IMPLICATIONS OF DISTRESS IN THE NIGERIAN BANKING INDUSTRY

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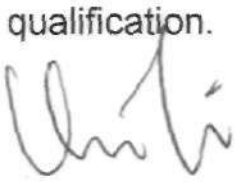
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DEDICATION

This thesis is dedicated to Almighty Allah for making all things possible, my father Alhaji H.A. Kirfi for his financial support, my mother Hajiya Zainab for her love and care, and all my friends for making me a worthy friend.

DECLARATION

The author hereby declares that the whole of this study now submitted for the Master of Science Degree (Economics) of Ahmadu Bello University, Zaria, is the result of his research, except where reference is made to published literature and duly acknowledged, has not been part of any presentation for any other qualification.



M.U. Hussaini

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CERTIFICATION

This thesis entitled, ***"Implications of Distress in the Nigerian Banking Industry"*** by Mohammed Uwaisu Hussaini meets the regulations governing the award of the degree of Master of Science (Economics) of Ahmadu Bello University, Zaria and is approved for its contribution to knowledge and literacy presentation.

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ABSTRACT

This study is an attempt at studying the general framework put in place to check financial irregularities within the industry. In the course of this exercise, the causes and implications of banks failure were identified, discussed and failure resolution recommended.

Based on the works of Doguwa (1997) on an early warning model, the thesis made use of the logit - analytic technique which derived its data from financial ratios the licensed banks render to both the Central Bank of Nigeria (CBN) and Nigerian Deposit Insurance Corporation (NDIC). The analysis was carried out using the data from bank financial ratio of December 1993 and 1994. The result of the study was found to be consistent with our earlier prediction. For policy illustration, the analysis of the banks financial position was carried out using data for December, 1999 and January, 2000 for merchant and commercial banks respectively to determine distress or sound banks.

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CHAPTER ONE

INTRODUCTION

The financial system of any economy especially the banking sub-sector plays an important role in promoting and supporting economic growth and development. It is against this background that an efficient financial system is necessary for the growth and development of a nation's economy.

The establishment of Modern Banking dates back to colonial era, when the African Banking Corporation (A.B.C.) was established in 1882 to distribute currency notes of the Bank of England for the British Treasury. Subsequent developments were encouraged by the colonial entrepreneurs who needed banking institutions to back-up colonial trade.

In its bid to address the credit needs of indigenous entrepreneurs, Nigerians later ventured into the banking industry, initially through private initiative and later through deliberate government policy with the establishment of the Central Bank of Nigeria in 1958.

The introduction of the Structural Adjustment Programme (S.A.P.) in 1986 changed tremendously the Nigerian financial landscape. With respect to the banking sector, one of the major developments was the liberalization of entry conditions leading to the growth in number of banks from 40 in 1986 to about 120 in 1993 (NDIC 1993).

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The other institutional developments included the establishment of the Nigerian Deposit Insurance Corporation (NDIC), specialized banks such as Nigerian Export and Import Bank (NEXIM), People Bank, Community Banks and Mortgage Banks. Subsequently, the development of financial instruments followed to cope with the expansion in the industry.

The Challenges posed by their developments, no doubt shook the fabrics of the Nigerian financial system and heightened competition among banks. These Financial problems manifested in distress within the Banking Industry.

The issue of distress in the Nigerian economy, including outright banking failure has been observed in Nigeria as far back as 1930 when the first banking failure was reported. Indeed between 1930 and 1958 when the Central Bank of Nigeria (CBN) was established, over 21 bank failure were recorded.

However, the degree of intensity and scope of distress has never been as serious as had been observed since June 1988, when the Federal Government of Nigeria introduced a policy shock, instructing commercial banks to lodge Naira backing for foreign exchange request with Central Bank of Nigeria (CBN).

This was followed in 1989 by another directive requiring that public sector deposits be transferred to the Central Bank of Nigeria. These two policies exposed the precarious liquidity positions of some banks and the distress they had subterraneously haboured. What was then thought to be temporary liquidity problem for a few banks soon caught up with a lot more banks.

This development spurred the supervisory bodies to move rigorously and examine the safety and soundness of the banks by assessing the extent and depth of distress.

With the implementation of prudential guidelines, the number of distressed banks that stood at nine in 1990 soon rose to 16 in 1992, and 45 by the third quarter of 1995 (NDIC quarterly). The implication of this to the Nigerian economy has been delimitating not only on the institution but also on the overall economy. This was manifested in the deposit base of the banks, which led to a reduction in the inflow of investible resources that could be channeled to the most competitive investment outlets.

Ordinarily, the failure of one bank is difficult to contain within a vibrant economy, let alone when many banks tumble almost simultaneously.

FINANCIAL DISTRESS AND BANK DISTRESS

Professor Herbert (1997) defined financial distress as a major disruption in the financial market characterized by sharp decline in assets prices and failures of many financial and non-financial institutions. He described it as a derivative condition of organizational failure caused by the joining of severe liquidity problem and or insolvency with depositors' fear of loosing their deposits. He concludes that it is these depositors' uncertainty that prospectively leads to bank runs.

Alice (1993) defined distress as a complete cessation of independent operation by affected bank or continuance of normal operation with the assistance of the regulatory body. On a broader scale, Benson et al (1986) defined banking distress as the manifestation of severe financial, operational and managerial weakness on the part of the concerned bank.

While Schwartz (1985) and Mishkin (1996) in discussing demand for money described bank distress as demand for reserve money so intense that the demand could not satisfy all the parties simultaneously in the short run.

Bringing these views together Ebhodaghe (1996) defined distressed bank as one with persistent severe financial, operational and managerial weakness with low or negative network and requiring assistance (technical and/or financial) from the supervisory authorities. He further added that such banks will not only default on prudential standard set by supervisory authorities but would also be unable to discharge their obligations to depositors and other creditors.

With the benefit of hindsight, Glaesner and Mas (1991) observed that distress in any financial setting is often technically used to describe two distinct, but closely related states/conditions of an institution namely insolvency and illiquidity. The illiquidity position indicates the banks' inability to meet its maturing short-term obligations especially to depositors.

On the other hand, insolvency relates to net position of the (market) values of total assets and total liabilities where the latter exceed the former. This in essence is the shareholder residual interest in the business. In a similar way the Federal Reserve Bank of San Francisco (1985) described distress as a sharp reduction in the value of financial institutions' assets resulting in apparent or real insolvency of many financial institutions accompanied by some runs and possibly the collapse of some institutions.

STATEMENT OF THE PROBLEM

The increased risk assumed by banks, poor quality of loans and advances, mismanagement, fraud, local and national economic trends, amongst other things, have led to an increase in the number of banks' problems in Nigeria since the early 1990s.

Earlier when banks were relatively fewer in number, banks hardly become distressed. The continuous increase in the number of distressed banks in Nigeria has captured our attention in this research, to seriously view and identify problem banks, and be able to predict failures with sufficient lead time for regulators and managers to institute remedial action to prevent them from going into insolvency.

OBJECTIVES OF THE STUDY

The primary objective of this research is to provide us with a model that can assist the regulatory bodies in identifying potential problem banks. However the specific objectives of the study are:

1. Examine the causes of the current banking sector distress in the Nigerian banking industry.

2. Evaluate the economic implications of the existence of distressed banks to the economy.

3. Provide an assessment of the banking industry using the CAMEL rating index and also an overview of the regulatory framework put in place to ensure financial stability in the banking industry.

4. Empirically, test a model developed by Doguwa (1996) which is an early warning model used in identifying potential problem banks.

5. On the basis of our findings, propose a comprehensive and effective policy package that would ensure the resolution of distress in the Nigerian banking industry.

SCOPE AND LIMITATIONS

This study covers a wide spread of banking activities including the regulatory framework and economic implication of the existence of distressed banks in the Nigerian economy. For the achievement of a desired result and the importance of the banking industry to the economy, this study is limited to the banks alone leaving the other sectors of the economy. This is based on the premise that bank constitute the largest percentage of the economic environment, therefore can be a good representation.

HYPOTHESIS

In the course of this study, the analysis will test the null hypothesis.

Ho: that the higher the overall scores, the more vulnerable the banks financial condition and its existence is threatened.

Against the alternative hypothesis

Hi: Banks overall score has no significant impact on its condition and therefore its existence is not threatened.

METHODOLOGY

The methodology adopted in this work is both theoretically and empirically based. In the evaluation of the mechanisms that are behind problem banks, data will be sourced based on the monthly returns banks render to both the Central Bank of Nigeria and Nigerian Deposit Insurance Corporation.

There are varieties of multivariate statistical techniques that can be used to predict a binary dependent variable – a problem (vulnerable, weak or distress) or non-problem bank from a set of discriminatory independent variables. One maximum likelihood estimation technique that is appropriate for binary choice problems, such as classifying banks and non-problem groups is the logit model.

Our objective in the choice of a logit model is to determine the conditional probability that a certain bank will fail, given a set of derived balance sheet ratio for that bank. In view of the operational

uniqueness such as retail and wholesale banking and the fact that merchant banks are prohibited from carrying out certain functions performed by commercial banks, this study separate both the merchant and commercial banks using 1993 data to capture varying operational characteristics.

STRUCTURE OF THE RESEARCH STUDY

The study is structured into six chapters, beginning with general introduction. Chapter two review relevant literature on distressed banks based on some theoretical reviews such as causes, measures, resolution options and experience of some countries. Chapter three is concerned with the regulatory framework put in place. The assessment of the industry using CAMEL rating index and implication of the existence of distressed banks to an economy is in Chapter Four. Chapter five deals with data analysis based on the methodology and hypothesis stated .In conclusion, Chapter six summarizes by evaluating major findings and concludes by making some policy recommendation.

CHAPTER TWO

LITERATURE REVIEW

2.1 INTRODUCTION

This chapter reviews some relevant literature on theoretical and empirical studies, which would provide us with a framework for the study of distress in the Nigerian banking industry.

Sanusi (1995) tracing the genesis of banking failure in Nigeria prior to the era of deregulation described them as mostly indigenous one with low capital and strong foreign bank domination. Banking services were then tailored to the needs of expatriate.

He concluded by describing the widespread incidence of distress infesting the banking industry today as traceable to the sharp increase in the number of banks. Also, the introduction of the Structural Adjustment Programme in 1986 and the subsequent rise in the Non-financial institutions that cater for high nominal interest rate expectations .With the lapses in regulation and supervision of the financial institution, the presence of distress did not come as a surprise.

Ebhodaghe (1996) while looking at the implication of the existence of distressed banks to the Nigerian economy described the phenomenon as that of recent origin. The manifestation became

discernible with some policy shocks starting in 1983 with the Central Bank of Nigeria's directive to banks that Naira backing for foreign exchange applications be lodged with the Central Bank, followed by another requiring public sector deposit to be transferred to the Central Bank. He added that these two directives exposed the precarious liquidity positions of some banks and the distress they had subterenously haboured.

2.2 EXTENT AND DEPTH OF DISTRESS

Sundanarajan and Balino (1991) in their work on the banking crisis of some developing countries based the extent and depth of financial system distress either to be generalized or systematic in nature.

