as well as stability. Shih (2003) has argued that concentration policy with the fewer banks should reduce the insolvency risk through asset diversification. It is necessary to bear in mind though, that a merger between a sound and unhealthy bank has the potential to result in calamity for the emerging bank. Berger et al (1990) posited that governments usually promote concentration because they believe that it stems distress in the system, citing the case of the USA's Federal Deposit Insurance Corporation (FDIC). The case of Latin America countries is used to buttress the salutary effects of concentration **(See table 3-2 in Chapter 3)**.

The Herfindahl-Hirschman Index (HH) measures concentration in the banking system. For each market, say Nigeria's, the index equals the sum of the squared percentage deposit share of all banking firms competing in the market. The HHI takes on the values representing higher levels of concentration. According to Shields, et al (2004) quoting the US department of Justice's (DOJ), a market with an HHI between 1,000 and 1,800 is considered to be moderately concentrated. Evidence exists that in the USA, for instance, when the post merger HHI is higher than 1,800 the DOJ takes action to check

concentration which could be inimical to the competition. This is a point that the monetary authorities will need to watch out for in the post-merger/concentration era in Nigeria.

Table **3c** below shows that the picture for Latin America is mixed. In some instances, the HHI index rose showing an increase in concentration, while in other it fell. Countries that experienced a rise in the HHI were Argentina, Brazil Chile and Mexico. Only that of Venezuela fell from 979.2 to 923.1. We proffer no explanation, as the country was not in the sample used below. In the study of Pennsylvania State in the USA, Shields et al (2004) found that the HHI was not fixed overtime, but tends to be influenced by the consolidation activities. For instance, while the state was moderately concentrated in 1994, by 2003, it became more concentrated. This means that the policy of merger/acquisition can be adjusted for or against concentration.

TABLE 3-2: Concentration in the Banking Sector Share in Total Deposit

	1994				2000			
	No. of banks	3 largest	10 largest	HH index	No. of banks	3 largest	10 largest	HH index
Latin America								
Argentina	206	39.1	73.1	756.9	113	39.8	80.7	865.7
Brazil	245	49.9	78.8	1220.9	293	55.2	85.6	1278.6
Chile	37	39.5	79.1	830.4	29	39.5	82.0	857.9
Mexico	76	48.3	80.8	1005.4	23	56.3	94.5	1360.5
Venezuela	43	43.9	78.6	979.2	42	46.7	75.7	923.1

Source: Studart (2003:41)

NB: HH Index= Herfindahl-Hirschman Index.

3.2.3 Consolidation

The process of improving banking performance is not new. Sawada and Okazaki (2003) provides evidence that the Japanese experience dates back to the Bank law of 1927. This stemmed from the recognition of the government that "the market structure with many small banks was harmful to the stability of the financial system and hence launched its

consolidation promotion policy. By the 1920s, the direction of policy was in favour of consolidation rather than branching out with respect to Bank regulation policy of 1923. Specifically, it was provided that "the establishment of a new bank consolidation would be promoted" (Sawada and Okazaki, 2003). Another perspective of the policy was that banks which failed to meet the capital requirement were allowed to fail rather than being bailed out by the regulatory authorities. Sawada and Okazaki further note that 807 of the 1407 banks which did not meet the Y1 million in 1927 law failed in 1928.

Consolidation could take any form of absorption, acquisition and combination. These forms arise from the power relationship among combination. These forms arise from the power relationship among the participant banks (Sawada and Okazaki (2003). For instance, combination describes a situation where the power of the participant banks is nearly equal, and their coming together result in a new bank. On the other hand, where a strong and a weak bank are involved, the strong one acquires or absorbs the other. Consolidations have been rather common in the Asian region in the wake of the 1997 crises.

3.2.4 Country Experiences

Capitalization experiences in some of the countries reviewed has taken the form of consolidation. In United States of America (USA) there were over 7000 mergers between 1980 and 1998.The nineties recorded the largest mergers in the banking history of the US as the number of banks in the US declined by more than one third between 1980 and 1997.Consequently, the proportion of the banking assets declined sharply from 75 percent in 1980 to nearly 50 percent in 1997. The same trend occurred in the United Kingdom and other European countries (Boyd et. al 1993).

In the period 1997 -1998, 2003 cases of bank mergers and acquisitions took place in the Euro area. In 1998, a merger in France resulted in a new capital base of $688 billion, while the merger in Germany resulted to a capital base of $541 billion. In many emerging markets including Argentina, Brazil and Korea, bank capitalization/consolidation became prominent as banks try to reposition their operations in order to cope with the growing challenges in the globalized banking systems. Most mergers that took place in countries were as a result of the government efforts to restructure inefficient banking systems (as in many Latin American countries), or from intervention following banking crises (as in

Korea and Southeast Asia). Just like Nigeria, in Asia the capitalization/consolidation of the financial services was more or less government-led rather than market-driven. Bank mergers in this region were motivated by the need to strengthen capital adequacy and promote financial viability of many smaller, often family owned banks that were affected by the 1997-1998 crisis. Soludo (2004) posited that:

> *"In Malaysia, the first round of bank consolidation was initiated by the government in 2000, when it imposed a $526 million capitalization requirement on banks. The then 54 existing banks were ordered to merge into 10 core groups, so called anchor banks. The government has fully liberalized the sector in 2007. In Indonesia, four of the seven state banks existing before the crisis were consolidated into a new state bank (Bank Mandiri), which now controls about a quarter of the total commercial bank deposits. In Singapore, a country with about three million people, banks are being consolidated to about six and further moving down to three, with the second largest having a capital base of about $67 billion".*

Consolidation in Malaysia

It would be recalled that the 1997 Asian crises particularly hit Malaysia hard and its highly integrated financial system was the worse for it. Indeed, under the leadership of Mahather Muhammed, the country undertook a comprehensive reform of the financial system, including the banking industry. Specifically, its hitherto fifty-five (55) banks were consolidated into ten (10). It has further been observed that even the 10 banking groups are to be consolidated into more manageable groups. This second stage is projected to be between the banks and their subsidiary finance companies, on the one hand, and in the near future, between the ten (10) banks on the other.

Features of Malaysian Consolidation

- The banking sector asset quality improved post consolidation.
- There was an improvement in transparency and corporate governance in the banking industry.

- As a consequence, its banks are now rated high by the international rating agency. Moody, Malaysian bank was recently rated in the world, as opposed to not being rated pre-consolidation era.

- Weak banks were repackaged and additional funds injected into them before privatization.

Other details on Malaysian consolidation are contained in **Table 3-3 below (p. 85)**

In Korea, recent mergers were brought about by the government as a way of resolving the problem of unsound banks. The government who provided capital support to several private banks in 1998 to take over, through purchase and assumption operations, the assets and liabilities of five commercial and 17 merchant banks that were closed. In the fiscal 2000, the system was left with only 8 commercial banks with about 4500 branches after consolidation.

South Korean Consolidation Experience

The consolidation process in South Korea has the feature of Japanese, Indonesian and Malaysian. Essentially, the programme consisted of supporting the banks with bright prospects and closing those whose position clearly showed that they are terminally ill. The greatest contributing factor was the presence of a high over hang of non-performing loans (NPLs). Furthermore, the action on the part of the government was prompt and decisive, ostensibly to forestall the spread of distress to other banks than infesting the entire banking system (Deloitte Touche Tohmatsu, 2004). In this regard, in the first round of consolidation, in the 1990s, "five banks with capital adequacy ratios below the eight percent (8%) Bank for International Settlement (BIS) guideline were taken over by healthy banks and forced to exit the market in 1998, (Deloitte, 2004:8). This affected considerable number of banks. In a similar development, another seven banks merged to form three banks in 1999. The merger continued. As at 2003, banks that had benefited from funds injection at the initial stages were reviewed in the subsequent round of consolidation, **(See table 3-4 below p.87).**

Table 3-3: Bank Consolidation in Malaysia

S/N	Group	Merged Banks
1	Malaysian Banking Bhd (May Bank)	Mayban Finance Bhd, Aseabankers Malaysia Bhd, Philoe Allied Bank Bhd, Pacific Bank Bhd, Sime Fin. Bhd and Kewangan Bersatu Bhd
2	The Bumiputra Commerce Bank Bhd.	Bumiputa-Commerce Fin. Bhd & Commerce Int. Merchant Bankers Bhd
3	RHB Bank Bhd	RHB Sakura Merchant Bankers Bhd, Delta Fin. Bhd and Inter-Finance Bhd
4	Public Bank	Public Bank Bhd, Public Finance Bhd, Hock Hua Bank Bhd, Advance Finance Bhd & Sime Merchant Bankers
5	The Arab Malaysia Banks Bhd (AMB)	Aran Malaysia Fin. Bhd, Aran Malaysian Bank Bhd, Bank Utama Malaysian Bhd & Utama Merchant Bank Bhd
6	Hong leong bank bhd	Hong loeng Fin. Bhd, Wah Tat Bank Bhd & Credit Corporation Malaysia Bhd.
7	Perwira affin bank bhd	Affin Fin. Bhd, Perwira Affin Merchant Bankers Bhd, BSN Commercial Bank Bhd, BSN Fin. Bhd & Bsn Merchant Bankers Bhd.
8	Multipurpose bank Bhd	International Bank Malaysia Bhd, Sabah Bank Berhad, Mbf Fin. Bhd, Bolton Fin. Bhd,Sabah Fin. Bhd Bumiputra Merchant Bankers Bhd
9	Southern Bank Bhd	Ban Hin lee Bank Bhd, Cempaka Fin. Bhd, United Merchant Fin Bhd, Perdana Fin. Bhd, & Perdana Merchant Bankers Bhd
10	EON Bank Bhd	EON Fin. Bhd, Oriental Bank Bhd City Fin Bhd, Perkasa Fin Bhd and Malasian Internationalnal Bankers Bhd

Sources : Various Websites

Features of South Korean Consolidation

- Troubled banks receive fund from the government and placed under government owned financial holdings companies. For instance, Shinhan Financial Group and Woori Financial Group were set up by the government to

handle consolidation in 2001. These groups injected fund into some banks and raise their capital ratios to 10%, a figure higher than the Bank For International Settlement (BIS) guideline;

- Government's role in the programme continues to be strong and aimed at strengthening the banks so that they can create and enjoy economies of scale and scope, although it intends to divest itself after;

- The rehabilitated banks are encouraged to form conglomerates by setting up subsidiaries in Securities Company, insurance and related companies. This was meant to enhance diversification and minimization of risk;

- There was a merger between provincial and national banks.

This option has been attractive as it affords the national banks access to the provincial economies and the cheap funds that can be obtained and channeled to more profitable segment of the market (economy). This programme is further supported by the granting of preferential tax treatment to the merged banks.

- A plank of consolidation exercise in South Korea also entails merger between sound banks so as to create 'mega bank' that would facilitate their competition in the expanding global market. This feature is similar to that observed in the merger plans by three big Japanese banks for the same reason

- The consolidation and reform of the banking industry also aimed to attract foreign investors. Indeed, there is evidence that Citi bank of the USA has already invested in the country. It bought Korean Bank for US$2.7bn, while Lonestar (US based investment fund) acquired 51% of Korean Exchange Bank for US$1.16bn.

TABLE 3-4: Bank Mergers in South Korea

s/n	New bank	Year	Merged institutions
1	Kookwin Bank	Nov.2001	Kookwin Bank and Housing: Commercial
2	Hana Bank	Dec. 2002	Hana Bank and Seoul Bank
3	Chohung Shinhan	Jan. 2003	Shinhan Bank and Chohung Bank

Source: .deloitte. Deloitte, T (2004) p.8

In India the financial sector reforms provided the necessary platform for the banking sector to operate on the basis of operational flexibility and functional autonomy thereby enhancing efficiency, productivity and profitability. The case of India was quite different from the other emerging markets hitherto discussed. The country has not faced any major economic and financial crises, though in 1990/1991, there was some pressure on its external sector with the current account deficit and external debt servicing reaching large proportions. However, due to prudent macroeconomic policies, it was possible to reform the country to a sustainable growth path.

According to Talwar (1995) the reforms in India:

> *"brought about structural changes in the financial sector and succeeded in easing external constraints on its operations, introducing transparency in reporting procedures, restructuring and recapitalizing banks and enhancing the competitive element in the market through the entry of new banks. It is evident that the consolidation process in India has not gone far therefore its impact has not been significant. The consolidation and convergence of banks in India has, however, not kept with global phenomena". This section analyses the bank capitalization/consolidation experiences of Japan and Indonesia in South East Asia and Nigeria.*

JAPAN

As a fast emerging economies and one of the world's largest economy after the USA, Japan operates a market base economy and its banking sector has lagged behind those of its contemporaries in the G7 industrialized countries. Since 1990, it has witnessed an

economic crisis that has affected the entire sector thus requiring reforms. It has been noted by (Deloitte, 2004) that its banking system is plagued by the problem of non-performing loans (NPLs). As noted earlier, the consolidation plan of the 1920s had proved ineffective and this necessitated another round in the 1990s. As at today, the banking industry is dominated by the five groups.

Features of Japanese Consolidation Programme

- Consolidation that started in the wake of the economic crisis of the 1990s is continuing and there are plans to form the biggest bank in the world. It is a merger between UFJ, Mizuho Fin Group (MTFG), and Sumitomo Mitsui Fin Group (SMFG).

- Current consolidation is market rather that public sector driven and it is thus expected to produce lasting result

- The pre-consolidation position shows Japanese banks as less profitable than their OECD counterparts in terms of net income after tax, non-interest income and net interest income

- The consolidation aims at increasing the coverage of banks both in terms of clientele and the geographical areas. For instance, the merger between MFTG, SMFG and UFJ is to extend the coverage beyond just Tokyo but to Osaka and Nagoya

- We can deduce from the table 3-5 below that:

    i. The five groups are large in terms of consolidation assets. This should enhance their power to fund industry and the economy generally, and also to compete in the region and the world.

    ii. The number of banks has fallen from about 20 to 5 banking groups. Depending on the type of consolidation, there have been cuts in costs thereby leading to greater efficiency.

iii. The degree of concentration has risen as a result of a fall in the number of banking organizations. This is what consolidation is expected to produce.

TABLE 3-5: Bank Consolidation in Japan

S/N	Banking Groups	Year Established	Major subsidiary banks	Former Banks	Consolidation Assets 31.3.04
1	Mizuho Fin Group (MFG)	Jan 2003	Mizuho Banks, Mizuho Corporate Bank, Mizuho Trust & Banking	Industrial bank of Japan, Daiichi Kangyo, Fuji, Yasuda Trust Banks	US$1,324bn
2	Sumitomo Mitsui Fin. Group (SMFG)	Dec 2002	Sumitomo Mitsui Banking Corporation (SMBC)	Sumitomo Bank, Sakura Bank	US$983bn
3	Mitsubishi Tokyo Fin. Group. (MTFG)	April 2001	Bank of Tokyo, Mitsubishi (BTM), Mitsubishi & Trust Banking Corp.	Bank of Tokyo, Mitsubishi Trust Bank, Nippon Trust Bank	US$1025bn
4	UFJ	April 2001	UFJ Bank, UFJ Trust	Sanwa Bank, Tokai Bank, Tokyo Trust & Banking	US$789bn
5	Resona Fin Group (RFG)	Dec 2001	Resona, Saitama Resona, Kinki Osaka, Nara Banks, Resona Trust & Banking	Asahi Bank, Daiwa Bank	US$383bn

Source: Company Websites

Consolidation in Indonesia

The Indonesian approach has been a combination of the sale of government owned banks so as to inject necessary capital and management into them.

Features of the Consolidation Exercise

- Government is at the heart of the consolidation process in Indonesia unlike in Japan or Malaysia. Thus indicating that there is not only one approach, but a combination of private-public partnership can also work.

- The bank restructuring agency was closed thereby handing the job to the private sector

- The Indonesian government intervened by injecting funds into many debt-ridden banks so as to prevent systemic collapse that could disrupt the consolidation programme.

- There is a strong incentive for the foreign investors into the banking industry. Details of these **in Table 3-6.**

Table 3-6: Bank Consolidation and Government Divestment in Indonesia

S/N	Activity	Year	Investor
1	Selling controlling stake in Bank Central Asia (BCA)	2003	US private equity investor
2	Selling Bank Niaga	2002	Commerce Asset -Holding (Malaysia)
3	Selling majoriry stake in Danamon Indonesia	2003	Consortium led by Temasek holdings (Singapore) and Deutch Bank (Germany)
4	IPO of 20% Bank Mandiri dominant National bank	2003	Public
5	IPO of 40% of bank Rakyat Indonesia, a state controlled bank	2003	Public
6	Selling 51% in Bank International Indonesia	2003	Kookmin Bank (S.Korea) and Temasek Holdongs (Singapore)
7	Selling 52% stake in Bank Lippo	2004	Group of investors led by Raiffeisem Zentral Bank Ostevrich.

Source: Deloitte Touch Tohmatsu (2004) p.12

3.2.5 The Nigeria Experience in Bank Consolidation: Government Framework for Bank Capitalization/Consolidation in Nigeria

On July 6, 2004, the Governor of the Central Bank of Nigeria (CBN), Prof C.C. Soludo, addressed the Bankers' Committee, in a special meeting, on the government policy toward "Consolidating the Nigerian Banking Industry to Meet the Development Challenges of the Century" (Soludo,2004). The focus of the policy framework was toward ensuring exchange rate and price stability, managing interest rate for payments system, financial sector diversification and regulatory reforms as well as strategies for integrating Nigeria's financial system into the African regional and global financial systems.

Consolidation and strengthening of the banking system were taken to constitute the first phase of the reforms designed to ensure a diversified, strong and reliable banking sector

which will ensure the safety of depositors' money, play active development role on the Nigerian economy and as competitive players in the African regional and global financial systems. The goal of the reforms is to help banks become stronger players, and in a manner that will ensure longevity and hence higher returns to their shareholders over time and impact positively on the Nigerian economy. The beneficiaries in the Nigerian economy will include the ordinary men and women who can put their deposits in the banks and have a restful sleep; the entrepreneurs who can now have a stronger financial system to finance their businesses; and the Nigerian economy itself which will benefit from internationally connected and competitive banks that would also mobilize international capital for Nigerian development.

The issue of bank capitalization which often metamorphose into consolidation of banks around the globe has fuelled an active policy debate on the impact of consolidation on financial stability, (Beck, Demirguc-Kunt and Levine:2003), Boyd and Graham (1991 and 1998). They concluded banks capitalization/consolidation exercise was designed to improve Nigerian banking system efficiency through the enhancement of the composite units. In the literature, concentration levels have been a major determinant of banking system performance by way of efficiency. The greater subsidy for large banks may in turn intensify risk-taking incentives beyond and diversification advantages enjoyed by them, thereby increasing the fragility of concentrated banking system. Berger, e tal (1995) find evidence that the increase in the proportion of banking industry assets controlled by the largest banking organizations in the 1990s, due to the liberalization of geographic restrictions on banking in the United States, may have been responsible for part of the credit crunch observed in 1989-1992. Peek and Rosengren (1996), combining a single cross-section data on lending businesses in the New England states for 1994 with some information on mergers and de novo entry, find that after big banking organizations merged with smaller organizations, the consolidated organization typically reduced the amount of small business lending that was conducted earlier by the acquired institution.

The literature reviewed on bank capitalization, management and performance cut across published work related to the research. Most of the earlier studies reviewed here focused on the determinants of bank's performance. Bank performance with respect to macro-economic variables and theoretical perspectives will be discussed in section 3.6

Restructuring of commercial banking system now deposit money banks in Nigeria began in mid-1980s, and was intended to instill competition in the banking sector, mobilize savings and lead to a more efficient allocation of resources. Reforms were articulated around five axes: liberalization of interest rates and credit allocation, introduction of new indirect monetary policy, strengthening prudential regulation, opening of the financial sector to foreign financial institutions and promotion of the equity market. All these developments certainly have implications on performance especially profitability of the Nigerian banking industry. Over the last decade, the international banking, particularly in emerging market economies, has undergone substantial structural changes. Particularly, noticeable is the tendency towards consolidation leading to a reduction in the number of banks and other deposit taking institutions with a simultaneous increase in size and concentration of the remaining entities in the sector (Bank for International Settlements, 2001). Among other factors, these changes have been initiated and sustained by technological innovation, deregulation of financial services at the national level, opening up to international competition, changes in corporate behaviour- such as growing disintermediation and increased emphasis on shareholder value (see Berger et al 1999), repeated episodes of banking sector crisis, and privatization of state-owned banks, especially in emerging market countries (see De Nicolo et al (2003); Bank for International Settlements (2001); International Monetary Fund (2001).

While there are a host of studies that have analyzed the impact of bank capitalization, consolidation on performance in mature markets (Boyd and Runkle (1993), and De Nicolo (2000), there are have been few attempts to study this issue in the context of emerging market countries. Studies of the U.S banking industry in the 1980s and early 1990s found mixed evidence of the impact of bank capitalization/ consolidation on financial firm's risk (De Nicolo and Runkle, 1993). Related studies by Hayden, Porath and Westernhagen (2006) on the relationship between diversification and performance of German banks showed that diversification significantly improves banks' profitability only in case of moderate risks levels and industrial diversification. Susmel, Marston, Druck and Basu (2004) studied a large panel of more than 100 banks from Argentina to find the effects of bank consolidation on performance between December 1995 and December 2000, a period

of heavy bank consolidation and relative calm. Overall, they find a positive and significant effect of bank capitalization/ consolidation on bank performance. Bank returns increase with consolidation, and insolvency risk is reduced. The study suggests that mergers and privatizations have a beneficial effect on bank returns. Smith and Walter (1999) posited that because of the effect of the third-world debt crisis on the capital positions of banks, the Bank for International Settlement (BIS) sponsored an effort by the central banks of the leading industrial countries to establish a common, risk adjusted regulatory standard for capital adequacy. All the countries concerned agreed to these standards in 1988, to become effective at the end of 1992. In the opinion of Largan (2000) if the host supervisor believes that any of the Basel standards are not met, it can impose restrictive measures or prohibit the establishment of banking offices. Basel standards had earlier been categorized into two major parts. They are the Basel 1 and Basel 11. The first official agreement between the United States, Belgium, Canada, France, Germany, Switzerland, the United Kingdom and Luxembourg, formally approved in Basel, Switzerland, in 1988 and imposing common minimum capital requirements on banks headquartered in countries.

3.3 REVIEW OF EMPIRICAL LITERATURE

According to Valentine, McDonald and Schumacher (2009), the findings of their study on the determinants of commercial bank profitability in Sub-Saharan Africa have implications for policy makers. Bank profits are high in Sub-Saharan Africa compared to other regions. This picture holds true whether profitability is measured as returns on assets, returns on equity, or net interest margins. High bank profitability can reduce financial intermediation if the high returns imply that interest rates on loans for same maturity are higher than in other parts of the world. Moreover, if high returns are the consequences of market power, this would imply some degree of inefficiency in the provision of financial services. Bank profits are also an important source of equity. If bank profits are reinvested, this should lead to safer banks, and consequently, high profits could promote financial stability.

Research on the determinants of bank profitability has focused on both the returns on bank assets and equity, and net interest rate margins. It has traditionally explored the impact on bank performance of bank-specific factors, such as risk, market, and regulatory costs. More recently, research has focused on the impact of macroeconomic factors on bank capital and

performance. Using accounting decompositions, as well as panel regressions, Al-Haschimi (2007) studied the determinants of bank net interest margins/net profit in 10 Sub Saharan Africa (SSA) countries. He finds that credit risk and operating inefficiencies (which signal market power) explain most of the variation in net interest margins across the region. Macroeconomic risk has only limited effects on net interest margins/net profit in the study.
Using bank level data for 80 countries in the 1988-1995 periods, Demirguc-Kunt and Huizinga (1998) analyzed how bank characteristics and the overall banking environment affect both interest rate margins and bank returns.
Results suggest that macroeconomic and regulatory conditions have a pronounced impact on margins and profitability. Lower market concentration ratios lead to lower margins and profits, while the effect of foreign banks have higher margins and profits compared to domestic banks in developing countries, while the opposite holds in developed countries. Demirguc-Kunt and Huizinga (1998) also found that banks with relatively high non-interest earning assets are, in general, less profitable. Banks that rely on deposits for their funding are also less profitable, possibly due to the required extensive branch network, and other expenses that are incurred in administering deposit accounts. Gelos (2006) studies the determinants of bank interest margins in Latin America using bank and country level data. He finds that spreads are large because of relatively high interest rates (which in the study is a proxy for macroeconomic risk, including from inflation), less efficient banks, and higher reserve requirements. Although Al-Haschimi (2007) does not test explicitly for market power, the large association he finds between high operating costs and net interest margins could be evidence of market power.
In a study of United States banks for the period 1989-1993, Angbazo (1997) finds that net interest margins reflect primarily credit and macroeconomic risk premia. In addition; there is evidence that net interest margins are positively related to core capital, non-interest bearing reserves, and management quality, but negatively related to liquidity risk. Saunders and Schumacher (2000) analyzed the determinants of interest margins in six countries of the European Union and the US during the period 1988-1995. They find that macroeconomic volatility and regulations have a significant impact on bank interest rate margins. Their results also suggest and important trade-off between ensuring bank

solvency, as defined by high capital to asset ratios, and lowering the cost of financial services to consumers, as measured by low interest rate margins.

Athanasoglou, Delis and Staikouras (2006) study the profitability behaviour of the south eastern European banking industry over the period 1998-2002.The empirical results suggest that the enhancement of bank profitability in those countries requires new standards in risk management and operating efficiency which, according to the evidence affects profits. A key result is that the effect of market concentration is positive, while the picture regarding macroeconomic variables is mixed. Athanasoglou, et al. (2006) apply a dynamic panel data model to study the performance of Greek banks over the period 1985-2001, and find some profit persistence, a result that signals that the market structure is not perfectly competitive. The results also show that the profitability of Greek banks is shaped by bank-specific factors and macroeconomic control variables, which are under the direct control of bank management. The main source of bank-specific risk in Sub Saharan Africa (SSA) is credit risk. Poor enforcement of creditor rights, weak legal environment, and insufficient information on borrowers expose banks to high credit risk. At the macroeconomic level, weak economic growth adds to risk as it promotes the deterioration of credit quality, and increases the probability of loan defaults. We measure credit risk using the ratio of shareholders fund to deposits, loans to deposit and short term funding since this provide a forward-looking measure of bank exposure to default and asset quality deterioration. We expect a positive association between profits and bank risk.

Well capitalized banks need to borrow less in order to support a given level of assets, and tend to face lower cost of funding due to lower prospective bankruptcy costs. Also, in the presence of asymmetric information, a well-capitalized bank could provide a signal to the market that a better-than-average performance should be expected (Athanasoglou et al., 2005 and Berger, 1995). Well-capitalized banks are, in this regard, less risky and profits should be lower because they are perceived to be safer. In this case, we would expect to observe a negative association between capital and profits. However, while some researchers have used loan loss provisions to measure credit risk, we opted not to follow this as loan loss provisions are part of the accounting breakdown of the revenue itself, which would a priori, induce a significant negative correlation between the two variables.

Berger (2005) finds that if larger banks have a greater proportion of the domestic market, and operate in a non-competitive environment; lending rates may remain high (while deposit rates for larger banks are lower because they are perceived to be safer) and consequently larger banks may enjoy higher profits. Moreover, modern intermediation theory predicts efficiency gains related to bank size (proxied by total assets), owing to economies of scale. This would imply lower costs for larger banks that may retain as higher profits if they do not operate in very competitive environments. The results obtained by the literature for the relationship between size and profits are diverse. Using market data (stock prices) instead of accounting measures of profitability, Boyd and Runkle (1993) find a significant inverse relationship between size and rate of return on assets in U.S banks from 1971 to 1990, and a positive relationship between financial leverage and size. They do not provide, however, any theoretical model to rationalize this evidence. Goddards, Molyneux and Wilson (2004) use panel and cross-sectional regressions to estimate growth and profit equations for a sample of banks for five European countries over the 1990s. The growth regressions suggest that, as banks become larger in relative terms; their growth performance tends to increase further, with little or no sign of mean aversion in growth.

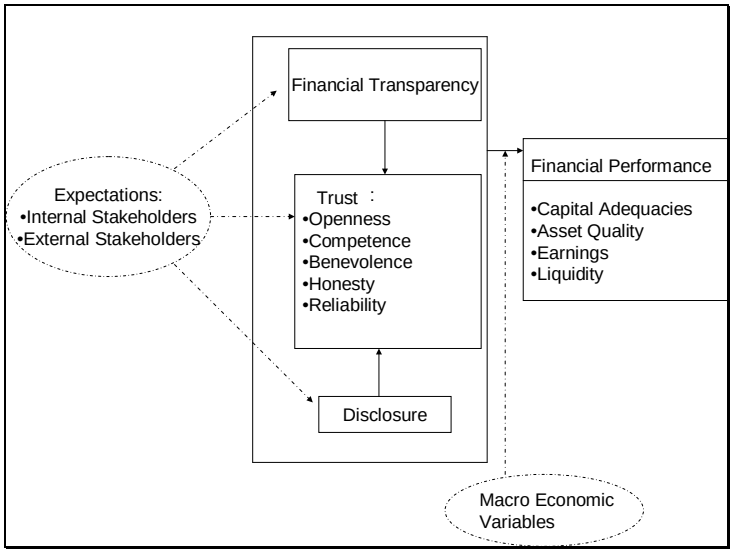
Al-Haschimi (2007) finds that operating inefficiencies appear to be the main determinants of high bank spreads in SSA economies. Brock and Rojas Suarez (2000) also show that administrative and other operating costs contribute to the prevalence of high spreads in Latin America countries. Heggestad (1977) studied the interaction of market structure, profitability and risk, and argues that banks with monopoly power systematically reduce the risk they take at the expense of greater profitability. Given the importance of bank credit as factor of production for almost all firms, this effect may plausibly affect market concentration in other sectors of the economy by making the expansion of smaller firms more difficult. The extent to which inflation affects bank profitability depends on whether future movements in inflation are fully anticipated, which, in turn, depends on the ability of firms to accurately forecast movements in the relevant control variables. An inflation rate that is fully anticipated raises profits as banks can appropriately adjust interest rates in order to increases revenues, while an unexpected change could raise costs due to imperfect interest rate adjustment. Other studies, for example, Bourke (1989), Molyneux and Thorton

(1992), Demirguc-Kunt and Huizinga (1998), have found a positive relation between inflation and long term interest rates with bank capital and performance.

Adewunmi (1997), Oyetan (1997) and Obadan (2004) agreed that there are other critical factors, which combined with capital adequacy, would guarantee a healthy banking sector. Oyetan (1997) argues that indicators or measures of a bank financial condition and performance are based on capital adequacy, asset quality, managerial capability, profitability and liquidity. The stakeholders in deposit money banks expect bank management to demonstrate trust, openness, reliability, competence, honesty, benevolent in utilization of bank funds entrusted in their custody. This is illustrated in chart one below.

Figure One

BANK AND FINANCIAL PERFORMANCE



Rogers Makerere email @yahoo. (2006)

The Nigerian economy is made up of two principal sectors, namely: the private sector and the public sector. In the private sector, resources are either managed by the owners or entrusted by them to professional managers in the private sector. Incorporated companies are corporate bodies whose affairs are runned by a board of directors on behalf of the stakeholders. These professional managers are perceived to possess special skills and

ability to manage the resources efficiently and profitably. Likert (1971) cited in Ade Ojo (1992) makes this point admirably well thus:

> *"All the activities of any enterprise are initiated and determined by the persons who make up that institution…Every aspect of a firm's activities is determined by the competence, motivation and general effectiveness of its human organization".*

For instance, a huge capital can be squandered by an irresponsible and fraudulent management and the bank can fail (Obadan, 2004a). Empirical evidence suggests that higher equity is associated with lower overall bank risk. Virtually every bank failure model finds that a higher equity-to-asset ratio is associated with a lower future probability of failure (e.g. Lane et al., 1986; Avery & Berger, 1991; Cole & Gunther, 1995).

Basel 1 accord of 1988 which deals on bank capital was reviewed to Basel 11 accord of 1992 to meet with the challenges facing banks worldwide. However, the recent 2005 recapitalization of banks in Nigeria was absolute measure of capital adequacy and not relative to the Basel Capital Accord. The issue of capital adequacy has been a controversial subject in finance and the recent recapitalization of Nigerian banks is a pointer to this. Hence, the need to establish to what extent bank capitalization has been influenced by management and performance. In the literature of finance, there are cases that link bank capitalization and market concentration especially where institutional behaviours by regulatory has pushed for a policy of minimum capital requirements. There are those by (Berger, Demsetz and Strahan, 1999); Shih (2003); Studart (2001, 2003), Yacaman (2001). For instance, Studart (2001, 2003) found that four Latin American countries' effort towards instituting an efficient and competitive banking pushed for a policy of concentration in the period (1997-1998).This was facilitated by more effective supervision by the apex banks. The tightening of the regulatory environment resulted in "more international and more concentrated banking sector" (Studart, 2003). Therefore, in this study, the nexus between market concentration and bank capitalization in the Nigerian banking industry will be investigated.

