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LOAN MANAGEMENT IN NIGERIAN BANKS:

A STUDY OF THE EFFICIENCY OF COMMERCIAL

BANKS' LENDING FUNCTION IN A DEVELOPING ECONOMY

by

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TO MY PARENTS

MICHAEL AND IBITOLA ADEWUNMI

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GENERAL NOTES

- Symbols (a)
 - = nil
 - * = not available
- (b) Rounding

Totals may differ from the sum of the constituent items because of rounding or multiple responses from interviewees

(c) Currency equivalent

N1 = EO.781

(d) Numbering

> Main chapters, tables and figures in Arabic numerals Appendix tables and figures in Roman numerals

- (e) List of abbreviations
 - LDCs Less Developed Countries
 - 2 Organisation for Economic Co-operation OECD and Development
 - 3 IBRO Inter-bank Research Organisation
 - 4 NIDB Nigerian Industrial Development Bank
 - NBCI Nigerian Bank for Commerce and Industry
 - 6 NACB Nigerian Agricultural and Co-operative Bank
 - 7 FMBN Federal Mortgage Bank of Nigeria
 - NPF National Provident Fund
 - . 9 FSB Federal Savings Bank
 - 10 POSB Post Office Savings Bank
 - Local Government AuthoGross Domestic Product ll LGA Local Government Authorities
 - 12 GDP 13 CBN
 - Central Bank of Nigeria
 - 14 CDs Certificate of Deposits
 - 15 OFN Operation Feed the Nation
 - 16 SSIS
 - Small Scale Industry Scheme Agricultural Credit Guarantee Scheme 17 ACGS
 - Investment Preference Test
 - 18 IPT 19 SLRQ Simulated Loan Request Questionnaire
 - 20 SQI Structured Questionnaire Interview
 - 21 ECGD Export Credit Guarantee Department
 - 22 MAN Manufacturers Association of Nigeria
 - 23 NSE Nigerian Stock Exchange
 - FOS 24 Federal Office of Statistics
 - 25 CSNRD Consortium for the Study of Nigerian Rural Development
 - 26 A or AGRIC Agriculture
 - M or MANUF Manufacturing 27
 - 28 TERM DEPOSITS - Savings plus Time deposits

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"Unless the Lord builds the house, its builders will have toiled in vain."

Psalm 127-1

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SUMMARY

This study investigates the efficiency of commercial bank lending in Nigeria against the background of the generally held a priori assumption that there is an important role for these institutions in the process of economic development. As the primary aim of the study is to identify and define approaches for improving the lending function in Nigerian banks, it was first necessary to examine various facets of this activity. Thus an appraisal of the banks' lending record was undertaken. Through a series of surveys the lending attitudes and practices of the bankers were also investigated. To obtain an independent but complementary view on these issues, an empirical study of the perception of bankers and their lending services by their customers was conducted. Finally a comparative study of loan planning and control in U.K. and Nigerian banks was undertaken in order to draw out possible lessons for Nigerian banking practice.

These enquiries revealed important weaknesses in the loan management of Nigerian banks. It appeared that their lending was neither adequate nor appropriate. Loan planning and control were also found to be either non-existent or deficient in the banks.

Building on these findings the next stage of this research concentrates on measures that could be taken to improve bank lending efficiency. To test the feasibility of the hypothesis that Nigerian banks could be more efficient and yet remain safe and profitable, a hypothetical 'efficient' bank was created and simulated in both normal and crisis situations. The simulation

results confirmed this hypothesis.

It is concluded that there is a need for the government to provide essential infra-structural support to both lenders and borrowers. The research results also point to the view that the banks should improve their management practices particularly in the light of the practices in other developed and developing countries.

CHAPTER 1

INTRODUCTION

1. BACKGROUND

The study of banking is as old as the industry. Mints (1970, p. 9) suggests that "attempts in English speaking countries to explain the operations of commercial banks began with the inception of these institutions, that is to say, in the second half of the seventeenth century in Great Britain and in the 1780s in the United States." It was not until much later and beginning with the seminal work of Schumpeter (1934) that attention began to be focused on the relationship between the financial system and economic growth and development. in most economic debates there have emerged many schools of thought on this issue and particularly on the role of the financial system in the process of economic growth. This almost traditional tendency to dissent among economists has been helped in this case by the plethora of interacting variables that act jointly to determine the size, nature and pace of economic growth. The most contentious point in these debates today, however, is the weight to be assigned to the contribution of the financial system in economic development rather than the fact of the correlation of the two sectors (see Cameron, 1972).

Because of the greater need for rapid development in less developed countries (LDCs), these countries have provided rich case study materials for students in this field. Apparently in view of the important intermediation role assigned to the financial systems of most of these countries, these studies have generally started off with the implicit assumption that the financial systems have a causative role in these countries'

development efforts. The studies have gone from this base to appraise the role of the financial systems in LDCs. To name only a few, these include Ojo (1974) on Nigeria; Taylor (1972) on Sierra Leone; Islam (1973) on Pakistan; Bourne (1969) on Jamaica; and Abdi (1977) on Eastern Africa.