Explaining further, generalized banking system distress is said to exist when a significant proportion of these institutions have liabilities in excess of market value of their assets leading to runs and portfolio shifts, collapse of such distressed banks/or requiring monetary authorities intervention. In other words, there exists a generalized solvency problem leading to liquidation, mergers or other forms of restructuring affecting a sizeable proportion of banks.

While it becomes, systematic in dimension when in addition to the features of the generalized case, the crisis has triggered a run on all banks regardless of their individual soundness. In other words, public confidence in the banking system has been lost such that it is seen as being incapable of performing its basic role of savings mobilization, credit allocation and facilitating payment.

Balino (1991), analyzing the collapse of the banking sector in Argentina gave a comprehensive distinction between the two sayings that generalized distress exists when its occurrence is spreading and cuts across all the sub-sectors of the industry. But its depth in terms of the ratio of total deposits to total deposits in the industry, the ratio of total assets of distressed institutions to total assets of industry; and the ratio of total branches of distressed banks to total institutional branches of the industry; among others, have not adversely affected the confidence of the public in the financial system.

The problem becomes systemic and of serious concern to the relevant authorities and depositors when its prevalence and contagious effect becomes endemic and threatens the stability of the entire system with its attendant negative effects on the nation's payment system, savings mobilization, financial intermediation processes and depositors confidence.

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An international monetary fund (IMF – 1991) working paper shows that the level at which the system will get to before it triggers off runs on the entire system varies from country to country, depending on the level of awareness in a country, the existence of or otherwise of an explicit deposit insurance scheme which normally contains contagious effect, and the level of alertness of the regulatory authority in swiftly taking corrective actions.

However, Kunt and Detragiache (1997) disagreed that explicit deposit insurance would reduce bank fragility. In a recent study,

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using regression analysis, they found that deposit insurance makes bank unsoundness more likely. The evidence shows that, in the period under consideration (1980 – 1994), moral hazard played a significant role in bringing about systemic banking problems. In the case of Nigeria, Ebodaghe (1996) using economic data, indicates that the number of distressed banks has reached 57 out of 115 banks as at the end of 1995. These distressed banks had 15 %, 18.5% and 27.3% of the total assets of all banks in 1992, 1994 and 1995 respectively. The figure obtained in 1995 represents a staggering ₦ 68 million while the total deposit of the distressed banks stood at ₦ 47.9 million or 28% (i.e. more than one quarter) which rose from 20% and 26% both in 1992 and 1995 respectively.

The adjusted shareholders fund for the distressed banks indicated in them that the equity investment in them had not only been lost totally but also funds from creditors including depositors had been lost to the tune of ₦ 4.6 Billion in 1994. The amount required for re-capitalizing the distressed banks to meet the minimum prudential level stood at ₦ 24.3 Billion as at September, 1995. He added that the prospect of reviving them is gloomy in view of the current economic condition, however gave the authorities a pass mark for curtailing the distress, not reaching the systemic level.

2.3 MEASURES OF DISTRESS

Work by West – 1984, Platt & Platt – 1990, Crouchy & Galai (1991) and Espahbodi (1991) has been undertaken as early warning models. While Kaminsky and Reinhart (1996) examines

the behavior of a number of macro-economic variables in the months before and after a banking crisis. In a sample of 20 countries using the methodology developed for predicting the turning points of business cycles, they identified variables that act as early signals for crises.

Gonzalezeltermosi, ilo et al (1997) used an econometric model to predict bank failures using Mexican data for 1991 – 1995. Most of these works have not only become popular tools for detecting early warning signals for crisis but have also been useful in analyzing distress in the financial system.

In Nigeria, the works of Jimoh (1993) and Nyong (1994) could be described as having established an empirical framework in the categorization of any financial institution as a sound or weak bank based on the CAMEL rating system (an acronym for capital adequacy, asset quantity, management, earnings and liquidity).

The authorities assess a bank's performance in the five areas mentioned. Based on these parameters, appropriate financial ratios are developed to indicate the condition of the financial institution under consideration. As observed by Ebodaghe (1996) a bank in distress is usually the one that depicts poor condition in all or most of the five performance areas as follows:

(a) Gross under-capitalization in relation to the level of operation.

(b) High level of classified loans and advances.

(c) Iliquidity reflected in the inability to meet customer's cash withdrawals.

(d) Low earnings resulting from huge operational losses.

(e) Weak management as reflected by poor credit quality, inadequate internal controls, high rate of fraud and forgeries, labour turnover etc.

He further explained that using these parameters, a bank's condition is assessed against some standard benchmark like minimum capital adequacy ratio, liquidity ratio and the ratio of non-performing credit to shareholder funds among others, to make a statement about the health status of the institution.

When these parameters deviate negatively form the predetermined critical level set by the relevant authorities, the institution is classified as exhibiting symptoms of distress. In a joint survey carried out by a team from Central Bank of Nigeria (CBN) and Nigeria Deposit Insurance Corporation (NDIC) in 1996 confirmed the existence of distress among a significant proportion of virtually all categories of operators in the Nigeria Financial service industry.

The survey using the famous CAMEL rating system introduced definite criteria for measuring bank distress and has established causality between factors that affects the odds of a bank being distressed. It also proposed a composite rating index (that would categorize a bank as being distressed or not) which was tested using banks secondary data and was able to successfully identify the current operational status of sample banks. Its advantage is

that it could be used as an early warning signal to assist the operators in the identification of likely distressed banks for appropriate remedial action, provided the bank reports reflect their actual performance.

However, it was discovered that the use of such ratios may not permit the determination of different thresholds that would describe the level of distress. As a result of this, to make for a more effective measure of distress through the establishment of a threshold, efforts are being intensified by some operators in the system to develop composite measures based on CAMEL parameters that will enable supervisors to determine on a uniform platform the extent of distress in each of the banks and by extension in the entire financial system as a whole.

Such composite measures take cognizance of both quantitative and qualitative indicators of performance including compliance with existing directives. It provides a bank with a rating grid graduating from very sound, satisfactory, marginal to unsound. From such a rating system, it is obvious that there is a range of performance scores that would qualify a bank for distress classification.

In line with this model, a private firm Augusto and Co (1994) made the first commendable private initiative at developing bank-rating system. It essentially follows the same general pattern using a group of financial ratios to measure a bank's performance in respect of certain factors, weighing these score to rate banks. There is therefore strong merit in adopting the Augusto model for weighing of the associated factors.

The resulting composite score and the rating should yield a more objective and acceptable measure of the extent of distress at both macro and micro levels. The major defects to this model is that data cannot be sourced easily as some banks will not be willing to

release information and the rating is more subjective to various operators within the system that's not having a standard benchmark.

2.3 THEORETICAL FRAMEWORK FOR BANK DISTRESS

A number of theoretical explanations have been offered in recent times for cause of distress among financial institutions. Among them are:

(i) **Business Cycle Theory:**

This holds that financial environment responds endogenously to the state of the business cycle or some displacement that opens up opportunities for profit. This means that financial institutions or businesses are generally more vulnerable to economic shocks during periods of expansion. This does not mean that financial crises occurs at the peak of the business cycle, but rather crises result from systemic focus that develops near the peak.

(ii) **Credit Market Conditions Approach:**

The basic argument here is that since the demand for credit is interest inelastic and supply of credit is interest elastic, at the peak of business cycle, any interruption of the supply of credit would trigger a business down fall. In Nigeria, the high rate on lending rate on bank credit created debt servicing problem and resulted in the accumulation of bad debts by banks thereby rendering some banks distressed.

(iii) **Monetary Approach:**

Based on this approach advocated by Friedmann – 1963, financial crisis need not occur at any particular stage of the business cycle but could develop whenever the Central Banks control for money supply or reserve money is erratic and results in excessive monetary tightening. As in 1989 when the Federal Government, instructed Parastatals and Ministries to withdraw their funds from commercial and merchant banks to the Central Bank of Nigeria. Banks were suddenly forced to sell assets in order to obtain needed reserves. This forced sales of assets, threatened bank solvency and reduces confidence. The erratic monetary policies of the Central Bank such as the frequent use of stabilization securities might have contributed significantly to the recent distress experienced in the financial sector.

(iv) **Kurt and Datragiache (1997) – The Determinant of banking Crisis:**

This model studies the features of the economic environment that tend to breed banking sector fragility and ultimately lead to systemic banking crisis. Rather than focusing on the behaviour of high frequency scores around the time of the crisis, the model studies the determinant of the probability of banking crisis in a multivariate logic form specification with annual data using a panel including all likely macro economic variables for which data were available. The explanatory variable captures some of the macro economic features. This approach will assist in identifying a number of interesting correlations. The macro economic variables among others

include gross domestic products, inflation rate, foreign exchange depreciation, real interest rate etc.

(v) **Doguwa (1996) – Early Warning Model:**

This is an alternative early warning model use in identifying problem banks. The model relies on the logic analytic technique and the use of financial ratios derived from monthly returns licensed banks render to the Central Bank and deposit insurance. The model is separated into two each developed for commercial and merchant bank is more efficient in that it drastically reduced the misclassification errors inherent in other failure prediction models developed in the past. Apart from identifying all banks that were already known to be distressed by the regulatory authorities, the model will also reveal banks that require urgent attention in order to prevent them from becoming distressed.

2.5 CAUSES OF DISTRESS

The issue of the causes of distress in the financial system is an empirical one. As observed by Balino (1987) while writing on the banking crisis in Argentina, Chile, Malaysia, the Philippines, Spain, Thailand and Uruguay, the diversity of experience with distress owing to cross country differences in micro economic conditions, the regulatory framework, the intensity of crisis and the approaches used to deal with it, makes it difficult to generalize and develop stylized descriptions or prescriptions.

Ebhodaghe (1996) in an attempt to conceptualize causes of distress in some developing economies, regarded banking distress as arising from the failure on the part of an individual bank timely resolve a complex set of inter-related problems that affect operational efficiency and their solvency in good time.

These problems are precipitated by factors within the concerned banks and beyond. They identified the internal factors comprising of management, ownership structure, capital adequacy and fraud, while macro economic policies and shocks, socio-political instability as well as regulatory regime are the principal external factors capable of generating distress problem for banks.

The International Monetary Fund (IMF) institute (1991) discovered in some countries in South America and Asia the crisis periods were closely associate with periods of strong real output, downturn in investment, adverse external shocks and balance of payment difficulties. While the effect of the overall macro economic problems on financial distress is of varying degrees however what has been established is that it is difficult to separate distress in the financial service industry of a country from the severity of recessions witnessed by the economy.

A weak macro economic environment was found by Kunt and Detragieche (1997) to be the real factor behind systemic banking sector problems. Structural characteristics of the sector and the economic environment in general also play a role. The test they carried out shows that vulnerability of the system to sudden capital outflows increases the probability of a banking crisis. They also

found evidence that crises in the industry is most likely where a large share of credit goes to the private sector, with a possible indication of a connection between the emergence from a state of financial repression and banking sector distress.

It also confirmed that low gross domestic product (GDP) growth is clearly associated with a higher probability of a banking crisis, showing that low development in the real side of the economy has been a major source of systemic banking sector problems of the sampled economies in the 1980's and 1990's. Also, a decline in the terms of trade appears to worsen banking sector unsoundness.