3.3.1 Review of Empirical Literature

In the study of bank performance and credit risk management, Schuller (2008) using a time-series analysis of a five year financial data of Qatar Central Bank (QCB) examined the relationship between profitability (ROE and ROA, separately) which are capital indicators and loan losses (NPL/TL) which represent the credit risk management effectiveness. The regression model for the study is represented below:

$P (ROA, ROE) = \alpha + ßNPL /TL + \mu$

Where, NPL denotes non-performing loans, TL denotes total loan and P denotes capital variables (ROA, ROE). Also, α is the intercept and ß is the parameter of explanatory variable ROA and ROE, μ represent the disturbance terms. The result of ROE on NPL/TL show that non-performing loan of the financial institutions is significantly negatively related to return on assets and return on equity. The results verify the hypothesis that better credit risk management results in better bank performance.

Grigorian and Manole (2005) investigated the determinants of commercial bank performance in transistion using data envelopment analysis (DEA), a non-parametric method that allows one to account for a wide range of functions performed by the banks. The study compared relative performance of decision-making units (DMU) in this case, banks by building a frontier comprised of the most efficient DMUs and focusing on how close other DMUs are to this frontier The DMUs falling inside the frontier are termed inefficient, and their performance were measured vis-à-vis the frontier DMUs. The study found that tighter minimum capital adequacy ratios are associated with stronger revenue-generating capacity and more aggressive deposit-taking behavior. It also found that banking sectors with a few large, well-capitalized banks are likely to generate better efficiency and higher rates of intermediation.

Okazaki and Sawada (2006) investigated the effects of policy consolidation on the stability of the financial system. In the 1920s and 1930s, the Japanese government promoted bank consolidations using a minimum capital regulation stipulated by the Bank Law. They examine the effects of consolidation on bank performance by comparing the changes in performance from year T-1 to year T+ 2 and T+3, between the consolidated banks and the non-consolidated banks, where T refers to the event year when the consolidation occurred.

In order to identify the consolidation effects clearly, they excluded banks that participated in multiple consolidations in the period from year T-2 to year T+3. In measuring bank performance, they focus on the deposit growth rate and the return on total assets (ROA). The deposit growth rate is a performance measure closely related to the stability of the financial system. In calculating standard error, the heteroskedasticity-robust standard by white (1980) was used.

$\Delta Xit = \quad + \quad + \quad ( ) + ß \quad + \quad + \varepsilon it$

Where i refers to the bank and t refers to the event year group. The dependent variable Xit is the difference in ROA or the deposit growth rate in the period from year T-1 to year T+2 or T+3.CONS is a dummy variable that equals 1 if the bank was a merged one, and 0, otherwise. The special interest was the coefficient of the variable. If the consolidation had a positive effect on bank performance, the coefficient is expected to be positive with respect to both dependent variables. The study found that consolidations had a negative effect on ROA, which indicates that consolidations led to inefficiencies, and that this dominated the effect of increased market power, if any such increase occurred.

In White model, recapitalization was not made compulsory for all banks. Mason et al 1999 specified his model as stated below to test the relationship between Financial Liberalization and Corporate performance.

$P = f (, , , , ,)$

The estimated multiple regression equation use was written as:

$P = \quad ß_1 + ß_2 + ß_3 \quad + ß_4 \quad + ß_5 \quad + ß_6 \quad + \mu.$

Where FL = Financial liberalization

ß = Coefficients of independent variables

P = Performance

μ = error term

The result of their work showed that the financial liberalization programme pre-(SAP) has not had a considerable impact on corporate performance of the manufacturing industry and has not improve significantly during the Post-SAP period.

Susmel, Marston, Druck and Basu (2004) in their study of "Bank Consolidation and Performance: the Argentine Experience"; used bank performance as dependent variable while consolidation was treated as the independent variable. They used several bank

performance indicators: return on asset/equity (ROA/ROE), ROE adjusted for return variance (Z-ROE), and a variable indicating the degree of banking sector solvency (Z-ROA. The multiple accounting-based performance variables are meant to compensate for the lack of market determined performance measures. The study considered bank consolidation as exogenous (macroeconomic) or endogenous (microeconomic). In the model the treatment of bank consolidation was considered as exogenous to the return - generating process and Granger –causality tests show weak evidence for causality between the dependent variables and bank consolidation.

The Econometric Method was represented as follow:

$= \alpha + \beta + Uit$

Where: i denotes cross-sections and t denotes time-periods with i = 1, 2, ---- N, and t = 1, 2, ….. T. The dependent variable, , denotes bank returns, α is a scalar, β is K x 1 vector of coefficients and is the it-th observation on K explanatory variables or risk factors or risk factors. A fixed effect model, which specifies the error term as:

$Uit = \sum \mu i\, Di + \varepsilon it$

Where Di is a dummy variable for the i-th bank, and εit is the error term

The empirical model we employed is that of Naceur Ben Samy (2003). He used the model in his research of bank capitalization and performance. The empirical test was concerned with the determinants of interest margin and profitability of the Tunisia deposit banks. Capital ratio, overhead, loan and liquidity ratios were proxies for internal indicators. Meanwhile macroeconomic measures and financial structure indicators were used as external factors. A linear equation relating the performance measures to a variety of factors is shown below:

$Perij, t = f (BCij, t + Mt + FSt)$

Where:

Perij,t represents two alternative performance measures for the firm j during the period t.

BCij, represent bank variables for bank j at time t; Mt are macro economic variables.

Mt is macro economic variables.

FSt are measures of financial structure indicators.

The relationship between net interest margins and profitability, and bank' characteristics indicators, the inclusion of macro-economic variables and financial structure indicators was to control for cyclical factors that might impact bank profitability Two measures of performance used in the study are net interest margin (NIM) and return on assets (ROA). The NIM variable is defined as the net interest income divided by assets while ROA is a ratio computed by dividing the net income over total assets. The bank's characteristics indicators used as internal of performance are:

i. The ratio of operating expenses to total assets (Efficiency of Management) is expected to have a negative impact on performance because efficient banks are expected to operate at lower costs.
ii. The ratio of equity capital to total assets (CAP);
iii. The ratio of bank's loans to total assets (BLOAN);
iv. The ratio of non interest bearing assets to total assets (NIBA)
v. The log of bank assets (LNSIZE)

The macro economic variables used are: inflation (INF), interest (INT) and exchange (EXCH) rates. High inflation rates are generally associated with high loan interest rates, and therefore, high incomes. High interest rates and exchange rates are expected to have a positive impact on bank's performance. The result of the research also examines how the performance of the banking sector is related to the development of the banks. Relative size (RSIZE) is calculated as the ratio of the stock market capitalization to total assets of deposit money banks. The stock market capitalization divided by GDP (MCAP) as a proxy of financial market development and as a measure of the size of the equity market. The size of the banking sector (SBS) is measured by the ratio of total assets of the deposit banks to GDP and is intended to measure the importance of banking financing in the economy expected to have a positive impact on bank' s performance.

The empirical findings of the research confirm positive relationship whether we use interest margin or return on assets as a dependent variable and in all specifications. This may indicate that well-capitalized banks support lower expected bankrupt costs for themselves and their customers, which reduce cost of capital. Next is a positive and significant coefficient on the overhead to assets ratios variable (OVERHEAD) in the net

interest margin and return on assets equations. In all net interest margin equation specifications, the coefficient on bank loans (BLOAN) is positive and significant.

Macro-economic variables (independent variables) that affect bank performance are - interest rate, inflation and exchange rates (Ige, 2006). He captured and represented the macro economic variables of bank capitalization and performance as follows:

Change in capital base and income.

Ige (2006) postulates that capitalization of the banking system will positively affect the growth rate of the economy and therefore states that:

(1) Y = f (,i)

Where Y = growth rate of the Gross National Product (GNP); and

= change in shareholders' fund of the commercial banks.

i = interest rate

Interest rate

(2) Ige (2006) postulates that Individuals and businesses expect capitalization to have a significant effect on interest rate. In other words we examine:

i = f (Y, , E, P)

This implies that the rate of growth of the economy y, the change in shareholders fund K, exchange rate and the general price level P should affect interest rate i.

The exchange rate.

Capturing the variation of the exchange rate, Ige (2006) postulates that:

(3) e = f (Y,)1

The modification to Naceur Ben Samy (2003) model in this research is by way of introduction of LAD (Liquidity), B DEPOSIT, EXPEAN (Expenses Management) and (MC) Market Concentration (Internal determinants) and macroeconomics variables: interest rate and exchange rate as determinants of bank performance in Nigeria. The ratio of bank's loans and advance to bank deposit (B DEPOSIT), Liquid asset to deposit (LAD), Operating expenses to total assets (EOM), the ratio of bank's loan to total assets (B LOAN) and the ratio of Shareholders fund to total assets (CAP), EXPEAN = Expense preference of bank is measured by ratio of total expenses to total earnings; and MC =

Market Concentration is measured by market share of bank asset, bank deposit and bank credit concentration (loans & Advances). This will be captured by Market Share Percentage. These variables mentioned above are internal determinants of bank performance. Because of the rising prices of goods and services (Inflation), we need to determine their effect on bank performance. The same goes for overhead considering the increase in expenditure in energy bill of deposit money banks and other sectors of the economy due to unstable power supply. The macroeconomic variables in the study are interest rate, inflation and exchange rate. While deposit rates have stagnated, interest rate on loans and advances has been on the increase over the years in Nigeria and it has affected lending to the real sectors of the economy. Since the introduction of SAP in 1986, the exchange rate and inflation have been on the increase. However, the rates have been stable since the beginning of 2008.

In the study of capital requirements and bank behavior (1985-1995) empirical evidence for Switzerland, Bertrand (2000), remodeled the equations of Shrieves and Dahl (1992) because observed changes in capital and risk in period t are a function of the target capital and risk levels, the lagged capital and risk levels, and any exogenous factors. The model built for this purpose is stated as:

$$\Delta CAP_{j,t} = + .REG_{j,t-1} + . ROA_{j,t} + . SIZE_{j,t} + . Risk_{j,t} - .CAP_{j,t-1} + e_{j,t}$$

$$\Delta RISK_{j,t} = + . REG_{j,t} + .LLOSS_{j,t} + . SIZE_{j,t} + . CAP_{j,t} - .RISK_{j,t-1} + n_{j,t}$$

Where: CAP represents capital, REG represents regulatory pressure, ROA represents return on assets, RISK represents risk- weighted assets, SIZE represents total assets, LLOSS represents current loan losses and e represents dummy. They observe a positive and significant relationship between changes in risk and changes in the ratio of capital to total assets but no significant relationship between changes in risk and changes in the ratio of capital to risk-weighted assets. These findings are consistent in a regime of risk-based capital standards, as banks constrained by capital requirements have to increase their capital risk-adjusted capital ratio constant. They also found that Swiss banks close to the minimum regulatory capital requirements tend to increase their ratio of capital to risk-weighted assets. This means the penalty implied by a breach of the capital requirements, has the desired impact on banks' behavior. This indicates that an increase in available

capital through retained earnings or equity is less costly than a downward adjustment in the risk of the portfolio. The editorial comment of Nigerian Banker (2004) on 2004 monetary policy implementation observes that in fiscal 2004 and 2005 the CBN expected banks and other financial institutions to operate in such a way as to remain liquid at all times and avoid the spectre of overdrawn accounts and being sent of clearing. The CBN (2004) posited that:

> *"the rating of licensed banks using CAMEL parameters shows that 10 banks were "sound", 51 were "satisfactory", 16 rated "marginal" while 10 were rated unsound as at the end of 2004.The report also shows that banks have continued to show deteriorating performance with 17 banks (18.89%) rating either marginal and /or unsound out of 90 banks in 2001, while 26 banks (29.89%) of the 87 banks in existence in 2004 rated either marginal and/or unsound. The marginal and unsound banks are considered to have exhibited such weaknesses as under-capitalization, illiquidity, weak/poor asset quality, poor rating", etc.*

Nwude (2005) identified the imperatives for bank recapitalization in Nigeria to include too many banks with sizes being too small to support any sound banking business; stunted growth of the real sector arising from incapability of bank capital ratio and size to fund industrial development; high lending rate and shunning of real sector, and unprofessional and unethical practices. Others include the need to promote public confidence in the banking sector; curtailment of excessive risk taking by banks; reduction in the incidence of insolvency and distress and the need to dilute ownership structure giving rise to professionalism. Ilo (2006) study sought to establish what factors influenced the capital ratio of the Nigerian banks prior to the recapitalization mandate. The study analyzed the data as contained in the financial report of 29 commercial banks out of the 87 banks operating in Nigeria as at the end of 2003, representing 33% of the commercial banks. The model built for this purpose is stated as:

CAR = f (ROA, RSK, DR, LLP, REG, Z)

Where:

CAR = Capital Ratio; measured as the ratio of equity to total asset

ROA = Return on Asset; a measured of profitability; measured as the ratio of profit before tax to total asset.

RSK = Lending Risk, measured as the ratio of classified loans to total loans.

LLR = Loan Loss Reserve Ratio; proxied by the ratio of loan loss provision to total assets;

DR = Deposit Ratio, which measures the extent of bank reliance on depositors funds for financing bank assets (also an indicator of its liquidity) measured as ratio of customers total deposit liabilities to total asset.

REG = Regulatory Pressures, which evaluate the level of pressure on a bank to strive to attain the minimum capital base of N2 million as at the end of 2003 as required. Proxied by dummy variable: REG = 1 if bank has met minimum capital base and '0' if otherwise.

Z = Bank Size; measure by the natural log of the bank total asset. The ratio of equity capital to total asset is used as an inverse measure of leverage in standard banking research in part because of the regulatory attention paid to capital ratios (Berger, Wharton Financial Institution Centre, & di Patti, 2002).

The regression result shows that profitability has a positive and significant influence on bank capital ratio. The risk assets, deposit ratios and bank size have negative and significant influence on bank capital ratio. This is because increases in values of these variables tend to make Nigerian banks to be highly geared. Regulatory pressure was found to improve capital base given its positive influence, though not significant.

Joh (2003) identified control-ownership disparity as a determinant of firms' profitability. In a firm with a high control-ownership disparity, a controlling shareholder exercises control but owns only a small fraction of the firms' cash flow and La Porta et al (2002b) find that these firms are widely around the world. Joh argues that, during economic crisis, firms having high control-ownership disparity show low performance mainly because these firms' controlling shareholder have an incentive to expropriate resources since the private benefits exceed cost.

Some studies of the Nigerian banking industry have linked characteristics of individual bank companies to profitability. These studies include Nwosu and Nwosu (1998), Uche and Ehikwe (2001, Beck et al (2005) and Brownbridge (2005). In the main, their studies link capital base (Nwosu and Nwosu, 1998), lending activities (Beck et al., 2005) and Brownbridge, 2005), information technology (Uche and Ehikwe, 2001), management

quality (Nwosu and Nwosu, 1998) and Brownbridge, 2005) and bank size (Brownbridge, 2005) to the profitability of banks in Nigeria. However, among all these studies, only Beck et al (2005) employed the intricacies of econometrics in deriving their conclusions. The majority of studies on bank performance, such as Short (1979), Bourke (1989), Molyneux and Thorton (1992), Demirguc-Kunt and Huizinga (2001), Goddard et al (2004) and Athanasoglou et al (2005) use linear models to estimate the impact of various factors that may be important in explaining bank performance.

Aburime (2008) in his study of the determinants of bank profitability: company-level evidence from Nigeria; elicited his data from the public financial statement of an unbalanced panel (Athanasoglou et al., 2005 and Baltagi, 2001) of 33 commercial and merchant banks in 91 observations over the 2000-2004 period.

He built the model for his study as follows:

Pit = . + δCAP $_{i, t-1}$ + . + δ + . + . + . + . + . + . + .

δ CODit + δSA + .

Where Pit is profit of bank i at time t; $_{,t-1}$ is capital size of bank i at time t-1; is size of deposit liabilities of bank i at time t; is size of credit portfolio of bank i at time t; is composition of credit portfolio of bank i at time t; is labour productivity of bank i time t; is state of IT of bank i at time t; is risk level of bank i at time t; is size of bank i at time t; is ownership of bank i at time t; is ownership concentration of bank i at time t; is control-ownership disparity of bank i at time t; is structural affiliation of bank i at time t; is a constant; is variable coefficient e is an error term.

Three reliable conclusions were drawn from the study. First and foremost, capital sizes, size of credit portfolio and ownership concentration are significant company-level determinants of bank profitability in Nigeria. Secondly, size of deposit liabilities, labour productivity, state of Information technology (IT) ownership, control-ownership disparity and structural affiliation do not significantly determine the profitability of banks in Nigeria. Finally, the relationship between bank risk and profitability is inconclusive in the study. Though the results indicate that capital size is a significant determinant of bank profitability in Nigeria, only the size of the reserves component of bank capital has a significant relationship with bank profitability. The shares component of bank capital does not have a significant relationship. This finding is consistent with that of Aburime and

Uche (2006), and indicates that bank share capital regulations in Nigeria have simply been altering the form and not the substance of banks operating in the Nigeria banking industry. Estimation results also reveal that size of the credit portfolio is a significant determinant of bank profitability in Nigeria; however, the relationship is negative. The result jointly indicate widespread non-performance of bank loans and advances in Nigeria, and are consistent with the findings of Mamman and Oluyemi (1994), who attribute it to low management quality. Estimation results reveal that ownership concentration is a significant determinant of bank profitability in Nigeria; and the relationship is positive. This finding is consistent with that of Mitton (2002) and indicates that owners having large stakes in banks characterized by high levels of ownership concentration are more efficient in monitoring the management and performance of their respective banks. Besides the need for banks to improve their risk return characteristics in their portfolios, Ojo (2006) posited that the missing link in Nigerian banks' failure to perform their expected role over the years goes beyond mere jerking up the capital but ability to lend and willingness to finance industrial or productive ventures that can accelerate the country's economic development.

Sangosanya and Posu (2006) posited that a crucial impediment to the efficient functioning of the financial system is asymmetric information. It explains a situation in which one party to a financial contract has less accurate information than the other party. For example, a borrower who takes out a loan usually has better information about the potential returns and risk associated with the investment projects that the loan will finance than the lender does.

Osinubi (2006) in his study of the effects of recapitalization on financial performance in selected banks 2001-2005, found that the asset quality of the Nigerian banking industry does not depend on its capital base. The study calculated the CAMEL ratios for each of the selected banks and relates these to their capital base. Data was collected on shareholders' fund, which constitutes the bank's capital base; data was also collected on the total asset, classified loans, Earning before interest Taxes (EBIT) and Gross Loans and Advances. Using the CAMEL indicators, the study found that the asset quality of the Nigerian banking industry does not depend on its capital base. However, the study shows that the more the capital base the higher the liquidity and capital adequacy of the banking industry.

The return on assets also increases as the firm's capital base increases. The performance indicator model (CAMEL ratios) was calculated for each bank as follows:

C: Capital Adequacy = $\frac{\text{Equity}}{\text{Total Asset}}$

A: Asset Quality = $\frac{\text{Classified Loans}}{\text{Equity}}$

ME: Management Efficiency = $\frac{\text{Earnings before interest and Tax}}{\text{Total Asset}}$

Liquidity: = $\frac{\text{Gross Loans and Advances}}{\text{Total Asset}}$

Toby (1999) evaluated the financial performance of public enterprise banks in Nigeria. Cost of fund and mismatched of interest sensitivity and duration periods are found to be other relative causes of poor financial performance. The study suggests an optimal match of sound management and macroeconomic stability to reverse the dwindling fortunes of the banks. Finally, the study suggested that surviving banks be recapitalized by privatizing them through the NSE. The recent bank recapitalization/consolidation has underscored this submission both for state –owned banks and privately-owned banks in Nigeria. Empirical evidence from Naceur and Goaied (2001) indicate that the best performing banks are those which have maintained a high level of deposit accounts relative to their assets. Increasing the ratio of total deposits to total assets means increasing the funds available to be used by the bank in different profitable ways such as investments and lending activities.

In turn, this should increase the banks' returns on assets *ceteris paribus* (Allen and Rai, 1996 and Holden and El-Bannany, 2006). The interest rate policy can be seen from two perspectives, the bank's policy regarding the interests it pays on deposits received by it and the bank's policy regarding the interests it receives on credits given by it. The interest paid by a bank on its deposit liabilities is a cost source and tends to contract the bank's income, *ceteris paribus*. This is why Fries, Neven and Seabright (2002) argued that the profit function of a bank includes the interest it pays on deposits. On the other hand, the interest received by a bank on credits given by it is a revenue source and tends to expand the bank's income *ceteris paribus*. Hence, Bobakova (2003) argues that the profitability of a bank is influenced by its interest rate policy. Here the decisive factor is the bank's ability

to set such an interest rate for asset deals that meets cost of funds, operating cost, as well as the required rate of profitability.

The profit function of a bank includes the size and composition of its credit portfolio (Bashir, 2000 and Fries et al., 2002). Ordinarily, loans generate revenue through interest and increase bank profits (Rhoades and Rutz, 1982); hence, a large credit portfolio ought to imply improve profitability. However, substandard credits are a source of heavy financial losses to a bank and have actually been held responsible for numerous bank failures, (Olajide, 2006). It follows that a large credit portfolio could also result in reduced bank profitability if it mainly comprises substandard credits. Therefore, it is right to conclude that the size of a bank's credit portfolio affects its profitability either positively or negatively, depending on the composition of substandard credits. Koehn and Santomero (1980), Kim and Santomero (1988) and Athanasoglou et al (2005) suggest that bank risk taking perverse effects on bank profits and safety. Bobakova (2003) asserts that the profitability of a bank depends on its ability to foresee, avoid and monitor risks and possibly to cover losses incurred in the course of business. Hence, in making decisions on the allocation of resources to asset deals, a bank must take into account the level of risk to assets.

Furlong (1992) cited in the Federal Reserve Bank of San Francisco (FRBSF) economics letter (2004) argued that a firm that produces a higher volume of output can see its unit cost of production decline because the cost of some of the inputs are fixed, such as administrative and overhead expenses. However, diseconomies of scale are also possible, in that average cost of production may start to rise when output exceeds a certain volume because it may be more costly to manage a very large firm. For instance, where more branches of a bank are opened, some may just become cost centre such that in the long run it may not be cost effective.

The performance of deposit money banks is influenced by a host of factors some of which are macroeconomic, institutional, regulatory and legal. Uchendu (1995) posited that in attempting to maximize profits; banks must do so under capital adequacy and liquidity considerations. He noted that the regulatory influences of monetary authorities include

those on interest and exchange rates, bank reserves (indicating credit availability), labour costs or productivity. Yudistira (2003) in his study of bank capital requirement in Indonesia found that there is a strong positive relationship between bank capital and the growth rate of bank deposit. Secondly, the results from the effect of deposits and loans showed that poor capitalized operated with low net worth relative to asset. The capital/asset ratio was insignificant and reduced in size as a withdrawal of bank deposits throughout the post crisis in Indonesia. Altunbas and Marques Ibenez (2004) in their work on mergers and acquisition in Europe find that differences on the capitalization and investment in technology and financial innovations of merging banks institutions enhanced performance while diversity in their capitalization, technology and financial innovation strategies are negative from a performance perspective.

The effect of changes on capital levels on performance hinges on the recent theory of the banking firm, which is based on the 'specialness" of banks in a setting in which there is asymmetries of information. In this setting, commercial bank specializes in lending information to problematic borrowers (Berger et al., 1995). Another argument relating changes in the bank capital and performance relates to agency problems between shareholder and managers. Jensen (1986) suggests that increasing financial leverage could reduce the type of agency problems. The reason is that leverage may increase pressure on bank managers to become more efficient due to short-term pressures derived from the needs of servicing the funds. There is no doubt the various sources of finance are available to corporate organizations, this ranges from internally generated funds, interbank loans, and the capital market (for debt and equity) yet, bank management faces a lot of problems, in deciding whether to finance investment with debt or equity; that is using either internal or external sources. At any time the success or otherwise of the firm depends on bank management judicious acquisition and commitment of financial resources (debt and equity) to the firm’s investments. Bank management effectiveness in doing this will magnify the return of shareholders wealth which has been described as the best objective of a firm in finance theory. The leverage of banks also comes in form of deposit liabilities which bank service from profit generated. Therefore, least profitable banks will not be able to service its deposit liabilities by way of paying interest without affecting the capital

structure adversely. In terms of bank profitability and margins, a key international study is by Demirguc-kunt and Huizinga (1999) that estimates bank profitability and net interest margins over 1988-95 in 80 countries. They find that higher net interest margins and higher profitability are associated with stronger capital base, higher inflation, higher real interest rates and lower reserve requirements. He stated bank specific variables as:

- Loan-to-asset ratios and the real loan growth which proxy for the credit risk of bank assets. We assume that loans are riskier investment compared to typical assets in the securities portfolio of banks (e.g government bonds). Hence, a higher loan-to-asset ratio implies higher interest margins to compensate for higher credit risk.
- Capital strength, defined as the unadjusted equity-to-asset ratio. Typically a strong capital base implies a lower default probability for the bank and therefore its cost of funding is lower (i.e. interest margin is higher). It also gives the bank more freedom to take advantage of profitable lending opportunities. On the other hand, too-low capital ratios may have opposite impacts on banks' lending decisions.

The net interest margin is an indicator of profitability and credit risk involved in bank assets. It is hypothesized that an increase in lending rate as well as the spread between the lending rate and deposit rate lead to increase in profit, so does increase in black market premium. However, an increase in excess liquidity may or may not lead to an increase in bank profitability. An increase in capitalization may lead to increase in profit in a condition of strong demand for loanable funds. It may lead to a fall in profit in a condition of weak demand and hence constrain the ability of banks to make profits. Rising labour costs could increase return on capital only if matched with productivity. Generally, increase in labour cost should decrease return on capital, as it is a cost to the banking firm. It may also lead to an increase return on capital if the increase is matched with productivity, in line with the marginal productivity theory. The proposition is testable. Closely related to the issue is the level of operating efficiency indicated by the ratio of total operating expense less interest paid on deposit to total earnings. It has been argued that part of the problems in banking especially the systemic distress witnessed in the past years is as result of absence of good

corporate governance coupled with the frivolous indulgence by management in ostentatious expenditure that has little or nothing to do with productivity.

Nyong (1994) opined that globally, regulators attach great importance in the regulation to bank capital than the detail of asset portfolio because capital adequacy is the most important single indicator of bank's soundness, particular with respect to solvency or the probability of bank failure. Bank failure has serious adverse effect on economic development. There is no doubt that large-scale bank failures limit the ability of banks to create money, jeopardize the payment mechanism and disrupt lending activities. Adequate capital permits the acquisition of the institutional structure necessary for a bank to perform the intermediation function and also to provide related financial services. It provides protection in conditions of near economic collapse against unanticipated adversity leading to loss in excess of normal expectations.

From the perspective of Watson (1980) cited in Nyong (2001) a banking industry with very few failures inspires public confidence and gives the appearance that the regulator has done his job well. In the literature of finance and from historical perspective, capitalization is being perceived as a fundamental feature of the banking industry of the 1990s. Most of the capitalization that came up through consolidation framework assumed that the primary motive for consolidation is the maximization of the shareholder value. However, the interest of other stakeholders are consider important if it affects the value of shares through the cost of funds, supply of labour or other factors of production and the demand for services. In Boyd et al (1993), it was discovered that in merger and acquisition (M&A) arrangement, a larger, more efficient institution tends to take over smaller, less efficient institution, presumably at least in part to spread the expertise or operating policies and procedures of the more efficient institution over the one acquired. Peristiani (1993) posited that acquiring banks are more profitable and have smaller non-performing loan ratios than targets.

Simulation evidence also reveals that large efficiency gains are possible, if the best practice banks merge and reform the practices of the least efficient banks (Savage 1991, Shaffer 1993). In Calomiris and Karceski 1998 and Rhoades 1998), their case studies of United States (US) bank M&As support the view that potential efficiency gains act to influence some M&A. From the above perspective, they concluded that poorly capitalized

banks are more likely to be acquired while banks with a high degree of cost inefficiency are, *ceteris paribus*, less likely to be acquired without government assistance (Wheelock and Wilson 1998). Forcarell, Panetta and Salleo (1998) found in their study that profitable banks are always willing to be acquirers, while small, unprofitable banks tend to be the ones acquired. In the recent Nigeria capitalization of banks in 2005, Soludo (2004) argued that consolidation was designed to ensure diversified, strong and reliable banking sector, which in turn guarantee the safety of depositors' money, effective performance of its developmental roles (economic growth and development) and competitive players in African regional and global financial system. The main reason behind financial reforms in the world is to make banks to become stronger players in a manner that will ensure returns to their shareholders over time and greater impacts on their domestic economies. Where developing countries fail to take this opportunity, they will be left behind in the global train and thus stand to be marginalized in the long run.

Evidences from the findings of Altunbas, Maunde and Molyneux, (1995) revealed that the potential for efficiency gains also motivate consolidation in the financial industry as it provides impetus for improvements between the acquirers and targeted banks. Diversifying M&A may also improve efficiency in the long term through expanding the skill of the management (Milbourn, Boot and Thakor, 1999). According to Talwar (1995) consolidation is a good strategy for enhancing efficiency, reducing overlap in operations, "right sizing" and redeploying surplus staff either by retraining, alternate employment or voluntary retirement etc. According to Rose (1989), the response of typical managers of banks on the issue of motives for capitalization/consolidation is that it is for risk reduction purposes. However, the recent capitalization/consolidation process in the Nigerian banking industry and around the world has shown that it helps to produce less risky organization.

It is important to note that financial stress on bank customers could stem from the disruption of historical lending patterns. A lack of short-run substitutes for bank credit would imply that a disruption in the supply of bank credit would have negative consequences for the affected borrowers and possibly for the macro-economy, as argued in the literature by Bernanke (1993). Capitalization/Consolidation shift banking assets to larger banking organizations and that larger banking organizations tend to devote a smaller fraction of their assets to small business lending. There is a growing feeling that the

reduction in small business lending as a result of consolidation could be substantial under what they term "consolidation hypothesis". Strahan and Weston (1998) found that the decline in the percentage of small business loan-to-assets is greater among banks not involved in mergers than among banks involved in mergers. Their findings do not support the consolidation hypothesis.

The banking industry has undergone drastic changes over the past decades as a result of advances in information technology, deregulation, and globalization. The recent wave of consolidation remains a major issue that characterizes the banking industry restructuring in most countries of the world. It is simply an indirect way of preparing the industry for possible survival. It is part of natural evolution of industrial revolution aimed at making an institution larger, more efficient and better capitalized; among others. With consolidation, banks are now becoming highly capitalized for purposes of meeting their day-to-day banking obligations. It constitutes a major concern to deposit money banks as it has adverse consequences along the path of achieving financial stability. The magnitude of the effects of consolidation also depends on the quality of the regulatory framework, supervision practices, and financial market sophistication. The various efforts of the regulators in designing a comprehensive incentive package that would facilitate the process of mergers and acquisitions for resolving financial crisis in the country are wholesome development and should be reinforced. The recapitalization process and the need to seek to build high quality assets should be accorded utmost priority in any financial system. The concept of bank market concentration and bank consolidation are different but related concepts in literature. The essence of the reference to them in this work is to show how one affects the other in terms of advantage of megabanks in an economy. We shall now proceed to examine some conceptual and theoretical underpinning for this study.

3.4 THEORETICAL FRAMEWORK

3.4.1 Buffer Theory of Capital Adequacy

As a consequence, banks may prefer to hold a 'buffer' of excess capital to reduce the probability of falling under the legal capital requirements, especially if their capital adequacy ratio is very volatile. Capital requirements constitute the main banking supervisory instrument in Nigeria. The Central Bank of Nigeria intervenes little in banks'

activities but does directly conduct on-site examination and at times delegating this task to external auditors. By contrast, a breach of the capital requirements is considered a major infringement of banking legislation and is not tolerated by the Central Bank of Nigeria. Banks remaining undercapitalized for prolonged periods are closed. The withdrawal of some banking license at the expiration of the recent capitalization of banks in Nigeria is a pointer to this fact. Banks will require more capital if deposits are not fully mobilize from the public. Capital is more reliable, dependable and can be used for long term planning. Ability of banks to mobilize enough deposits obviates the capital base from being eroded. The buffer theory of Calem and Rob (1996) predicts that a bank approaching the regulatory minimum capital ratio may have an incentive to boost capital and reduce risk in order to avoid the regulatory costs triggered by a breach of the capital requirements. However, poorly capitalized banks may also be tempted to take more risk in the hope that higher expected returns will help them to increase their capital. This is one of the ways risks relating to lower capital adequacy affects banking operations. In the event of bankruptcy of a bank, the risks are absorbed by the bank, customers and Nigeria Deposit Insurance Corporation (NDIC). At present NDIC pays a maximum of N200,000 to a customer in the event of bank failure. Hence, customers are concerned about capital position of banks at all time. Banks are expected to insure and pay 15/16 of customers deposit liabilities multiplied by 1% to NDIC to enable their customers benefit from the scheme. The above practice of NDIC in Nigeria is applicable to other countries but varies in amount.

In model 3 of this study, capital our dependent variable which is represented by shareholders fund (SHF) and explained by our buffer theory of capital adequacy helps us to test the propositions in hypothesis 3. The higher the shareholders fund the better is bank liquidity and capital adequacy. The deposit insurance scheme, which is compulsory in Nigeria, also exerts regulatory pressure on banks. In his study, Vojta (1980) opined that adequate capital provision against excess loss permits the bank to continue operations in periods of difficulty until a normal level of earning is restored. The benchmark set by regulators of bank capital sometimes differs from those of the bankers. These capital standards have led to questions on whether or not regulators have been able to bring about changes in bank capital when their standards of capital adequacy differed from those of

bankers. Aggressive banks may try to extend the frontiers of "imprudent management policy" by operating with less capital base, often in violation of the regulatory guidelines. But the supervisory agencies usually stand their ground by resisting decline of capital to avoid bank failure with the concomitant high cost to the society.

3.4.2 Diversification Theory

In banking, the greater size implies the potential for improved diversification in product/services. Diversification by way of innovation in product/services offers less risk and, hence, cost savings in managing risk (Diamond, 1984) and in signaling the bank's riskiness to outsiders. Diamond further stated that:

> *"if larger banks respond to a reduced marginal cost of risk by taking on and managing more risk, they may appear to have constant or even decreasing returns to scale because the extra risk is costly. Given a bank's scale and in its inherent asset quality an increase in financial capital reduces the probability of insolvency and provides an incentive for allocating additional resources to manage risk in order to protect the larger equity stake. Since financial capital constitutes the bank's own bet on its management of risk, it conveys a credible signal to depositors of the resources allocated to preserving capital and insuring the safety of their deposits".*

Thus higher levels of capitalization, given observable scale and inherent asset quality, inferred from measures such as the level of nonperforming loans, signal greater safety to depositors and, thus, reduce the probability of a liquidity crisis. Banks, like other business organizations, are constrained to observe at least the three basic decisions of investing, financing and dividend policy. When banks promoters are convinced of getting satisfactory returns (captured by ROC in model 2) from banking business that is investment then they have to think of financing the banking business if banks are to play the role of financial intermediaries (channeling funds from deficit to surplus units) they must build up an appropriate level of asset base commensurate with their target level of operation and profitability. This implies that interest from bank loans and advances (bulk of bank profit) affects the return on capital (ROC) and return on asset (ROA). Bank assets

should be financed with an appropriate mix of bank core capital, depositors' funds and other liabilities. Diversification is also key where there is high concentration of firms in an industry. This would be discussed in our hypothesis four.

Koehn and Santomero (1980), Kim and Santomero (1988) and Rochet (1992) found that if capital is relative expensive, the forced reduction in leverage diminishes the bank's expected returns. As a consequence, the bank's owners may choose higher return and a higher risk position. For instance in model 1, where it is perceived that return on asset will be higher, shareholders fund/loans and advances (safety index) that is capital adequacy ratio is expected to be higher. In some cases; the increase in the bank's risk overcompensates the increase in capital and leads to a higher default probability. The introduction of risk-based capital standards can be considered as an attempt to eliminate the possible perverse effects of capital requirement. Unfortunately, evidence indicates that current capital requirements do not reflect banks' risk-taking accurately.

Avery and Berger (1991), for example, find that the Basel Accord risk-weighting framework explains only about 5% of banks' loan performance. If there are flaws in the risk-weightings, risk-based capital standards may have destabilizing effects, as banks constrained by the capital requirements can improve their capital ratio by decreasing risk in terms of the official standards while business risk is actually increased. According to Myers and Majluf (1984), in the absence of periodic adjustments in the capital ratio, banks would never hold more capital than required by the regulators or the market. In practice, however, adjusting the capital ratio may be costly. Equity issues may, in the case of information asymmetries, convey negative information to the market on the bank's economic value. Moreover, shareholders may be reluctant to contribute new capital if the bank is severely undercapitalized, as most of the benefits would accrue to creditors. In the absence of these capital adjustments, banks falling under the legal capital requirements will not be able to react instantaneously. They may then be subject to repeated regulatory penalties, or even worse, closed down.

3.4.3 Expense Theory

According to the expense theory of Williamson (1963) cited in Nyong (2001) otherwise called the theory of managerial discretion, managers have the option in pursuing policies,

which maximize their own utility rather than profit maximization for shareholders. Such utility include the satisfaction which mangers derive from certain types of expenditure. Managers' prestige, power and status are to some extent reflected in the amount of slack they receive in the form of expense account, luxurious offices and building, company cars and other perquisites of office. Operating efficiency (operating expenses/total assets) attempts to capture this aspect of bank behaviour. Operating expenses/total assets captured by (EOM) is represented in model 1 as one of our control variables to explain the dependent/regressand that is return on assets (ROA). Operating expenses (expenses management) is derived from the use of resources and can have positive (if well utilized) or negative implication on the dependent variable.

3.4.4 Portfolio Regulation Theory

We can also use the theory of portfolio regulation to gauge the performance of banking firms. The theory opined that the regulation of banks is necessary to maintain safety and soundness of the banking system, to the extent, which put them in a position to meet its liabilities without difficulty. This made it imperative for the regulatory authorities to compel greater solvency and liquidity on individual banks than making it optional. This theory is represented in model 1 of this study. It captures LAD that is Liquid Assets (LA)/ Bank Deposit (BD) and depicts the liquidity position of the banks. The higher this ratio the better liquidity and solvency of the individual banks. According to Peltzman (1970), if the asset portfolio is deemed too risky or capital inadequate, the relevant supervisory agency will attempt to compel a change in the bank's balance sheet.

3.4.5 Deposit Insurance Theory

The deposit insurance theory also provides an insight into the behaviour of deposit money banks (Flannery, 1989; Cham, Greenbaum and Thakor, 1992). In the context of this theory, banks are viewed as portfolio of risky claims. As insured banks increase their risk of failure without limit, there is an expected value transfer of wealth from government deposit Insurance Corporation to bank owners. Regulators are concerned about bank's soundness, particular with respect to solvency or the probability of bank failure. Therefore, regulation of bank risks exposure is necessary to reduce the expected losses incurred by the deposit

insurance corporation. Deposits solicited from customers are not as dependable and reliable as the bank capital requirement. It cannot be used for long term planning. However, more deposits means banks can grant more loans and will not obviate the need for excessive capital. Where bank loans and advances are given out to customers without due process it might affect capital and liquidity position of a bank in the long run. In model 1, B deposit (LAD: liquidity/deposit - LA/BD) that is liquidity is captured as one of our independent variable. According to Flannery (1989) the regulatory capital requirements means that larger banks are less inclined to take greater risks. Kelly (1990) opined that large banks may be less willing to take risks so as to exploit the deposit insurance subsidy. An important feature of this theory is that large banks are less likely to fail than small ones because of their low inclination to take risks. This implies that although the return on capital made by large banks may not be high, they are secured.

An analysis of the Annual and Financial Reports (1985-1989 and 1999-2005) of the three big banks in Nigeria First Bank of Nigeria (FBN), United Bank of Africa (UBA) and Union Bank of Nigeria (UBN) evidence a yawning gap in the Loan-Deposit interest structure. For instance, UBN paid interest on savings amounting to N41,685m, received interest on loan amounting to N70,543m, mobilized deposit amounting to N1,04,767m and extended loans to customers to the tune of N280,935m for the period 1999-2005. UBA paid interest on savings amounting to N29,886m, received interest on loan amounting to N58,607m, mobilized deposit amounting to N920,187m and extended loans to customers to the tune of N275,002m from 1999-2005. For the period 1984-1988, UBA paid interest on savings amounting to N1,191,536m, received interest on loans to customers amounting to N1,203,591m. FBN paid interest on savings amounting to N26,403m, received interest on loan amounting to N78,437m, mobilized deposit amounting to N1,200,068m and extended loans to customers to the tune of N459,977m from 1999-2005. For the period 1984-1988, FBN paid interest on savings amounting to N1,139,352m, received interest on loans to customers amounting to N1,203,865m. The Loan-Deposit interest structure gap is a true reflection of a weak economy base that needs to be reflated in order to stimulate industrialization's. The Loan-Deposit interest rate gap also shows the extent of maladministration by the custodian of funds in the Nigerian financial system. Depositors

can hardly save because the structure portrays low interest rate on savings while only few investors can afford the high interest rate on loans and advances.

3.4.6 Intermediation Theory

Intermediation theory is the process taken by bank management in mobilizing funds from the surplus spending units to the deficits units. A strong capital base implies a lower default probability for the bank and therefore its cost of funding is lower. It also gives the bank more freedom to take advantage of profitable lending opportunities. Bank performance can also be looked at from the modern intermediation theory, which provides a new dimension to bank behaviour as seen in Boyd and Prescott (1986), Williamson (1986) and Allen (1990). Hence, the use of superior strategies and tactics to generate funds from the public is very critical to bank management. The theory predicts an inverse relationship between size and probability of failure, and hence the larger the size, the greater the potential of expected return on capital that may be realized. Return on capital is captured in model 2 of this study as our dependent variable. Where bank management is able to mobilize deposits and profitably utilize such funds, return on capital may increase all things being equal. Managers' prestige, power and status are to some extent reflected in the amount of slack they receive in the form of expense account, luxurious offices and building, company cars and other perquisites of office. The superior performance of large banks is due to consistent return on capital which has enhanced economies of scale in production, adoption of advanced technology and diversification.

3.4.7 Capital Structure Theory

According to Owualah (1998), the debate on capital structure has shifted from whether it exists or not to determining the optimal for any particular company as well as understanding the underlying influences. Firstly, the static trade-off theory postulates that the tax-deductibility of interest payment induces a company to borrow up to the margin where the present value of interest tax shield is just offset by the value of loss due to agency cost from issuing risky debt as well as the cost of possible liquidation or re-organization. Secondly, the Pecking order theory postulates that companies prefer internal to external financing. However, companies with least profitable investment in an industry

will have less internally generated fund for new investment and will ultimately borrow more. It further postulates that as a company seeks more external financing, it will follow the pecking order of securities, from safe to risky debt, convertibles and other quasi equity instruments and finally to equity as a last resort. Although, they would embrace the latter if necessary to finance real investment with positive Net Present Values. This explains while banks with weak capital base before the 2005 recapitalization had problem in generating deposit from their customers. Thirdly, the Organizational theory focuses on internal finances because it believes external finances no matter its sources, signals to the market that, internal sources are inadequate. The theory suggests that when a company issues debt to replace equity a decrease in corporate wealth occurs. This theory further confirms why most profitable companies typically borrow least as high earnings result in greater retention and less reliance on external financing and consequently a lower debt ratio. According to Hart and Moore (1989, 1999) and Booth and ScharfStein (1991) cited in Adaramola, Sulaiman and Fapetu (2005) the fourth theory that is the bargaining based theory states that a firms capital structure influences potential future negotiations between the firm and its investors, and the anticipation of such negotiations, in turn, influences financial decisions.

Booth, Aivazian, Demirgruc-Kunt and Maksimovic (1999) examined capital structure in developing countries. The study documents three fundamental theoretical models of capital structure, the static trade-off model (STO), the pecking-order hypothesis (POH) and agency theoretical framework (ATF). They observed that in each model, the choice between debt and equity depends on both firm-specific and institutional factors. The STO model suggests that capital structure moves towards a target that reflects tax rates, asset type, business risk, profitability and bankruptcy code. While the ATF indicates that potential conflict of interest between inside and outside investors determines an optimal capital structure that trade off agency costs against other financing cost. The POH considers capital imperfections as central. Transaction costs and asymmetric information link the firm's ability to undertake new investments to its internally generated funds. If firms are to rely on external funds, they would prefer debt to equity due to lesser impact of information asymmetries. They then emphasized that distinguishing empirically between

these hypotheses has proven difficult, thus most recent empirical researches have focused on explaining capital structure using cross –sectional tests and a variety of variables that can be justified using any or all of the three models.

Cebenoyan and Strahan (2001) examined how active management of bank credit risk exposure through the loan sales market affects capital structure, lending, profits and risk for US banks from 1988 to 1993. The study found that all assets classes have positive and significant influence on capital asset ratio. It also shows that banks that buy and sell loans have the lowest capital-to-assets, liquid assets ratio and the highest level of risky loan. Also Demsetz and Strahan (1997) report that larger banks hold less capital and are able to pursue higher risk activities. Larger banks, consequent upon merger, tend to decrease their capital and increase their lending (Akhavein, Berger & Humphrey, 1997). Berger, Wharton Financial Institution, Centre, and Di Patti (2002) examined capital structure and firms performance from an agency theory perspective on 697 US banks from 1990-1995.

> *"They showed that the mean capital ratio was 9.4% of the total assets of banks and about 72% of the banks had a gross total asset of less than $100 million. The mean return on equity is about 10.6%, while board members and their relatives hold barely 0.9% equity of an average bank. The study shows that a change in profit efficiency with respect to changes in equity capital ratio is negative for all values of equity capital ratio below 0.16".*

Profit efficiency is measured as the ratio of profit earned by a firm to the profit earned by the best performing firm in the industry. Kleff and Weber (2003) investigated the relevance of potential determinants of banks capital ratio in German banks from 1992 through 2001. The study showed that portfolio risk had a positive and significant effect on the capital ratio for the savings banks as regulations were more likely to be binding for these weaker capitalized banks. Profitability had positive and significant short-term and long-term impacts on the capital ratio for savings banks, as they tended to depend on retained earnings because they had limited access to capital market to increase their capital ratio like other banks. They found that deposit ratio as a determinant of capital ratio showed no consistent result across the class of bank. Also the ratio of provision to total assets showed

a negative effect on capital ratio for the savings banks while a positive effect was found in case of other banks group. This effect was attributed to highly profitable banks retaining their earnings in sound financial health. Regulatory pressure had a positive effect on capital ratio. Accordingly, banks with a capital ratio close to the regulatory minimum increased their capital ratio to a greater extent than other banks. Finance is the artery of any economic organization. Financing which is also referred to as capital structure that is the proportionate mix of debt and equity. Agrawal and Nagarajan (1990) examined corporate capital structure, agency cost and ownership control for all-equity firms in the US from 1979-1983.

An all-equity firm is defined as one with no long-term debt over a continuous five-year period, while a levered firm is one that maintains a ratio of book value of long-term debt to firm value. Their findings indicate that all-equity firms tend to be relatively small in terms of sales value. All equity firms are adverse to debt of any kind. Their mean short-term debt to total asset is 0.0%, while for levered firms it is 2.77%.They have lower current liabilities relative to current assets and maintain a larger custom of liquid assets than levered firms. They also found that managers of all-equity firms have significantly larger stockholdings than managers of similar levered firms in their industry. There is significantly greater family involvement in the corporate operations of equity firms; managerial ownership in all-equity firms related to the extent of family involvement. All equity firms are characterized by greater liquidity positions than levered firms. Bank use a mix of debt but more of equity in their financing. The later shall also be used to explain our model 3.

3.4.8 Structure-Conduct-Performance and Relative Efficiency theories

If the relative size of a firm expands, its market power and profits increases. This is the Market-Power (MP) hypothesis. The hypothesis is also referred to as the Structure-Conduct-Performance (SCP) hypothesis (Athansoglou et al (2005). The early empirical literature focused on the structure-conduct-performance hypothesis (SCP), and the relative efficiency (RE) hypotheses. SCP says a change in the market structure of banking firms affects the way banks behave and perform. The more concentrated the market, the more market power banks have, which means they can be inefficient (i.e avoid minimizing costs) without being forced out of the market.SCP predicts that the more concentrated the

market, the more profitable the banks, earned from higher loans rates and lower deposit rates. RE posits that some firms earn supernormal profits because they are more efficient than others. The above analogy shall be explored in discussing our proposition in hypothesis 4 of this study.

Greater efficiency may well be reflected in greater output. Like SCP, the relative efficiency hypothesis predicts a positive profits concentration relationship. Under the market-power hypothesis, firms in a concentrated market with a large share and well-differentiated products may exercise market power pricing and earn supernormal profit. The efficient-structure hypothesis posits low cost of production of relative efficient firms enable them to compete aggressively, capture a bigger market share and earn high profit. The same may be true in respect of the Nigerian banking industry, which has been dominated for many years by First Bank Plc, UBA, UBN and Afrique bank. Heffernan and Xiaoqing (2005) for the period 1985-2002,incorporated measures of concentration, market share, X-efficiency, scale efficiency, and an ownership dummy directly into estimating equation to test both the market –power and efficient-structure hypotheses in China's banking sector. The findings of the study suggest that future policy should be directed at encouraging the development of the joint stocks (which are shown to be more efficient) so that they can increase their market share and further improve competition.

3.4.9 Concentration Theory

Concentration refers to the degree of control of economic activity by large firms, Sathye (2002). Concentration theory is captured by our model 4 and hypothesis 4 in this study. The increase and magnitude of concentration levels could be due to considerable size enlargement of the dominant firm(s) and/ or considerable size reduction of the non-dominant firm (s). Similarly, curtailment of the concentration levels could be attributed to considerable size reduction of the dominant firm (s) and/ or considerable size enlargement of non-dominant firm (s) Athanasoglou e tal (2005). Bank concentration theories and pro-deconcentration theories exist in the literature and Nigerian banks capitalization/consolidation exercise takes it roots from these theories. Protagonists of banking sector concentration posited that economies of scale stimulate bank mergers and acquisitions (increasing concentration), so that increased concentration goes hand-in-hand

with efficiency improvements, Demirguc-Kunt and Levine (2001).In his study, Boyd and Runkle (1993) examined 122 US bank holding companies and found an inverse relationship between size and the volatility of asset returns. In the US situation consolidation was voluntary while in the Nigerian case the consolidation exercise was by compulsion. In Allen and Gale (2000); Beck, Demirguc-Kunt and Levine (2004) their theoretical arguments suggests that concentrated banking sector with many small banks is more prone to financial crises than a concentrated banking sector with a few large banks. The reason is that reduced concentration in a banking market results in increased competition among banks and vice-versa. Concentrated banking systems contribute to enhanced performance of the banks profit and also lower bank fragility. Enhanced profits provide a bulwark against adverse shocks and increase the franchise value of the bank, reducing incentives for bankers to take excessive risk. In addition, a few large banks are easier to monitor than many small banks, so that regulatory control of banks will be more effective and the risks of contagion less pronounced in a concentrated banking system, Beck, Demirguc-Kunt and Levine (2003).

The protagonists of this 'concentration- stability' view opined that larger banks can diversify better so that banking systems characterized by a few large banks will tend to be less fragile than banking systems with many small banks, (Allen and Gale, 2003). The present structure of Nigerian banking industry (deposit money banks) is a clear demonstration of their strength when compared to the situation before 2005 bank capitalization. Therefore, we can say that there is a linkage between adequate capital and market share. Capital has a big role to play in helping bank to compete effectively. Our hypothesis 4 proposition describes how adequate capital has enabled banks to control market share such as deposit and loans and advances etc in the Nigerian banking industry.

The Pro-Deconcentration theories such as Chong (1991) in his finding indicate that bank consolidation tends to increase the risk of bank portfolios. The proponents of banking sector deconcentration argue that concentration will intensify market power and political influence of financial conglomerates, stymie competition and access to financial services, reduce efficiency, and destabilize financial system as banks become too big to discipline and use their influence to shape banking regulations and policies (Demirguc-Kunt and Levine: 2000); Beck, Demirguc-Kunt and Levine (2004) and Bank for International

Settlements (2001). On the one hand excessive competition may create an unstable banking environment, insufficient competition and contestability in the banking sector may breed inefficiencies. In concentrated banking systems, bigger, politically connected banks may become more leveraged and take on greater risk since they can rely on policymakers to help when adverse shocks hurt their solvency or profitability. Similarly, large, politically influential banks may help shape the policies and regulations influencing banks activities in ways that help banks, but not necessarily in ways that help the overall economy.

For instance, powerful banks may argue against granting generous deposit insurance since that levels the playing field for smaller banks that do not enjoy the too-big-to-fail policy of most governments in economies where concentration levels are high. But it can also reduce the number of banks. To boost the profitability of large clients, powerful banks may also seek to control 'unruly' markets by weakening anti-trust laws and other policies designed to promote competition. According to Demirguc-Kunt and Levine (2000), if concentrated powerful banks unduly influence the formation of policies and regulations, this may hinder political integrity and reduce tax compliance. Advocates of concentrated banking structure noted that larger banks frequently receive subsidies through implicit 'too big-to-fail' policies that small banks do not enjoy. According to Boyd and Runkle (1993), this occurs when regulators fear potential macroeconomic consequences of large bank failures.

3.4.10 Basel Accord and Risk Management in Nigerian Banks

Basel 11 Accord is the outcome of about five years of work by banking regulators and financial industry working groups. It was published in 2004 to replace the Basel 1 Accord, which came into existence in 1988. Basel 11 Accord tries to set standards for many aspects of bank risk management over the next decade. The Basel Committee and the different local regulators have however continued to fine-tune the new rules and to determine the implementation procedures. Basel 11 Accord aims at making individual banks regulatory minimum capital requirement much more responsive to the economic risk that the bank is actually incurring. As a matter of fact, the new capital accord tries to give banks a strong incentive to employ the most advanced risk measurement techniques in an attempt to replicate the best practice standards for risk management in the global banking industry.

Nigerian banks post-consolidation ought to be Basel 11 complaint as a step towards sustaining the gains of bank consolidation.

Basel 11 Accord focuses primarily on the promotion of the safety and soundness of the financial system. New automated technologies, more complex products, e-banking acquisitions and trading catastrophes have rapidly increased the need for more rigorous operational controls in financial institutions. To meet business and regulatory challenges, a comprehensive solution is required to collate, analyze, report on, as well as mitigate risks.

Basel 11 requires a holistic view of a bank's risk tolerance level coupled with a view into risks that one can act on proactively, and strategically maximize capital allocation and pricing as well as minimize an institution's exposure to sub-optimal portfolio performance. Basel 11, among other things, stresses the need for:

i. More emphasis on a bank's own internal methodologies, supervisory review and more market discipline;
ii. Flexibility, a menu of approaches and incentive for better risk management;
iii. Increased risk sensitivity and
iv. Inclusion of explicit capital requirement for operational risk.

The risk bank faces can be categorized into two: Exogenous and Endogenous risks. The Endogenous risks among others, include credit risk, operational risk, liquidity risk, reputational risk, system failure, fraud and forgeries etc. The Exogenous risks include: interest rate risk, foreign exchange risk, environmental risk, regulatory risk, political risk etc. The Basel 11 Accord provides a new and improved way of thinking about risk management and capital adequacy for banks. It is globally accepted and applied in most free economies. The three pillars of Basel 11 on which the safety and soundness of the financial system rest are:

Pillar 1: The minimum capital requirement for this class are-

i. Increased risk sensitivity through more refined credit;
ii. Risk weights and internal ratings based approaches;
iii. Explicit capital charge for operational risks;
iv. Growing requirements with the sophistication of the approaches.

A bank will determine the proportion of its capital, which it must keep in reserve based on a given calculation.

Pillar 11: This section hinges on Supervisory Review. It emphasizes the following:

i. Encouraging financial institutions to develop better risk management technique, transparency and accountability;
ii. More active role for supervisors;
iii. Creation of a mechanism for regulators to require greater capital adequacy status for banks.

Pillar 111

This section dwells on Market Discipline. It requires banks to disclose their capital risk measurement and management, risk levels and processes and increased frequency and volume of reporting. In Nigeria, banks face numerous risk management constraints. These include data paucity, poor quality of data when available, measurements being typically inadequate and sub optimal human capital. Consequently, many banks tend to manage risk based on mere assumptions and there is usually a real danger that risks are inadequately being factored into the business strategy and capital allocation decisions. Risk management has been heightened by the banking sector of recent because of the:

i. Bank capitalization/consolidation
ii. Increased capital base of banks; and
iii. The adoption of risk-based supervision

From the analysis of Basel Accord 1,11 and 111 above sound capital is the key to bank continued existence as it helps to absorb operational risks of banks and risk-based supervision of Central Bank of Nigeria (CBN) and Nigerian Deposit Insurance Corporation (NDIC). Hence capital which is the key of Basel Accord is represented by shareholders fund (SHF) in model 3 of this study as the dependent variable. The bottom line of the basel accord is that banks' should maintain capital that will adequately reflect the kind of risks they carry. According to Adewunmi (1992) in assessing the capital of a bank, the directors must consider the bank's growth experience, its plans and prospects and the quality of management which will impact on the quality of assets. Adequacy of bank capital is required to absorb losses that may

result from the acquisition and holding of risk assets. It was stated in Adewunmi (1992):

> *"that the success of a bank depends on the composition of its assets but more importantly on the quality of the assets. The more high yielding/high risk assets a bank carries in relation to low yielding/low risk asset, the more profitable the bank will be. For instance, banks that are able to recover loans and advances (high risk/high yielding assets) granted to customers are likely to earn more profit".*

The more loans and advances that is the high risk assets a bank holds, the greater the perceived contribution to the development effort of its socio-economic environment. Bank directors must pay great attention to the evaluation of the management of their bank. The performance of a system is a function of the quality inputs. This important factor (management) is unfortunately, the most difficult to evaluate in banking. The theory above explains only the aspect of capital adequacy (riskiness) in our model 1 (return on Asset) which is aptly captured by our hypothesis 3

3.5 SUMMARY OF THEORETICAL FRAMEWORK AND LITERATURE REVIEW

This section will try to summarize the relevance of major theories and literatures reviewed to my work, method employed; approaches and model formulation. The buffer theory of capital adequacy Calem and Rob (1996) form the basis bank capitalization. It predicts that a bank approaching the regulatory minimum capital ratio may have an incentive to boost capital and reduce risk in order in order to avoid the regulatory costs triggered by a breach of the capital requirement. In model 3 of this study, capital our dependent variable is represented by shareholders fund (SHF) and explains by our buffer theory of capital adequacy help us to test the propositions in hypothesis. The higher the shareholders fund the better is bank liquidity and capital adequacy all things being equal. The expense theory of Williamson (1963) cited in Nyong (2001) otherwise called the theory of managerial discretion, which states that managers have the option in pursuing policies, which maximize their own utility rather than profit maximization for shareholders is represented in our model 1. Basel 11 Accord aims at making individual banks regulatory minimum

capital requirement much more responsive to the economic risk that the bank is actually incurring. The Basel 11 explain only the aspect of capital adequacy (riskiness) in our model 1 (return on Asset) which is aptly captured by our hypothesis 3.

The Portfolio regulation theory propounded by Peltzman (1970) which emphasizes safety and soundness of the banking system is represented in model 1 of this study. It captures LAD that is Liquid Assets (LA)/ Bank Deposit (BD) and depicts the liquidity position of the banks.

The deposit insurance theory also provides an insight into the behaviour of deposit money banks (Flannery, 1989; Cham, Greenbaum and Thakor, 1992). Deposits solicited from customers are not as dependable and reliable as the bank capital requirement. In model 1, B deposit (LAD: liquidity/deposit - LA/BD) that is liquidity is captured as one of our independent variable. According to Flannery (1989), the regulatory capital requirement means that larger banks are less inclined to take greater risks. The Intermediation theory predicts an inverse relationship between size and probability of failure, and hence the larger the size, the greater the potential of expected return on capital that may be realized. Return on capital is captured in model 2 of this study as our dependent variable. The theory of capital structure explains that all equity firms are characterized by greater liquidity positions than levered firms. Bank use a mix of debt but more of equity in their financing. The later shall also be used to explain our model 3.

Structure-Conduct-Performance (Athansoglou et al (2005) says a change in the market structure of banking firms affects the way banks behave and perform. The more concentrated the market, the more market power banks have, which means they can be inefficient (i.e avoid minimizing costs) without being forced out of the market. RE posits that some firms earn supernormal profits because they are more efficient than others. The above analogy shall be explored in discussing our proposition in hypothesis 4 of this study. The protagonists of this ‘concentration- stability’ view opined that larger banks with strong capital base can diversify better so that banking systems characterized by a few large banks will tend to be less fragile than banking systems with many small banks, Allen and Gale (2003). Beck, Demirguc-Kunt and Levine, 2003), Studart, 2004).Capital has a big role to play in helping bank to compete effectively. Our hypothesis 4 proposition describes how

adequate capital has enabled banks to control market share such as deposit and loans and advances in the Nigerian banking industry. Several literatures and empirical studies were reviewed as it applies to this study but the most significant are those of Ige (2006), Al-Haschimi (2007), Osunubi (2006), Ilo (2006), Yudistira (2003), Okazaki and Sawada (2006), Naceur and Goiaed (2001). There are those by (Berger, Demsetz and Strahan, 1999); Shih (2003); Studart (2001, 2003), Yacaman (2001). For instance, Studart (2001, 2003) found that four Latin American countries' effort towards instituting an efficient and competitive banking pushed for a policy of concentration in the period (1997-1998). Finally, Naceur Ben Samy (2003) empirical model on bank capitalization and performance provided inspiration for this study. The empirical test was concerned with the determinants of interest margin and profitability of the Tunisia deposit banks. The modification to Naceur Ben Samy (2003) model in this research is by way of introduction of LAD (Liquidity), B DEPOSIT, EXPEAN (Efficiency of Management) and (MC) Market Concentration (Internal determinants) and macroeconomics variables-- interest rate and exchange rate as determinants of bank performance in Nigeria. The study of Goddards, Molyneux and Wilson (2004) provided the direction for the use of panel and cross-sectional data. They used regressions to estimate growth and profit equations for a sample of banks for five European countries over the 1990s.

CHAPTER FOUR

RESEARCH METHODOLGY

4.1 Introduction

This section tries to capture empirically the relationship between bank capitalization, management and performance. Capitalization in this study refers to a concept and not a variable for measurement per se. Rather; it refers to a number of variables of interest which are produced from the existence of funds for use in the process of intermediation. From capitalization, obviously concepts such as rate of Return on Assets (ROA), Return on Capital (ROC) and Shareholders Fund (SHF) are derivatives from the use of funds. From available funds, assets are created, returns/profit produced, operating expenses are facilitated. Therefore, when we talk about capitalization, we are referring at the same time to variables that derive their substance from capitalization and in this study; we employed variables such as Return on Capital, Return on Asset and Shareholders fund. Therefore, Shareholders fund (paid-up capital plus reserve) is the actual capital while Return on Capital and Return on Asset represent the outcome of the use of capital.

Therefore, our equations look at the extent to which these variables are brought into light or the realization is facilitated by the existence of what we generally referred to as adequate capitalization. Availability of funds enhances ROC, ROA, buoys up SHF. Thus the kernel of our study is to examine how performance of Nigerian banks has enhanced the outcomes of the use of bank capital. Further, the crux of this study is to see how bank capitalization/consolidation in Nigeria makes funds available for the realization of adequacy of capitalization, management and performance. Obviously, we can only look at a number of years, given the fact that bank consolidation took place only four years ago. This is what makes it impossible to make use of time series analysis because we have only two years to seriously discuss issues. This is why the use of panel data is preferred in this exercise to time series analysis. Also, we have not used cross sectional data analysis in this study because it is not possible to complete set of data on any bank for any particular year if only because merger has taken place randomly and banks have also come into existence randomly. The panel data methodology provides a useful answer to all these, hence, the

choice. This study uses the econometric approach in estimating the effect, and to be specific it uses the e-view software employing panel of data.

4.2 OPERATIONALIZATION OF THE VARIABLES

In this study, bank capitalization and outcomes from the use of funds are the dependent or explained variables represented by the following indicators: firstly, actual capital represented by Shareholders fund (SHF) and outcome from the use of bank capital represented by Return on Asset (ROA) and Return on Capital (ROC). Bank performance and Management are the explanatory or independent variables represented by their absolute and capital ratios (Liquidity, Efficiency and Capital adequacy). The indicators of the independent variables are regressed against the actual capital and outcomes from the use of bank capital (SHF, ROA and ROC).

4.3 POPULATION AND SAMPLE SIZE

The population of this research is drawn from the Nigerian banking industry (Deposit Money banks) referred to as the conventional banks because they are deposit-taking institutions. This is because they dominate the financial sector in terms of number and coverage. Despite the involvement of other financial institutions such as non-bank financial institutions - insurance companies, development banks, finance houses, etc in the intermediation process, deposit money banks still control the major proportion of the nation's deposits and savings. There were eighty-nine deposit money banks in Nigeria before the 2005 bank recapitalization exercise and the number has been reduced to twenty-five banks after consolidation and to 24 (after merger of IBTC & Stanbic bank to Stanbic-IBTC) in 2008.

Of the twenty –four banks, four of them that is: Unity bank, Sterling bank, Spring and Skye banks are new creation of mega banks. The sample size of fourteen out of the twenty four deposit money banks **(See table 4 below)** was employed in the study. The sample (of fourteen deposit money banks) was drawn from both the old and new generation banks using the Stratified sampling technique based on simple random sampling supported by Judgment Sampling. The selection process is restricted to banks quoted in the Nigerian Stock Exchange. The banks not listed on the Nigerian Stock Exchange Daily official List

(SEDOL) are Nigerian International Bank, Standard Chartered bank and Equatorial Trust bank.