Other factors that were found by Kunt and Detragiache (1997) to be significant in determining banking sector distress include real interest rate and inflation. This confirmed the well-known vulnerability of the banking system to nominal and real interests rate shocks. As predicted by the theory, the values of "law and order" index, which should proxy more opportunities to loot and or lower ability to carry out effective prudential supervision, are associated with as higher likelihood of a crisis.

Kaminsky and Reinhart (1996), examined monthly data around the time of a banking crisis and found that the decline in G.D.P. growth to precede the onset of the banking distress by about eight months. The Fund (IMF) confirmed that it is only a resilient economy that can provide the primary guarantee for the stability in the financial system. Balino (1987) corroborated this position while analyzing the banking crisis in South America. He observed that the main cause of distress was the deterioration of the loan

portfolio – a deterioration that stemmed in the part from development in the general economic environment and their effect on business condition.

Contrary to this, De Juan (1988) and Long (1983), looking at the financial sector reforms and distress of some developing countries realized the difficulty in establishing causality between the two. In Argentina and Uruguay financial reforms took place between mid and late 1970's, distress on the other hand took place in early 1980, while in the Philippines distress set in immediately after deregulation of its financial sector in 1981. In the case of Spain, its banking crisis occurred right within the period of its financial reform i.e. between 1977 and 1987. In many other cases, the weaknesses of problem institutions might have well started before the regulatory authority noticed these, as it is common for banks to conceal relevant information about their true financial condition especially when it is negative.

On the effect of deregulation Fernande (1983) opined that it is always accompanied by rapid expansion of financial institutions such that most of them are manned by inexperienced personnel. This situation could cause or aggravate banking crisis, which may eventually lead to distress.

Looking beyond that, Balino (1987) observed that deregulation often changes the structure of the financial system,. with the emerging structure of the financial system, with the emerging structure depicting concentration of power in the financial system with interlocking ownership and lending patterns. He described

such an environment as one that is particularly susceptible to failures. This he discovered while looking at the Chilean crisis, where large shares of credit to related firms were discovered. Banco Central de la Republic Argentina (1980) in its report on distress were of the opinion that deregulation may also lead to institutions with vulnerable liability structure to engage in distress borrowing and this may lead to serious liquidity problems for the individual banking institution, thereby instigating banking crisis in the system as was the case in Argentina.

Added to this, banks regarded that the sequencing of financial reforms does not recognize the existence of an appropriate macro economic environment and regulatory apparatus to match the likely development in the system after deregulation.

The distress in the Nigeria banking system according to Ebhodaghe (1996) is a manifestation of a complex set of interrelated problems, which emanate from a number of factors. Although there seems to be an emerging worldwide consensus that the quality of management makes the difference between sound and unsound banks, he listed other factors to include economic down turn, inhibitive policy environment, inadequate capital, deregulation and ownership structure. He classified them into two endogenous and exogenous causes of banking sector distress.

Herbert (1997) emphasized that it is not uncertainty or insolvency individually or together that occasions organizational failure in the banking industry but it is rather the alignment of factors with

bounded rationality on one hand, and the joining of others that give rise to distress syndrome.

In conclusion, there is generally no consensus as to the effect of the regulatory factors. Comos (1994) is of the opinion that since the primary responsibility of ensuring a stable and healthy financial system is vested on the Central Bank of Nigeria by the CBN decree 24 of 1991, then by this decree the bank has legal right to discharge its responsibility. Therefore he concluded that the effectiveness of Central Bank in the discharge of this responsibility can be assessed vis – a – vis the prevailing financial condition of the operators in the system. In addition BOFID were promulgated to permit the Central Bank to take prompt actions with respect to problem banks.

However, the Central Bank has absolved itself of any blame, insisting that the affected banks were victims of institutional factors such as inept management, boardroom quarrels and unprofessional practices.

CHAPTER THREE

3.0 REGULATORY FRAMEWORK FOR ENSURING BANKING CONFIDENCE AND STABILITY:

INTRODUCTION:

Worldwide, the banking is regulated and supervised. This is because of the pivotal role the banking industry plays in most economies. An efficient banking system is widely accepted as a "sine qui non" for an efficient functioning of nation's economy. Thus for the industry to be efficient, it must be regulated in view of the failure of the market system to recognize social rationality and the tendency for market participants to take undue risks which could impair the stability and solvency the banking industry.

What happens in Nigeria does not differ widely from what happens in other nations. Over the years, specifically since 1952 when the first Banking ordinance was promulgated several other statues have also been put in place to serve as legal backbone for the actions of the monetary authorities in regulating the banking industry.

Presently, the major relevant statues include Central Bank of Nigeria Decree No. 24 of 1991, the Banks and other financial Institution Decree (BOFID) No 25 of 1991, the Nigerian Deposit Insurance Corporation (NDIC) Decree No. 22 1988, the company and Allied Matters Decree No. 1 of 1990 and lately, the failed Banks (Recovery of Debts and Financial Malpractice) Decree No. 18 of 1994.

3.1 BASIC GOALS OF REGULATION AND SUPERVISION

Financial institutions especially banks are expected to adhere strictly to safe and sound practices, maintain adequate and appropriate internal control systems to prevent incidence of frauds, forgeries and other financial malpractice, to ensure stability and engender public confidence in the financial system. The basic goals for regulating are briefly discussed here.

3.1.1 PROTECTION OF DEPOSITORS

The most basic reason for financial regulation is depositors' protection. Bank depositors have difficulty in protecting their interest when compared to bank creditors and investors. Given the increased number of banks in the system, a shift in government support policy and the bitter experience of prior banking failure in the country, the need for regulation to protect depositors becomes rather imperative.

3.1.2 MONETARY STABILITY

Bank regulations promotes financial stability by encouraging a flexible banking that can always meet the public transaction needs and by discouraging banking practices that might disrupt the payment system. In the way monetary stability could lessen or prevent the occurrence of banking panics and their disruptive effects on the economy and thus be linked with the goals of depositors protection.

3.1.3 EFFICIENT AND COMPETITIVE BANKING SYSTEM

One aspect of good banking system is that bank customers are provided quality services at competitive prices. One of the

purposes of bank regulations is to create a regulatory and supervisory framework that encourages efficiency and competition. Competition is a vehicle for achieving efficiency. Since in a competitive banking environment, banks are forced to operate efficiently if they are to keep their customers and remain in business.

3.1.4 CONSUMER PROTECTION

Another important goal of supervision in the banking industry is to protect the consumers' interest in certain aspect of financial relationship. Broadly interpreted, the objective could encompass most financial regulations as well as legal protection generally given to all customers. It could include regulations designed to protect depositors.

3.2 AN OVERVIEW OF THE REGULATORY INSTITUTION

The origin of regulation in the financial services in Nigeria particularly bank dates back to the early 1950s following the tragic failure suffered by the largely unregulated indigenous banks – a phenomenon, which caused untold hardship for many bank customers.

This incidence led to the enactment of the 1952 Banking Ordinance amended in 1958 and 1962 and repealed in 1969, followed by the birth of the 1969 Banking Decree (amended several times) which was also repealed following the promulgation of the Central Bank of Nigeria Decree No. 24, and Banks and other Financial Institutions Decree (BOFID) No. 25 both of 1991, later amended in 1997. The Decree updates the innovations in the

banking system and they also now cover Non-Banking Financial Institutions.

Like the practice in many other countries regulation and supervision of the banking services industry in Nigeria is carried out by government agencies. These agencies are discussed below:

3.2.1 THE CENTRAL BANK OF NIGERIA

The promulgation of the 1952 Banking Ordinance and the need to implement its provisions made it imperative and inevitable for the establishment of a Central Bank in the country. The Central Bank of Nigeria (CBN) was established in 1958 by an Act of Parliament. The Bank commenced operation in July, 1959 and was charged among other things with the responsibility of promoting monetary stability and a sound Banking structure in the country.

3.2.2 FEDERAL MINISTRY OF FINANCE .

The Federal Ministry of Finance in addition to its numerous responsibilities to government also oversees the regulatory agencies. It regulates all financial services industry in Nigeria directly. The Finance Ministry licenses and regulates the activities of all participants in the industry.

3.2.3 FEDERAL MORTGAGE BANK OF NIGERIA

The bank was created by decree No 7 of 1977 to take-over the assets and liabilities of the Nigerian Building Society which had hitherto been performing mortgage administration businesses since its incorporation in 1956. Following the promulgation of the

decree No. 53 of 1989, the Bank became a regulatory and supervisory body over all secondary mortgage institutions. The bank is empowered by the Decree to license, regulate and supervise all mortgage institutions in Nigeria.

3.2.4 NIGERIAN DEPOSIT INSURANCE CORPORATION (NDIC)

The Nigerian Deposit Insurance Corporation was established by Decree No. 22 of 1988 and commenced operation in March, 1989. The agency is an autonomous body i.e. an independent agency of government which acts as an additional supervisory authority over licensed banks and other deposit taking financial institutions. For now NDIC insures only commercial and Merchant Banks, and therefore limits its supervisory activities to them. The agency not only provides financial guarantee to depositors in case of failures but also ensures that banks comply with regulations and practices which foster safety and soundness in the market place.

However, in a research carried out by Kunt and Detragiache (1997), found that Deposit Insurance makes bank unsoundness most likely as it creates incentives for excessive risk taking by Bank Managers.

3.3 POLICIES PUT IN PLACE TO PROTECT AND ENSURE FINANCIAL STABILITY IN THE SYSTEM.

Ensuring good banking practices through protection of depositors and enhancing the stability of the whole monetary system are the two of the major goals of regulation. Banking business being a highly leveraged one, practically every aspect of it could be said to have implications for depositors' safety and by extension the whole

financial system. Worldwide, regulators work tirelessly in enhancing banking confidence through restricting bank risks to a level that is generally acceptable to depositors. Regulatory bodies are assigned to protect depositors' interest, the insurance of deposits with a premium levy to cover depositors claims. While the government assume the overall responsibility for monetary stability and depositors protection. All work to guard against banking failures.

The role bank regulators assume in the protection of depositors is similar to the position any creditor or insurer takes in the protection of his interest. Here we discuss briefly some of the policies.

3.3.1 LICENSING REGULATIONS

Since the establishment of the Central Bank in 1959, all commercial and merchant banks are required to obtain a license to conduct business. Bank chartering is adopted primarily to prevent over banking and to keep dishonest or inexperienced people from operating banks, either of which would lead to banks failure and possible depositors losses and hence endanger confidence on the entire system.

Going by (BOFID) section 2 (1), no person is permitted to carry on banking business in Nigeria, except if it is a company duly incorporated in Nigeria under the company and Allied Matters Decree of 1990 and in possession of valid banking license issued under the BOFID.

In further pursuance of protecting bank customers, section 40 of BOFID disallows any person(s) or corporate to solicit for any type of deposit from the public except it is a duly licensed bank. This provision is necessary to prevent exploitation of the general public by just any body, thus causing financial instability in the economy.

3.3.2 MAINTENANCE OF ADEQUATE CAPITAL

A bank must have adequate capital to provide a cushion for absorbing possible loan losses, fund its internal needs and expansion. Therefore adequate capital provides added security for depositors and the deposit insurance system.