TABLE 4: **BANKS IN THE SAMPLE**

Serial No.	Name of Bank	Listing	Date of Incorporation/Registration	Date of Commencement of Operations
1	Union Bank Plc	Yes	1917	June 1917
2	United Bank Africa Plc	Yes	1961	May 1961
3	First Bank Plc	Yes	1969	March 1894
4	Afribank Plc	Yes	1959	Jan.1960
5	Wema Bank Plc	Yes	May, 1945.	May 1945
6	Oceanic Bank Plc	Yes	April 1990	June 1990
7	Diamond Bank Plc	Yes	December, 20 1990	March 1991
8	Guaranty Trust Bank Plc	Yes	July 1990	Feb. 1991
9	IBTC	Yes	1989	1989
10	Intercontinental Bank Plc	Yes	Feb. 1989	April 1989
11	Access Bank Plc	Yes	Feb. 1989	May 1989
12	Zenith Bank Plc	Yes	30, May 1990	1990
13	First Inland Bank Plc	Yes	May 1988	Oct.1988
14	Fidelity Bank Plc	Yes	Nov. 1987	June 1988

Source: Nigerian Banking Annual, Lagos (I989/90 Edition)

The sample drawn from the population was grouped into categories based on the size of their capital as at the 2006. **(See table 1 in Chapter One)**. The sample units consists of both old generation and new generation banks. Banks that commenced operation before

1988 are old generation banks while those that commenced operation from 1989 are new generation banks. Amongst others, new generation banks started aggressive marketing a departure from armchair banking which old generation banks were noted. New generation banks also introduced new technology for efficient service delivery change. There is a modified sample size for banks in this study. Since this study is between 1986-2006, banks that are not quoted are eliminated because their data are not readily available. During the field work, it was observed that these banks had no data bank for their Annual financial statements. Hence, such banks are not considered. Thus, in our sample size, banks such as Nigerian International Bank, Standard Chartered Bank, Equatorial Trust bank that are not (listed) quoted were eliminated and this reduced our population of study to twenty-one. This represents 14/21 (67%) of the quoted banks in Nigeria.

The study analyses the data as contained in the financial reports of 14 deposit money banks out of the 24 banks operating in Nigeria as at the end of 2006, representing about 60% of the deposit money banks and about 67% of the quoted banks. The bank data were obtained from the CBN Banking Supervision and Annual Reports, (2006-2007) and Annual financial Statements from various years of the selected banks for the years 1986 -2006 are used for the analysis. The end of the cut-off date represents just one year after the bank consolidation mandate of 2004 by the Central Bank of Nigeria which took effect on December, 2005. The study of bank capitalization, management and performance thus covers the period from the structural adjustment program of 1986 to 2006. The period of 1986 was the beginning of bank deregulation and liberalization (more banks were licensed) while we projected from 2005 the commencement year of the study to a cut-off date of 2006 (one year after bank consolidation) when financial statements of banks are expected to be available. Audited bank financial statements most time fall in arrears. As stated in Section 1.7, this study employed the Stratified Sampling Technique. In stratified sampling, the population is categorized into groups that are distinctly different from each other on relevant variables. Each group is called stratum (plural strata). In applying stratified sampling, we categorized the population and stratified using bank capital (shareholders fund), **See table 4-1** below showing population of the study and bank stratification. On this basis, the simple random sampling method was applied.

TABLE 4-1 **POPULATION OF THE STUDY AND BANK STRATIFICATION OF Deposit Money Bank (DMB)**

S/N	Name of Banks	Frequency of bank Capital	Bank Capital 'billion	Remark
1	Access	Between 25 - 34.9 billion	28.8	
2	Bank PHB	"	28	
3	Fidelity	"	25.6	
4	FCMB	"	25.2	
5	ETB	"	28.4	N.Q.B
6	First Inland	"	29.4	
7	Standard Chartered	"	26	N.Q.B
8	Spring	"	25	
9	Afribank	"	26	
10	Wema	"	34.8	
11	Diamond	"	34.7	
12	GTB	" Between N35 billion and above	36.4	
13	Sterling	"	35	
14	NIB		35.2	N.Q.B
15	Oceanic	"	37.1	
16	Ecobank	"	35.3	
17	Skye	"	37.7	
18	Unity	"	35	
19	Intercontinental		53	
20	FBN	"	58.9	
21	Zenith	"	93	
22	UBA	"	47	
23	UBN	"	95.6	
24	IBTC/Stanbic	"	60	

Source: **CBN Banking Supervision Annual Report 2006 And 2007**

N.O.B = Non-Quoted Banks, Deposit Money Banks: (DMB)

In this study, the elements in a particular stratum are the same with respect to the relevant parameter (bank capital). The banks are grouped into stratum and were selected using simple random sampling supported by judgment sampling (non-probability) methods. The

banks were grouped into two strata. The first set of banks have capital between N25 billion < N34.9 billion and the others between N35 billion and above. At the of end of the selection process, 67% that is six (6) out of the nine (9) of the banks fall into the frequency of between N25 billon < N34.9 billion while 67% that is eight (8) out of the twelve banks (12) fall into the frequency of between N35 billion and above. Quoted banks were specifically selected. Our table below shows that 11 banks (9 banks excluding non-quoted banks) fall into the frequency of bank capital between N25 < N34.9. This means that 2/3 multiplied 9 gives approximately 6 which were selected from the first stratum. In applying the probability sampling technique, particularly the simple random sampling in the context of stratified random sampling, the names of nine banks were written on a piece of paper, wrapped and put in a tray from where they were picked. The six out of the nine banks picked are Access bank, Fidelity bank, First Inland bank, Wema bank, Spring bank and Diamond bank. However, Spring bank was dropped because the data is only for one year (that is 2006) and would not be very useful. In applying the Judgment sampling an additional bank that is Afribank was selected to complete our simple random sampling of 2/3 x 9 = 6 in the first stratum of N25 < N34.9 billion frequency.

For the second stratum, in applying the probability sampling technique, particularly the simple random sampling in the context of stratified random sampling, the remaining eight (8) out of the twelve banks (12) were also selected by writing the names of the banks on a piece of paper, wrapped and put in a tray from where they were picked. Our **table 4-1** above shows that of the 13 banks (12 banks excluding non-quoted banks) fall into the frequency of bank capital between N35 billion and above that is 2/3 multiplied 12 gives 8. The following banks were picked Oceanic bank, Guaranty Trust bank, Intercontinental bank, First bank of Nigeria, Union Bank of Nigeria, United Bank, Zenith and IBTC/Stanbic bank. At the of end of the selection process, 67% that is six (6) out of the nine (9) banks fall into the frequency of between N25 billon < N34.9 billion while 67% that is eight (8) banks out of the twelve (12) banks fall into the frequency of between N35 billion and above. The selection process picked 50% (seven) of the old generation banks and 50% (seven) of new generation banks **(See table 4, p.136 above)**. The study analyses the data as contained in the financial report of 14 deposit money banks out of the 24 banks

operating in Nigeria as at the end of 2006, representing about 60% of the deposit money banks and about 67% of the quoted banks. The bank data were obtained from Central Bank of Nigeria specifically the CBN Statistical Bulletin, CBN Banking Supervision and Annual Reports, (2000-2006), Nigerian Stock Exchange Fact Book (1986-2005) and Annual financial Statements from various years of the selected deposit money banks for the years 1986 -2006 are used for the analysis.

4.4 RESTATEMENT OF HYPOTHESES

From the theoretical perspective, literature review and research questions the following hypotheses are postulated to justify our statement of problem and objectives of study. The study will be carried out in three consistent groups of equation and are specified below:

A. Return on Assets and bank capital ratios (Efficiency of Management, Liquidity and Capital Adequacy).
B. Return on Capital (indicator of efficiency of use of capital), Management and Performance variables.
C. Shareholders' funds and Performance variables.

1. : Bank capital ratios (Capital adequacy, Liquidity and Efficiency/Quality of Management) has no significant impact on Return on Assets.
   : Bank capital ratios (Capital adequacy, Liquidity and Efficiency/Quality of Management) has significant impact on Return on Assets.
2. : Operating Expenses has no significant impact on return on capital.
   : Operating Expenses has significant impact on return on capital.
3. : Banks' liquidity, bank loans and growth of bank deposits has no significant impact on Shareholders fund.
   : Banks' liquidity, bank loans and growth of bank deposits has significant impact on Shareholders fund.
4. : Shareholders fund has not significant relationship to banks control of market share (total deposit: TD, loans and advances: LA, total assets: TA)
   : Shareholders fund has significant relationship to banks control of market share (total deposit: TD, loans and advances: LA, total assets: TA).

4.5 DEFINITION OF VARIABLES

PROF = Profitability of bank is measured by return on capital (ROC).

ROA = Return on Asset is a measure of the profitable use of all resources of the bank.

SHF = Shareholders fund is an explanatory variable of bank capitalization.

EOM = Efficiency of Management/Quality of Management is measured by ratio of Operating expenses to Total assets.

SIZE = Bank's size is measured by total assets;

CAP = Capital Stock in banking represents change in the bank capital measured by ratio of shareholders fund to total assets;

LAD = Liquid asset to deposit;

B deposit = Expected rate of growth of the bank deposit proxied by previous year's deposit growth rate and also measured by the ratio of bank's loans and advance to bank deposit;

EXPENSES = Expense preference of bank is measured by ratio of total expenses to total earnings.

MC = Market Concentration is measured by market share of bank asset, bank deposit and bank credit concentration.

4.6 DATA AND MODEL SPECIFICATION

The bank data were obtained from Central Bank of Nigeria specifically the CBN statistical bulletin, CBN Banking supervision and Annual Reports, (various issues) and Annual financial statements from various years. The samples are unbalanced panel data extracted from 14 banks during 1986-2006. Indeed, late eighties and early nineties was the period that many banks were detected to have problems in Nigeria especially with the introduction Prudential Guidelines in 1990.We have ended the study in December, 2006 to avoid distortions from lapses in submission of rendering annual reports to regulatory authorities which sometimes fall in arrears for some banks. Another reason to end the study in December, 2006 is that the banks have different accounting year end dates.

The sample of banks' scrutinized in this task include all deposit money banks supervised by the Central Bank of Nigeria. The liquidated banks before the end of 2006 were eliminated from the sample because the inclusion would bias the results towards

summarizing the connections between bank capital, management and performance. The definition of assets as suggested by the Bank of International Settlements may complicate testing the capital. We then focus on total assets (inclusive of loans and advances) rather than test all different definitions of assets. This approach works effectively as the shareholder funds to total assets is the proxy of risk-weighted Capital adequacy ratio (CAR).

4.7 THE PANEL DATA METHOD

Instead of using time series data or a cross section of banks, this study looks at a panel data specification for individual banks. In Cross section analysis, data are collected across units of observation at a given point in time. For cross section unit, we observe the same attribute on different people, geographical units, etc using same year. For example, one can collect data on total deposits of banks in say 2006. Here the variation is across the units, that is different banks and not for different years. In time series, data span across a time horizon usually on quarterly or yearly basis. An example is the total deposits of First Bank from 1986-2006 as could have been used in this study. In this case the variation is over time. Panel data or data set is a technique that combines the features of both time series and cross section methods. For example, total deposits of banks (one of our explanatory variables) in Nigeria from 1986-2006 as used in this study. Thus, panel data has the features of time series and cross section. For example, we can illustrate a Panel Data Model with this:

$Yit = Xit + ßit\ Xit + \mu it$

Where: Y = Dependent or Response variable or Regressand;

X = Independent or covariate or control variables;

i = the units (the respective bank);

t = time unit (1986-2000);

μ = disturbance term.

This is an example of a linear panel data model. It is a static model because all explanatory variables are dated contemporaneously with Yit. Several benefits of panel data are shown by Baltagi (1995). Firstly, our panel data controls for banks heterogeneity within certain dynamic duration which cannot be found in times series or cross section studies. Secondly,

as panel data is usually assembled on micro units, such as banks in our case, most variables can then be more accurately measured at the micro bank level and biases resulting from aggregation over banks are eliminated. We try to minimize the limitations that may come up in panel data by carefully designing and collecting the sample data. Thirdly, it gives more informative data, more variability, less co-linearity among variables, more degree of freedom, and more efficiency. This is because it combines times series of cross section observation. Fourthly, it is better suited when a study is dealing with the dynamics of change such as turnover because it involves the repeated cross section of observations.

However it has estimation and inference problem. For instance, error in (where t = time) affects or (autocorrelation) and problem of one bank affect the other (cross-correlation).

As indicated by Greene (2000), the fundamental advantage of a panel set over a cross section or time-series is that it gives the researcher far greater flexibility in allowing for differences in behavior across individuals and/or time periods. However, the data set rules out use of fixed effects because of a degree of freedom problem: it is not possible to introduce bank dummies. Also, the ownership dummy is time invariant, so a fixed effects estimator cannot be computed. For purposes of comparison, the equations are estimated for the pooled sample using OLS. Banks are not expected to fall below the minimum capital requirements; rather it is anticipated to adjust capital or assets to satisfy the regulator. Thus, a bank with poor capitalization is expected to have a sluggish growth in deposits or liabilities than better capitalized institutions. Thus, banks with capital to assets ratio below the required minimum would need to mobilize deposit to shore up the capital base. This study hypothesized that bank capitalization and the outcome from the use of fund has not enhanced bank management and performance of the Nigeria banking industry. The multiple regression analysis of ordinary least square (OLS) will be used to examine the relationship between capitalization measures and the corporate performance indices of the Nigerian banking industry.

4.8 A PRORI EXPECTATION

Bank capitalization is expected to have a positive relationship with bank management and performance indicators. For instance, an increase Shareholder fund could translate to an improvement in bank performance if increased funds are utilized for productive activities

especially in the real sector of the economy. Shareholders fund is expected to have a positive relationship with bank performance. This is because increase in the total shareholders' fund (equity plus reserves) will boost the performance of banks by end of the recapitalization. A bank will always seek avenue to increase its permanent capital and reserves to boost performance. This has a great implication on the Return on Assets and Return on Capital (Profit). Shareholders' fund is also used to represent efficiency of capital in this study.

Paid-up Capital

Paid-up Capital is expected to have a positive relationship with bank performance. This means that increase in paid-up Capital will lead to improvement in bank performance

Shareholders Fund

This variable is expected to have a positive relationship with bank performance. This is because increase in the total shareholders fund (equity plus reserves) will boost the performance of banks. A bank will always seek avenue to increase his permanent capital and reserves to boost performance. This has a great implication on Returns on Assets and Return on Capital. Shareholders fund was used as the benchmark for 2005 minimum capitalization of banks in Nigeria.

Error Term

The error term is actually related to the political factor that affects negatively bank performance through various unstable policies and unhealthy bureaucracies in government. This variable is “error term” because it cannot be actually valued numerically. Nyong (2001) in his findings identified that endogenous and exogenous variables are the critical factors affecting deposit money banks performance. The model will be specified in endogenous and exogenous form.

4.9 THE MODELS

We postulate that the return on assets of banks will be affected positively by bank performance and management indicators. Therefore, we can represent the functional

relationship in model forms as follows:

(i) ROA = f (B Loan, B Deposit, EOM, LAD, CAP, μ) ……..**Equation 1**

Where BLoan = the ratio of bank's loan (L) to total assets (TA) that is L/TA. Bank loan depicts Efficiency/Quality of management

B deposit = the ratio of bank's loans and advance (LA) to bank deposit (D) that is LA/D. This depicts liquidity position of banks

EOM = The ratio of operating expenses (OE) to total assets (TA) that is OE/TA. This depicts efficiency of management.

LAD = Liquid asset (LA) to deposit (BD) that is LA/D. This depicts the liquidity position of banks.

CAP = the ratio of shareholders fund (SHF) to total assets (TA) that is SHF/TA.This depicts the capital adequacy of banks.

Restating the variables in equation 1 in explicit form, we can represent them as follows:

ROA = + Bloan + deposit + EOM + Lad + Cap + Uit ……**Equation 2**

Where the a prori expectation is stated as $> 0 \quad > 0 \quad < 0 \quad > 0 \quad > 0$

$\approx U(0,1)$

ROA measures the profit earned per naira of assets and reflect how well bank management use the bank investments resources to generate profits. We postulate that the Return on Assets (ROA) of the banks will be affected positively by the bank management and performance; captured by capital ratios e.g. the ratio of bank's loan (L) to total assets (TA) L/TA that is (B Loan), the ratio of bank's loans and advance (LA) to bank deposit (D) LA/D that is (B Deposit) depicts the liquidity position of banks, Efficiency of Management that is OE/TA (EOM), Shareholders fund (SHF)/Total Assets (TA) that is risk of default (CAP) and Liquid Assets (LA)/Bank deposit (BD) represented by (LAD).

$$\delta ROA / \delta BPM > 0.$$

All the explanatory variables with the exception of expenses are expected to have positive signs with respect to the return on assets.

(ii) We postulate that the return on capital of banks will be affected positively by the indicators of bank variables (performance and management). The functional relationship would be represented in model forms as follows:

ROC = f (Bank deposit, Bank assets, Bank loans, Inflation rate, Interest rate, Expenses, Exchange rate, liquid assets,μ) …… **Equation 3**

Restating the variables in equation 3 in explicit form, we can represent the model as follows:

ROC = + BD + BA + BL + Infl + + Expean + Exch + + Uit …… **Equation 4**

Where: B D = Bank Deposits

BA = Bank Assets

BL = Bank Loans

Infla = Inflation rate

Intr = interest rate on investment

Exch = Exchange rate

LA = Liquid assets

EXPEAN = Expense preference of bank i.e operating expense (OE) /total earnings (TE). This represents the efficiency of management.

Where the a prori expectation is stated as > 0 > 0 < 0 > 0 > 0 $< > 0$

$\approx U(0,1)$

We postulate that bank expenses which reflect the efficiency of bank management is expected to be negatively related to the return on capital. Where the a prori expectation is stated as: $\delta ROC/\delta EOM < 0$

Return on bank capital is expected to be affected positively by interest, inflation and exchange rate ceteris paribus. The coefficient of default risk of bank portfolios, which reflects efficiency of bank, is expected to be negative. The more losses sustained on its loan portfolio, the less profit the bank makes, ceteris paribus. Both inflation and interest

rate are expected to have positive and negative effects on the returns on capital depending if there is an increase or decrease. The coefficient on Efficiency of Management is expected to be negative in line with the expense preference theory postulated by Williamson (1963). The coefficient on bank shareholders' funds/ loan and advances ratio is expected to be either negative or positive and also impact on return on capital. It is expected to be negative if the bank holds large excess reserves and less in loans and advances to the various sectors of the economy for growth. Where it is the policy to keep large capital fund in preference to extending such as loanable funds that may be negative to the growth of capital. Similarly, in situations where banks are not too consciously involved in its traditional role of directing and mobilizing resources from less essential uses to exchange of local currency for foreign currencies in the money market to maximize profit, a positive may be expected.

(iii) We postulate that the capital investment in banking captured by Shareholders fund will be affected positively by bank management and performance indicators and the functional relationship would be represented in model forms as follows:

SHF = f (Bank Deposit, Bank assets, Bank loans, Infl, Intr, Expeans, Exch, LA, μ)

…….. **Equation 5**

Restating the variables in equation 5 in explicit form, we can represent the model as follows:

SHF = + BD + BA + BL + Infl + + Expean + Exch

+ + Uit …… **Equation 6**

Where: BD = Expected growth of bank deposits

BA = Bank Assets

BL = Bank Loans

Infla = Inflation rate

Intr = interest rate on investment

Exch = Exchange rate

LA = Liquid assets

Bank Capitalization (SHF) is expected to be positively related to bank loan. Bank management and performance indices such as bank assets, bank deposits, liquid assets and bank loan (BA, BD, LA, and BL) should have a positive relationship with Shareholders Fund. This is represented in equation form as: $\delta SHF/\delta BPM > 0$

iv. Market Concentration (Mc) is measured by market share of bank assets, bank credit and bank deposit. We postulate that there should be a strong relationship between bank deposit and shareholders fund and bank total assets on the one hand and loan and advances and shareholders fund and total assets. The functional relationship in implicit form will be represented as:

Bank deposit (BD) = f (Shareholders fund, Bank total Assets, μ) ……**Equation 7**

When presented in explicit form, we have it as:

Bank deposit = + + + μ …… **Equation 8**

Where the a priori expectation is stated as: , > 0

The second measure of market share can also be stated in equation. The functional relationship in implicit form is represented below as follows:

Loan and advances (LA) = f (shareholders fund, total assets, μ) …… **Equation 9**

When presented in explicit form, we have it as:

LA = + + + μ…… **Equation 10**

Where the a priori expectation is stated as: , > 0

The market power by way of control of bank credit, bank asset and bank deposit determines the market share control by the banks. Before the N25 billion bank recapitalization in 2006 the big four (UBN, UBA, FBN and Afribank) controlled a larger proportion of the banking industry in terms of assets, capital, profit, loans & Advances and deposit. To what extent has this changed market power since the last capitalization on 31st December, 2005.This is expected to have changed after recapitalization. We therefore

expect market concentration to be positively related to capital investment in the banking industry. Market concentration can also influence market power of banks. The size of bank capital reflects the concentration theory in this case. A small and positive value for the capital will be consistent with deposit insurance theory while a large and positive value will be consistent with financial intermediation theory. Theoretically, either a positive or negative sign may be expected, depending on the perception of the bank's management. Where management considers its capital base capable of wooing depositors and other customers to the bank for various transactions, a positive sign is expected. Moreso, when the regulatory authorities expect banks to always have strong capital base for soundness and safety. If management pursues profitability as the dominant and overriding objective and all other things are secondary, then aggressive pursuit of profit will mean operating on a very thin capital base. In such case, we expect bank capital to constrain manager's decision to make more profitable investment. A negative sign will be expected in this case. An important determinant of capital investment in banking is the expected profitability of investment, which is proxied by the current rate of return on capital. The coefficient on this variable is expected to be positive. The coefficient on capital-deposit ratio is expected to be positive. The larger the capital-deposit ratio, the more banks tend to increase their capital investment in line with the volume of their deposit base. The lending rate will affect shareholders fund positively or negatively depending on the state of the economy.

According to Ige (2006) an increase in the capital base of the banks all things being equal should lead to an appreciation of the naira if utilized in funding the real sectors while an increase in the growth rate of GNP may also lead to an appreciation of the naira. In Nigeria, the naira is more noted for its depreciation than appreciation because the banks are not playing the expected role of funding the real sectors. Banks also contribute negatively to the permanent phenomenon of depreciating exchange rate of the naira. Better bank supervision by the CBN can arrest this trend. It is also expected that an increase in the capital base of banks will positively impact on the rate of interest that is rate of interest is expected to fall in the long run. For the purpose of this study, the dependent variable is bank capitalization while the independent variable is management and performance measures. Bank capitalization refers to a number of variables of interest which are

produced from the existence of funds for use in the process of intermediation. From this funds, concepts such as Return on Capital (ROC), Return on Assets (ROA) and Shareholders fund (SHF) are derivatives from the use of funds, while the proxies for management and performance are reported by Bloan, B deposit, Expenses, CAP and LAD, Efficiency of Management, Expense preference of bank, capital-deposit ratio, interest rate, inflation and exchange rate.

4.10 CRITERIA FOR DECISION MAKING

There are tests that will be performed in order to verify the theoretical and statistical validity of the parameter estimates derived from the regression result. For this cause, the following econometrics and statistical techniques shall be adopted.

1. Expected signs and magnitude of the independent variables: it helps to know whether our parameter estimates conforms to theory.
2. Goodness on fit test, using R^2 and adjusted R^2: it measures the percentage of systematic variations in the dependent variable that can be explained to changes in the independent variables.
3. T- test: it measures the individual significance of the explanatory variables
4. F-statistics: it measures the overall significance of the model
5. The Durbin Waston statistic: it helps as a test for the presence of serial correlation
6. The standard error of estimates: it is used to measure the standard error of the stochastic term.

Co-efficient of determination (R^2) and Adjusted R^2

This shows the percentage of the total variation of the dependent variable that can be explained by the independent variable(s). The higher the R^2, the greater the percentage of variation of the dependent variable that is explained by variations in the explanatory variables and vice versa. Also, the adjusted R^2, measures the same thing as the R^2 but adjusted for the changes in degree of freedom. This is because it gives a better measure of goodness of fit having been adjusted for the loss in degree of freedom as more explanatory variables are added.

The sign expectation

This refers to what theory says about a particular economic relation. The sign either positive or negative and size of the parameter estimate is usually captured by it. Parameters in the model are expected to have sign and size that conform to economic theory, if they do, they are accepted. On the other hand, if they do not conform to a priori specification we either reject them and we therefore have a reason to believe that the principles of economic theory do not hold, (Koutsoyannis, 1977).

The F-statistics

This is used to test the overall significance of a model. The regression equation is adequate if the F-statistic gives a value higher than the appropriate table F-statistic, but if the calculated F-statistic is less than the appropriate table figure (at a chosen level of significance) found from the F-table with k-1 and n-k degree of freedom, then the regression will be significant.

T-test

The T-test will be used to determine the statistical significance of the parameter estimates. The T-statistics will be given in parenthesis under the associated parameter estimates. A two-tailed test will also be carried out at the 1%, 5% and 10% level of significance. We then compare the computed t-statistic with the given tabulated t-statistics to establish significance. When the calculated t-value is less than the tabulated t-value, then the parameter is not statistically significant and vice-versa.

Durbin-Watson Test

This is used to test for the presence of auto correlation in the variable. However, this test is appropriate only for the first order auto regressive scheme. The decision rule for the DW statistics is if there is no auto correlation, then d =2. Likewise if d= 0, we have a perfect auto correlation. However, if $0 < d > 2$, then there is some degree of positive auto correlation (which is stronger if d is closer to zero). Also, if d = 4 there exist perfect negative auto correlation. And if d lies between 2 and 4, i.e. $2 < d < 4$, there is some degree of negative auto correlation.

Standard Error

The standard Error of estimates will also be used to measure the standard error of the stochastic term. If the standard error of the estimates is small relative to the mean values of the dependent variable, the model equation is preferred and vice versa. In summary, the standard error regression helps to minimize error that is estimation error. The smaller the error the better the result. The positive and negative sign measures the significant of the variables while the size of the result captured by t-value, probability, F-statistics, Durbin Watson, and adjusted also attest to the significance of our result. Durbin Waston measures auto-correlation (or serial correlation whether errors in past period affects current period or not).

4.11 ESTIMATION TECHNIQUE

The ordinary least square method and multiple regression analysis will be used in estimating the effect of bank capitalization, management and performance of the Nigerian banking industry. To test for the significance, reliability and validity of the result, F-statistic T-statistics, and their related probabilities, Coefficient of determination ( ) , R bar, Durbin Waston (DW), Sum Square Residual (SSE), Standard Error (SE) of the explanatory variables and coefficient of determination are employed. The model will be estimated using annual data and the study will involve the use of multiple regression technique (Ordinary Least Square: OLS) using E-View package will be used in presentation of the result.

4.12 DATA SOURCES AND COLLECTION

Secondary data was used for the entire work. In order to carry out this study, data from (1986-2006) was collected from various issues of the Annual Reports of deposit money banks, Central Bank of Nigeria Statistical Bulletin and the Nigerian Stock Exchange Fact Book. The data include time series data, cross section data and panel data on variables adopted. Secondary data will be needed for the regression analysis on variables such as bank's capital (shareholders fund) and data on bank management and performance. For instance, the ratio of bank's loans and advance to bank deposit (B DEPOSIT), Liquid asset to deposit (LAD), Expenses to total Earnings, the ratio of bank's loan to total assets (BLOAN) and the ratio of shareholders fund to total assets (CAP). Operating efficiency of

bank (EOM) is measured by ratio of operating expenses (OE) to total assets (TA) ; Expense preference (EXPEAN) of bank is measured by ratio of total expenses (TE) to total earnings (TE); and Market Concentration (MC) is measured by market share of bank asset, bank deposit and bank credit concentration.

Market concentration will be captured by computing the market share percentage (MSP). The variables mentioned above are internal determinants of bank performance. Because of the rising prices of goods and services (inflation), we need to determine the effect on bank performance. The increase in overhead on bank products and services is also pertinent considering the increase in expenditure on energy bill in deposit money banks and other sectors of the economy because of the unstable power supply. The macroeconomic variables in the study are interest rate, inflation and exchange rate. Interest rate on loans and advances has been on the increase over the years and has affected lending by the deposit money banks in Nigeria. Since the introduction of SAP in 1986, the exchange rate and inflation have been on the increase. The banks' capital account data used in this research is captured by shareholders fund. Data are reasonably available on inflation rate, exchange rate, interest rate and bank internal determinants of performance. In an enabling environment, we expect inflow of foreign investment to the banking industry in the foreseeable future. Bank capitalization/consolidation and good management are expected to improve the banking environment, attract foreign investors and enhance bank performance. The size of bank capital reflects the deposit insurance and modern intermediation theories. A small and positive value for the coefficient will be consistent with deposit insurance theory while a large and positive value will be consistent with financial intermediation theory.

Table 4-2 DATA SOURCES (1986-2006)

		Names of Variables			
SOURCES		int' rate	Exch'rate	Inflation	Bank Variables
	Appendix 1				
Bank Annual Report	No	No	No	No	1986-2006
Nigerian Stock Exchange Fact Book		No	No	No	1986-2005
CBN Statistical Bulletin		1986-2006	1986-2006	1986-2006	No
CBN Banking Supervision Annual Report		No	No	No	2006
Return on Asset (ROA)		Computed from Appendix 1			
Market Concentration Variables		Computed from Appendix 1			
Concentration Ratio		Computed from Appendix 111			
The Four Big Banks		Computed from Appendix V			
Four Firm Concentration Ratio		Computed from Appendix V			
Ten Firm Concentration Ratio		Computed from Appendix			

Source: Compiled By the Researcher

CHAPTER FIVE

DATA PRESENTATION AND DISCUSSION OF RESULTS

5.1 Introduction

The study of bank capitalization, management and performance enables us provide answer to questions of macroeconomic variables such as (interest rate, exchange rate and inflation); if inadequate capital affects the Nigerian banks to compete effectively in the international market and play their major role of financing economic activities. It also provides answer to the soundness, safety, profitability, quality of loan portfolio, asset, and deposit in the Nigerian banking industry. The selection of bank management has not been taken seriously and the performance is a function of the inputs. The study also provides answer to the impact of cost of operation on bank capital.

5.2 DATA PRESENTATION

The results of the study on bank capitalization, management and performance are presented below in tables 5, 5-1, 5-2. Tables 5, 5-1, 5-2 precisely are results of the models: (Portfolio Regulation theory, Intermediation theory and Buffer theory of capital adequacy) as generated by the computer. Tables 5-3, 5-4, 5-5, 5-6, 5-7 and 5-8 are results of the models on market concentration explained by the concentration theory.

TABLE 5: Return on Asset (ROA)

Dependent Variable: ROA
Included observations: 225
Excluded observations: 64 after adjusting endpoints
Convergence achieved after 10 iterations

Variable	Coefficient	Std. Error	t-Statistic	Prob.
BL_BA01	0.090600	0.024388	3.714970	0.0003
BL_BD01	0.024091	0.022290	1.080807	0.2810
CAP_SF_TA01	-0.004666	0.025794	-0.180900	0.8566
EOM_OE_TA01	0.092903	0.030697	3.026444	0.0028
LAD_LA_BD01	0.9504	0.009414	2.071941	0.0395
SHF_BD01	-0.050925	0.024804	-2.053062	0.0413
SHF_BL01	0.036365	0.014697	2.474369	0.0141
C	-0.009340	0.016474	-0.566949	0.5713
AR(1)	0.595940	0.052842	11.27786	0.0000
R-squared	0.372843	Mean dependent var		0.056176
Adjusted R-squared	0.349615	S.D. dependent var		0.064093
S.E. of regression	0.051688	Akaike info criterion		-3.047988
Sum squared resid	0.577085	Schwarz criterion		-2.911344
Log likelihood	351.8987	F-statistic		16.05140
Durbin-Watson stat	2.040680	Prob(F-statistic)		0.000000
Inverted AR Roots	.60			

Source: E-View Software Package: Computer Print Out

TABLE 5-1: Return on Capital (ROC)

Dependent Variable :PT
Included observations: 238
Excluded observations: 51 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
BA	0.023594	0.003308	7.133410	0.0000
BD	-0.023017	0.003185	-7.226430	0.0000
BL	0.032228	0.003467	9.295387	0.0000
EXCH	-66.20895	69.96019	-0.946380	0.3450
INFL	-163.0124	158.2960	-1.029795	0.3042
INTR	-761.4167	778.1650	-0.978477	0.3289
LA	0.066479	0.003096	21.47500	0.0000
OE	0.508664	0.370432	1.373165	0.1710
C	31328.88	20141.62	1.555430	0.1212
R-squared	0.997883	Mean dependent var		157309.1
Adjusted R-squared	0.997809	S.D. dependent var		916476.3
S.E. of regression	42899.94	Akaike info criterion		24.20821
Sum squared resid	4.21E+11	Schwarz criterion		24.33951
Log likelihood	-2871.777	F-statistic		13491.71
Durbin-Watson stat	1.973462	Prob(F-statistic)		0.000000

Source: E-View Software Package: Computer Print Out

TABLE 5-2: SHAREHOLDERS' FUND (SHF)

Dependent Variable: SHF
Included observations: 238
Excluded observations: 51 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
BA	0.192667	0.040763	4.726561	0.0000
BD	-0.156447	0.039253	-3.985617	0.0001
BL	0.253775	0.042728	5.939253	0.0000
EXCH	-527.0022	862.1977	-0.611231	0.5417
INFL	1011.074	1950.858	0.518271	0.6048
INTR	1953.035	9590.197	0.203649	0.8388
LA	-0.160024	0.038151	-4.194481	0.0000
OE	-3.379571	4.565248	-0.740282	0.4599
C	-79658.81	248227.7	-0.320910	0.7486

R-squared	0.975007	Mean dependent var	477140.4
Adjusted R-squared	0.974134	S.D. dependent var	3287385.
S.E. of regression	528704.0	Akaike info criterion	29.23133
Sum squared resid	6.40E+13	Schwarz criterion	29.36263
Log likelihood	-3469.528	F-statistic	1116.715
Durbin-Watson stat	2.465165	Prob(F-statistic)	0.000000

Source: E-View Software Package: Computer Print Out

Table 5-3: Dependent Variable: TBD (Market Share 10 banks
Method: Least Squares

Sample: 1986 -2006

Variable	Coefficient	Std. Error	t-Statistic	Prob.
SHF	0.2168	0.0839	2.5811	0.0188
TA	0.9637	0.1090	8.8382	0.0000
C	-0.3021	0.2742	-1.1015	0.2852

		Mean dependent var	4.1943
R-squared	0.9378		
Adjusted R-squared	0.9309	S.D. dependent var	0.4301
S.E. of regression	0.1130	Akaike info criterion	-1.3908
Sum squared resid	0.2299	Schwarz criterion	-1.2416
Log likelihood	17.6030	F-statistic	135.7926
		Prob (F-statistic)	0.0000

Source: E-View Software Package: Computer Print Out

Where: SHF: Shareholders Fund, TA: Total Assets; TBD: Total bank deposits

Table 5-4: Diagnostic Tests/Confirmatory (Market share of 10 banks)

Dependent Variables: Dlogbd

Variables	F-Statistic	Prob.
Jargue-Bera	0.1889	0.9098
B-G Serial Correlation	1.4237	0.2697
White Heteroskadasticity	0.8969	0.4886
Ramsey's RESET		
Chow Breakpoint	5.516	0.7012
Arch	0.3311	0.5721

Source: E-View Software Package: Computer Print Out

Table 5-5: Dependent Variable: TLA
(Market Share)
Method: Least Squares
Sample: 1986 2006

Variable	Coefficient	Std. Error	t-Statistic	Prob.
SHF	0.0439	0.1089	0.4032	0.6916
TA	0.7204	0.1414	5.0954	0.0001
C	0.6099	0.3556	1.7154	0.1034
R-squared	0.7874	Mean dependent var		3.4963
Adjusted R-squared	0.7638	S.D. dependent var		0.3015
S.E. of regression	0.1466	Akaike info criterion		-0.8713
Sum squared resid	0.3866	Schwarz criterion		-0.7221
Log likelihood	12.1491	F-statistic		33.3332
		Prob(F-statistic)		0.0000

Source: E-View Software Package: Computer Print Out

Where: TLA: Total loans and Advances; SHF: Shareholders Funds; TA: Total Assets

Table 5-6

Dependent Variable: TBD
(Market Share)
Method: Least Square
Sample: 1986 -2006

Variable	Coefficient	Std. Error	t-Statistic	Prob.
SHF	0.0783	0.0781	1.0023	0.3295
TA	1.1959	0.1229	9.732695	0.0000
C	-0.5521	0.2849	-1.937404	0.0685

R-squared	0.9378	Mean dependent var	4.0123
Adjusted R-squared	0.9309	S.D. dependent var	0.3969
S.E. of regression	0.1043	Akaike info criterion	-1.5509
Sum squared resid	0.1959	Schwarz criterion	-1.4017
Log likelihood	19.2844	F-statistic	135.7149
Durbin-Watson stat	1.1759	Prob (F-statistic)	0.0000

Source: E-View Software Package: Computer Print Out

Where: TBD: Total Bank Deposits; SHF: Shareholders Funds; TA: Total Assets

Table 5-7

Diagnostic Tests/Confirmatory	(Market share of 4 banks) Dependent Variables: Dlogbd	
Variables	F-Statistic	Prob.
Jargue-Bera	3.001	0.2229
B-G Serial Correlation	1.3742	0.2813
White Heteroskadasticity	1.0234	0.4249
Ramsey's RESET	0.188	0.6700
Chow Breakpoint	0.416	0.8865
Arch	1.5033	0.2359

Source: E-View Software Package: Computer Print Out

Table 5-8 : Dependent Variable
Variable: TLA
Method: Least Squares
Sample: 1986 2006

Variable	Coefficient	Std. Error	t-Statistic	Prob.
SHF	0.2895	0.1474	1.9643	0.0651
TA	0.2911	0.2318	1.2558	0.2252
C	1.0798	0.5376	2.0086	0.0598
R-squared	0.5569	Mean dependent var		3.2017
Adjusted R-squared	0.5077	S.D. dependent var		0.2805
S.E. of regression	0.1968	Akaike info criterion		-0.2814
Sum squared resid	0.6973	Schwarz criterion		-0.1322
Log likelihood	5.9550	F-statistic		11.3136
		Prob(F-statistic)		0.0007

Source: E-View Software Package: Computer Print Out

Where: TLA: Total loans and Advances; SHF: Shareholders Funds; TA: Total Assets

The result presented below gives us some clue to objectives and hypothesis of this study.

Model 1: Portfolio Regulation theory

ROA = + Bloan + deposit + EOM + Lad + Cap + Uit ……**Equation 2**

Where the a prori expectation is stated as > 0 > 0 < 0 > 0 > 0

$\approx U(0,1)$

The actual result of model 1 stated in **table 5** is presented below:

ROA = -0.0093 + 0.0906 + 0.0241+ 0.0929 + 0.9504 + -0.0047 …. Coefficient

(-0.5669) (3.715) (1.0808) (3.0264) (2.0720) (-0.1801) ….t-statistics

(0.5713) (0.003) (0.2810) (0.0028) (0.0395) (0.8566) … Probability

Model 2: Intermediation theory

ROC = $_{+}$ BD + BA + BL + Infl + ΔIntr $_{+}$ Expean + Exch

+ + Uit …… **Equation 4**

The actual result of model 2 stated in **table 5-1** is presented below:

ROC= 31328 + -0.023+ 0.024 + 0.032+ -163.0+ -761.41+ 0.509 + -66.20 + 0.066

….Coefficient

(1.555) (-7.226) (7.1334) (9.295) (-1.029) (-0.978) + (1.373) + -0.946 + 21.475

…. t-statistics

(0.121) (0.000) (0.000) (0.000) (0.304) (0.328) + (0.170) + 0.345 + 0.000

…. Probability

Model 3: Buffer theory of Capital Adequacy

SHF = $_{+}$ BD + BA + BL + Infl + ΔIntr $_{+}$ Expean + Exch

+ + Uit …… **Equation 6**

The actual result of model 3 stated in **table 5-2** is presented below:

SHF = -79658.8 + - 0.156 + 0.193 + 0.254 + 1011.1 + 1953.0 + -3.379 + -527.0 + -0.160

…. Coefficient

(-3.201) (-3986) (4.7265) (5.939) (0.5182) (0.2036) + (-0.7402) + (-6112) $_{+}$ (-4.1944)

….. t- statistics

(0.7486) (0.0001) (0.0000) (0.0000) (0.6048) (0.8388) + (0.4599) + (0.5417) + (0.000)

…. . Probability

Model 4: Concentration theory

Results of Model 4 are shown in six different tables (5-3 5-4, 5-5, 5-6, 5-7 and 5-8). Only four of the results: 5-3, 5-5, 5-6 and 5-8 will be presented because tables 5-4 and 5-7 are diagnostics test which shall be explained in our discussion of results. Equation 8 is explained by our tables 5-3 and 5-6 while equation 10 is explained by our tables 5-5 and 5-8. Equation 8 and 10 explained the extent to which shareholders fund and total assets have significantly influenced bank deposit and loans and advances of the ten and four big deposit money banks in Nigeria.

Bank deposit = + + + μ …… **Table 5-3 (Equation 8)**

The actual result of table 5-3 (market share of 10 banks) is presented below:

BD = -0.3021 + 0.2168 + 0.9637 ….. Coefficient

-1.1015 + 2.5811 + 8.8382 ….. t- Statistics

0.2852 + 0.0188 + 00000 …… Probability

LA = + + + μ …….. **Table 5-5 (Equation 10)**

The actual result of table 5-5 is presented below:

LA = -0.6099 + 0.0439 + 0.7204 ….. Coefficient

1.7154 + 0.4032 + 5.0954 ….. t- Statistics

0.1034 + 0.6916 + 00001 …… Probability

Bank deposit = + + + μ …… **Table 5-6 (Equation 8)**

The actual result of table 5-6 is presented below:

BD = -0.5521 + 0.0783 + 1.1959 ….. Coefficient

-1.937 + 1.0023 + 9.7326 ….. t -statistics

0.0685 + 0.3295 + 00000 …… Probability

LA = + + + μ …… **Table 5-8 (Equation 10)**

The actual result of table 5-8 is presented below:

LA = 1.0798 + 0.2895 + 0.2911 ….. Coefficient

2.0086 + 1.9643 + 1.2558	….. t -statistics
0.0598 + 0.0651 + 0.2252	…… Probability

Table 5 above depicts return on asset and is explained by the portfolio regulation theory. In short, the theory simply state that where asset portfolio is deemed too risky or capital inadequate, the relevant supervisory agency will attempt to compel a change in the bank's balance sheet. Our model 1 above tries to explain the proposition showing the relationship between the dependent variable of return on Asset (ROA) and our independent variables: bank loan/bank asset (BL/BA), bank loan/bank deposit (BL/BD), Shareholders Fund/Total Asset (SHF/TA), Operating Expenses/Total Asset (OE/TA), Liquid Asset/Bank Deposit (LA/BD), Shareholders Fund/Bank Deposit (SHF/BD) and Shareholders Fund/Bank Loan (SHF/BL).

Table 5-1 above depicts return on capital and is explained by the intermediation theory. The theory simply state that a strong capital base through funds mobilization, implies a lower default probability for the bank and therefore its cost of funding is lower. The theory predicts that the larger the size, the greater the potential of expected return on capital that may be realized. It also gives the bank more freedom to take advantage of profitable lending opportunities. The model 2 above explains the proposition showing the relationship between the dependent variable of return on capital (ROC) and the independent variables: bank asset (BA), bank deposit (BD), bank loan (BL), Operating Expenses (OE), Liquidity (LA), Exchange Rate (Exch), Interest rate (Intr) and Inflation (Infl).

Table 5-2 above depicts shareholders' fund and is explained by the buffer theory of capital adequacy. The theory simply states that banks may prefer to hold "buffer' of excess capital to reduce the probability of falling under the legal capital requirements, especially if their capital adequacy is very volatile. It also helps to reduce risk in order to avoid the regulatory costs triggered by a breach of the capital requirements. Our model 3 above explains the proposition showing the relationship between the dependent variable Shareholders Funds (SHF) and the independent variables: bank asset (BA), bank loan (BL), bank deposit (BD), Operating Expenses (OE), Liquidity (LA) Exchange Rate (Exch), Interest rate (Intr) and Inflation (Infl).

5.3 DISCUSSION OF RESULTS

The results from the panel regression carried out in the study are reported in tables 5, 5-1, and 5-2 above (pp.156-157). The discussion of our results will take the following steps: explanation of result in terms of (coefficient of determination), adjusted and Durbin-Watson test (and DW), the signs, significance of variables and results of hypothesis.

The result of Model 1 (Portfolio regulation theory) was presented in table 5 (p.156) above that is:

ROA = + B loan + deposit + EOM + a4 Lad + Cap + Uit ……**Equation 2**

Where the a priori expectation is stated as > 0 > 0 < 0 > 0 > 0

Model 1 explains our hypothesis 1 (one) and has coefficient of determination () of 0.373 and adjusted () of 0.350. This shows that the regression has low explanatory power. However, the values (i.e and adjusted) indicate that over 37 percent of the variations in the dependent variables (return on assets) is attributable to the explanatory variables selected by the model and include Liquidity ratios (LAD = LA/BD), Bank Loan/Bank Deposit (BL/BD), Efficiency/Quality of management ratio (Operating Expenses = OE/TA), Bloan = (BL/BA) and Capital Adequacy ratio (CAP = SHF/BL). Though the and adjusted appear low, it is significant judging from the significant F-statistics, which is equally high. The implication of this is that the model is well specified and does not suffer mis-specification bias. In other words, the result from the model can be relied upon in making useful deductions with respect to return on assets. The S.E regression and Durbin-Watson statistics equally lend credence to the fact that there is no auto correlation. The financial implications of this regression will be further explained in 5.3.1 that is result of hypotheses.

The result of Model 2 explained by our intermediation theory and buffer capital adequacy theory dwells on our hypothesis two (two) and is captured in table 5-2 that is:

ROC = + BD + BA + BL + Infl + + Expenses + Exch + LA + Uit

…….. **Equation 4**

Model 2 (Intermediation theory) has coefficient of determination () of 0.9978 and adjusted () of 0.9978. This shows that the regression has high explanatory power. The values (i.e and adjusted) indicate that over 99 percent of the variations in the dependent variables (return on capital) is attributable to the explanatory variables selected by the model and include Bank Deposit (BD), bank asset (BA), bank Loan (BL), Inflation (Infl), Interest (Intr), exchange rate, (Exch), Expenses (OE) and Liquidity (LA). This high goodness of fit is further supported by the significant F-statistics, which is equally high. The implication of this is that the model is well specified and does not suffer mis-specification bias. In other words, the result from the model can be relied upon in making useful deductions with respect to return on assets. The S.E regression and Durbin-Watson statistics equally lend credence to the fact that there is no auto correlation. The financial implications of this regression will be further explained in 5.3.1 that is result of hypotheses.

The result of Model 3 explained by our table 5-2 dwells on our hypothesis three that is:

SHF = + Bank Asset + Bank Deposit + Bank Loan + + + +

+ Uit…… **Equation 6**.

Where the a prori expectation is stated as $\delta SHF/\delta BPM > 0$

Model 3 has coefficient of determination () of 0.975 and adjusted () of 0.974. This shows that the regression has high explanatory power. The values (i.e and adjusted) indicate that over 97 percent of the variations in the dependent variables (shareholders fund) is attributable to the explanatory variables selected by the model and include Bank Deposit (BD), bank asset (BA), bank Loan (BL), Inflation (Infl), Interest (Intr), exchange rate, (Exch), Expenses (OE) and Liquidity (LA). This high goodness of fit is further supported by the significant F-statistics, which is equally high. The implication of this is that the model is well specified and does not suffer mis-specification bias. In other words, the result from the model can be relied upon in making useful deductions with respect to return

on assets. The S.E regression and Durbin-Watson statistics equally lend credence to the fact that there is no auto correlation. The financial implication of this regression will be further explained in 5.3.1 that is result of hypotheses.

Our macroeconomic variables of interest rate, inflation and exchange rates have had no significant effect on Return on Capital (ROC).This is represented in model 2 of this study. Thus, it means that macro economic variables that is interest rate, inflation and exchange rates have not led to significant change on Return on Capital (ROC) one of the indicators of bank capitalization **(See table 5-1)**. Inflation rate, interest rate and exchange rate have negative association with return on capital. This implies that return on capital and inflation rate, interest rate and exchange rate move in opposite direction. The coefficient points to the fact a percentage increase of these macroeconomic variables (inflation rate, interest rate, exchange rate) will lead to about 66.2 in exchange rate, 163. 0 inflation rate and 761.4 interest rate decrease in return on capital. As reported by Ige (2006) recent studies incorporating these variables indicated they could be statistically significant since they are more often than not at the mercy of the free market and not by government fiat. This does not conform to our a priori expectation that capitalization will be affected positively by interest rate, inflation and exchange rate.

Foreign exchange (forex) pricing mechanism (s) over the years has been an important macroeconomic variable in an open economy such as Nigeria. In an open economy, we expect a flourishing banking sector that was deceptively awash with capital fund to affect the external sector. The recent bank audit of Nigerian deposit money banks in August, 2009 showed that only some of them passed the CBN audit test. Borrowing for the purchase of machines and raw materials from abroad should be expected as banks make more demand for forex at the periodic bidding using the Dutch Auction System (DAS). This will only drive up the exchange rate, causing the Naira to depreciate, posing an inverse relationship, and very little or no statistical significance. Interest rate and return on capital share a negative relationship, thus as interest rate rises, return on capital decreased during the period covered by this study. However, historically, we know that even when prime interest rate was falling it made no significant impact on the economy. Banks have

not made concerted effort to transmit to the economy the benefit of lower interest rate. In the past, excess money balances will normally go for purchase of foreign exchange from the CBN auction market for a premium in the foreign exchange parallel market. In this new era of mega banks, we expect bank management to have another look at their interest rate policy such that it will re-engineer and stimulate the growth of the economy. Inflation rate possesses an inverse relationship to return on capital, thus as inflation rises, return on capital during the period covered by the study falls. This conforms to a priori expectation. Where the economy is resting at a sub-optimal level, it requires government's fiscal policy or perhaps any external shock, a change in expectation (output) etc to boost aggregate demand and subsequently aggregate supply. An important tool to stem the tide of rising inflation in Nigeria is massive expenditure in infrastructure development.

Appendices 111-V111 explains the relationship between capitalization and control of market share. This study adopted the N-firm absolute concentration ratio, which is an indication of the percentage of total deposits, total assets, total capital & reserve and loan & advances controlled by the largest N firms in the banking industry. N is a large absolute number relative to the total number of firms in the industry. The four-firm Concentration ratio employed is therefore a measure of the market power (market share) enjoyed by these firms in the banking industry specifically deposit money banks. Save for 1998, 2004, 2005 and 2006 where Zenith bank broke into the big four, First Bank (FBN), United Bank for Africa (UBA), Union Bank of Nigeria (UBN) and Afribank banks have the largest total assets, total capital and reserve, total deposits and loans and advances from 1987-2006. First, on size, measurement, the study adopted the firm's assets, deposits, total capital and reserve and loans and advances because it is more reliable than other parameters.

However, with increased capitalization over the years culminating in N25 billion capitalization for banks which took effect from 31st December, 2005 the market power (market share) of the big four dropped to 33.52 percent for total assets,30.28 percent for total capital and reserve, 49.03 percent for total deposits and 22.29 percent for loans and advances. Market power rests with firms that have captured a good proportion of the whole market as evidence by their statistics on Appendices 111-V111. Secondly, the study ranked firms in the Banking Industry (BI) specifically, deposit money banks from the

largest to the smallest of the sample. Using the index of total assets, deposits, loans and advances and total capital and reserves, FBN, UBA, UBN and Afribank bank came top followed by the other firms. The share of the total industry deposit held by these firms accounted for the BI concentration from 1987-2006.

Results from Appendix V shows the banking industry as a highly concentrated industry from 1987 to 2006.The banking industry was a pure monopoly for 11 years (1986-1996) until 1997 when the market power was deconcentrated following the emergence of the new generation banks which brought new innovations such as aggressive marketing, new technology into the industry. This supports the view of pro concentration theorist such as Sathye (2002) that the degree of control of economic activity is influenced by large firms. The increase and magnitude of concentration levels could be due also to considerable size enlargement of the dominant firm (s) and/ or considerable size reduction of the non-dominant firms. Allen and Gale (2000); Beck, Demirguc-Kunt and Levine (2004) suggested that concentrated banking sector with many small banks is more prone to financial crises than a concentrated banking sector with a few large banks. This explains the position of the Nigerian banking industry where a few large banks have been in control of the market share. The protagonists of concentration theory opined that larger banks can diversify better so that banking systems characterized by few large banks will tend to be less fragile than banking systems with small banks, Allen and Gale (2003). This can also be explained by the Structure-Conduct –Performance theory which predicts that the more concentrated the market, the more profitable the banks earned from higher loan rates and lower deposits (due to low interest rate) which is true of the Nigerian banking industry. The more concentrated the market, the more market power banks have, which means they can be inefficient without being forced out of the market

Even when the total number of banks increased from 29 in 1986 to 65 in 1991, decreased to 64 in 1996, increased to 90 in 2001 and 25 in 2006, the four giants banking firms more or less maintained their market power of 33.52 percent of total assets, 30.28 percent for total capital and reserve, 49.03 percent for total deposits and 22.29 for loans and advances. There is thus a substantial amount of Banking Industry (BI) market power with FBN, UBA, UBN and Zenith banks as at 2006. From this high “top-level’ concentration can be

inferred an even higher concentration say for 10 banks ratio (See Appendix 1V). There is also the possibility of price leadership and barriers to entry arising from the scale of economies and product differentiation. This could be explain by the diversification theory which states that in banking the greater size implies the potential for improved diversification of product/services. Diversification by way of innovation in product/services offers less risk and hence, cost savings in managing risk (Diamond, 1984). He further stated that larger banks respond to a reduced marginal cost of risk by taking on and managing more risk, they appear to have constant or even decreasing returns to scale because extra risk is costly.

Given a bank's scale and its inherent asset quality, an increase in financial capital reduces the probability of insolvency and provides an incentive for allocating additional resources to managing risk in order to protect the larger equity stake. This follows from the firm's long experience in banking business and the corresponding acceptance of their product by customers, reflected by the companies' relative maintenance of their market shares in the whole period (1986-2006) of banking industry's history. The BI's high concentration ratio may lead to an undesirable performance in the crucial matter of price-cost relations such as in lending and deposit rates. However, according to Bain (1956), where the sellers that is banks concentration in the banking industry is greater than that in which 'the largest six sellers (banks) supply two-thirds to three quarters of the output of the industry, there is strong disposition towards monopolistic price-raising and excessive profit. In the case of the banking industry (BI) where it has been found that entry barriers exist as a result of increased capitalization, high concentration would seem to suggest a poorer performance (in areas of service delivery) than in highly concentrated industries in which entry barriers are non-existent. Apart from the very high concentration, which this study has found to characterize the banking industry in Nigeria, the industry has also exhibited increasing return to scale (profit). Bain (1956) posited that the implication of structural traits combination of high seller (bank) concentration and high entry barriers (as a result of increased capitalization) remain high in an industry, then seller (bank) concentration is likely to rise further through the institution of effective and extensive product differentiation. As a corollary, higher seller (bank) concentration is not likely to persist for periods of time after high barriers to entry are pulled down.

5.3.1 Discussion of Hypotheses

Hypothesis one

This hypothesis is captured by model 1 (Portfolio regulation theory). **Table 5** above presents the return on asset as dependent variable and the indicators of bank performance and management. The result shows that the indicators of bank performance and management are significant at 10% in explaining the dependent variable. Our explanatory variables are represented by liquidity ratio: Liquid Asset/ Bank deposits (LAD = LA/BD) and Bank loan/ Bank Assets (BL/BA), Efficiency of Management represented by Operating expenses/Total Assets (EOM = OE/TA), Capital Adequacy indices represented by Shareholders Fund /Bank deposits (SHF/BD) and Shareholders fund/Bank loan (SHF/BL) are statistically significant in their influence on return on asset. However, while others are positive in their influence, the result further shows that Capital adequacy ratio represented by Shareholders fund/Total Assets (CAP = SHF/TA) and Shareholders fund/ Bank deposit (SHF/BD) have negative association with ROA. Bank Loan/Bank deposit (BL/BD), Liquid Asset/ Bank deposit (LA/BD) measures liquidity. Shareholders Fund/ Bank deposit (SHF/BD) and Shareholders fund/Bank Loan (SHF/BL) measures capital adequacy, Operating expenses/ Total Assets (OE/TA) and Bank Loan/Bank Asset (BL/BA) measures efficiency and quality of management. The overall liquidity position for the banks as computed and regressed by the panel data shows that bank liquidity is statistically significant. The result shows that bank performance indices (Capital adequacy ratios) such as Shareholders Fund/Total Assets (SHF/TA), Shareholders fund/bank deposits (SHF/BD) have negative association with Return on Asset (ROA). This implies that return on assets (ROA) and capital adequacy ratios move in opposite direction.

The coefficient points to the fact that a percentage increase of capital adequacy ratio will lead to about 0.05 Shareholders Fund/Bank deposit (SHF/BD) and 0.0047 Shareholders Fund/ Total Assets (SHF/TA) decrease in return on asset (ROA). This could be attributed to the sterility/volatility of deposits and reserves which do not stay long in banks vault. Deposits in bank vaults can be volatile and vulnerable that is subject to withdrawal without

notice e.g saving and current account of governments, customers (individuals), corporate bodies and permanent deposits that stay with banks for some time e.g (fixed deposit). As a result capital base may be eroded and could make the return on asset susceptible to fluctuation. The reserve ratio may also affect the ability of banks to comply with regulatory directive as it has not been consistent. The efficiency and quality of management captured by Operating Expenses/Total Assets (OE/TA), Bank Loan/Bank Assets (BL/BA) shows that a percentage increase in operating expenses will lead to little increase of 0.0929 and 0.0906 increases in ROA.

Hypothesis two

The relevant results containing hypothesis 2 (two) are in **table 5-1** above in which return on capital (ROC) as reflected by profitability is stated as the dependent variable. This is represented in model 2 of the study. The result shows that the null hypothesis of no significant relationship between operational efficiency (operating expenses) and return of capital cannot be rejected at 10 percent level of significance. This is because the probability value of 0.171 is greater than 0.10. Thus, the operating efficiency, though it is positively related to return on capital, its impact is not significant in its influence. This does not conform to a priori expectation that operating expenses is expected to be negatively related to ROC.

Wrong signs and/or significance or non-significance of the parameters does not necessarily imply that violation of a priori expectations is tantamount to poor empirical result. Rather one is led to ask the ultimate question whether in a posterior and a priori expectations Nigerian deposit money banks can be expected to utilize bank capital to the ends required by the shareholders and the economy. The real issue in Nigeria case has been that of mismanagement of funds which is aptly explained by our expense theory. A good explanation may be found with management expertise, which presupposes that high capital requirement as stipulated by the buffer theory of capital adequacy may not curtail reckless spending by managers who may indulge in reckless spending of bank capital. In other words a bank without good management may worsen the position it was before the injection of new funds. In the Pre and Post consolidation era in Nigerian banking industry, what we have seen is bank management establishing more bogus bank branches

everywhere rather using bank capital for worthwhile projects that will enhance shareholders' wealth and the economy.

Hypothesis three

Going to specifics and testing the stated hypothesis three (three) in model 3 which captures the buffer theory of capital adequacy, the result in the **table 5-2** above indicate that hypothesis 3 with null that there is no significant relationship between shareholders' fund and bank's liquidity is rejected at 1 percent level of significance. This is because the probability value is far less than 0.01. Thus, the alternative hypothesis that there is a significant relationship between shareholders' fund and banks' liquidity is substantiated. This implies that banks capitalization (shareholders fund) and banks' liquidity move in opposite direction as reflected by the negative sign. This conforms to a priori expectation that bank shareholders' fund is affected positively by bank liquidity. This implies that bank capitalization requirement is very significant to bank health. In capital structure theory all equity firms are characterized by greater liquidity positions than levered firms and would embrace equity to finance real investment with positive net present value. However, banks use a mix of debt but more of equity in their equity financing to avoid seizure of the assets by creditors in the event of bankruptcy.

However, the nature of the results may not precisely explain the situation in the Nigeria context because there are other real issues that needs to be explained. A good explanation may be found with management expertise, which presupposes that high capital requirement may not make significant impact to bank's liquidity and by extension profitability, if qualitative management is not in place to ensure effective and rewarding utilization of additional capital introduced. In other words a bank without good management, accountability and good governance culture may worsen the position it was before the injection of new funds. Hence, the use of regulatory tools by CBN to check illiquidity in the Nigerian banking industry. The period of 1990's and earlier 2000 in the Nigerian Banking Industry witnessed high rate of bank distress due to banks having reduction of the capital base which affected their liquidity ratio – ability to meet short term obligations of customers as they became due.

Another sub hypothesis 3 (three) can be tested using the result in **(table 5-2)**. From the result, the null hypothesis of no significant relationship between shareholders fund (SHF) and bank loans (Bank Loan) is rejected, which means that the alternative hypothesis that states a significant relationship between shareholders' fund (SHF) and bank loan (BL) is accepted. The result equally shows a positive relationship between shareholders fund and bank loans. In other words, a unit increase in bank loans will create about 0.254 increase in the level of shareholders' fund. This conforms to theory that loans and advances represent the highest incomes item for banks. This also conforms to literature, that is, the higher the loans and advances portfolio the higher the shareholders' fund. However, this is subject to recovery of the loans and advances. The core business of banking which is credit involves financial intermediation manifested in the mobilization of deposit from the surpluses units and the passing on the funds sourced to the deficits (needed) units accordingly. The deposit is mobilized at a cost to the bank and this cost is often called interest. On the other hand, it is passed to the users who also pay interest though at a higher rates than the deposit rate. This presupposes that a bank must ensure proper management of its asset and liabilities, both in composition and utilization. Against the backdrop of the present competitive banking environment, the intermediation theory therefore requires that banks need to mobilize funds from the customers by engaging in aggressive marketing of financial services. This is very crucial for sustainability of banking business in this era of keen competition.

Another sub hypothesis 3 (three) was also tested using the result in **(table 5-2)** and help to reject the null hypothesis of no significant relationship between bank capitalization based on the use of shareholders fund and bank deposit in favour of the alternative hypothesis. In addition, the negative sign indicates that they move in opposite direct. The coefficient points to the fact that a unit increase of bank's deposit will lead to about 0.156 decrease in shareholders' fund. This is contrary to our a priori expectation that capitalization based on the use of shareholders fund will positively influence bank deposit. According to the expense theory, Nyong (2001) opined that managers have the option in pursuing policies, which maximize their own utility rather than profit maximization for shareholders. Where managers prefer prestige, wrong loan application, power and status, it would be reflected in the amount of slack they receive in form of expense account, luxurious offices and

building, company cars and other perquisites of office. This was the situation that led to the spate of bank distress in Nigerian banking Industry in the late 1980's, mid-1990 and early 2000.

Hypothesis 4

Model 4a below will test to the extent to which shareholders fund of the (10) ten big banks have significantly influenced market share specifically bank deposit of deposit money banks in Nigeria (See Appendix IV). The model 4a has the proposition which state in null hypothesis that shareholders fund and total assets have not significantly influenced the ten big banks to compete effectively by way of control of market share (bank deposit) between 1986-2006. The times series data for the banks are consolidated. In explicit form, we have it as:

Bank deposit = + + + μ …… **Equation 8**

Where the a priori expectation is stated as: , > 0

The equation above relates total deposits with factors that influenced it, which are shareholders fund (SHF) and total assets (TA). The variables (See appendix 6) were regressed using log transformation due to the fact; logathmic relations bring variables to a more comparable manner because it examines their rate of change. It equally helps to minimize the problem of heteroskedasticity. The result in **Table 5-3** above explained by equation 8 shows that the shareholders fund and total assets of the banks had positive and significant impact in influencing the level of total deposit of the ten big deposit money banks. The coefficients, which denote elasticity of financial performance with respect to the individual explanatory variables, imply that a unit increase in shareholders fund and total assets will lead to about 0.22 and 0.96 units increase in total deposit respectively. Besides, both variables are positive and are significant at 5% for shareholders fund while total assets is at 1%.This conform to theory that an increase in shareholders fund (capital and reserve) will heighten confidence of bank customers, hence, increase in bank deposit. With regards to the model; the result in **table 5-3** shows that (Coefficient of determination) is 94% and adjusted shows that about 93% variations in total deposit is explained by both shareholders fund and total assets. The F-statistics, which is significant at 1% implies that the model had good fit and as such the result from the test can be relied

in making useful inference. To further validate the reliability of the model, the study carried out diagnostic and confirmatory test. To examine the efficiency of the model statistically, some standard diagnostic tests were carried out as reported in table 16. From **table 5-4**, the Jargue-Bera test points out that the stochastic term in the model were randomly distributed. It could be observed that Jargue-Bera (J-B) test that normality assumption cannot be rejected, meaning that asymptotically; the error terms are identically independently distributed. This is supported by the Breuch-Godfrey (B-G) serial correlation test, which indicates that the results are free from first order auto correlation. In addition, the white's heteroskedaticity test reveals that the regression results do not suffer from this problem i.e the ordinary least square (OLS) assumption of homoskedasticity is not violated. The Ramsey's regression specification error test (RESET) test also elucidates that our null hypothesis is rejected in favour of the alternate hypothesis.