Banks' regulators view capital as an important element in holding banking risks to an acceptable level. Worldwide the determination of adequate capital for a bank has been a very knotty problem. Until a decade ago when the Basle Committee (1988) came up with a concept of risk-weighted assets in measuring capital adequacy, regulators tried to promulgate laws covering the issue, at the beginning, a minimum paid up share capital would be specified for all licensed banks. According to BOFID such amount can vary over time and between different types of banks. Failure to comply with this provision can result in the revocation of a bank's license.

3.3.3 RESERVE REQUIREMENT

(Minimum holding of Cash Reserves, Specified Liquid Assets, Special Deposits and Stabilization Securities). Both the Central Bank and Nigerian Deposit Insurance have legal backing to the minimum amount of cash reserves as well as amount and type of

liquid assets to hold by all licensed banks. Accordingly every bank shall maintain with the apex bank cash reserves and special deposits, and hold specified liquid assets or stabilization securities as the case may be prescribed by the apex bank. These assets are mainly used by monetary authorities as instruments of policy. In addition, the maintenance of these assets is also to cover normal fluctuations in deposit that may be experienced by banks.

3.3.4 GENERAL LENDING AND INVESTMENT RESTRICTIONS

(a) **General Loan Restriction:**

As a general rule, the Central Bank of Nigeria is empowered to fix ceiling on the volume of loans, advance and discount that may be granted and or outstanding at any time. The Bank is required by law, to submit all applications for loans to the apex bank for approval and no such loans shall be made without such approval. The apex bank fix a ceiling on the volume of loans, advances and discount outstanding at each bank and may also fix different ceilings.

The rationale behind this general rule is to guard against over lending in general as well as monitor those that affect specific sectors of the economy. In other words, implementation of such rules guarantees monetary stability since loans themselves and in whatever form constitute the largest single group of assets of a bank as well as the riskiest of all of them. Over-lending to any particular sector can lead to a set of serious problems to the banks involved as well as the economy.

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(b) **Limits on Loans to a Single Borrower:**

Bank lending decisions are affected not only by general credit limitation statues alone but also by severe specific credit regulations. One such regulation limits the loans and advances that can be made to a single borrower. For any licensed Commercial Bank, the limit is pegged at 20% of shareholders fund unimpaired by losses and in the case of Merchant Banks not more than 20%. These limits include the aggregate of all advances, loans or credit facilities extended to any person or subsidiaries or associates of a corporate body. Regulators usually consider excessive loans to a single borrower as a serious matter requiring immediate correction. Such loans do not provide adequate diversification and can leave a bank dependent on the fortunes of a few borrowers.

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(b) **Loans to Insider**

This is another credit restriction, which applies to bank shareholders, directors, executives, officers and their relations. Within the banking industry, worldwide insider loans are considered as one of the main factors that contribute to bank failures. Hence regulators try to put up legislation that severely limits easy and improper access to depositors fund by bank owners and employers or their relations. A section of BOFID limits the amount of unsecured loans and advances any licensed bank can grant to its director(s) to Fifty Thousand Naira (₦50,000.00) only. This restriction also applies to a corporate body where a director

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maintains a shareholding of not less than 5% either directly or indirectly.

(c) **Restriction on Certain Banking Activities:**

In order to guard against diversion of depositors funds to other non-banking activities, however profitable it may be, regulators have promulgated laws governing "no go" areas for licensed banks. The essence of such limitation is to protect depositors' fund from being put in risky ventures as well as outright misuse by banks' officials. The rationale is that such protection will minimize banks losses and thus enhance banking confidence and financial stability.

BOFID forbids all licensed banks from all forms of wholesale or retail trade for profit either on its account or commission basis without approval form the apex bank. Also banks are not allowed to purchase/sell acquisitional disposal or lease of real estate for profit except where such real estate are used for collateral for loans which have become due for payment. All these regulations are aimed at protecting the industry and its participants from its fund being employed for speculative or risky ventures.

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(e) **Disclose of Interest by Director, Managers and Officers**

Provisions concerning the disclosure of interests are included in the banks' legislation in order to forestall against undue influence by Bank Directors, Managers and Officers over depositors' funds and bank activities in general. The belief is that a declaration of interest in any particular

advances or loans by these set of people would forewarn the supervisors or inspectors. A section of the BOFID prevents such a person from having interest in any loan/advances without declaring the nature of their interest. In addition ,they are not expected to benefit materially from the granting of such loans and advances, neither could they grant such loans or any other form of credit facility for that matter without due regard to the rules and regulations governing the banks.

(f) Prohibitions of Employment of Certain Persons, Inter-Directorship and Disqualification and Exclusion of Certain Individuals from Management of the Banks:

Management constitutes the key factor that determines the success of any bank. The other factors all hang on good management. The lack or absence of good management automatically spells doom for any bank. It could at the extreme situation lead to bank failure, which jeopardizes banking confidence. On the basis of that, bank regulators critically monitor and approve those they want to own and manage banks.

No bank is permitted by the law to employ or continue the employment of any person who is or at anytime has been adjudged bankrupt or has suspended payment to or has compounded with his creditors or who is or has been convicted by a court of law for an offence involving fraud, dishonesty or professional misconduct.

(g) **Information Disclosure:**

Information disclosure by banks is basically designed to ensure that depositors, investors and general public are adequately informed of a bank's performance or condition. It is in this regard that every bank is expected to keep proper books of account with respect to all its transaction. Proper books of account are kept with respect to all transactions and a fair view of the state of affairs of a bank are in compliance with the accounting standard as may be prescribed for banks.

Banks are also required to publish their annual statement of accounts in the national dailies before hosting annual general meetings.

3.3.5 SUPERVISORY COMPLIANCE PROCEDURES

The principal supervisory procedures used to check compliance, falls under two categories: (i) Bank Examination (ii) Reporting Requirement

(i) **Bank Examination:**

Bank examinations are used to collect on the spot information that will indicate the current financial condition of a bank and its compliance with applicable laws and regulations. All phases of bank's operations are covered in an examination, though they do not serve as audit. Examiners confine themselves to evaluating only the activities and bank records that are necessary to judge a bank's condition and regulatory compliance.

An examination can be routine or special. In these two cases, the paramount thing in the mind of examiners is the protection of funds and stability. Bank examinations tend to prevent a small problem from becoming a large one. It reveals the lapses of management and supervisors tend to proffer solutions to such problems and lapse.

(ii) **Reporting Requirement:**

In various forms, banks are required to file information as may be required by the regulatory bodies for effective monitoring of their conditions with the utmost objective of maintenance of confidence and financial stability. The periodic information supplied by banks is used by supervisors for off-site surveillance of the banks. Such surveillance gives early warning signals of problems and may be reasons for on-site examination on the affected bank.

3.3.6 MANANAGEMENT OF FAILING OR FAILED BANK

Actions that are taken by regulatory bodies regarding failing or failed banks may have significant positive or negative effect on banks' depositors and the entire financial system. In a banking system, where there is absence of deposit insurance either in the implicit or explicit form, the run that may be experienced when a bank fails can ruin the whole system. In most economies, the impact of liquidated banks are minimized through strict and careful

management of banks failure coupled with some extra-ordinary legal provisions.

In Nigeria, specific provision in the statute books have ensured no significant negative impact on bank failures. The Central Bank is empowered by BOFID to take over any bank perceived to be failing and subsequently apply appropriate failure resolution options. In a case where the appropriate resolution is restructuring the legal provisions give the regulatory bodies power to merge, consolidate or convert such banks.

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CHAPTER FOUR

4.1 AN OVERVIEW OF THE HEALTH OF NIGERIAN BANKS

The health of Nigerian banks could not be totally divorced from the banks' antecedents. As it would be recalled, when banking commenced in Nigeria in 1892, it was solely an industry for the foreigners. Nigerian entrepreneurs who came into banking industry from the late 1920s to early 1950s did so with the aim of meeting the financial requirement of indigenous Nigerian businesses. Due to problems such as inadequate capital, mismanagement, over-trading, lack of regulation and unfair competition from the foreign owned banks, 21 out of the 25 indigenous banks that came on stream up to 1954 failed. The failure no doubt brought untold hardship to depositors who lost their money and confidence in the banking industry.

It was not until government started to regulate banking through the Banking Ordinance of 1952 and the establishment of the Central Bank of Nigeria in 1959 that banking started to thrive once again. The oil boom of the 1970s and economic growth that followed made banking a very lucrative business. The economic down turn noticeable from the mid eighties brought strain to Nigerian economy which soon became depressed. The financial condition of economic agents worsened– firms and individual were unable to honour their contractual obligations of loan repayment to banks thus impairing bank portfolio quality. This economic predicament

combined with other factors such as mismanagement adversely affected the health of some banks.

For a more in-depth assessment of the financial condition of Nigerian Banks, the usual parameters of Capital Adequacy, Assets Quality, Management and Staff, Earnings and Profitability, and Liquidity and Fund Management, the CAMEL rating will be used. These are examined below.

4.1.1 CAPITAL ADEQUACY

The Capital adequacy of a Bank is generally gauged by the extent to which owners' funds provide cover for depositors in the event of loans and advances going bad. Bank Supervisors have used the ratio of capital to total risk weighted assets to determine the adequacy of a bank's capital, and from there determine the surplus or capital required for the bank's level of operations. Using this criterion, which is expected to be a minimum of 8% for any bank, the extent of under capitalization of insured banks is determined from 1991 to September 1994 in the table below.

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TABLE 4.1

UNDER CAPITALIZATION OF SELECTED INSURED BANKS

Category	Number of banks and Capital surplus (required)' m			
	1991	1992	1993	1994
State Government Controlled Commercial Bank	24 (2,233)	25 (4,740)	25 (4,953)	20 (8,826)
Non-State Government Controlled Commercial Bank	20 221	41 (283)	41 (474)	45 227
Merchant Banks	46 95	54 (500)	54 (3,670)	51 (4,377)
All Banks	100 (1,917)	120 (5,553)	120 (9,097)	116 (12,483)
Distressed Banks	8 (2,354)	16 (5,530)	33 (13,578)	47 (17,469)

Source: NDIC 1995

NOTE: Those in brackets indicate shortfall in the capital requirement.

Table 4.1 shows that Commercial Banks controlled by state governments required additional capital of ₦22 Billion in 1991.This position deteriorated over the years to ₦8.8 Billion in September, 1994. The situation in non-state government controlled bank shows that their capital position worsened to ₦ 2.2. billion and ₦0.4 billion in 1992 and 1993 respectively. However by September 1994, non-state government controlled commercial

banks had a capital surplus of N0.2 billion. The trend in the merchant banks was similar to that of non-state government controlled banks .For the industry as a whole, it was a sad story as the capital shortfall rose sharply from ₦1.9 Billion in 1991 to ₦12.5 Billion by September of 1994.

As at the end of 1994, eight distressed banks (that is banks that had negative networth) would require ₦ 2.35 Billion capital for revival. The number of distressed banks has been on the increase, so also their capital shortfall, which rose over the period to about ₦ 17.5 Billion in September, 1994 for the 47 distressed banks.