Table 5-5 above explained by equation 10 also shows that shareholders fund and total assets of the bank had a positive and significant impact in influencing the level of loans and advances for the ten big deposit money banks. The coefficients, which denote elasticity of financial performance with respect to the individual explanatory variables, implies that a unit increase in shareholders fund and total assets will lead to about 0. 5units and 0.72 units increase in total loans and advances. Total assets had significant impact on loans and advances. This conforms to theory that increase in the level of deposit will impact on the magnitude of loans and advances extended to customers provided capital is not eroded. We therefore accept the alternate hypothesis that total assets have influenced the market share of the ten big banks between 1986-2006.

Our **model 4b** below will test to what extent shareholders fund and total assets of the (4) four big banks have significantly influenced bank deposit (See Appendix V). The time series data for the banks are consolidated. Our model 4b has the proposition which state in null hypothesis that shareholders fund and total assets have not significantly influenced the four big banks to compete effectively by way of control of market share (bank deposit) between 1986-2006. In explicit form, we have it as:

Bank deposit = + + + μ …… Equation 8 Where the a priori expectation is stated as: , > 0

Table 5-6 above relates total deposits with factors that influenced it, which are shareholders fund (SHF) and total assets (TA). The variables (See appendix V) were regressed using log transformation due to the fact, logathmic relations bring variables to a more comparable manner because it examines their rate of change. It equally helps to minimize the problem of heteoskedasticity. The result in table 5-6 above shows that the shareholders fund and total asset of the banks had positive and significant impact in influencing the level of total deposit (See equation 8). The coefficients, which denote elasticity of financial performance with respect to the individual explanatory variables, implies that a unit increase in shareholders fund and total assets will lead to about 0.08 and 0.20 units increase in total deposit respectively. Though, shareholders' fund is not significant, total assets is positive and significant at 1%. This conform to theory that a decrease in shareholders fund (capital and reserve) will dampen the confidence of bank customers, hence, lower the growth of bank deposit.

With regards to the model, the result in table 5-6 shows that (Coefficient of determination) is 94% and adjusted shows that about 93% variations in total deposit is explained by both shareholders fund and total assets. The F-statistics, which is significant at 1% for total assets, implies that the model had good fit and as such result from the test can be relied in making useful inference. To further validate the reliability of the model, the study carried out some diagnostic and confirmatory test. This was validated by serial correlation LM test; which shows that there was no problem of autocorrelation while the white test shows that there is no problem of heteroskedastic. From the table 5-7 below, the Jargue-Bera test points out that the stochastic term in the model were randomly distributed.

Table 5-8 above explained by equation 10 also shows that shareholders fund and total assets of the bank had a positive and significant impact in influencing the level of loans and advances of the four big deposit money banks in Nigeria.

In explicit form, we have it as:

LA = + + + μ …… Equation 10

Where the a priori expectation is stated as: , > 0

The coefficients, which denote elasticity of financial performance with respect to the individual explanatory variables, implies that a unit increase in shareholders fund will lead to about 0.29 units increase in total loans and advances. Though, total asset is not significant, our shareholders fund had considerable impact on loans and advances at 10%. This conforms to theory that increase in the level of deposit will impact on the magnitude of loans and advances extended to customers provided capital is not eroded. We therefore accept the alternate hypothesis that shareholders fund has influenced the market share of the four big banks between 1986-2006.

CHAPTER SIX

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

6.1 INTRODUCTION

The problem of the Nigerian banking industry especially the deposit money banks and most economies today has been how to resolve the problem of unsound bank, inadequate capital, poor management and supervision, reduce non-performing loans and advances, increase profitability, reduce risk, ensure quality asset management in order to enhance performance and to put the banks in a strong liquid position to meet customers obligation at all times. The recent audit of Nigerian deposit money banks (July-August, 2009) shows that about seven banks (Union bank, Finbank, Ocean bank, Afribank bank, Intercontinental, Bank PHB and Spring bank) have impaired capital and liquidity problem. The global financial crisis and the on-going credit crunch being experienced in the Nigerian banking industry have affected the Nigerian deposit money banks. This study has addressed some of these issues and we shall now summarize the findings and recommendations in this chapter.

The extent of growth of bank deposits, bank loans and liquidity and their influence on bank capitalization, influence of bank capital, asset and liquidity ratios on return on capital, impact of management control of operating expenses on return capital (profitability), extent of macroeconomic variable effect (such as interest, inflation and exchange rates) on bank capital and the relationship between bank capitalization and market concentration (market share) have been tested in the models specified in Chapter four. The findings are stated under 6.2.

6.2 SUMMARY OF FINDING

This study has attempted to find the relationship between bank capitalization, management and performance in the Nigerian banking industry specifically deposit money banks. Capitalization in this study refers to a number of variables of interest which are produced from the existence of funds for use in the process of intermediation. From these funds, obvious concepts such as rate of Return on Assets (ROA), Return on Capital (ROC) and Shareholders Fund (SHF) are derivatives from the use of funds. In this research, SHF, ROA and ROC represent our dependent variables whereas our controlled independent variables are: Liquidity ratios, efficiency ratios and capital adequacy ratios, macroeconomic variables such interest rate, exchange rate and inflation. Availability of funds facilitates return on capital and return on assets. Further, the crux of this study is to

see how bank capitalization/consolidation in Nigeria makes fund available for realization of adequacy of capitalization, management and performance. The panel data methodology provides a useful answer to all these. The following are the **findings**:

(i) The analyses on **table 5** show that shareholders fund/bank deposits and shareholders fund/total assets indices of bank management and performance has negative relationship with ROA. The overall capital adequacy ratios of the study shows that Shareholders Fund/Total Assets (SHF/TA), which measures capital adequacy of banks (risk of default) have negative impact on ROA. This is one of the tests for capital adequacy and it shows that both move in opposite direction and also the negative signs indicate that capital adequacy has been impaired.

(ii) Also from **table 5** the overall liquidity position for the banks as computed and regressed by the panel data shows that bank liquidity is statistically significant at 10%.This is explained by the fact that liquidity does not mean adequacy of capital. A bank can be liquid that is meeting obligations as they fall due but may be technically experiencing inadequate capital because of losses in its balance sheet. The ten (10) banks taken over recently by Central Bank of Nigeria in 2009 is a case in point (See Chapter one for the banks).

(iii) The efficiency of management measured by operating expenses indice positively related to return on assets **(tables 5 and 5-1)**. Management control of Operational expenses is affected by absence of electricity, access roads and other overheads has affected banking performance e.g overall profitability. However, the impact is not too significant. The positive and insignificant coefficient in our operating expenses, instead, suggests that banks are able to pass on most of the high overhead costs to customers through higher spreads in order to keep profits unaffected. This may also explain the large gap between lending and saving rates in banks (See Chapter 3, p. 120-121). To the extent that banks' ability to overcharge is a function of their market power, this outcome presents evidence of market power incidence in the banking sector. Because of the rising cost of doing business

the tendency is that interest rate on lending might continue to rise except it is controlled by government.

(iv) We also find that there is significant relationship between shareholders' fund and banks' liquidity, bank deposits, and bank loans. This also conforms to a priori expectation that bank capitalization will be affected positively by bank liquidity, bank deposits and bank loans.

(v) Inflation rate, interest rate and exchange rate have negative association with return on capital **(Table 5-1**). This implies that return on capital and inflation rate, interest rate and exchange rate move in opposite direction. Macroeconomic policies are important. Inflation reduces credit expansion by contributing to higher interest margins.

(vi). As shown in **Appendices 111-V11**, we find evidence in support of a significant impact of bank capital on market power (market share) as a proxy of market concentration. There is also a strong relationship between bank capital funds and bank deposits, loans and advances (proxies for market concentration). Prior to the recent bank capitalization, many Nigerian banks were passive players in the financial markets **(See Appendices 111-VIII)**.

(vii) The result in **Tables 5-3, 5-5, 5-6 and 5-8** shows that shareholders' fund and total assets of the banks have positive and significant impact in influencing the level of total deposits. In the same vein, shareholder fund and total assets of the bank had a positive and significant impact in influencing the level of loans and advances. The diagnostic tests also lend credence to the results **(See tables 5-4 and 5-7, Chapter 5)**.

(viii) Our results from **Appendix V**, shows banking industry (deposit money banks) as a highly concentrated industry from 1987 to 2006. Save for 1998, 2004, 2005 and 2006 where Zenith bank broke into the big four, First Bank (FBN), United Bank for Africa (UBA), Union Bank of Nigeria (UBN) and Afribank bank had the largest total assets, total capital and reserve (shareholders fund), total deposits and loans and advances from 1987-2006. Even when the total number of banks increased from 29 in 1986 to 65 in 1991,

decreased to 64 in 1996, increased to 90 in 2001 and 25 in 2006, the four giants banking firms more less maintained their market power of 33.52 percent of total assets, 30.28 percent for total capital and reserve, 49.03 percent for total deposits and 22.29 for loans and advances.

(ix) The result of the study when compared to the phases of banking, for instance, the periods 1891-1928, 1929-1951, 1952-1958, 1959-1968, 1969-1976, 1977-1985,1986-1998,1999-2003,and 2004-2008 witnessed mismanagement in the banking industry and this led to the collapse of most banks with the rapidity in which they came on board (See Chapter two).This is a major theoretical findings of our study. The former state governments' banks are case in point. The period 1929-1951, witnessed the failure of the indigenous banks due to poor asset quality, under capitalization, illiquidity, overtrading and complete absence of regulation and supervision. The period 1977-1985, witnessed 25 distressed banks as result of undercapitalization.

6.3 CONCLUSION

When bank loans are profitably employed it will definitely lead to increase in profit and consequently shareholders fund. When banks are able to influence the other sectors in the economy through extension of loans, it would lead to multiplier effect in the long run, reduce inflation and appreciate the naira. Bank management owes it a duty to keep watch and constantly monitor the quality of assets, especially the risk assets must be improved upon. If the existing ratio falls below the benchmark of 20%, excessive and unnecessary growth of the loan portfolio volume must be minimized. Bank capital cannot on its own influence bank deposit as depicted by our result. There is no doubt that the days of armchair banking are over and intense competition in the Nigerian banking industry has come to stay. Besides these lapses of unfavorable enabling environment (excessive operational expenses, shareholders fund/total assets that is risk of default), mismanagement of assets, there is the issue of bad governance on the part of bank management which has failed in all respect to provide positive leadership.

In this study, we have specified an empirical framework to investigate bank capitalization/consolidation, management and performance. Based on the results of the

theoretical and empirical analysis, bank loan, bank deposit, bank asset, bank liquidity, operating expenses, loan interest-deposit interest rates gap, inflation rate, interest rate, exchange rate, market share, unfavourable environment affects the performance of bank management. Capital adequacy ratios, efficiency/Quality of management and Liquidity ratios are also very crucial factors affecting bank capitalization and performance. Therefore, in order to improve performance, management of banks should focus on maintaining sizeable amounts of reserves which can be ploughed back into the business, improving the quality of their credit portfolios, diversifying product and services, beefing up the capital in line with regulatory authorities and best practices. This cannot be possible without employing skillful, experience and efficient team of management that are visionary and focus. To forestall future credit crunch and bank distress in the Nigerian banking industry, the CBN should tailor its policies and regulations toward ensuring that banks do not falter in their performance.

6.4 RECOMMENDATIONS.

On the basis of the theoretical and empirical findings of this study, and considering the fact that the days of armchair banking has been overtaken with the intense competition in the Nigerian banking industry, we recommend the following:

(i) A bank without good management (input) may worsen the position it was before the injection of new funds. Where managers prefer prestige, power and status, it would be reflected in the amount they receive in form of expense account and luxury. Management capability should be better supported, for the best of assets can be overturned in short period by poor management. It is a known fact that CBN plays an important role in the selection of bank executives at the directorate level. The policy for the selection of this class of bank workers should emphasize strict consideration of good track records and sequential growth phase through the ranks as some of the imperatives.

(ii) Shareholders' fund and total assets of the bank should be periodically evaluated. The regulatory authorities will need to put in place appropriate

machinery or tool that will address issues of bank liquidity and shore assets quality in the industry. Bank management in conjunction with the regulatory authorities should at all times address causes of illiquidity rather than the systems. In this way, lost confidence can once again be restored in the Nigerian banking industry. It is important to carry routine checks, periodic examinations on bank returns.

(iii) We strongly suggest that apart from capital, technology, customer care, aggressive marketing and efficient service delivery are tools that can be used to attract more customers to shore up bank deposit**.** This will also help to reduce market concentration and also break the monopoly power of the big banks.

(iv) Where there exists a viable financial infrastructure, bank management should lobby governments for the provision of an enabling environment (such as security, access roads, uninterrupted power supply etc.) for banks to strive. This will help to minimize the operation expenses (OE) of the banks.

(v) Bank returns are affected by macroeconomic variables, suggesting that macroeconomic policies that promote low inflation rate, stable exchange rate, low interest rate and output growth will boost credit expansion. Government should provide an enabling environment and also control interest rate on credit in the short term to enable customers such as corporate bodies, manufacturers, and industrialists obtain loan and also to save in order to stimulate economic growth. In summary, policies aimed at controlling inflation should be given priority in fostering financial intermediation. Fiscal and monetary policies designed to promote output stability and sustainable growth is good for financial intermediation.

(vi) The study identified a positive relationship between shareholders fund and bank loan. The higher the loans and advances, the higher the bank income; provided the credit facilities are recovered. In order to sustain this relationship,

bank management should strengthen their supervisory units in credit administration, that is, from loan application to drawdown of such facilities so as to avoid bad loans in its financial statement.

(vii) The study found that there is a significant relationship between shareholders fund and liquidity; and a positive relationship between shareholders fund and bank loans. Therefore, the gap between deposit and lending structure which has been very wide need to be closed. Regulatory authorities need to take another look at the disparities between deposit and lending structure.

(viii) The overall capital adequacy ratios shows that Shareholders Fund/Total Assets (SHF/TA) which measures capital adequacy of banks (risk of default) have negative impact on Return on Asset (ROA). This implies that the regulatory authorities should put in place measures to raise the level of this ratio to avoid future bank collapse**.**

(ix) With respect to bank capital and market power (market share), for Nigerian banks to be major players in domestic and international financial market, its capital must be kept above the minimum regulatory requirement at all times.

(x) When new assets are to be created, the credit appraisal process must be thorough and devoid of sentiments so as to prevent delinquency and deterioration in the course of time. The bank should review regularly its loans and advances portfolio once a quarter in order to detect early danger signal and take immediate and appropriate remedial/preventive action. Top managers must be competent, experienced and be all-round managers who will not only manage their desks but be capable of managing overall organizational resources.

(xi) The study established a negative relationship between shareholders fund and deposit, shareholders' fund and total assets (capital adequacy ratios). In this

light, the regulatory authorities, that is Central Bank of Nigeria (CBN) should continually review the capital requirements of banks to keep with rising inflation and global best practices (global trend) as prescribed by Basel Accord. In the past, the CBN has not pragmatically addressed this issue. This has not been regular, systematic but arbitrarily done. This precipitated the drastic increase in the capital base of banks in December, 2005 and we hope this trend of periodic review of bank capital will be sustained for the survival of the Nigerian banking industry.

(xii) Central Bank of Nigeria should ensure that bank management/managers apply customers' deposit for worthwhile projects instead of using such for prestige, wrong loan application, power and status, luxurious offices and building, company cars and other perquisites of office.

6.5 CONTRIBUTION TO KNOWLEDGE

It is true that the lip services paid to assets and liabilities management in the banking industry may have accounted for the banking distress of the 1980's, mid-1990 and earlier 2000. It is important for bank management to work hard in order to avoid the pitfalls of the past and restore confidence in the industry. The framework and emerging studies of bank capitalization has become very crucial amongst nations since it is the hub around which other economic activities revolve.

The study has made contribution to knowledge in the following aspects: the study will contribute towards assets and liabilities management in the Nigerian banking industry in the following aspects. For instance, capital adequacy ratios of the study showed that shareholders fund/bank deposits and shareholders fund/total assets indices which measures capital adequacy (risk of default) have negative relationship with Return on Asset. Secondly, the study showed that management control of expenses has affected banking performance even though the impact is not too significant. Thirdly, the study showed that bank capital and total assets of banks have positive and significant impact in influencing the level of total deposits.

This study will no doubt help in the resolution of the spate of distress in the Nigerian banking industry, inconsistent regulatory policies and supervision in the recent years has put doubt in the minds of stakeholders. This study will contribute to literature on bank capitalization that will enhance performance of bank management. A bank without good management (input) may worsen the position it was before the injection of new funds. Good performance by bank management will help raise the confidence level of stakeholders (personal customers, corporate customers and governments). The study will assists government regulators in the management of the Nigerian financial system especially the Nigerian deposit money banks and also to keep aligning with global best practices.

6.6 LIMITATIONS OF THE STUDY

This study is limited to deposit money banks in Nigeria whereas in the financial intermediation process, we have a gamut of non-bank financial institutions such as insurance companies, finance houses, investment companies, mutual trust fund/unit trust, development and specialized banks etc that are involved in funds mobilization. Secondly, in the course of the field work we observed that many banks do not have data bank for their annual financial statements and made it cumbersome to obtain data for this study. We also observed some inconsistency in annual financial statements of banks and that of the regulatory authority (Central Bank of Nigeria).

6.7 RECOMMENDATION FOR FUTURE STUDY

Several studies about bank capitalization exist in United Kingdom (UK), United States (US) and Asia, Africa, South Africa and Tunisia. The extent to which such studies have addressed the issues of bank capitalization, management and performance in Nigerian deposit money banks is yet to be answered. This is one of such studies put together to address some specific issues in the Nigerian deposit money banks as indicated earlier in chapter one. However, the study of bank capitalization, management and performance for the entire Nigerian banking industry should be investigated to strengthen and confirm the results of our study.

APPENDICES

APPENDIX 1: ECONOMETRICS VARIABLES FOR THE STUDY

ZENITH BANK N' M

YEAR	BA	BL	BD	LA	SHF	P	OE	infl	Exch	Int
1986								5.40	2.0206	12.00

1987								10.20	4.0179	19.20
1988								56.00	4.5367	17.60
1989								50.50	7.3916	24.60
1990								7.50	8.0378	27.70
1991	419	46	307	297	34	68	-20	12.70	9.9095	20.80
1992	773	54	429	459	67	162	-41	44.80	17.2934	31.20
1993	1,481	292	647	966	128	356	-100	57.20	22.0511	18.32
1994	3,064	656	2,014	2,049	251	655	-198	57.00	21.8891	21.00
1995	5,096	652	2,205	3,775	412	816	-360	72.90	21.8891	20.79
1996	9,780	1,895	3,012	7,164	669	1,351	-596	29.30	21.8891	20.86
1997	16,016	4,317	7,138	10,710	1544	2,330	-926	8.50	21.8891	23.32
1998	21,735	6,267	11,867	14,189	2,350	3,777	-1,803	10.00	21.8891	21.34
1999	34,023	9,886	19,375	22,490	5,113	1,529	-2,135	6.60	92.6934	27.19
2000	40,756	11,939	25,035	26,334	5,130	1,863	-3,312	6.90	102.105	21.55
2001	60,190	13,029	30,688	44,038	6,725	2,802	-4,047	18.90	111.943	21.34
2002	92,563	20,665	50,134	67,428	9,306	3,990	-5,454	12.90	120.97	29.70
2003	112,535	27,895	61,574	77,140	12,665	5,440	-10,049	15.00	129.357	22.47
2004	193,321	54,420	131,095	121,891	15,674	6,405	-13,797	19.00	133.5	20.62
2005	329,717	125,531	233,413	180,407	37,790	9,165	-18,164	18.00	130	20.10
2006	608,505	204,057	392,864	360,291	93,799	15,154	-31,298	15.00	127	19.00

OCEANIC BANK N'm

YEAR	BA	BL	BD	LA	SHF	P	OE	infl	Exch	Int
1986								5.40	2.0206	12.00
1987								10.20	4.0179	19.20
1988								56.00	4.5367	17.60
1989								50.50	7.3916	24.60
1990								7.50	8.0378	27.70
1991								12.70	9.9095	20.80
1992								44.80	17.2934	31.20
1993								57.20	22.0511	18.32
1994								57.00	21.8891	21.00
1995								72.90	21.8891	20.79
1996	14991	422	1168	462	-526	-205	-450	29.30	21.8891	20.86
1997	3245	1102	2787	1586	-593	263	-234	8.50	21.8891	23.32
1998	5594	1555	4006	2924	70	675	-407	10.00	21.8891	21.34
1999	8932	2148	5900	5143	564	289	-844	6.60	92.6934	27.19
2000	21525	3788	15143	16007	1501	1375	-1,312	6.90	102.105	21.55
2001	32320	7574	23388	20929	3564	2474	-4,172	18.90	111.943	21.34
2002	53294	11272	40028	34298	5565	3121	-4,595	12.90	120.97	29.70
2003	64978	13600	49366	43893	7073	3287	-7,767	15.00	129.357	22.47

2004	86884	24827	68954	51404	10360	3445	-9,178	19.00	133.5	20.62
2005	329717	125531	233413	62488	37790	9165	-17,044	18.00	130	20.10
2006	608505	204057	392864	46489	37670	15154	-13,111	15.00	127	19.00

UBA N'm

YEAR	BA	BL	BD	LA	SHF	P	OE	Inf	Exch	Int
1986								5.40	2.0206	12.00
1987	5,656	1,798	4,766	2,828	286	106	-463	10.20	4.0179	19.20
1988	7,061	2,008	5,875	3,820	328	84	-557	56.00	4.5367	17.60
1989	9,205	3,004	8,159	4,428	417	101	-719	50.50	7.3916	24.60
1990	11,350	2,505	9,694	6,144	472	116	-1,030	7.50	8.0378	27.70
1991	12,864	2,435	11,894	6,293	484	17	-1,443	12.70	9.9095	20.80
1992	18,610	3,650	17,356	10,362	504	15	-2,065	44.80	17.2934	31.20
1993	22,975	5,428	18,627	10,129	739	368	-2,563	57.20	22.0511	18.32
1994	24,281	4,317	18,353	12,064	1,577	213	-3,430	57.00	21.8891	21.00
1995	44,200	6,220	33,161	28,539	3,611	490	-4,169	72.90	21.8891	20.79
1996	52,016	4,240	37,019	33,720	4,287	1,246	-6,082	29.30	21.8891	20.86
1997	57,782	4,894	39,521	36,121	5,290	903	-6,807	8.50	21.8891	23.32
1998	73,751	10,872	48,858	42,523	5,036	225	-7,939	10.00	21.8891	21.34
1999	99,978	10,850	73,207	60,568	5,011	1,766	-8,991	6.60	92.6934	27.19
2000	119,978	9,595	82,518	88,418	6,782	3,804	-15,022	6.90	102.105	21.55
2001	183,248	31,041	133,135	135,535	8,427	1,585	-17,705	18.90	111.943	21.34
2002	198,680	41,150	131,866	133,582	9,782	2,238	-20,049	12.90	120.97	29.70
2003	200,995	50,178	142,427	123,105	13,767	4,816	-19,066	15.00	129.357	22.47
2004	208,806	58,885	151,929	130,317	18,059	5,608	-18,500	19.00	133.5	20.62
2005	248,928	70,086	205,110	168,160	17,702	6,239	-19,569	18.00	130	20.10
2006	851,248	116,960	757,404	666097	47,621	12,514	-21,410	15.00	127	19.00

Intercontinental Bank N'm

YEAR	BA	BL	BD	LA	SHF	P	OE	Inf	Exch	Int
1986								5.40	2.0206	12.00
1987								10.20	4.0179	19.20
1988								56.00	4.5367	17.60

1989								50.50	7.3916	24.60
1990								7.50	8.0378	27.70
1991	71	81	-526	785	71	45	-183	12.70	9.9095	20.80
1992	1,599	347	-581	1034	157	137	-361	44.80	17.2934	31.20
1993	4,247	879	-2287	1,695	413	593	-1,222	57.20	22.0511	18.32
1994	4,993	932	-2794	2,912	593	740	-770	57.00	21.8891	21.00
1995	5,613	2,455	-3295	2,386	850	520	-808	72.90	21.8891	20.79
1996	4,376	3,634	-4626	3,654	1,248	559	-1,179	29.30	21.8891	20.86
1997	10751	5482	6646	3,569	1,662	869	-1,446	8.50	21.8891	23.32
1998	12,575	6386	8486	4,494	1,905	1,068	-2,401	10.00	21.8891	21.34
1999	16,150	5,363	11700	7,819	2,176	1,271	2,996	6.60	92.6934	27.19
2000	23,503	7,913	15271	11,164	2,775	1,927	-3,577	6.90	102.105	21.55
2001	35,779	12,080	23509	19,933	3,456	1,523	-4,098	18.90	111.943	21.34
2002	47,797	14,556	35584	25,370	7,484	2,380	-4,862	12.90	120.97	29.70
2003	71,412	23,187	50245	41,551	8,611	3,414	-6,557	15.00	129.357	22.47
2004	87,006	30,514	63508	43,224	9,988	2,712	-8,358	19.00	133.5	20.62
2005	164,348	55,306	110014	98,062	32,576	6,706	-14,244	18.00	130	20.10
2006	360,903	170,035	252281	150,249	53,911	11,030	-22,484	15.00	127	19.00

					IBTC CHARTERED	**BANK**	N'm			
YEAR	BA	BL	BD	LA	SHF	P	OE	Infla	Exch	Int
1986								5.40	2.0206	12.00
1987								10.20	4.0179	19.20
1988								56.00	4.5367	17.60
1989	214	33	90	160	15	11	-6	50.50	7.3916	24.60
1990	441	69	297	320	34	25	-11	7.50	8.0378	27.70
1991	487	94	287	339	61	43	-28	12.70	9.9095	20.80
1992	915	87	167	744	121	121	-75	44.80	17.2934	31.20
1993	2634	179	1007	2326	379	557	-121	57.20	22.0511	18.32
1994	3591	990	1283	2456	704	1039	-197	57.00	21.8891	21.00
1995	4861	710	314	3581	1255	1071	-255	72.90	21.8891	20.79
1996	5713	2007	1821	3095	1512	1320	-370	29.30	21.8891	20.86
1997	5260	2406	1275	2244	1988	864	-438	8.50	21.8891	23.32
1998	N/A	N/A	N/A	N/A	N/A	N/A	N/A	10.00	21.8891	21.34
1999	9970	3801	3345	5350	2208	912	-687	6.60	92.6934	27.19
2000	9404	3449	2774	4721	5348	823	-449	6.90	102.105	21.55
2001	13894	6932	6475	3958	3779	1208	-463	18.90	111.943	21.34
2002	20578	10210	8910	8921	3936	1503	-608	12.90	120.97	29.70
2003	23947	9604	8182	9601	5881	1688	-713	15.00	129.357	22.47
2004	26872	9618	10886	15009	5794	1711	-648	19.00	133.5	20.62

2005	34568	13670	10886	19721	14275	3013	-1,238	18.00	130	20.10
2006	110782	58132	57073	11365	59687	5418	-2746	15.00	127	19.00

				FIDELITY	**BANK**	**N'm**				
YEAR	BA	BL	BD	LA	SHF	P	OE	Infl	Exch	Int
1986								5.40	2.0206	12.00
1987								10.20	4.0179	19.20
1988								56.00	4.5367	17.60
1989	328	23	213	294	9	17	-81	50.50	7.3916	24.60
1990	351	25	231	181	24	19	-70	7.50	8.0378	27.70
1991	621	68	476	443	40	23	-95	12.70	9.9095	20.80
1992	699	57	453	518	76	46	-116	44.80	17.2934	31.20
1993	872	100	579	619	95	47	-196	57.20	22.0511	18.32
1994	1053	280	644	242	164	63	-271	57.00	21.8891	21.00
1995	1673	311	746	1013	201	84	-197	72.90	21.8891	20.79
1996	2772	681	1011	1611	275	127	-267	29.30	21.8891	20.86
1997	4152	1397	2075	1913	674	195	-409	8.50	21.8891	23.32
1998	4788	1900	2578	1893	779	208	-680	10.00	21.8891	21.34
1999	6213	2154	3833	2671	832	213	-1,036	6.60	92.6934	27.19
2000	10012	3428	7040	3164	922	267	-1,277	6.90	102.105	21.55
2001	12715	2882	9323	5918	1300	442	-2,155	18.90	111.943	21.34
2002	15637	5927	12281	5171	1915	634	-2,609	12.90	120.97	29.70
2003	22517	7881	16888	10284	2515	1085	-3,301	15.00	129.357	22.47
2004	27552	11014	19340	15780	3520	1079	-4,394	19.00	133.5	20.62
2005	34953	15676	20572	20000	9125	1564	-4833	18.00	130	20.10
2006	119986	46398	78648	23141	25597	3587	-5316	15.00	127	19.00

					DIAMOND BANK		N'm			
YEAR	BA	BL	BD	LA	SHF	P	OE	infl	Exch	Int
1986								5.40	2.0206	12.00
1987								10.20	4.0179	19.20
1988								56.00	4.5367	17.60
1989								50.50	7.3916	24.60
1990								7.50	8.0378	27.70

1991								12.70	9.9095	20.80
1992	227	36	80	127	50	82	-23	44.80	17.2934	31.20
1993	13,051	141	671	1,001	96	51	-129	57.20	22.0511	18.32
1994	2,886	328	2,157	2,212	208	161	-333	57.00	21.8891	21.00
1995	7,040	1,022	4,576	5,234	401	303	-448	72.90	21.8891	20.79
1996	10,162	1,734	6,491	7,545	825	530	-739	29.30	21.8891	20.86
1997	13,273	3,636	9,544	8,353	1,134	485	-1,253	8.50	21.8891	23.32
1998	17,357	5,212	11,676	10,451	1,680	569	-1,918	10.00	21.8891	21.34
1999	26,035	6,106	19,048	18,353	2,238	919	-1,960	6.60	92.6934	27.19
2000	30,473	8,689	22,464	18,516	2,815	987	-2,551	6.90	102.105	21.55
2001	47,372	15,798	32,398	27,394	4,086	2,225	-3482	18.90	111.943	21.34
2002	53,199	16,255	33,556	28,877	5,320	2,142	-4806	12.90	120.97	29.70
2003	59,287	15,932	42,147	35,778	4,993	3,090	-6225	15.00	129.357	22.47
2004	69,062	19,500	43,391	38,853	6,520	7,004	-6207	19.00	133.5	20.62
2005	125,675	41,805	75,166	61,385	20,710	3,522	-8371	18.00	130	20.10
2006	223,048	81,306	144,570	50,119	34,970	5,292	-7289	15.00	127	19.00

AFRIBANK million

YEAR	BA	BL	BD	LA	SHF	P	OE	infl	Exch	int
1986								5.40	2.0206	12.00
1987								10.20	4.0179	19.20
1988	2,714	1,052	1,734	931	210	91	-304	56.00	4.5367	17.60
1989	2,360	1065	1,654	798	276	123	-359	50.50	7.3916	24.60
1990	3,387	1,073	2,478	1,556	288	66	-590	7.50	8.0378	27.70
1991	4,490	1,400	3,257	2,136	312	57	-642	12.70	9.9095	20.80
1992	6,386	1,968	4,756	2,898	391	149	-1,106	44.80	17.2934	31.20
1993	12,770	2,024	10,977	3,593	893	426	-2,187	57.20	22.0511	18.32
1994	16,413	2,658	18,087	4,664	1,041	379	-2,659	57.00	21.8891	21.00
1995	26,041	6,143	21,215	9,219	2,269	838	-3,718	72.90	21.8891	20.79
1996	26,763	9,450	18,446	5,722	1,529	159	-5,080	29.30	21.8891	20.86
1997	34,366	12,700	26,342	10,807	1,626	321	-5,012	8.50	21.8891	23.32
1998	N/A	N/A	N/A	N/A	N.A	N/A	N/A	10.00	21.8891	21.34
1999	41,400	14,400	33,877	18,903	1,726	403	-8,410	6.60	92.6934	27.19
2000	63,250	12,867	54,881	27,915	2,040	-780	-10,506	6.90	102.105	21.55
2001	71,839	21,122	58,287	32,259	2,823	1,090	-9,367	18.90	111.943	21.34
2002	73,088	31,138	56,955	31,148	4,332	2,231	-14,651	12.90	120.97	29.70
2003	83,144	33,845	61,195	44,381	6,546	2,471	-14,795	15.00	129.357	22.47
2004	70,578	26,482	57,989	30,790	5,317	1,566	-12,867	19.00	133.5	20.62
2005	95,754	30,543	61,601	40,649	21,387	231	-13,941	18.00	130	20.10
2006	131270	48,224	94,816	42,501	27,059	3,695	-14,523	15.00	127	19.00