4.1.2 ASSETS QUALITY

The quality of banks assets portfolio is generally defined in terms of the ratio of classified portfolio to the total portfolio. A bank which has very low ratio of classified loans and advances to total loans and advances is presumed to have a high quality loan portfolio. The assets quality of insured banks in table 4.2 are for the period 1989 to September, 1994. The assets quality of all banks is judged by the proportion of the classified loan and advances.

TABLE 3.2

ASSETS QUALITY OF INSURED BANKS

Years	Loans & Advances ('m)	Classified Loans & Advances (m)	Portfolio of Classified Loans & Advances to the total (%)
1989	23,125	9,427	40.8
1990	26,952	11,905	44.1
1991	32,879	12,817	39.0
1992	41,436	18,816	45.4
1993	80,416	32,858	41.0
Sept. 1994	104,154	43,307	41.6

Sources: NDIC

Loan assets to total loan assets at 40.8% in 1989 deteriorated to 44.1% in 1990. The improvement witnessed in 1991 was most likely due to the implementation of prudential guidelines of licensed banks which was issued in 1990. The portfolio quality of banks worsened to 45.4% in 1992 before it improved slightly to 41.0% and 41.6% in 1993 and 1994 respectively. A further interpretation of the assets quality of Nigerian Banks is that for every One Naira (₦ 1) loans and advances about ₦ 0.40k could be said to be non-collectible between 1989 to 1994.

4.1.3 MANAGEMENT AND STAFF

The upsurge in the number of financial institutions thinned the executive capacity in the banking industry. This had an adverse

effect on the quality of the management staff. Since the "taste of the pudding is in the eating" the quality of management is best judged by a bank's performance on other indices of financial health.

The prudential problems of inadequate accounting system and poor record keeping in some banks are manifestation of poor management. It is also not uncommon to find internal inspectors refusing to report to management adverse processes discovered in the operations of some banks. Negative culture of inter-personal wrangling among banks top management staff leading to polarization of the rank and file has persisted in the industry. Board members and top management staff are known to embark on empire building, boardroom quarrels, an access to privileges and perquisites of office rather than charting profitable and growth oriented programme for their banks. There is a high incidence of indiscipline, disloyalty and fraudulent practices on the part of management and staff of some banks. These are pointers to ineffective and undisciplined management of some Nigerian Banks.

4.1.4 EARNINGS AND PROFITABILITY

The implementation of the prudential guidelines for licensed banks reduced paper profits, which used to be reported by banks. The huge operational cost incurred by the individual banks also reduce their earning and profitability. The expectation is that in the nearest future, the earnings of banks would improve as there would be sanity in banks credit policies and administration with resultant positive effects on loan quality and reduction in loan losses. Also

banks declared profits would have become realistic, as adequate provisions would be made for all anticipated losses.

4.1.5 LIQUIDITY AND FUNDS MANAGEMENT

Funds mobilized by insured banks must be effectively managed to optimally reconcile the interest of depositors and shareholders. Illiquidity would quickly expose a badly managed bank and would jeopardize the sustenance of a good earning prospect. The two combined makes it very important for any bank to survive. The adequacy of bank liquidity and its management are often gauged by the ratio of loans and advances to deposits. For the ratio of liquid assets to deposits, the regulatory authority stipulates a minimum of 30%, while the prudential ratio for loans and advances to deposits is a maximum of 70%. In Table 4.3, the number of banks having below the minimum liquidity ratio are given, so also are ratio of loans to deposit for the industry

TABLE 4.3

LIQUIDITY POSITION AND FUND MANAGEMENT OF INSURED BANKS

Category	Number of banks having liquidity ratio of less than 30% at year end			Ratio of loans & Advances to total deposits at year end (%)		
1990	12	13	25	79.5	106.0	84.9
1991	10	10	20	87.4	116.0	105.2
1992	7	6	13	73.5	159.0	82.8
1993	13	11	24	52.4	86.0	64.2
Sept, 1994	12	16	28	60.3	97.0	66.2

Sources: NDIC

More banks continued to experience illiquidity as the number of banks with liquidity ratio of less than 30% rose from 13 in 1992 to 28 by September, 1994. Using the ratio of loans and advances to deposits as an index for liquidity and funds management, merchant banks faired very badly as they generally exceeded the maximum 70% in all the years. The implication of this is that these banks are over-trading, as Merchant Banks gave out a staggering 159% of deposits as loans in 1992. As for Commercial Banks, they kept within the limits in both 1993 and 1994. The industry as a whole had ratios above the limit prior to 1993. This can be associated with the poor economic condition and its negative impact on bank loans repayment or possibly the establishment of the failed bank tribunal.

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EVIDENCE OF DISTRESS IN NIGERIAN BANKS

A study carried out by Central Bank of Nigeria and Nigeria Deposit Insurance Corporation (1995), which relied on the use of various statistical techniques confirmed the existence and degree of distress among a large segment of Commercial and Merchant banks for which consistent, relevant data for such analysis were available. Managerial, structural, operational, regulatory and political factors were also found to have contributed significantly to the distress condition among the banks. The study also provides five indicators of distress namely, degree of distress, illiquidity, capital deficiency, specified liquid assets and over-trading, based on the performance criteria ratings. Some of the causes of distress were found to be the following:

4.2 CAUSES OF DISTRESS IN THE BANKING SECTOR

The distress in the Nigerian Banking Sector is a visible expression of a complex set of inter related problems which emanated from a number of factors, including the inhibitive policy environment (over regulation), capital adequacy, poor management and staff, economic downturn, impact of deregulation and ownership structure by either the private – public or government. Therefore for banks to be made safer and stronger, the government, supervisors and managers need to develop a better understanding of why banks get into these problems. These factors are examined below as any resolution options proposed must first address them for it to be credible.

4.2.1 ADVERSE ECONOMIC CONDITION

The economic down-turn since the early 1980s is reflected by high inflation, large fiscal deficits, a heavy debt burden and slow growth arising from the stress in economy. Many borrowers have been unable to service their loans thereby making many financial institutions to loose. The inability of borrowers to repay their loans gives rise to poor quality assets. The macro economic reform introduced in 1986 also had its toll on the external value of the naira, which was then believed to be overvalued. A massive depreciation followed and shot up foreign manufacturing input to greater domestic capacity under utilization.

Moreover the trend of macro economic variables has a powerful effect on the way banks do business. When the rate of growth and inflation are on the increase working borrowers credit risk becomes extremely difficult. A company's credit history in periods of high inflation says little about its credit worthiness in more stable times and banks that survive by speculation in a currency markets during bouts of high inflation in currency markets get unstuck when prices fall back to earth and they have return to more conventional ways of earning. These problems greatly impaired the quality of bank assets as non-performing assets become unbearable and turned out to be a huge burden on many banks.

4.2.2 POOR QUALITY MANAGEMENT

The quality of management constitutes no doubt an important difference between sound and unsound banks. There seems to be unanimity of opinion among the supervisory authorities and bankers that management is the most singular factor that affects

the performance of a bank. Experience has shown that poor bank management results in excessive risk taking, excessive operating expenses, inadequate supervision of loan portfolio, overtly aggressive growth policy, interest rate speculation and poor judgement. All these result in stress for the banks. With the advent of financial liberalization, the number of professionals manning the financial system especially the banking sector, has been thinned down with the rapid expansion that followed. This resulted in relatively inexperienced staff being saddled with management of some banks.

In addition, some of bank's management are characterized by instability of tenure of directors and key management staff, board room quarrel, weak internal control system, lack of strategic planning, as well as rampant contravention of well intended statutory regulations.

4.2.3 IMPACT OF DEREGULATION

The macro economic reform in the country introduced in the mid 1980s has less than salutary impact on the health of some banks particularly those that had hitherto enjoyed some implicit subsidy. By exposing them to market forces, deregulation should have left them better managed, efficiently allocated credit and provide bank customers with a better deal. Yet financial liberalization and banking mishap tend to go together. The trouble is that liberalization exposed banks to new risks, which without proper precaution can make a crisis more likely. The lifting of restrictions often releases pent-up demand for credit which can turn into an uncontrolled lending boom.

Opening banks to new entrants multiply the risks involved. As new competitors arrive on the scene, they put pressure on existing bank earnings, perhaps tempting them to finance even riskier ventures to try to match the easier profit of the older banks. The switch from a cozy – state – directed system to one driven by competition, also requires that commercial banks develop new ways of thinking. One of the effects of this, was the large number of weak banks, particularly among the new generation banks.

Part of the blame with liberalization, is that the number of banking supervisors has not risen in line with the rise in banking activity. Besides, those supervisors first have to learn their new jobs, government is also slow in bringing in new rules needed to operate the new system. The need to sanitize the operations of banks in a deregulated economy prompted the introduction of some measures which adversely affected some of them. Among such policy measures are the prudential guidelines, statement of accounting standard for banks, and the use of stabilization securities by the Central Bank to mop up excess liquidity in the system. The adoption of these measures though imperative exposed many weak banks and threatened them with insolvency. In extreme cases of illiquidity, there was near panic as some of the banks were unable to meet depositors' demand.

Consequently, the banks embarked upon distress borrowing in the inter-bank market at exorbitant rates.

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4.2.4 OWNERSHIP STRUCTURE AND OR POLITICAL INSTABILITY

Owners direct intervention, most especially in government owned or controlled banks, in the internal management of the banks has contributed to the financial distress in some of the banks. While in the privately owned banks, the prevalence of boardroom quarrels and insider abuse are the most prevailing causes of distress in virtually all of them. Besides, most of the government-controlled banks are often treated as an extension of the government or as a political bank for settling government campaigners/lobbyists.

In most cases, the board and management staffs of these banks are changed arbitrary as changes occur in the administration of their own government. The result is inconsistency in policies while loans and advances to owner government and agencies are hardly repaid. Similarly, unstable political environment could contribute greatly to the loss of confidence in the financial system, engendering a run on the system as experienced during the 1993 June 12th Election crises.

4.2.5 INADEQUACY OF CAPITAL

One principal function of capital in any bank is to serve as a means by which losses may be absorbed. Capital provides a cushion to withstand abnormal losses not covered by current earnings, thus enabling the bank regain equilibrium and re-establish a normal lending pattern. Unfortunately, a good number of the country's second-generation banks are grossly under-capitalized. This problem of inadequate capital has been further accentuated by the

huge amount of non-performing loans which has eroded the capital base of the banks.

Available statistics on banks capital adequacy show that the adjusted shareholders fund which recorded a negative position of ₦ 2.98 Billion in 1992 deteriorated to ₦ 10.21 Billion in 1993 (NDIC,1995). The paid up share capital and owners resources of these banks had not only been completely eroded by bad and doubtful debts, and operating losses, but also that the depositors' fund had been used up to the extent of the capital deficiency.

4.2.6 FRAUDULENT AND CORRUPT PRACTICES

The problem of weak management has been compounded by unprofessional behaviour of some bank owners and managers. Revelations from the proceedings of the failed Banks (Recovery of Debts) and Financial Malpractices tribunal show that bank customers obtained loans from their banks without proper documentation and comparable collaterals. Most of those who had obtained loans in that way had no intention of repaying.

Some unscrupulous businessmen have found it easy to set-up banks simply to finance their company's pet projects. Loans to related companies' are rarely made at an arms length basis and tend to be granted at below market rates, with scant credit vetting. Many bad loans just fester, it takes a brave manager to foreclose on a loan to a firm run by a senior colleague or a major shareholder. The resources or will to enforce rules meant to protect such calamities are absent. The International Monetary Fund (IMF) 1996 is worried that banks operators are always

finding clever new ways round supervisors latest attempts to spot and penalize excessive chumminess between Commercial Bank operators and their friends. In several banks especially the distressed ones, revealed the wide spread use of dummy accounts and fictitious names that had escaped regulators attention at better times.

4.2.7 INADEQUATE LEGAL FRAMEWORK

The ability of the supervisory bodies to deal with distressed financial institutions has been hampered by inadequate legal framework. A situation whereby a monetary authority requires prior approval of the executive or legislative branch of government to deal decisively with ailing banks may involve excessive bureaucracy. This delay provides an avenue for the crisis to spread before resolution options are applied. This is the situation in which the Central Bank finds itself.

4.3 ECONOMIC IMPLICATION OF BANK DISTRESS

The symbiosis between a country's economy and its banking system implies that their states of health is interwoven. This mutual interdependence makes a review of the trend in the macro economic, an illuminating exercise in the diagnosis of banking system distress. For this reason, we review the trend in some selected macro-economic indicators. Table 4.4 presents the trend from 1990-1994.

TABLE 4.4

SELECTED MACRO-ECONOMIC INDICATORS

Indicator Period	1990	1991	1992	1993	1994
Real GDP (Growth Rate %)	8.3	4.7	3.0	2.3	1.3
Manufacturing Capacity Utilization (%)	43.2	39.4	41.8	37.2	30.4
Index of Industrial Production	127.2	137.3	138.4	138.4	116.3
Net Domestic Credit	17.1	45.3	69.1	91.4	29.2
Broad Money M2	40.4	32.7	49.2	49.8	38.1
Inflation Rate %	7.4	13.0	44.6	57.2	57.0

Sources: CBN Annual Report, 1997.

The table shows a persistent decline in the growth rate of the real GDP, which stood at 8.3 percent in 1990 but had fallen to 1.3% by 1994. As an indicator of the growth rate of the economy, this implies that there was a decline in the rate of real output. This fact is corroborated by both the indexes of industrial production and capacity utilization in the manufacturing sector. Despite this reduced growth in real output, information on some critical monetary aggregates shows that they grew at much higher rate than that of real output, for instance, growth in money supply (M)

and net credit to the economy during the period. This readily explains the trend in the inflation rate, which skyrocketed from 7.4% in 1990 to 57% in 1994 and had remained high all through the years.

Failure to arrest further deterioration as well as resolve the distressed financial condition of banks on the system could have adverse consequences on the banking sector in particular and the economy in general. Some of these adverse consequences are briefly highlighted.

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4.3.1 LOSS OF BANKING CONFIDENCE

The continued existence of distressed banks in the system would erode public confidence and lead to deposit run as well as endanger the survival of other healthy banks. The crisis of confidence in the banking industry would no doubt further worsen the already depressed condition in the economy. Banks in the course of mobilizing financial surpluses, issue claims (securities) on them to the fund owners. Such securities become less attractive in the event of widespread insolvency, thereby increasing the holders risk exposures and also make them lose confidence in the banking system. This clearly paralyses the development of a good banking culture, as the problem of insolvency of substantial proportion of them in an economy could precipitate. Arising from their intermediation, banks generate financial resources and put these at the disposal of deficit economic units who use resources to further the course of economic growth in the form of increased employment of otherwise idle resources and this in turn leads to increased output.

But more importantly, the development will cause the banks cost of intermediation to rise as banks will need to pay higher returns to attract and retain deposits. Coupled with this is the fact that there will also be great and pervasive uncertainty such that the expected returns on financial assets will not be attained. Other indirect costs will also go up as the case of more frequent intervention by the regulatory authorities. In the worst circumstance, the bank becomes terminally distressed, depositors' fund are lost.

4.3.2 DEMONETIZATION

Another serious danger posed by widespread distress among banks is the threat to the development of an efficient payment mechanism. Settlement of transaction will become predominantly cash-based with its associated cost. Also, the effectiveness of monetary policies will be reduced in direct proportion to the extent of loss of confidence in the system. This will be reflected in the instability that will characterize the demand for money and proportion of money in circulation that will be outside the system, as banks no longer serve as safe depositories. This is clearly shown as the total currency outside the bank system rose from 42.6% of the total money supply in 1990 to 59% in 1995 (CBN,1997).

4.3.3 CREDIT MARKET (*Crowding Out*)

The intermediating role of banks and their relevance both in the transmission of monetary policies and in the payment system underscore their importance as well as the problem that insolvency of substantial proportion of them in an economy could precipitate. Arising from their intermediation, banks generate financial

resources to further the course of economic growth in the form of increased employment of otherwise idle resources and this in turn leads to increased output.

The high incidence of non-performing loans would limit the ability of banks to make new lending. Even when they grant new loans such would likely be concentrated with a few large borrowers who would use them to service old debt facilities or sustain unliable enterprises. The effect of this would be to crowd-out some productive sectors of the economy from access to loanable funds vital to the revival of the economy. This can be seen from Table 4.5 that the proportion of classified credit remained at all time high between 1989 to September 1995. Therefore, an industry wide insolvency of banks should be expected to retard the economy's rate of capital formation, reduce the level employment and output, and ultimately the pace of economic growth.

TABLE 4.5

DISTRESSED BANKS CLASSIFIED CREDIT

Number of Distress banks	1989	1990	1991	1992	1993	1994	1995
	7	9	8	16	33	45	61
Proportion of Credit Classified (%)	67.1	72.8	76.5	78.4	63.53	68.4	57.2

Sources: NDIC Annual Report 1995

4.3.4 RESTRUCTURING COST

There will be explicit financial cost to be incurred by the economy in order to resolve the distress problem, this is invariably borne by taxpayers at large. These implications would be more severe for a depressed economy that is already on the path of declining growth.

TABLE 4.6

DISTRESSED BANKS AND RECAPITALIZATION REQUIRED

Variable Period	1989	1990	1991	1992	1993	1994
Number of Distressed banks	7	9	8	16	33	45
Proportion of Credit Classified (%)	1,061.6	1,984.3	2,354.0	5,530.0	13,578.0	16,681.0

Source: NDIC Annual Report

The table provides us with the information on the required capital for the distressed banks. Required capitalization rose from ₦ 1.06 Billion in 1989 to ₦ 16.7 Billion in 1994 and by the first quarter of 1995 the number had risen to about ₦ 24 Billion. The prospect of reviving them is gloomy in view of the present predicament. In these banks, ₦ 47.9 Billion or 24.6% of the entire banking system's total deposits were potentially locked up. The total assets of these banks stood at ₦ 68.5 Billion accounting for 18.3% of the total assets of all banks (NDIC Quarterly 1996).

CHAPTER FIVE

DATA ANALYSIS

INTRODUCTION

The recent increase in the rate of distress banks in Nigeria has refocused attention on efforts to identify problem banks and to predict failures with sufficient lead time for regulators and management to institute remedial action to prevent them from going into insolvency.

A number of factors make an effective statistical warning system desirable, especially for aiding regulatory authorities respond efficiently to initial signs of distress. First, significant changes in a bank's management policies and financial conditions can occur between examinations. Second, an on-site examination is a lengthy and expensive process and not always the most cost-effective method of tracking small, but important changes in a bank's financial condition. Third, although examiners generally are sensitive to developing trends that indicate potential future management or financial problems and normally comment on such matters in their reports, they must necessarily emphasize their findings concerning the actual condition of the bank rather than estimated impact of potential problem. Fourth, an examiner's findings are part of the official record and could provide the basis for the enforcement or other supervisory actions. In contrast, statistical early warning measures can be informal, affording the

opportunity to experiments techniques to uncover financial weakness at its earliest stages.

Moreover, an efficient early warning system can be a useful tool of analysis in the appraisal of bank's financial condition.

The primary objective of this paper is to develop and test early warning models using the logit-analytic approach, that can assist both the CBN and NDIC in identifying potential problem banks based on the statutory monthly returns the banks render to them.

MODEL SPECIFICATION

In particular, bank regulators need a method of identifying banks that are unsound or that show signs of weakness before examination teams are sent into the field. There are varieties of multivariate statistical techniques that can be used to predict a binary dependent variable – a problem (vulnerable, weak or distress) or non-problem bank from a set of discriminatory independent variables. Multiple regression analysis and discriminate analysis are two related techniques in this regard.

One maximum likelihood estimation technique (MLE) that is appropriate for binary choice problems, such as classifying banks into problem and non-problem groups, is the logit model. The objective of the logit model is to determine the conditional probability P, that the i^{th} bank will fail, given a set of k derived balance sheet ratios: X_{i1}, X_{i2}...., X_{ik} for that bank. The model could be expressed thus: let Y_i, Y_2...., Y_n be independent binary

response variables whose probability functions P_1, P_2...., P_n satisfy the equation:

$$Log\left(\frac{P_i}{1 - P_i}\right) = a_0 + \sum_{j=1}^{k} a_j X_{ij} \quad (1)$$

where i = 1,2, ...n, and P_i is given by:

$$Pi = \frac{1}{1 + \exp\left(-\beta_i\right)} \quad (2)$$

with β_i defined as,

$$\beta_i = a_0 + \sum_{j=1}^{k} a_j X_{ij} \quad (3)$$

The coefficient a_j (j = 1,2..,n) measures the effects on the odds of the failure of a unit change in the corresponding independent variable. Thus, the logit model (2) tends to be more preferred to a set of competing alternatives by researchers, especially as a unique maximum always exists for the logit model .Almost any non-linear estimation routine will find the estimated parameters of the model. Specially, the parameters of equation (2) are estimated by maximizing over the a_j's in the log-likelihood function:

$$L = \sum_{i=1}^{n} Y_i \log (P_i) + \sum_{i=1}^{n} (1 - Y_i) \log (1 - P_i) \quad (4)$$

A bank may be classified as weak or sound based on its conditional probability, P_i of failure. A bank is classified as a problem bank if the conditional probability of failure for that bank is greater than an optimal cut-off point, CCP. Following past studies, this study chooses the usual cut off point:

CCP = ½

To report both the estimation and validation results.

DATA SOURCE

This study differs from others, in that instead of using publicly available data, data are obtained from routine monthly data the banks render to the regulatory authority. Also in view of the operational uniqueness such as retail and wholesale banking and the fact that Merchant Banks are prohibited from carrying out certain functions performed by commercial Banks, this study separates the two banks using 1993 data to capture this varying operational characteristic. However, data collected were coded for obvious security and the confidential nature of such materials.