GUARANTY TRUST million

YEAR	BA	BL	BD	LA	SHF	P	OE	infl	Exch	int
1986								5.40	2.0206	12.00
1987								10.20	4.0179	19.20
1988								56.00	4.5367	17.60
1989								50.50	7.3916	24.60
1990								7.50	8.0378	27.70
1991								12.70	9.9095	20.80
1992	1125	105	849	920	66	52	-101	44.80	17.2934	31.20
1993	2323	436	1650	1645	152	215	-327	57.20	22.0511	18.32
1994	4868	1109	3161	3456	291	601	-678	57.00	21.8891	21.00
1995	10942	2256	7689	8178	542	553	-588	72.90	21.8891	20.79
1996	11790	3290	7532	7911	1018	1010	-1,107	29.30	21.8891	20.86
1997	16170	5754	9753	4543	1539	1041	-1,623	8.50	21.8891	23.32
1998	19132	7006	10808	6512	1984	873	-1,804	10.00	21.8891	21.34
1999	20625	7957	10369	4745	2563	933	-2,405	6.60	92.6934	27.19
2000	35597	8087	15446	8402	3117	1361	-4,599	6.90	102.105	21.55
2001	40819	12667	24139	16683	4124	2050	-1,561	18.90	111.943	21.34
2002	59292	18217	31373	23223	7950	2657	-7,993	12.90	120.97	29.70
2003	83311	31556	51068	31256	9661	3802	-12,454	15.00	129.357	22.47
2004	119698	45198	74222	31999	11618	4633	-13,941	19.00	133.5	20.62
2005	167898	67179	95564	47471	30895	7004	-18,678	18.00	130	20.10
2006	305081	86958	212834	74501	36446	10025	-23,126	15.00	127	19.00

FIRST INLAND BANK N'm

YEAR	BA	BL	BD	LA	SHF	P	OE	infl	Exch	int
1986								5.40	2.0206	12.00
1987								10.20	4.0179	19.20
1988								56.00	4.5367	17.60
1989	132	20	46	106	14	2	-9	50.50	7.3916	24.60
1990	371	48	314	271	28	7	-30	7.50	8.0378	27.70
1991	234	51	165	140	34	7	-53	12.70	9.9095	20.80
1992	509	128	369	315	74	17	-77	44.80	17.2934	31.20
1993	1,013	267	734	374	98	28	-219	57.20	22.0511	18.32
1994	1,053	325	704	310	129	1	-192	57.00	21.8891	21.00
1995	1,125	533	751	298	133	7	-232	72.90	21.8891	20.79
1996	2,252	802	1,477	380	362	51	-338	29.30	21.8891	20.86
1997	4,700	1,403	3,624	1,754	638	161	-476	8.50	21.8891	23.32
1998	N/A	N/A	N/A	N/A	N/A	N/A	N/A	10.00	21.8891	21.34
1999	7,911	2,880	5,691	3,136	775	265	-1,367	6.60	92.6934	27.19

2000	9,869	3,414	6,349	3,396	2,017	128	-1,621	6.90	102.105	21.55
2001	13,834	5,228	8,956	6,234	2,258	283	-1,860	18.90	111.943	21.34
2002	16,646	6,950	10,099	6,334	2,299	598	-2,838	12.90	120.97	29.70
2003	24,580	9,991	15,101	8,955	2,444	478	-3,608	15.00	129.357	22.47
2004	26,403	11,138	16,158	7,918	3,631	527	-3,604	19.00	133.5	20.62
2005	31,684	13,365	19,390	9,502	4,358	632	-4,325	18.00	130	20.10
2006	63,367	26,038	23,268	11,403	29100	949	-5,190	15.00	127	19.00

ACCESS BANK N'm

YEAR	BA	BL	BD	LA	SHF	P	OE	infl	Exch	int
1986								5.40	2.0206	12.00
1987								10.20	4.0179	19.20
1988								56.00	4.5367	17.60
1989								50.50	7.3916	24.60
1990	197	4	153	171	15	2	-11	7.50	8.0378	27.70
1991	219	25	82	115	18	5	-16	12.70	9.9095	20.80
1992	543	69	271	336	26	6	-43	44.80	17.2934	31.20
1993	961	123	365	103	57	21	-120	57.20	22.0511	18.32
1994	1,371	245	624	920	76	30	-241	57.00	21.8891	21.00
1995	2,351	241	852	1,734	97	41	-259	72.90	21.8891	20.79
1996	1,176	328	667	501	151	28	-257	29.30	21.8891	20.86
1997	1,777	719	1,195	813	184	41	-246	8.50	21.8891	23.32
1998	1,714	685	952	703	213	18	-344	10.00	21.8891	21.34
1999	4,878	1,259	2,733	3,049	801	167	-433	6.60	92.6934	27.19
2000	8,434	3,127	4,401	3,750	842	167	-1,029	6.90	102.105	21.55
2001	8,001	2,794	4,832	3,666	917	116	-1,326	18.90	111.943	21.34
2002	11,343	4,980	6,475	5,464	1,944	-18	-2,586	12.90	120.97	29.70
2003	22,582	7,135	9,309	9,543	2,365	811	-3,357	15.00	129.357	22.47
2004	31,342	12,341	22,724	6,305	2702	952	-4,563	19.00	133.5	20.62
2005	66,918	17,942	32,608	19,802	14,072	751	-6,744	18.00	130	20.10
2006	174,554	60,941	110,879	84,255	28,844	1,119	-12,241	15.00	127	19.00

UNION BANK N'm

Year	BA	BL	BD	LA	SHF	P	OE	infl	Exch	int
1986								5.40	2.0206	12.00

1987	5747	1872	4073	1191	348	83	-527	10.20	4.0179	19.20
1988	6335	2228	4876	2061	412	112	-661	56.00	4.5367	17.60
1989	7986	2380	5782	4172	533	152	-907	50.50	7.3916	24.60
1990	9241	2650	6379	4525	652	127	-1294	7.50	8.0378	27.70
1991	13166	1736	9739	7588	668	14	-1809	12.70	9.9095	20.80
1992	23869	3773	15712	17150	989	109	-2590	44.80	17.2934	31.20
1993	32008	4218	20114	22832	1448	614	-3323	57.20	22.0511	18.32
1994	43274	7105	24914	5331	1318	606	-5189	57.00	21.8891	21.00
1995	76432	11255	51607	7154	1734	839	-7054	72.90	21.8891	20.79
1996	80055	16704	56914	10363	2449	1257	-9953	29.30	21.8891	20.86
1997	85850	23364	63654	5963	3289	1615	-9364	8.50	21.8891	23.32
1998	109586	26148	83093	5742	6053	2318	-12655	10.00	21.8891	21.34
1999	138342	28662	102775	9500	11159	4046	-17116	6.60	92.6934	27.19
2000	188326	34147	146190	107667	13137	7943	-32781	6.90	102.105	21.55
2001	238311	39631	189605	119480	15191	7058	-28336	18.90	111.943	21.34
2002	275194	45486	204347	166452	30302	7490	-24356	12.90	120.97	29.70
2003	329583	54560	224347	176285	32730	10154	-24558	15.00	129.357	22.47
2004	367798	78338	241585	203372	35985	10210	-28975	19.00	133.5	20.62
2005	398271	78684	200511	274903	39129	11935	-32838	18.00	130	20.10
2006	517564	134864	275457	263392	95685	12350	-36424	15.00	127	19.00

FIRST BANK Million

Year	BA	BL	BD	LA	SHF	P	OE	infl	Exch	int
1986	5995	1869	4412	2645	311	145	-426	5.40	2.0206	12.00
1987	6776	2047	5010	3248	373	106	-586	10.20	4.0179	19.20
1988	7071	2253	5646	3286	434	124	-736	56.00	4.5367	17.60
1989	8492	2402	5785	3954	534	163	-988	50.50	7.3916	24.60
1990	8281	1651	6585	4550	300	-205	-1433	7.50	8.0378	27.70
1991	11319	1635	8287	7114	457	-31	-1575	12.70	9.9095	20.80
1992	16686	2379	11965	11316	955	366	-2323	44.80	17.2934	31.20
1993	23552	3073	16439	16949	1494	1196	-3374	57.20	22.0511	18.32
1994	36552	6164	25022	25002	2219	1179	-4735	57.00	21.8891	21.00
1995	63872	12666	43464	40897	6264	1238	-7742	72.90	21.8891	20.79
1996	77269	17108	58214	50042	7018	1385	-9610	29.30	21.8891	20.86
1997	141052	22764	64455	52609	8740	2110	-11147	8.50	21.8891	23.32
1998	102418	28430	70697	55176	10462	2835	-12683	10.00	21.8891	21.34
1999	137869	34235	89868	76242	12509	4288	-15674	6.60	92.6934	27.19
2000	194744	38360	138003	135472	16016	5767	-23990	6.90	102.105	21.55
2001	224000	50170	155598	151648	18932	6715	-25576	18.90	111.943	21.34
2002	290593	66384	178603	203513	20202	5087	-40096	12.90	120.97	29.70
2003	409083	60439	264245	312978	27800	13393	-36177	15.00	129.357	22.47
2004	384211	83500	255491	247537	42311	14106	-36465	19.00	133.5	20.62
2005	407839	123739	332196	267761	49805	15145	-40647	18.00	130	20.10

2006	538145	190004	391169	272300	58996	19831	-44600	15.00	127	19.00

WEMA BANK

Year	BA	BL	BD	LA	SHF	N'm P	OE	infl	Exch	int
1986								5.40	2.0206	12.00
1987	365	140	335	191	29	3	-30	10.20	4.0179	19.20
1988	638	167	588	428	49	2.5	-48	56.00	4.5367	17.60
1989	890	198	822	604	67	21	-95	50.50	7.3916	24.60
1990	1006	254	927	654	78	28	-105	7.50	8.0378	27.70
1991	1402	315	1296	844	105	38	-181	12.70	9.9095	20.80
1992	1704	631	1561	930	142	44	-224	44.80	17.2934	31.20
1993	3145	1016	2842	1038	303	142	-385	57.20	22.0511	18.32
1994	6006	1022	4399	4451	474	375	-629	57.00	21.8891	21.00
1995	10019	1490	6242	7530	627	303	-837	72.90	21.8891	20.79
1996	10734	2928	7785	6064	821	251	-1266	29.30	21.8891	20.86
1997	13441	4734	9321	6388	1264	264	-1480	8.50	21.8891	23.32
1998	17268	7470	12679	7630	1438	351	-1737	10.00	21.8891	21.34
1999	17924	8620	13497	6958	1727	489	-2469	6.60	92.6934	27.19
2000	22751	7250	17585	8900	2314	303	-3759	6.90	102.105	21.55
2001	38813	14799	29631	22070	2596	800	-3857	18.90	111.943	21.34
2002	44101	17093	32775	22475	3768	2294	-5626	12.90	120.97	29.70
2003	61323	23508	43762	31451	7215	2286	-7430	15.00	129.357	22.47
2004	71423	36071	55071	27065	8040	1420	-11436	19.00	133.5	20.62
2005	329717	125531	233413	54493	37790	9165	-9433	18.00	130	20.10
2006	608505	204057	392864	36771	34800	15154	-10434	15.00	127	19.00

Source : Annual Financial Reports of Banks/Nigeria Fact Book (Various Issues) **Annual Financial Report of Banks** **and Nigeria Fact Book (Various Issues)** **Issues)**

Where:
BA= Bank Assets
BL= Bank Loans
BD= Bank Deposits
LA= Liquid Assets
SHF= Shareholders Funds
P= Profit (ROC)
O/E= Operating Expenses
Inf= Inflation
Exr= Exchange Rate

Int= Interest

APPENDIX II : ECONOMETRIC VARIABLE OF COMPUTED RATIOS

ACCESS BANK

Year	BL/BA	BL/BD	CAP=SF/TA	LAD=LA/BD	EOM=OE/TA	SHF/BL	SHF/BD	ROA
1986								
1987								
1988								

1989								
1990	0.0204	0.026	0.0766	1.116	0.055	3.758	0.0984	0.01
1991	0.1127	0.2999	0.0842	1.3969	0.0776	0.7467	0.223	0.0275
1992	0.1264	0.2536	0.0473	1.2406	0.0791	0.3737	0.0851	0.0114
1993	0.1282	0.3371	0.0598	0.2808	0.1248	0.4662	0.1589	0.0219
1994	0.1783	0.3915	0.0553	1.4726	0.1757	0.3102	0.1217	0.0219
1995	0.1024	0.2825	0.041	2.0359	0.1097	0.4011	0.1127	0.0174
1996	0.2785	0.4911	0.1287	0.7509	0.2185	0.4623	0.2279	0.0239
1997	0.4047	0.6019	0.1036	0.6802	0.1384	0.2561	0.1539	0.0105
1998	0.3994	0.7191	1	0.7383	0.2007	2.4949	1.7855	0.0104
1999	0.2582	0.4609	1	1.116	0.0889	3.8737	1.9136	0.0221
2000	0.3707	0.7105	0.0997	0.8523	0.1233	0.2689	0.1897	0.0147
2001	0.3493	0.5783	0.1146	0.7587	0.1657	0.3282	0.3002	0.0144
2002	0.439	0.7691	0.1714	0.8438	0.2279	0.3904	0.2541	-1E-04
2003	0.3159	0.7664	0.1047	1.0251	0.1486	0.3314	0.0871	0.0359
2004	0.3491	0.5496	0.1655	0.0568	0.1456	0.2357	0.5501	0.0304
2005	0.2681	0.5502	0.2102	0.6073	0.1008	0.7843	0.4315	0.4315
2006	0.3491	0.5496	0.1655	0.7599	0.0701	0.4741	0.2605	0.2605

Year			**AFRIBANK**					
1986								
1987								
1988	0.3875	0.6065	0.0775	0.5369	0.1124	0.1998	0.1212	0.0335
1989	0.4514	0.643	0.1172	0.4817	0.1522	0.2591	0.1672	0.0478
1990	0.3169	0.4332	0.0851	0.6279	0.1742	0.2684	0.1162	0.0195
1991	0.3116	0.4299	0.0694	0.6558	0.1429	0.2228	0.0957	0.0126
1992	0.3081	0.4136	0.0612	0.6094	0.1732	0.1986	0.0822	0.0233
1993	0.1584	0.1843	0.0699	0.3273	0.1713	0.4397	0.0813	0.0334
1994	0.1619	0.1469	0.0634	0.2579	0.162	0.3916	0.0575	0.0231
1995	0.2358	0.2895	0.0871	0.4346	0.1428	0.3693	0.1069	0.0322
1996	0.3531	0.5123	0.0571	0.3102	0.1898	0.1617	0.0826	0.0006
1997	0.3695	0.4821	0.0473	0.4103	0.1458	0.128	0.0617	0.0009
1998	_	_	_	_	_	_	_	_
1999	0.3478	0.4251	0.0416	0.5587	0.2031	0.1198	0.0509	0.0009
2000	0.2034	0.2345	0.0323	0.5086	0.1662	0.1585	0.0372	-0.012
2001	0.294	0.3624	0.0392	0.5534	0.1303	0.1336	0.0484	0.0152
2002	0.426	0.5467	0.0593	0.5468	0.2005	0.1388	0.076	0.0305
2003	0.407	0.5531	0.0787	0.7252	0.1779	0.1934	0.1069	0.0297
2004	0.3752	0.4628	0.0753	0.5309	0.1823	0.2007	0.0916	0.0222
2005	0.3189	0.4958	0.2234	0.6598	0.1455	0.7002	0.3471	0.0002
2006	0.3674	0.5086	0.2061	0.4482	0.1106	0.5611	0.2854	0.0281

DIAMOND BANK

Year	BL/BA	BL/BD	CAP=SF/TA	LAD=LA/BD	EOM=OE/TA	SHF/BL	SHF/BD	ROA
1986								
1987								
1988								
1989								
1990								
1991								
1992	0.1594	0.452	0.221	1.5792	0.0969	1.4166	0.625	0.0359
1993	0.1076	0.2092	0.0734	1.4894	0.0988	0.6857	0.1428	0.0387
1994	0.1139	0.1524	0.0719	1.0254	0.115	0.631	0.0963	0.0556
1995	0.1452	0.2233	0.0569	1.1437	0.0634	0.3923	0.0876	0.043
1996	0.1706	0.2671	-0.808	1.1625	0.0727	0.4754	0.1269	0.0522
1997	0.2738	0.3809	-0.0854	0.8753	0.0943	0.3119	0.1188	0.0365
1998	0.3003	0.4463	0.0967	0.8952	0.1105	0.3221	0.1437	0.0327
1999	0.2293	0.3205	0.084	0.9635	0.07344	0.3665	0.1174	0.0345
2000	0.2851	0.3867	0.094	0.8243	0.0837	0.3297	0.1275	0.0324
2001	0.3335	0.4876	0.0862	0.8455	0.0735	0.2587	0.1261	0.0469
2002	0.3056	0.4844	0.1	0.8605	0.0903	0.3272	0.1585	0.0402
2003	0.2687	0.378	0.0842	0.8483	0.1049	0.3133	0.1184	0.0005
2004	0.2823	0.4494	0.0944	0.8954	0.089	0.3343	0.1502	0.1014
2005	0.332	0.5562	0.1647	0.8166	0.0666	0.4953	0.2755	0.028
2006	0.3645	0.5624	0.1568	0.3467	0.0327	0.4301	0.2419	0.0237

FIRST BANK

Year	BL/BA	BL/BD	CAP=SF/TA	LAD=LA/BD	EOM=OE/TA	SHF/BL	SHF/BD	ROA
1986	0.312	0.424	0.052	0.599	0.071	0.1663	0.0705	0.0244
1987	0.302	0.409	0.055	0.648	0.087	0.1822	0.0745	0.0156
1988	0.319	0.4	0.061	0.582	0.104	0.1926	0.0769	0.0176
1989	0.282	0.415	0.0628	0.683	0.116	0.2223	0.0923	0.0192
1990	0.195	0.251	0.035	0.69	0.168	0.1817	0.0456	-0.024
1991	0.144	0.197	0.04	0.858	0.1391	0.2795	0.0551	-0.003
1992	0.14	0.199	0.056	0.946	0.139	0.4014	0.0798	0.0219
1993	0.091	0.187	0.063	1.036	0.143	0.4862	0.0908	0.0508
1994	0.167	0.246	0.098	0.999	0.13	0.3599	0.0887	0.0322
1995	0.198	0.291	0.091	0.941	0.121	0.4946	0.1441	0.0194
1996	0.221	0.294	0.097	0.86	0.124	0.4102	0.1205	0.0179
1997	0.25	0.348	0.102	0.82	0.124	0.3839	0.1355	0.0235
1998	0.278	0.402	0.0907	0.78	0.124	0.3679	0.1479	0.0277
1999	0.248	0.381	0.0822	0.848	0.114	0.3653	0.1392	0.0311
2000	0.197	0.278	0.0845	0.982	0.123	0.4175	0.1161	0.0296
2001	0.223	0.322	0.0695	0.975	0.114	0.3773	0.1217	0.0299
2002	0.228	0.372	0.0695	1.139	0.138	0.3043	0.1131	0.0175
2003	0.148	0.228	0.0679	1.184	0.088	0.4599	0.1052	0.0327
2004	0.217	0.327	0.11	0.969	0.095	0.5067	0.1656	0.0367

2005	0.263	0.327	0.11	0.966	0.15	0.4025	0.0705	0.0322
2006	0.263	0.316	0.1096	0.98	0.083	0.3104	0.0745	0.0368

FIDELITY BANK

Year	BL/BA	BL/BD	CAP=SF/TA	LAD=LA/BD	EOM=OE/TA	SHF/BL	SHF/BD	ROA
1986								
1987								
1988								
1989	0.0688	0.1056	0.0268	1.3791	0.2477	0.3913	0.0424	0.052
1990	0.0704	0.1069	0.0668	0.7826	0.1994	0.92	0.1039	0.0541
1991	0.1088	0.1422	0.0636	0.9313	0.1527	0.5882	0.0821	0.0368
1992	0.0821	0.1266	0.1093	1.1426	0.1661	1.333	0.1677	0.0652
1993	0.1147	0.1729	0.1093	1.0695	0.2254	0.955	0.1643	0.054
1994	0.2657	0.4342	0.1559	0.3749	0.2576	0.5878	0.2546	0.06
1995	0.0188	0.4178	0.1204	1.3583	0.1184	0.646	0.2694	0.0499
1996	0.2456	0.6731	0.09908	1.5924	0.0963	0.4029	0.271	0.0457
1997	0.3367	0.6738	0.1622	0.9223	0.0985	0.4817	0.3244	0.0469
1998	0.3968	0.737	0.1628	0.7345	0.1418	0.41	0.3022	0.0434
1999	0.3467	0.5619	0.1339	0.6965	0.1667	0.3857	0.2164	0.0342
2000	0.3424	0.4868	0.092	0.4493	0.1275	0.269	0.1309	0.0266
2001	0.2267	0.3091	0.1022	0.6346	0.1695	0.4511	0.1394	0.0347
2002	0.379	0.4826	0.1224	0.421	0.1668	0.323	0.1559	0.0405
2003	0.35	0.4666	0.1116	0.6089	0.1466	0.3191	0.1489	0.0481
2004	0.3997	0.5694	0.1278	0.8158	0.1545	0.3195	0.182	0.0391
2005	0.4484	0.762	0.2611	0.9721	0.0447	0.5821	0.4435	0.0447
2006	0.3867	0.5899	0.2133	0.2942	0.0298	0.5516	0.3255	0.0298

FIRST INLAND BANK

Year	BL/BA	BL/BD	CAP=SF/TA	LAD=LA/BD	EOM=OE/TA	SHF/BL	SHF/BD	ROA
1986								
1987								
1988								
1989	0.1514	0.4364	0.1023	2.295	0.0681	0.7	0.3043	0.0152
1990	0.1297	0.1526	0.0752	0.8591	0.0835	0.5833	0.0888	0.0197
1991	0.2197	0.3082	0.1451	0.8394	0.2274	0.6666	0.2048	0.0296

1992	0.2519	0.3478	0.1459	0.8536	0.1532	0.5781	0.201	0.0347
1993	0.2636	0.3636	0.0968	0.5096	0.0217	0.3684	0.1336	0.0275
1994	0.3083	0.4615	0.1223	0.4411	0.1823	0.395	0.1706	0.0009
1995	0.4733	0.7085	0.1185	0.396	0.206	0.25	0.177	0.0006
1996	0.3562	0.543	0.1606	0.257	0.1436	0.4501	0.2444	0.0224
1997	0.2985	0.3871	0.1357	0.5692	0.1013	0.4547	0.176	0.0342
1998	_	_	_	_	_	_	_	_
1999	0.3641	0.5062	0.098	0.5511	0.1727	0.269	0.1362	0.0335
2000	0.3641	0.5377	0.2044	0.5347	0.1642	0.5908	0.3176	0.0129
2001	0.3779	0.5838	0.1632	0.6961	0.1344	0.4319	0.2521	0.0204
2002	0.4175	0.6882	0.1381	0.6276	0.1705	0.3307	0.2276	0.0359
2003	0.4065	0.6616	0.9944	0.5929	0.1468	0.2446	0.1619	0.0194
2004	0.4218	0.6893	0.1376	0.49	0.1364	0.326	0.2247	0.0199
2005	0.4218	0.6893	0.1375	0.1375	0.49	0.326	0.2247	0.0199
2006	0.2531	0.6892	0.4126	0.4126	0.49	0.7738	0.8659	0.0149

GUARANTY TRUST BANK

Year	BL/BA	BL/BD	CAP=SF/TA	LAD=LA/BD	EOM=OE/TA	SHF/BL	SHF/BD	ROA
1986								
1987								
1988								
1989								
1990								
1991								
1992	0.0931	0.1236	0.0584	1.085	0.0897	0.6285	0.0779	0.0464
1993	0.1877	0.2642	0.0656	0.9969	0.1407	0.3494	0.0921	0.0921
1994	0.228	0.3507	0.0599	1.0933	0.1394	0.2623	0.092	0.1236
1995	0.2061	0.2934	0.0495	1.0503	0.0536	0.2399	0.0703	0.0505
1996	0.279	0.4369	0.0863	0.1352	0.0938	0.3094	0.1351	0.0857
1997	0.3558	0.5899	0.0951	0.4658	0.1003	0.2673	0.1577	0.0643
1998	0.3662	0.6482	0.1037	0.6024	0.942	0.2832	0.1836	0.0456
1999	0.3858	0.7673	0.1242	0.4575	0.1166	0.3219	0.2471	0.0452
2000	0.2272	0.5236	0.0875	0.5438	0.1291	0.3854	0.2017	0.0382
2001	0.3103	0.5248	0.101	0.6911	0.0382	0.3254	0.1708	0.0502
2002	0.3072	0.5807	0.134	0.7402	0.1347	0.4364	0.2534	0.0448
2003	0.3787	0.6179	0.116	0.612	0.1494	0.3862	0.1892	0.0456
2004	0.3776	0.6089	0.097	0.4311	0.1164	0.257	0.1565	0.0404
2005	0.4001	0.7029	0.184	0.4967	0.112	0.4598	0.3233	0.0417
2006	0.285	0.4085	0.1195	0.35	0.0758	0.4191	0.1712	0.0328

IBL

Year	BL/BA	BL/BD	CAP=SF/TA	LAD=LA/BD	EOM=OE/TA	SHF/BL	SHF/BD	ROA

1986								
1987								
1988								
1989								
1990								
1991	1.1418	-0.1541	1	-1.4923	2.614	0.8765	-0.1352	0.6428
1992	0.2173	-0.598	0.0978	-1.7796	0.2257	0.4495	-0.2685	0.085
1993	0.207	-0.3844	0.0972	-0.7411	0.2877	0.4698	-0.1805	0.1395
1994	0.1866	-0.3333	0.1188	-1.0419	0.1542	0.6369	-0.2122	0.1481
1995	0.4375	-0.7451	0.1515	-0.7238	0.1439	0.3462	-0.2579	0.0927
1996	0.8304	-0.7855	0.2852	-0.7895	0.2694	0.3434	-0.2579	0.1277
1997	0.0346	0.0561	0.1546	0.537	0.1345	0.3032	0.2501	0.0808
1998	0.0386	0.0571	0.1515	0.5295	0.1909	0.2983	0.2246	0.0849
1999	0.3321	0.4584	0.1348	0.6683	0.1854	0.4059	0.1859	0.0786
2000	0.3367	0.5181	0.1181	0.7309	0.1522	0.3509	0.1817	0.0819
2001	0.3376	0.5138	0.0966	0.8479	0.1145	0.2861	0.147	0.0426
2002	0.3045	0.409	0.1566	0.8479	0.1017	0.5142	0.2103	0.0497
2003	0.3246	0.4614	0.1206	0.7129	0.0918	0.3714	0.1713	0.0478
2004	0.3507	0.4804	0.1148	0.8269	0.096	0.3273	0.1572	0.3114
2005	0.3365	0.5027	0.1982	0.8194	0.0866	0.589	0.2961	0.0408
2006	0.4711	0.6739	0.1494	0.5956	0.0623	0.3171	0.2137	0.0305

IBTC

Year	BL/BA	BL/BD	CAP=SF/TA	LAD=LA/BD	EOM=OE/TA	SHF/BL	SHF/BD	ROA
1986								
1987								
1988								
1989	0.1539	0.3675	0.0704	1.7942	0.0282	0.4545	0.1685	0.0469
1990	0.1568	0.233	0.0777	1.074	0.0249	0.4928	0.1144	0.057
1991	0.1924	0.327	0.1257	1.1811	0.0574	0.6489	0.2133	0.0876
1992	0.0954	0.5228	0.1326	4.4611	0.082	1.3908	0.7289	0.1322
1993	0.0678	0.1771	0.1438	2.3043	0.0459	2.129	0.3756	0.2112
1994	0.2756	0.7717	0.1961	1.9143	0.0549	0.7111	0.5487	0.2892
1995	0.1459	2.2611	0.2577	1.1408	0.0526	1.7661	1.7662	0.2201
1996	0.3514	1.1021	0.2647	1.6996	0.0647	0.7534	0.8303	0.231
1997	0.4574	1.9633	0.3779	1.76	0.0833	0.8262	1.5592	0.1643
1998	_	_	_	_	_	_	_	_
1999	0.3812	1.1366	0.2215	1.5998	0.0689	0.5809	0.6603	0.2399
2000	0.3667	1.1243	0.5684	1.7021	0.0477	1.5497	1.9268	0.0875
2001	0.4989	1.0706	0.272	0.6111	0.0333	0.5452	0.589	0.0869
2002	0.4962	1.1459	0.1913	1.0011	0.0295	0.3855	0.4418	0.073
2003	0.401	1.1737	0.2456	1.737	0.0297	0.6123	0.7188	0.0704
2004	0.3579	0.9122	0.2156	1.4234	0.0241	0.6024	0.5495	0.0637
2005	0.3954	1.2557	0.4129	1.8115	0.358	0.3127	1.3113	0.0872

2006	0.5247	1.0186	0.2845	0.3042	0.0247	0.5421	0.5522	0.0489

OCEANIC BANK

Year	BL/BA	BL/BD	CAP=SF/TA	LAD=LA/BD	EOM=OE/TA	SHF/BL	SHF/BD	ROA
1986								
1987								
1988								
1989								
1990								
1991								
1992								
1993								
1994								
1995								
1996	0.0282	0.3614	-0.035	0.396	0.0299	-1.2464	-0.4503	-0.014
1997	0.3397	0.3955	-0.1828	0.5691	0.0718	-0.5381	0.2127	0.0812
1998	0.2778	0.3881	0.0125	0.7296	0.0725	0.0444	0.0174	0.1207
1999	0.2405	0.3641	0.0632	0.8716	0.0945	0.2625	0.0956	0.0323
2000	0.1759	0.2502	0.0697	1.0571	0.0609	0.3962	0.0991	0.0638
2001	0.2343	0.3237	0.1103	0.8948	0.129	0.4705	0.1523	0.0765
2002	0.2115	0.2816	0.1044	0.8568	0.0862	0.4937	0.139	0.0585
2003	0.2093	0.2754	0.1088	0.8891	0.1196	0.52	0.1433	0.0505
2004	0.2857	0.36	0.1192	0.7455	0.1057	0.4172	0.1502	0.0396
2005	0.3807	0.5378	0.1146	0.5121	0.0516	0.301	0.1619	0.0278
2006	0.3353	0.5194	0.1541	0.2175	0.0215	0.1846	0.0958	0.0249

UBA

Year	BL/BA	BL/BD	CAP=SF/TA	LAD=LA/BD	EOM=OE/TA	SHF/BL	SHF/BD	ROA
1986								
1987	0.3179	0.3773	0.0505	0.5933	0.0818	0.1585	0.06	0.0187
1988	0.2844	0.3419	0.0465	0.6505	0.0788	0.1633	0.0558	0.0417
1989	0.3307	0.373	0.0452	0.5427	0.0781	0.1366	0.0509	0.0109
1990	0.2207	0.2584	0.0415	0.6338	0.0907	0.1884	0.0486	0.0103
1991	0.192	0.2048	0.0382	0.5291	0.1138	0.1987	0.0406	0.0013
1992	0.1961	0.2103	0.2709	0.597	0.1109	0.138	0.029	8E-05
1993	0.2362	0.2914	0.0321	0.5438	0.1115	0.1361	0.0396	0.016
1994	0.1778	0.2352	0.0649	0.6573	0.1413	0.3652	0.0859	0.0008
1995	0.1407	0.1876	0.0817	0.8606	0.0943	0.5805	0.1088	0.0111
1996	0.0815	0.1145	0.0824	0.9108	0.1169	1.011	0.1158	0.0239
1997	0.0846	0.1238	0.9155	0.914	0.1178	1.0809	0.1338	0.0156
1998	0.1474	0.2225	0.0683	0.8703	0.1076	0.4632	0.103	0.0003
1999	0.1085	0.1482	0.051	0.8273	0.0899	0.4618	0.0684	0.0177

2000	0.0799	0.1162	0.0565	1.0715	0.1251	0.7068	0.0822	0.0317
2001	0.1693	0.2331	0.046	1.018	0.0966	0.2714	0.0633	0.0008
2002	0.2071	0.3121	0.0492	1.013	0.1009	0.2374	0.0741	0.0113
2003	0.2496	0.3523	0.0684	0.8643	0.0948	0.2744	0.0966	0.0239
2004	0.2818	0.3873	0.0864	0.8577	0.0885	0.3068	0.1188	0.0268
2005	0.2815	0.3417	0.0711	0.8198	0.0786	0.2525	0.0863	0.0251
2006	0.1374	0.1544	0.0559	0.2442	0.0252	0.4072	0.0629	0.1069