CHOICE OF VARIABLES

Discriminatory Variables Used in the Study:

The variables used in the study are derived from the financial statements in the form of monthly bank returns the licensed banks

render to both CBN and NDIC. A list of these variables, their definitions and their expected signs are reported in Table 1. These variables are expressed in ratio form (percentages). Many of these variables are the same as those employed in various monitoring systems used by bank regulators or in studies elsewhere to predict problem and failed banks [see in particular Jimoh (1993), Nyong (1994) and Sinkey (1979)]. The variables in table 1, reflect various banking characteristics. The first two variables CAR and CLR are capital adequacy measures. The variables LRWA, LQR, LCR, LTA and BDL are measures of the quality and risk of bank's portfolio. Variables LAS, LR and LDR reflect in various ways, the liquidity position of the bank and its ability to respond to liquidity pressures. Variables SFR and TKA reflect the source of a bank's funds, while variable LSL measures the dependence of a given bank on a particular loan category. Lastly, variables ROA and ROC are measures of bank profitability. However, in the computation of ROA and ROC, retained profit (or loss) is used as proxy for earnings since the earning figures for 1993 to 1995 for most of the sampled banks were not readily available.

CONSTRUCTION OF THE DUMMY DEPENDENT VECTOR

In addition to the prior classification by the regulatory authorities of problem and non-problem banks in December, 1993 and 1994, another quasi-independent source using the performance ratings, was also used to support the prior classifications. For example, a bank is classified as a 6-rated bank if it satisfies the prescribed requirements on the six performance criteria variables. In particular, banks with high performance criteria ratings of 6, 5 or 4

were considered sound and those with ratings of 3,2,1, or 0 were adjudged to be problem banks.

Banks with a performance rating of 3 are not believed to be in imminent danger of failure, but do demonstrate a degree of weakness sufficient to mark them as 'problem'. This is important in a monitoring or early warning sense, because these are banks considered most likely to become 2, 1, or zero related. Regarding 3 rated banks (i.e. banks satisfying only three of the six performance criteria) as problem also has the advantage of providing a more stringent test of the model.

TABLE 1: Independent Variables that have Impact on Bank Condition

J	Variable Code	Definition of Variable	Measure of	Expected Sign/1
1	CAR	Total Qualified Capital over Risk Weighted Assets	Capital Adequacy	–
2	CLR	Equity Capital over Total	Capital Adequacy	–
3	LRWA	Risk Weighted Assets over Total Assets	Asset Quality	+
4	LQR	Provision for Bad and Doubtful debt/Total Assets	Asset Quality	+
5	LCR	Provision for bad and Doubtful Debt/Equity Capital	Asset Quality	+
6	LTA	Total Loans/Total Assets	Asset Quality	+
7	BDL	Provision for Bad and Doubtful debts/Total Loans	Asset Quality	+
8	LAS	Treasury Bills & Certificates	Liquidity	–
9	LR	Total Specified Liquid Assets over Total Current Liabilities	Liquidity	–
10	LDR	Total Loans/Total Current Liabilities	Liquidity	+
11	SFR	CBN Overdrafts/equity Capital	Source of Funds	+
12	TKA	Takings/Total deposits and Takings	Source of Funds	+
13	LSL	Loans & Advance to States and Local	Loan Quality	+
14	ROA	Retained profit (or Loss) Over Total Assets	Profitability	–
15	ROC	Retained Profit (or Loss) Over Equity Capital	Profitability	–

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A positive sign means that an increase in the given Variable increases the risk of failure, and a negative sign implies the opposite.

A number of discriminatory variables are selected for testing (see Table 2a). These are variables that past experience indicated were closely associated with financial strength or weakness. The objective is to find the smallest set of variables, which could be used to detect early signs of financial deterioration. For each variable employed, its means, lambda (λ) and standard deviation (σ) are computed from the sample. The values of the variables are then compared with the means for all sampled banks in the study, and the differences are divided by the respective standard deviations of each of the variables. The resulting standardized deviations (or z-scores) are added algebraically to form an overall bank score, SF in which the component variables are weighted equally. That is:

$$SF_i = \sum_{j=1}^{k} C_j \frac{\left(X_{ij} - \lambda_j \right)}{\sigma j}, \quad i = 1, 2 \ldots\ldots\ldots n \qquad (6)$$

where C_j takes the value of 1 or –1, as shown in Table 2a, a score is then obtained for each of the sample banks from the financial data for December, 1993 and December, 1994 for both commercial and merchant banks.

Following Korobow et al (1976), we construct an observed probability YPD, for each bank in the sample in order to obtain the

dummy dependent variable vector YPD. The observed probabilities are obtained as a binary choice variable taking the value of 1 for vulnerability (problem bank), and 0 for resistibility (non-problem bank) as follows:

$$YPD_i = \begin{cases} 1 & \text{if } SF_i > 0 \\ 0 & \text{Otherwise} \end{cases} \qquad (7)$$

Where $SF_i = 0$, is consistent with the cut-off point, CCP defined in equation (5). These YPD_i values are then compared with the regulatory authorities' a priori classification of sound and distressed banks in both 1993 and 1994. Table 2b presents the cross-tabulation of the scoring function and a priori classification of banks by the regulatory authorities as at December, 1993.

It is of interest to observe that apart from identifying the weak commercial and merchant banks as perceived by the regulatory authorities, the scoring function has also identified 7 commercial and 3 merchant banks that were marginally weak, but were hitherto given the bill of health by the regulatory agencies. Thus, the dependent variable vector YPD for the Commercial Banks in 1993 consisted of 24 weak banks, with values of 1 and 36 non-problem banks with values of zero. For Merchant Banks, the model used 15 distressed banks and 35 healthy banks to obtain the YPD vector for the non-linear estimation of the logit model.

TABLE 2(a): Construction of the Scoring Function, SF Defined in Equation (6)

J	X_{ij}/1	Definition of Variable	Measure of	Expected Sign/1
1	CAR	Total Qualified Capital over Risk Weighted Assets	Capital Adequacy	-1
2	LRWA	Risk Weighted Assets	Asset Quality	+1
3	LCR	Provision for bad and Doubtful Debt/Equity Capital	Asset Quality	+1
4	LR	Total Specified Liquid Asset	Liquidity	-1
5	LDR	Total Loans/Total Current Liabilities	Liquidity	+1
6	SFR	CBN Overdrafts/Equity Capital	Source of Funds	+1
7	LSL	Loans & Advance to States and Local Government/Loans	Loan Quality	+1
8	ROA	Retained Profit (or Loss)/Total Assets	Profitability	-1

These variables have been standardized through the transformation $z = (X.j - \lambda)/\sigma$, where λ and σ are the *mean* and *standard deviation* of the independent variable X.j, respectively.

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Table 2(b): A Priori Identification of Problem Banks and the Scoring Function SF, in December, 1993

A Priori	**Commercial Banks**			**Merchant Banks**		
	SF			SF		
	Weak	Sound	Total	Weak	Sound	Total
Weak	17	0	17	12	0	12
Sound	7	36	43	3	35	38
Total	24	36	60	15	35	50

MODEL ESTIMATION

The predicted probabilities of failure (or weakness) are obtained by using the non-linear regression approach based on the model defined in equation (2) and (3) respectively. Our priori expectation on the parameters of the model could easily be deduced from equation (2) and (3) that, as β_i move towards infinity, the chances of bank i failing increases. Therefore, for β_i to attain its maximum value, the logit regression constants a_j (j = 1, 2, ..., k), in equation (3) are expected to behave as in Table 1. Equation (2) is a point estimates of the probability that bank i will fail, given the set of financial ratios for the bank. This probability estimate will always be between zero and one, regardless of the value of the optimum linear combination of the independent variables given in equation (3). The purpose of the logit regression is to estimate the relationship between the bank financial variables (X_{ij}) and the observed probabilities YPD_i to obtain the predicted probabilities P_i. This relationship is assumed to be a continuous function, approaching zero for large negative scores (SF) and approaching

one for large positive scores. The non-linear maximum likelihood estimation technique in MICROFIT software was employed to estimate the parameters (aj, j = 0, 1, 2, ...k) of the logit model defined in equation (2); with the observed (constructed) probabilities YPD as the dummy dependent variable.

The parameter estimates of the final logit models for Commercial and Merchant Banks as well as the summary statistics comprising: the analog R^2 –adjusted, the maximum of the log likelihood function, the residual sum of squares and the F-statistic are presented in Table 3. From the summary statistics presented, it is clear that the overall results appeared to be satisfactory at the 1% level; with the discriminatory variables explaining over 77% of the variation in the dummy dependent vector, YPD.

From the logit model, it is seen that five of the discriminatory variables have correct signs consistent with a priori theoretical expectation in the case of both commercial and merchant banks. As shown in this table, five variables are important in distinguishing weak from sound commercial banks. These variables are CAR, LRWA, LAS, LSL and ROA.

The capital adequacy ratio (CAR) is characterized as capital adequacy, risk weighted assets to-total assets ratio (LRWA) as asset quality, the liquid asset structure ratio (LAS) as liquidity, loan and advances to state and local governments-to-total loans and advances ratio (LSL) as loan category, and retained profit (loss) to-total assets ratio (ROA) as profitability. One interesting result is that four explanatory variables (discriminatory factors) in the

analysis bear close resemblance to the CAMEL components: capital adequacy, asset quality, earnings and liquidity, while the loan category factor indicates that increased loans to states and local governments have contributed to the distress condition of commercial banks.

Like the commercial banks, five variables are also important in distinguishing weak merchant banks from sound ones. The variables are CAR, LCR, LTA, LDR and TKA. The capital adequacy ration (CAR) is an indicator of capital adequacy; both loans-to-total assets ratio (LTA) and provision for bad and doubtful debt-to-equity capital ratio (LCR) asset quality; loans-to-deposit ratio (LDR) liquidity; and takings-to-total deposits and takings ratio (TKA) is source of funds. It is noted that while four of the CAMEL components were significant variables in the case of commercial banks, only capital adequacy, asset quality components of CAMEL seem to be important determinants of merchant banks financial conditions in Nigeria. One result from the analysis suggests that the merchant banks' sources of funds, characterized by takings (*money at call takings, takings from discount houses and inter*-bank takings)-to-total deposits and takings ratio (TKA), is very important factor in determining the financial condition of a merchant bank. Thus, increased takings will increase the risk of vulnerability (or distress) of merchant bank. It is noted also that other than the capital adequacy ratio, the commercial and merchant banks have different explanatory factors of distress unique to them.

TABLE 3: The Logit Regression Results of the Model Defined in Equation (2) Using the 1993 Data:

	Commercial Bank			Merchant Banks		
Variable	a-value	t-value	p-value	a-value	t-value	p-value
Constant	-27.2230	-2.977	0.004	-11.0027	-2.688	0.010
CAR	-0.4721	-2.811	0.007	-0.1381	-1.962	0.056
LRWA	0.5439	3.135	0.003	-	-	-
LCR	-	-	-	0.0023	1.239	0.222
LTA	-	-	-	0.1346	2.588	0.013
LAS	-0.1591	-1.892	0.064	-	-	-
LDR	-	-	-	0.0547	2.581	0.013
TKA	-	-	-	0.1323	2.299	0.026
LSL	2.8029	2.337	0.023	-	-	-
ROA	-0.5848	-1.720	0.091	-	-	-
Analog R^2-adjusted			79.5%			77.0%
Maximum of Log-Likelihood			7.824			6.6280
Residual Sum of Squares			2.7065			2.2457
F-Statistical F (5,54):			46.661	F(5,44):		33.8340

The F-Statistics is significant at the 1% level. The t-values reported are the asymptotic t-values, while the p-values give the approximate significance level, α. For example, the constant parameter is significant sat the 1% level for both commercial and merchant bank's logit model. Also, the analogR^2 -adjusted proposed (by Pindyck and Rubinfeld, 1981: *Econometric Models and Economic Forecasts,* New York, Pg. 312) as a measure of goodness-of –fit for logit models suggest that the discriminatory variables have very high explanatory power. This measure is calculated in the same manner as the classic R^2-adjusted measure for the linear regression model.