UBN

Year	BL/BA	BL/BD	CAP=SF/TA	LAD=LA/BD	EOM=OE/TA	SHF/BL	SHF/BD	ROA
1986	_	_	_	_	_			
1987	0.326	0.4304	0.7568	0.274	0.092	0.1864	0.0854	0.0145
1988	0.3517	0.457	0.7696	0.4226	0.104	0.1849	0.0847	0.1773
1989	0.298	0.4116	0.7241	0.7214	0.114	0.2239	0.0923	0.019
1990	0.2867	0.4154	0.6903	0.7094	0.14	0.246	0.1022	0.0138
1991	0.1318	0.1782	0.7398	0.7791	0.1373	0.3847	0.0685	0.001
1992	0.158	0.2401	0.0414	1.0914	0.1085	0.2621	0.0629	0.0004
1993	0.1318	0.2097	0.0452	0.1408	0.1037	0.3432	0.0719	0.0192
1994	0.1641	0.2852	0.0305	0.2139	0.1199	0.1855	0.0529	0.014
1995	0.1472	0.2181	0.0226	0.1386	0.0922	0.1541	0.0336	0.0109
1996	0.2086	0.2935	0.0306	0.1821	0.1243	0.1466	0.043	0.0157
1997	0.2721	0.367	0.0383	0.0936	0.1091	0.1022	0.0516	0.0188
1998	0.2386	0.3147	0.0552	0.0691	0.1154	0.2314	0.0728	0.0212
1999	0.2071	0.2788	0.0806	0.9326	0.1237	0.3893	0.1085	0.0292
2000	1.8138	0.2336	0.0699	0.7364	0.1741	0.3858	0.9012	0.1741
2001	0.1662	0.209	0.0637	0.6301	0.1189	0.3833	0.0801	0.0296
2002	0.1652	0.2225	0.1101	0.8145	0.0885	0.6666	0.1482	0.0272
2003	0.1655	0.2432	0.0993	0.7854	0.0745	0.5999	0.1458	0.0308
2004	0.213	0.3242	0.0978	0.8418	0.0787	0.4593	0.1489	0.0278
2005	0.1975	0.3924	0.0546	0.1085	0.0825	0.4972	0.1951	0.03
2006	0.2605	0.4896	0.0442	0.0831	0.0704	0.7094	0.3473	0.0238

WEMA BANK

Year	BL/BA	BL/BD	CAP=SF/TA	LAD=LA/BD	EOM=OE/TA	SHF/BL	SHF/BD	ROA
1986								
1987	0.3841	0.418	0.0812	0.5716	0.2143	0.2071	0.0865	0.0006
1988	0.2618	0.2837	0.0774	0.7271	0.2874	0.2934	0.085	0.0149
1989	0.2231	0.2414	0.0754	0.7351	0.4797	0.3383	0.0815	0.1057
1990	0.253	0.2743	0.0778	0.7057	0.4133	0.307	0.0841	0.1108
1991	0.2249	0.2431	0.0752	0.6516	0.1283	0.3333	0.081	0.1189

1992	0.3706	0.4045	0.0837	0.5956	0.1314	0.2253	0.0909	0.069
1993	0.3229	0.3574	0.0964	0.3654	0.122	0.2992	0.1069	0.1397
1994	0.1702	0.2323	0.079	1.0118	0.1046	0.4637	0.1077	0.3669
1995	0.1487	0.2386	0.0626	1.2063	0.0835	0.4214	0.1004	0.2034
1996	0.2728	0.3762	0.0765	0.7789	0.1178	0.2803	0.1054	0.0857
1997	0.3522	0.5079	0.0941	0.6854	0.1101	0.2669	0.1356	0.0557
1998	0.4326	0.5892	0.0833	0.6018	0.1005	0.1926	0.1134	0.0469
1999	0.4809	0.6387	0.0963	0.5155	0.1377	0.2003	0.1279	0.0567
2000	0.3187	0.4123	0.1017	0.5061	0.1652	0.3191	0.1315	0.0417
2001	0.3812	0.4994	0.0669	0.7449	0.0993	0.1754	0.0876	0.0541
2002	0.3876	0.5215	0.0854	0.6857	0.1276	0.2204	0.1149	0.1342
2003	0.3833	0.5372	0.1176	0.7167	0.1212	0.3069	0.1648	0.0972
2004	0.2815	0.4151	0.0811	0.1453	0.0591	0.288	0.1196	0.1177
2005	0.3807	0.5378	0.1146	0.2335	0.0303	0.301	0.1619	0.0278
2006	0.3353	0.5194	0.1541	0.1114	0.018	0.4596	0.2372	0.0249

ZENITH BANK

Year	BL/BA	BL/BD	CAP=SF/TA	LAD=LA/BD	EOM=OE/TA	SHF/BL	SHF/BD	ROA
1986								
1987								
1988								
1989								
1990								
1991	0.1094	0.1491	0.0802	0.7088	0.0477	0.7391	0.1107	0.1622
1992	0.0692	0.1247	0.087	0.087	0.053	1.2642	0.1586	0.2096
1993	0.197	0.4509	0.0864	0.0864	0.0675	0.4383	0.1978	0.2403
1994	0.2143	0.3259	0.0817	0.0819	0.0646	0.3926	0.1246	0.2139
1995	0.1281	0.296	0.0807	0.0808	0.0706	0.6319	0.1863	0.1602
1996	0.1938	0.629	0.0684	0.0684	0.0608	0.353	0.2221	0.1382
1997	0.2695	0.6048	0.0964	0.0964	0.0578	0.3576	0.2164	0.1454
1998	0.2883	0.5281	0.1081	0.1081	0.0824	0.3751	0.1981	0.173
1999	0.2905	0.5103	0.1503	0.1503	0.0627	0.5171	0.2639	0.0449
2000	0.2165	0.4769	0.0126	0.0126	0.0812	0.043	0.0205	0.0457
2001	0.2233	0.4246	0.1117	0.1117	0.0672	0.5162	0.2191	0.0465
2002	0.2233	0.4122	0.1005	0.1005	0.0589	0.4503	0.1856	0.0432
2003	0.2478	0.453	0.1124	0.1124	0.0892	0.4535	0.2054	0.0483
2004	0.2815	0.4151	0.0811	0.0811	0.0714	0.288	0.1196	0.0331
2005	0.3807	0.5378	0.1146	0.5471	0.0551	0.31	0.1619	0.0278
2006	0.3353	0.5194	0.1541	0.5921	0.0514	0.4597	0.2388	0.0249

Where**:** BL = Bank Loans

BA = Bank Assets

BD = Bank Deposits

CAP = Capital Adequacy Ratios

SHF = Shareholders Funds

TA = Total Assets

LA = Liquid Assets

LAD = Liquidity

O/E = Operating Expenses

ROA = Return on Assets

EOM = Efficiency of Management

APPENDIX III

MARKET CONCENTRATION OF KEY VARIABLES IN THE NIGERIAN BANKING INDUSTRY

1986 N' million

BANK	TA	MSP	TCR	MSP	TD	MSP	LA	MSP
FBN	5995	11.28	311	11.22	4413	11.16	1869	11.35
TOTAL	5995	11.28	311	11.22	4413	11.16	1869	11.35

INDUSTRY	53124	100	1432	100	27320	100	5308	100

1987 N' million

BANK	TA	MSP	TCR	MSP	TD	MSP	LA	MSP
FBN	6777	12.27	373	24.37	5010	17.8	2047	11.47
UBA	5657	10.24	286	18.63	4767	16.94	1799	10.07
UBN	5748	10.4	349	22.74	4074	14.47	1872	10.49
WEMA	366	0.66	30	1.89	336	1.19	140	0.78
TOTAL	18544	33.58	1006	65.75	14184	50.4	5857	32.87
INDUSTRY	55210	100	1530.3	100	28140	100	17851	100

1988 N' million

BANK	TA	MSP	TCR	MSP	TD	MSP	LA	MSP
FBN	7072	11.93	435	22.46	5646	19.43	2253	11.24
UBN	6336	10.69	413	21.38	4877	16.78	2229	11.11
UBA	7061	11.92	328	16.98	5873	20.2	2008	10.01
AFRIBANK	2714	4.58	210	10.88	1734	5.96	1052	5.24
WEMA	366	0.61	30	1.5	588978	2.02	140	0.7
TOTAL	23545	40	1413	73.14	18715	64.39	7680	38
INDUSTRY	59226.2	100	1932.4	100	29065.1	100	2051.5	100

1989 N' million

BANK	TA	MSP	TCR	MSP	TD	MSP	LA	MSP
FBN	8492	12.96	534	19.83	5785	21.28	2403	10.78
UBA	9205	14.05	417	15.45	8159	30.01	3044	13.66
UBN	7986	12.18	534	19.80	5783	21.27	2380	10.68
AFRIBANK	2360	3.60	277	10.25	1656	6.09	1065	4.78
WEMA	890	1.36	67	2.48	823	3.02	199	0.88
FIB	132	0.2	14	0.48	46	0.16	20	0.89
IBTC	214	0.33	15	0.55	89	0.32	33	0.04
FIDELITY	328	0.5	9	0.29	213	0.77	23	0.09
TOTAL	29604	45.18	1862	60	22550	82	9163	41
INDUSTRY	65523.7	100	2692.3	100	27181.3	100	22276.3	100

1990 N' million

BANK	TA	MSP	TCR	MSP	TD	MSP	LA	MSP
FBN	8482	10.22	300	8.08	6585	16.98	1651	6.40
UBN	9242	11.13	653	17.56	6380	16.45	2650	10.28
UBA	11351	13.68	472	12.72	9694	25.00	2505	9.72
AFRIBANK	3387	4.08	288	7.75	2478	6.39	1074	4.16
WEMA	1006	1.21	78	2.1	928	2.39	255	0.98

ACCESS	197	0.23	15	0.4	153	0.39	4	0.02
FIB	371	0.45	28	0.72	315	0.81	48	0.18
FIDELITY	351	0.42	24	0.62	231	0.59	25	0.09
IBTC	441	0.53	34	0.91	297	0.77	69	0.27
TOTAL	34823	42	1890	51	27058	70	8	32
INDUSTRY	82957.9	100	3712.7	100	38775.7	100	25782.8	100

1991 N' million

BANK	**TA**	**MSP**	**TCR**	**MSP**	**TD**	**MSP**	**LA**	**MSP**
FBN	11319	9.63	457	10.63	8287	15.81	1635	4.96
UBN	13166	11.20	668	15.53	9740	1858	1737	0.05
UBA	12684	10.79	484	11.26	11894	22.69	2435	7.4
AFRIBANK	4494	3082	311	7.23	3257	6.21	1400	4.25
WEMA	1402	1.19	106	2.44	1297	2.47	315	0.96
ACCESS	219	0.18	18	0.42	82	0.16	25	0.07
FIDELITY	622	0.52	40	0.93	476	0.90	68	0.2
ZENITH	419	0.36	34	0.77	308	0.58	46	0.13
FIB	234	0.19	34	0.77	166	0.32	51	0.15
IBTC	487	0.41	61	1.42	287	0.54	93	0.28
TOTAL	44446	38	2209	52	35264	67.38	7801	24
INDUSTRY	117511.9	100	4300.8	100	52408.7	100	32912.4	100

1992 N' million

BANK	**TA**	**MSP**	**TCR**	**MSP**	**TD**	**MSP**	**LA**	**MSP**
FBN	16686	9.18	955	11.71	11965	15.73	2379	5.84
UBN	23870	13.13	989	12.12	15712	20.65	3773	9.26
UBA	18610	3.51	505	6.18	17356	22.81	3650	8.96
AFRIBANK	6386	10.24	391	4.78	4757	6.25	1968	4.83
WEMA	1705	0.94	143	1.74	1512	2.05	632	1.55
ACCESS	543	0.3	26	0.3	271	3.56	69	0.17
FIDELITY	699	0.38	76	0.93	453	0.59	57	0.13
ZENITH	773	0.42	67	0.82	429	0.56	53	0.13
GTB	1125	0.62	66	0.79	848	1.11	105	0.26
DIAMOND	228	0.12	50	0.61	80	0.11	36	0.08
TOTAL	71621	40	32266	41	52849	70	12718	32
INDUSTRY	181736.1	100	8157.2	100	76073.5	100	40731.6	100

1993 N' million

BANK	**TA**	**MSP**	**TCR**	**MSP**	**TD**	**MSP**	**LA**	**MSP**
FBN	23552	9.4	1494	20	16439	14.62	3073	6.9
UBN	32008	12.77	993	13.31	20115	17.89	4219	9.46
UBA	22975	9.18	739	9.91	18628	16.57	5429	12.18
AFRIBANK	12770	5.09	893	11.97	10977	2.53	2024	4.54
WEMA	3146	1.25	304	4.06	2842	2.53	1016	2.28

ACCESS	960	0.38	57	0.76	365	0.32	123	0.28
FIDELITY	872	0.35	95	1.27	579	0.51	100	0.22
ZENITH	1481	0.59	128	1.7	647	0.58	292	0.65
GTB	2323	0.92	152	2.04	1650	1.48	436	0.97
DIAMOND	1305	0.52	96	1.27	672	0.59	14	0.003
TOTAL	101391.3	40.4	4948	66.33	73	63.54	16854.5	37.8
INDUSTRY	250600.4	100	7460.8	100	112407.4	100	44568.6	100

1994 N' million

BANK	**TA**	**MSP**	**TCR**	**MSP**	**TD**	**MSP**	**LA**	**MSP**
FBN	36552	11.28	2219	24.26	25022	17.57	6164	6.87
UBN	43274	13.36	1318	14.14	24914	11.50	7105	7.92
UBA	24282	7.49	1577	17.23	18354	12.88	4318	17.55
AFRIBANK	16413	5.07	1041	11.38	18087	12.70	2658	2.96
WEMA	6006	1.85	475	5.18	4399	3.01	1022	1.1
ACCESS	1371	0.42	76	0.82	624	0.44	245	0.27
IBTC	3591	1.11	704	7.69	1283	0.9	990	0.02
ZENITH	3064	0.95	251	2.74	2015	1.41	657	0.73
GTB	4863	1.5	291	3.18	3161	0.02	1109	1.24
DIAMOND	2887	0.89	208	2.26	2158	0.02	329	0.37
TOTAL	142303.3	44	8157	89	100014.3	70.23	24593.8	39.03
INDUSTRY	324002.1	100	9148	100	142399.2	100	89756	100

1995 N' million

BANK	**TA**	**MSP**	**TCR**	**MSP**	**TD**	**MSP**	**LA**	**MSP**
FBN	63872	13.78	3225	24	43464	23.32	12666	9.03
UBN	76432	16.48	1734	12.53	51607	27.69	11255	8.03
UBA	44200	9.53	3611	26.10	33162	17.79	6220	4.44
AFRIBANK	26041	5.62	2269	0.16	2125	1.14	6143	4.38
WEMA	10020	2.16	628	0.04	6243	3.35	1490	1.061
ACCESS	2351	0.51	97	0.69	852	0.45	241	0.17
FIB	1126	0.24	133	0.96	752	0.4	532	0.38
ZENITH	520	1.1	412	2.97	2205	1.18	653	0.4
GTB	10943	2.35	542	3.91	7689	4.13	2256	1.16
DIAMOND	7040	1.51	131	2.89	4576	2.45	1022	0.73
TOTAL	199894	43	13147	95	152233.7	81.68	42657.8	30.4
INDUSTRY	463671.4	100	13833.7	100	186373.6	100	140225.4	100

1996 N' million

BANK	**TA**	**MSP**	TCR	**MSP**	**TD**	**MSP**	**LA**	**MSP**
FBN	77269	14.41	14568	26.22	58214	25.84	17108	10.85
UBN	80055	14.93	2449	14.05	56914	25.26	16704	10.60
UBA	52016	9.70	4287	24.60	37019	16.43	4240	2.69
AFRIBANK	2676	4.99	2407	13.81	18446	8.19	9450	5.99

WEMA	10734	2.00	821	4.71	7785	3.45	2929	1.86
ACCESS	1176	0.02	151	0.86	667	0.29	328	0.2
IBTC	5713	1.06	1512	8.67	1822	0.81	2007	1.23
ZENITH	9781	1.82	731	4.19	3013	1.34	1895	1.2
GTB	11790	2.20	1018	5.84	7532	3.34	3290	2.09
DIAMOND	10163	1.89	825	4.73	6491	2.88	1734	1.1
TOTAL	285457.3	53.25	16705	95	197904.3	87	59682.3	37.87
INDUSTRY	536057.9	100	17425.3	100	225298.7	100	157568.8	100

1997 N' million

BANK	**TA**	**MSP**	**TCR**	**MSP**	**TD**	**MSP**	**LA**	**MSP**
FBN	141052	24.14			64455	23.88	22764	9.79
UBN	85850	14.69	3289	14.07	63654	23.59	23364	10.03
UBA	57782	9.89	5296	22.65	39521	14.65	4894	2.1
AFRIBANK	34366	5.88	2879	12.31	26342	9.76	12700	0.54
WEMA	13442	2.3	1264	5.41	9321	3.45	4735	2.03
ACCESS	1777	0.3	184	0.79	1195	0.44	719	0.31
IBTC	5260	0.9	1988	8.51	1275	0.47	2406	1.03
ZENITH	16017	2.74	1544	6.61	7139	2.65	4317	1.86
GTB	16170	2.77	1539	6,58	9753	3.61	5754	2.47
DIAMOND	13273	2.27	1134	4,85	9544	3.54	3636	1.56
TOTAL	384986	65.87	19110	81	232196.3	86	85285.7	36.67
INDUSTRY	584375	100	23374.9	100	269847.2	100	232506.5	100

1998 N' million

BANK	**TA**	**MSP**	**TCR**	**MSP**	**TD**	**MSP**	**LA**	**MSP**
FBN	102418	14.74	10462	20.41	70697	22.49	28430	10.83
UBN	109586	15.78	6053	11.81	83093	26.44	26148	9.96
UBA	73751	10.62	5036	9.82	48858	15.54	10872	4.14
AFRIBANK	5595	0.81	70	0.13	4006	1.27	1555	0.59
WEMA	17269	2.49	1439	2.81	12680	4.03	7471	2.85
ACCESS	1714	0.25	1714	3.34	952	0.3	685	0.26
IBL	12575	1.81	1906	3.72	8486	2.7	6386	2.43
ZENITH	21736	3.13	2351	4.58	11867	3.78	6267	2.39
GTB	19133	2.75	1984	3.87	10808	3.44	7006	2.67
DIAMOND	17358	2.5	1680	3.28	11676	3.71	5212	1.99
TOTAL	3811296	54.8	32690.5	63.77	263121.9	83.37	100028	38.1
INDUSTRY	694615.1	100	51258.7	100	314303.5	100	262529.9	100

1999 N' million

BANK	**TA**	**MSP**	**TCR**	**MSP**	**TD**	**MSP**	**LA**	**MSP**
FBN	137869	12.88	12510	17.66	89868	18.87	34235	10.12
UBN	138342	12.93	11159	15.75	102775	21.58	28662	8.48
UBA	99978	9.34	5011	7.01	73207	15.37	10850	3.21

AFRIBANK	41400	3.87	1726	2.44	33877	7.11	14400	4.26
WEMA	17925	1.68	173	0.24	13497	2.83	8621	2.55
ACCESS	4878	0.46	4878	6.88	2733	0.57	1260	0.37
IBL	9770	0.93	2208	3.12	3345	0.7	3801	1.12
ZENITH	34024	3.18	5113	7.22	19375	4.07	9887	2.92
GTB	20626	1.93	2563	3.62	10369	2.18	7957	2.35
DIAMOND	26633	2.49	2238	3.16	19049	3.99	6406	1.89
TOTAL	531648.2	49.68	47574	67	368094.3	77.27	126082	37.28
INDUSTRY	1070020	100	70841.8	100	476350.9	100	338160.4	100

2000 N' million

BANK	**TA**	**MSP**	**TCR**	**MSP**	**TD**	**MSP**	**LA**	**MSP**
FBN	194744	12.80	16016	15.67	138003	19.95	38360	11.11
UBN	188326	12.38	13175	12.89	146190	21.13	34147	9.89
UBA	119987	7.89	6782	6.63	82518	11.93	9595	2.79
IBL	23503	1.55	2776	2.71	15272	2.21	7913	2.29
WEMA	22752	1.49	2314	2.26	17585	2.54	7251	2.1
GTB	35597	2.34	3117	3.05	15446	2.23	8087	2.34
AFRIBANK	63250	4.16	2040	1.99	54881	7.93	12867	3.73
DIAMOND	30473	2	2865	2.8	22464	3.21	8689	2.51
ACCESS	8435	0.55	842	0.82	4401	0.64	3127	0.9
ZENITH	40757	2.68	514	0.5	25035	3.62	11939	3.46
TOTAL	727824.5	47.8	50442	49.3	521793	75.42	141972.3	41
INDUSTRY	1521158	100	102235.6	100	691794.3	100	345327.8	100

2001 N' million

BANK	**TA**	**MSP**	**TCR**	**MSP**	**TD**	**MSP**	**LA**	**MSP**
FBN	224007	10.34	18932	10.98	155598	16.42	50170	18.97
UBN	238311	10.99	15191	8.81	189605	20.01	39631	6.71
UBA	181248	8.46	8427	4.89	133135	14.05	31041	5.29
OCEANIC	32320	1.49	3564	2.07	23388	2.47	7574	4.45
WEMA	38813	1.79	2596	1.51	29631	3.13	14799	1.01
GTB	40869	1.88	4124	2.39	24139	2.55	12667	1.98
AFRIBANK	71839	3.31	2823	1.64	58287	6.15	21122	1.69
DIAMOND	47372	2.19	4086	2.37	32398	3.42	15798	2.82
ACCESS	8001	0.37	917	53	4832	0.51	2795	2.11
ZENITH	60190	2.78	6725	3.9	30688	3.24	13029	0.37
TOTAL	944920	43.59	67384.2	39	681701.3	71.97	208030	1.74
INDUSTRY	2167260	100	172415.6	100	947182.9	100	748144.2	27.88

2002 N' million

BANK	**TA**	**MSP**	**TCR**	**MSP**	**TD**	**MSP**	**LA**	**MSP**
FBN	224007	10.34	20202	10.98	178603	16.42	66384	7.85
UBN	238311	10.99	30302	8.81	204347	20.01	45486	5.38

UBA	181248	8.46	9782	4.89	131866	14.05	41150	4.87
OCEANIC	53294	1.97	5565	2.38	40028	3.22	11272	1.33
WEMA	44101	1.63	3768	1.61	32775	2.64	17093	2.02
GTB	59292	2.19	7950	3.4	31373	2.52	18217	2.15
AFRIBANK	73088	2.7	4332	1.85	56955	4.58	31138	3.68
DIAMOND	53199	1.97	5320	2.28	33556	2.7	16255	1.92
ACCESS	11343	0.42	1944	0.83	6475	0.52	4980	0.58
ZENITH	92563	3.42	9306	3.98	50134	4.03	20665	2.44
TOTAL	1151347	43	98471	42.11	766112.3	61	372640	32
INDUSTRY	2705749	100	233789.7	100	1243404	100	845682.8	100

2003 N' million

BANK	TA	MSP	TCR	MSP	TD	MSP	LA	MSP
FBN	409083	13.42	27800	9.54	264245	19.76	60439	5.8
UBN	329583	10.81	32730	11.24	224347	16.77	54560	5.2
UBA	200995	6.59	13767	4.73	142427	10.65	50178	4.8
ZENITH	112535	3.69	12652	4.34	61574	4.6	27895	2.68
GTB	83311	2.73	9661	3.32	51068	3.82	31556	3.03
ACCESS	22582	0.74	2365	0.81	9309	0.69	71350	0.68
WEMA	61323	2.01	7215	2.48	43762	3.27	23508	2.26
AFRIBANK	83144	2.73	6546	2.25	61195	4.57	33845	3.25
IBL	71412	2.34	8611	2.96	50245	3.76	23187	2.26
DIAMOND	59287	1.95	4993	1.71	42147	3.15	15932	1.53
TOTAL	1433255	47	126340	43.3	950319	71	328235.3	31.5
INDUSTRY	3047856	100	291252	100	1337296.2	100	1041663	100

2004 N' million

BANK	TA	MSP	TCR	MSP	TD	MSP	LA	MSP
UBN	367788	9.80	35985	12.36	241585	14.54	78338	6.05
FBN	384211	10.24	42311	14.52	255491	15.38	83500	6.45
UBA	208806	5.56	18059	6.20	151929	9.14	58855	4.55
GTB	119698	3.19	31999	10.98	74222	4.47	45198	3.49
ZENITH	193321	5.15	15674	5.38	131095	7.89	54420	4.20
DIAMOND	69062	1.84	6520	2.24	43391	2.61	19500	1.51
WEMA	71424	1.91	8040	2.76	55072	3.31	36607	2.83
AFRIBANK	70578	1.88	5317	1.83	57989	3.49	26482	2.05
IBL	87006	2.32	9988	3.43	63508	3.82	30514	2.36
ACCESS	31342	0.83	2702	0.93	22724	1.37	12341	0.95
TOTAL	1603245	42.7	176584.6	60.6	1097005.6	60	445755.6	34.43
INDUSTRY	1753278	100	291151.2	100	1661482	100	1294449.5	100

2005 N' million

BANK	TA	MSP	TCR	MSP	TD	MSP	LA	MSP
FBN	470839	10.43	49805	8.42	332196	16.31	123739	6.65

ZENITH	329717	7.30	37790	6.39	233413	11.46	125531	6.75
UBN	398271	8.82	39129	6.61	200511	9.85	78684	4.23
IBL	164348	3.64	32576	5.51	110014	5.4	55316	2.97
UBA	248928	5.51	177020	2.99	205110	10.07	70086	3.77
GTB	167898	3.72	30895	5.22	95564	4.69	67179	3.61
OCEANIC	329717	7.3	37790	6.39	233413	11.46	125531	6.75
DIAMOND	125675	2.78	20710	3.5	75166	3.69	41805	2.25
ACCESS	66918	1.48	14072	2.38	32608	1.61	17942	0.96
AFRIBANK	95754	2.12	21387	3.61	61601	3.03	30543	1.64
TOTAL	2398065	53.11	301856.3	51	1579596	77	736346	39.6
TOTAL INDUSTRY	4515118	100	591738.7	100	2036089.9	100	1859555	100

2006 N' million

BANK	TA	MSP	TCR	MSP	TD	MSP	LA	MSP
FBN	538145	8.41	58996	6.19	391169	11.36	190004	8.12
ZENITH	608505	9.51	93801	9.84	392864	11.41	204057	8.73
UBN	517564	8.09	95685	10.04	275457	8	134864	5.77
IBL	360903	5.64	53911	5.66	252281	7.33	170035	7.27
UBA	851241	3.30	47621	4.99	757407	22	116960	5.00
GTB	305081	4.77	36446	3.82	212834	6.18	86958	3.72
OCEANIC	608505	9.51	37670	3.95	392864	11.41	204057	8.73
DIAMOND	223048	3.48	3497	3.67	144570	4.2	81306	3.58
ACCESS	174554	2.73	28844	3.03	11.879	3.22	60941	2.61
AFRIBANK	131270	2.05	27059	2.84	94816	2.75	48224	2.66
TOTAL	4318816	67	515003.3	54	3025141	87	1297406	55.47
TOTAL INDUSTRY	6400783	100	953001.2	100	3442000	100	2338718.8	100

SOURCE: COMPILED FROM APPENDIX 1

Where TA: Total Assets LA: Loans and Advances

MSP: Market Share Power

TCR: Total Capital Reserves/Shareholders fund

TD: Total Deposits

APPENDIX IV: AGGREGATE CONCENTRATION RATIO IN THE BANKING INDUSTRY

(USING % METHOD)

YEAR	TA (MSP)	TCP (MSP)	TD (MSP)	L&A(MSP)	SAMPLED BANKS	Banks
1986	11.28	11.22	11.16	11.35	1	29
1987	33.58	65.75	50.4	32.8	5	34

1988	40	73.14	64.39	38	5	42
1989	45.18	69	82	41	8	47
1990	42	51	70	32	9	58
1991	38	52	67.38	24	10	65
1992	40	41	70	32	10	65
1993	40.4	66.33	63.54	37.8	10	66
1994	44	89	70.23	27.39	10	65
1995	43	95	81.68	30.4	10	64
1996	53.25	95	87	37.87	10	64
1997	65.87	81	86	36.67	10	54
1998	54.8	63.77	83.37	38.1	10	54
1999	49.68	67	77.27	37.28	10	54
2000	47.8	49.3	75.42	41	10	54
2001	43.59	39	71.97	27.88	10	90
2002	43	42.11	61	32	10	90
2003	47	43.3	71	31.5	10	89
2004	42.7	60.6	66	34.43	10	89
2005	53.11	51	77	39.6	10	89
2006	67	54	87	55.47	10	25

SOURCE: COMPUTED FROM APPENDIX 111

WHERE:	MSP=	Market Share Percentage
	TA=	Total Assets
	TCR=	Total Capital & Reserves/Shareholders fund.
	TD=	Total Deposits
	LA	Loans & Advances
	Banks=	Commercial Banks

APPENDIX V: CONCENTRATION RATIO IN THE BANKING INDUSTRY (USING %)

YEAR	TA (MSP)	TCR (MSP)	TD (MSP)	L&A (MSP)	BIG 4 (MSP)	BANKS
1986	11.28	11.22	11.16	11.35	1	29
1987	32.91	65.74	49.21	32.03	4	34
1988	39.73	71.7	62.37	32.6	4	42
1989	42.79	65.33	72.56	39.9	4	47

1990	39.11	46.11	64.82	30.56	4	58
1991	35.11	44.65	63.27	16.66	4	65
1992	36.06	34.79	65.44	28.89	4	65
1993	36.44	55.19	58.84	33.08	4	66
1994	37.2	67.28	60.65	22.56	4	65
1995	42.14	66.54	72.93	23.11	4	64
1996	44.03	78.68	75.72	29.83	4	64
1997	54.6	54.44	71.88	22.48	4	64
1998	44.27	46.62	68.25	27.32	4	54
1999	39.02	42.86	62.63	26.07	4	54
2000	37.23	37.18	60.94	27.52	4	54
2001	33.1	26.32	56.57	18.97	4	90
2002	30.95	27.63	45.97	21.78	4	90
2003	34.51	29.85	51.78	19.11	4	89
2004	30.75	38.46	46.95	21.54	4	89
2005	32.06	24.41	47.69	21.4	4	89
2006	39.31	31.06	52.77	27.62	4	25

SOURCE: COMPUTED FROM APPENDIX 111

WHERE:	MSP=	Market Share Percentage
	TA=	Total Assets
	TCR=	Total Capital & Reserves/Shareholders fund
	TD=	Total Deposits
	LA	Loans & Advances
	Banks=	Commercial Banks

APPENDIX VI: THE FOUR BIG BANKS IN NIGERIA (1986-2006)

YEAR	FBN	UBA	UBN	AFRIBANK	ZENITH
1986	*	*	*	*	
1987	*	*	*	*	
1988	*	*	*	*	
1989	*	*	*	*	
1990	*	*	*	*	

1991	*	*	*	*	
1992	*	*	*	*	
1993	*	*	*	*	
1994	*	*	*	*	
1995	*	*	*	*	
1996	*	*	*	*	
1997	*	*	*	*	
1998	*	*	*		*
1999	*	*	*	*	
2000	*	*	*	*	
2001	*	*	*	*	
2002	*	*	*	*	
2003	*	*	*	*	
2004	*	*	*		*
2005	*	*	*		*
2006	*	*	*		*

SOURCE: **COMPILED FROM APPENDIX V**

Where: FBN: First Bank of Nigeria
UBA: United Bank for Africa
UBN: Union Bank of Nigeria
Afri : AfriBank of Nigeria
Zenith: Zenith Bank of Nigeria

APPENDIX VII

BANKING INDUSTRY: FOUR FIRM CON.RATIO USING FIVE YEARS INTERVAL (1986-2006) USING PERCENTAGE METHOD

YEAR	TA(MSP)	TCR(MSP)	TD (MSP)	LA (MSP)	Av No. of Banks
1987-1991	38	58.7	62.46	31.35	8.13
1992-1996	39.17	60.5	66.71	27.49	6.17

1997-2001	41.64	41.84	64.05	24.47	6.32
2002-2006	33.52	30.28	49.03	22.29	5.24

SOURCE: **COMPILED FROM APPENDIX V**

Where: TA: Total Assets
TCR: Total Capital & Reserves/Shareholders fund
TD: Total Deposits
LA: Loans & Advances
MSP: Market Share Percentage

APPENDIX VIII

BANKING INDUSTRY: TEN FIRM CON. RATIO USING FIVE YEARS AVERAGE INTERVAL (1986-2006) USING PERCENTAGE METHOD

YEAR	TA(MSP)	TCR (MSP)	TD (MSP)	LA (MSP)	Av No. of Banks
1987-1991	32	62.18	66.83	33.58	15
1992-1996	44.13	77.26	74.49	33.09	15
1997-2001	53.35	60.01	78.81	36.18	16
2002-2006	50.56	50.2	72.4	38.6	13

SOURCE: **COMPILED FROM APPENDIX V**

Where: TA: Total Assets
TCR: Total Capital & Reserves/Shareholders fund
TD: Total Deposits
LA: Loans & Advances
MSP: Market Share Percentage
CON: Concentration

In this study, we have specified an empirical framework to investigate bank capitalization/consolidation, management and performance. Based on the results of the theoretical and empirical analysis, bank loan, bank deposit, bank asset, bank liquidity, operating expenses, loan interest-deposit interest rates gap, inflation rate, interest rate, exchange rate, market share, unfavorable environment affects the performance of bank management. Capital adequacy ratios, efficiency/Quality of management and Liquidity ratios are also very crucial factors affecting bank capitalization and performance. Therefore, in order to improve performance, management of banks should focus on maintaining sizeable amounts of reserves which can be ploughed back into the business, improving the quality of their credit portfolios, diversifying product and services, beefing up the capital in line with regulatory authorities and best practices. This cannot be possible without employing skillful, experience and efficient team of management that are visionary and focus.

Ochei Ailemen Ikpefan

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