APPRAISAL

Results of an earlier analysis by Doguwa (1996) shows bank weakness and or failure are attributed to mainly poor management which manifests in excessive credit and liquidity risk, poor loan quality and sluggish internal generation of capital. These types of weaknesses are reflected over time in the various financial ratios reported in the banks.

Using the statutory monthly returns which the reporting banks rendered to the Central Bank of Nigeria for the month of December, 1999 and January, 2000 for Merchant and Commercial Banks respectively, we computed the discriminatory factors for each of these banks. The model is then applied to the listed factors to obtain the failure probabilities of the banks. These failure probabilities and conditions are presented in table 4. The failure probabilities are then used to classify the bank as weak or sound using the following decision rule.

A bank is considered terminally distressed TD, if its probability of failure is unity. If probability is greater than or equal to 0.85, but less than unity, then the bank is classified as highly distressed (H.D). Probability greater than or equal to 0.5 but less than 0.85 is an indicator of distress (D). A bank is likely to be mildly distressed (M.D) if the probability is less than 0.5 but greater or equals to 0.25. However, a bank is considered sound if its probability of failure falls below 0.25.

MERCHANT BANKS – [DECEMBER, 1999]

BANKS	*FAILURE PROBABILITY*	*CONDITION*
A	0.9577672	HD
B	0.0000051	S
C	0.0000639	S
D	0.0286475	S
E	0.3966348	MD
F	0.0148855	S
G	0.0000003	S
H	0.0024602	S
I	0.0420475	S
J	0.0700451	S
K	0.7983387	D
L	0.0006086	S
M	0.3629441	MD
N	0.0132738	S
O	0.1634933	S
P	0.0001426	S
Q	0.0115750	S
R	0.1663833	S
S	0.0119217	S
T	0.0000010	S
U	0.0533599	S
V	0.0102220	S
W	0.1316023	S
X	0.0088713	S
Y	1.0000000	TD
Z	0.9999948	TD
AA	1.0000000	TD
BB	0.0663611	S
CC	1.0000000	TD

COMMERCIAL BANKS - [January, 2000]

Table 4b

BANKS	*FAILURE PROBABILITY*	*CONDITION*	*BANKS*	*FAILURE PROBABILITY*	*CONDITION*
A	0.0034	S	MM	0.0000	S
B	0.0000	S	NN	0.0000	S
C	0.0342	S	OO	0.0000	S
D	0.0000	S	PP	0.0000	S
E	0.9887	HD	QQ	0.0000	S
F	1.0000	TD	RR	0.0000	S
G	0.0092	S	SS	0.0000	S
H	0.0005	S	TT	0.0002	S
I	0.0000	S	UU	1.0000	TD
J	1.0000	TD	VV	1.0000	TD
K	0.0200	S	WW	0.0000	S
L	1.0000	TD	XX	1.0000	TD
M	0.9998	HD	YY	0.2063	S
N	0.0142	S	ZZ	0.0000	S
O	1.0000	TD	AAA	1.0000	TD
P	0.0181	S	BBB	0.0242	S
Q	0.5915	D	CCC	1.0000	TD
R	0.9997	HD	DDD	0.0000	S
S	0.0001	S	EEE	0.0000	S
T	0.0000	S			
U	0.0323	S			
V	0.9991	HD			
W	0.0000	S			
X	0.0000	S			
Y	0.0000	S			
Z	0.0046	S			
AA	0.9933	HD			
BB	0.0001	S			
CC	0.0007	S			

DD	0.0000	S			
EE	0.0013	S			
FF	0.2103	S			
GG	0.0000	S			
HH	0.1706	S			
II	0.0001	S			
JJ	0.0000	S			
KK	0.0000	S			
LL	0.9153	HD			

FINANCIAL CONDITION:

Table 5

BANKS	*TD*	*HD*	*D*	*MD*	*S*	*TOTAL*
COMMERCIAL	9	6	1	-	41	57
MERCHANT	4	2	1	2	21	30
TOTAL	13	8	2	2	62	87

The above table 5 gives us a summary of table 4A and 4B showing the financial condition of all reporting commercial and merchant banks in January 2000 and 1999 December respectively.

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CHAPTER SIX

6.1 SUMMARY

The study commenced with the general introduction by laying the foundation of the research, which among other things include the objective, methodology, statement of the problem and structure of the work.

Tracing previous attempts at work related to the topic, we generally relied upon the works and experiences of other countries, which had passed through similar experiences as well as other existing literature on the subject as there was a general dearth of relevant literature especially in areas of measuring distress. This explains why the study is more or less breaking new grounds in terms of identifying problem banks and predicting failures with sufficient lead time for regulators and management to institute remedial action.

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Reviewing the health of Nigerian Banking Industry, records have it that there was rapid growth in the number of indigenous banks between 1947 and 1952 and that the banks collapsed with the same rapidity with which they were established. The banking Act of 1952 and the establishment of Central bank of Nigeria in 1959 jolted to life the banking industry. Through an in-depth assessment of the financial condition of Nigerian banks, the usual parameters of CAMEL were examined and found to be deficient in most banks. In looking at the framework for ensuring banking confidence and stability within the system, reasons for regulations and the different organs responsible for such regulation were given.

We found that one of the principal rationales has been to ensure the safety and soundness of the banking system as a whole.

In using the logit – analytic approach to illustrate an early warning signal to detect distress syndromes in commercial and merchant banks in Nigeria. The logit model measures the condition of individual financial institution .From then we assigned each of them a probability of failure, based on the five discriminatory variables found to be important in distinguishing between weak and sound bank .The analysis was carried out and the result was consistent with our earlier prediction.

6.2 POLICY RECOMMENDATION

Despite the various causes of distress and economic implication of its existence, there would appear to be a prospect for a long-term recovery of the distressed banks. The following underlisted factors, we are of the strong belief, would enhance the future viability and also contribute to the growth of the banking industry in particular and the Nigerian economy in general.

(i) The failed banks (Recovery of Debts and Financial Mal-practices) Decree No. 18 of 1994 has provide an impetus for restoring accountability and discipline in the system and therefore has assisted in revamping the system. The prevention of banking failure in the future would depend to a large extent on the sustenance, expansion and improvement of the failed bank tribunal. However, this decree alone cannot ensure banking confidence nor succeed in shortening

the time except when the shareholders, practitioners, depositors and public commitment to change our orientation and tune our minds to seeing a good society at the end of the day.

(ii) Rekindling of discipline through healthy competition, in which the growth of banks is not rushed as in the period between 1986-1991. The market-based solution to the problem of distressed banks is likely to gain widespread acceptance in future whereby the Directors and Managers would likely be construed as professionals.

(iii) Review of the Banking Deposit Insurance decree to provide the regulatory authorities with sufficient powers for timely and resolute intervention in distressed banks. In addition, the Federal Government should stop interference or the delay associated with distress resolution proffered by the regulatory bodies.

(iv) An increase in the general public awareness about the existence of distress in the banking sector would compel the banks to operate on a safe and sound manner in order to attract patronage, remain profitable and competitive.

6.3 PROSPECT FOR SURVIVAL AND GROWTH

There are some basic issues that any distress resolution arrangement must address for it to hold any prospect for the successful revival of problem banks (distressed). The design of such framework must demonstrate a thorough appreciation of the distinction between preventive and remedial/measures.

Preventive measures essentially are directed at averting distress and so they are part and parcel of normal regulatory framework. Whereas remedial measures are directed at resolving crisis once they crystallized. These remedial measures must take cognizance of existing legal and other institutional inhibitions. They should also contain incentives for the stakeholders in the distressed banks to ensure their support for any resolution effort adopted. However, care must be taken with such incentives, so as not to impair market discipline and or worsen moral hazard. The distress resolution framework embodying these remedial measures should also be sustainable.

Another equally important consideration is the macro-economic and socio-political stability. These twin macro factors are so crucial that they cannot be over-emphasized. The uncertainties associated with instability in either of these factors worsen business prospects for both the banks and the real sector operators that the banks are supposed to serve. Such uncertainties generate widespread insolvency among businesses and even individuals. These are then reflected in increased non-performing credits for banks, reduced reservoir of mobile financial resources and even increased incidence of frauds arising from increased social pressure on bank staff. Macro economic policy instability in particular is capable of sending conflicting signals to allocable mechanism leading to sub-optimal economic decisions being made.

In the light of the legal enactment relating to distress resolution, we submit that these laws rightly emphasize the "stick" but ignore the

carrot in distress resolution by not specifically providing for the various stakeholders especially in respect of merger and acquisition option. A recent study by Orota (1995) has shown that considerable scale and scope economies exist among a group of banks. This lends credence to the viability of other merger options. The provision of such incentives will also inspire sincere commitment of the stakeholders to resolution efforts and thereby improving their chances of success.

Equally important issue to consider is the sustainability of the current distressed banks resolution framework. This has to do with its funding .Funding has been relied on the financial resources of the Central Bank of Nigerian and the Nigerian Deposit Insurance Corporation. Considering the enormous cost involved, it is clear therefore that the sustainability of any distress resolution arrangement depends on having an adequate funding scheme. By the very nature of the problem, it is apparent that it cannot be self-financing. As a matter of fact, distress resolution should be seen as desirable public good especially when it threatens to become systemic in nature. These considerations make a case for specific budgeting allocation for a scheme, apart from the fact that some few developing countries have rescued their banking system. However such financial support should be sterilized to avoid worsening of the inflationary trend.

In the early pre-deregulatory era, problems afflicting banks were resolved with the preventive measures that ordinarily were obtained in normal banking systems in particular, the lender of last resort role of the Central Bank. This has been used both explicitly

and implicitly through overdrawn position at the Central Bank by problem banks. The government support policy for banks then offered considerable cushion for ailing banks at tax payers expense and regarded exit of such banks as almost inconceivable. Though this policy stance may have been valid when there were relatively few banks and government ownership was dominant, it cannot be defended successfully in the post-deregulation era when private ownership dominates a much more expanded banking system.

Even with a more liberal bank licensing policy in the era of economic deregulation, the supervisory framework merely reinforced the preventive measures. Such is the essence in the establishment of the Nigerian Deposit Insurance Corporation which in the main, was meant to protect and guarantee small deposits so that such depositors would not, out panic, generate a deposit run on banks thereby causing banking system instability. The emphasis on preventive measures was mainly due to the banking policy stance and the absence of generated distress among the banks as we now witness.

Lastly, government should endeavor to minimize policy reversals and policy shocks. The uncertainties generated by this instability go a long way in discouraging investment in the real sectors. Complimentary to this is the socio-political instability. The fallouts of the 1993 political upheaval on the banking system stability remain fresh in our memory.

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