All of these studies have three notable features in The first is that they have all been very omnibus in nature. Some have either sought to enquire into the role of all aspects of the financial system or systems. Others have been less ambitious but still considerably wide in scope. Many of these have concentrated on the role of commercial banks as financial intermediaries, giving attention to various facets of their activities - deposit mobilization, lending, etc. goes without saying that studies of this nature can hardly be expected to probe deeply into important aspects of commercial banking such as lending. A second feature of these studies is that they have sought to answer the question: how are the financial systems or institutions performing? but without asking why? This is probably to be expected given the very wide-ranging nature of these enquiries. Finally, to a very great extent, these studies have relied on published aggregate data and neglected the views of bankers and customers. Inevitably they thus conducted their enquiry with the "detached viewpoint usually adopted by economists in analysing the behaviour of economic units." (Cohen and Hammer, 1966, p. 117). One can hardly quarrel with this approach given the fact that they were mainly concerned with the 'how' rather than the 'why' of the operations of financial systems and institutions.

2. OBJECTIVES OF THIS STUDY

It is against this background that the present study is conceived. An attempt is made to further complement these undoubtedly significant and useful pioneering efforts; as well as develop and improve on the insights they provide into the working of the commercial banking system. The primary aim of this study is to enquire into the efficiency of commercial bank lending in Nigeria. Put differently, the basic question this enquiry seeks to answer is whether the commercial banks through their lending activity are efficiently helping economic development efforts in Nigeria. As much as data availability permits, in answering this question special attention will be paid to the agriculture and manufacturing sectors. This is in view of the crucial role these sectors play in the economic growth and development of Nigeria (see Chapter 5). The time period—of main concern to this investigation is 1960-1979.

Like previous studies an attempt is made to examine how banks perform their lending functions, using the records of their operations. This is to facilitate an appreciation and understanding of why they operate the way they do. Unlike earlier studies, however, the focus is on one and indeed the most important aspect of the commercial banks' operations—lending. On a scale rarely undertaken by previous studies of this kind in LDCs, the bankers and their customers are involved in this enquiry. This is so that first hand information about how and why they relate to each other the way they do, can be obtained.

The orientation of this study is both positive and normative. It is positive in the sense that attempts are made to learn and analyse existing lending practices and the banker-

customer relationships in order to answer the question: "What is?" These efforts are made to provide answers for important questions such as: Do Nigerian commercial banks lend enough in the aggregate? Do they link this lending to national goals? How do banks appraise the creditworthiness of their clients? What extra-lending services do the banks provide in a deliberate effort to improve the creditworthiness of their customers and increase the volume of creditworthy projects in the economy? How do customers perceive their bankers?

It is also normative in the sense that it is policyoriented, that is attempting to answer the question: What ought
to be? particularly in the light of "what is". To help support
the rational suggestions about "what ought to be", this study
appropriately uses as a backdrop the 'state of the act of bank
management' in the U.K. and to a lesser extent in the countries of
the Organisation for Economic Co-operation and Development (OECD).
The aim is to see what lessons regarding loan management
techniques, rather than practices, can be learnt.

One of the big constraints of economic studies in LDCs is data availability. The infrastructural facilities — institutions, systems and procedures — for the generation and dissemination of economic statistics are, to put it mildly, poor. In addition to this problem, academic studies such as this are very often seriously handicapped by the fact that they do not receive the kind of financial support that will enable useful, extensive fieldwork. Because of these constraints, this study has had to use macro-analyses to augment the main micro-analyses. That is to say, aggregate statistics have had to be employed as a basis for analysing the behaviour of the

institutions in addition to the cross-sectional and other empirical micro-level data used.

3. THE RATIONALE FOR THIS STUDY

There are many good reasons why this study focuses on commercial banks and their lending function. The first reason is the politico-economic strategy of Nigeria which is based on the often-vaguely defined philosophy of mixed economy. The one thing that is clear about the economic arrangements in a mixed economy is that an important role is assigned to the private sector and by implication to the financial system, in general, and the commercial banks, in particular.

The commercial banks have traditionally and will in the foreseeable future, play a dominant role in the Nigerian financial system. This is because they represent the core of the system (see Chapter 5). In 1975, for instance, the institutions accounted for 86.6 and 85.4%, respectively, of institutionalised savings and the banking system's credit to the economy (see tables 5.4 & 5.5 Furthermore they account for a significant portion of the money supply in the form of demand deposits (see also table 5.12) and are the conduit via which monetary policies are effected. In the light of these, Roussakis's (1977, p. xiii) statement that "no other financial institution contributes more markedly to the successful functioning of a nation's economy than does its commercial bank" is as true for Nigeria as it could be for any other country. Such an important sector of the economy would appear to deserve consistent and continuous studies of this nature.

In spite of this evidently pre-eminent place of commercial banks in the Nigerian economy, there have emerged in the last

two decades a large number and variety of government sponsored specialist financial institutions to fill credit gaps in the economy. Historically, it is known that new financial institutions are established, in the main, to meet unsatisfied and/or inadequately satisfied credit and other needs of the economy. Besides, the government has indigenised the banking system more markedly during the last decade, mainly because of the system's inability and/or unwillingness to meet the financial intermediation needs of the economy (see Nwankwo, 1980, pp. 70-81). All these seem to raise questions about the efficiency of the commercial banks and thus help to justify the relevance of an enquiry of this kind.

The emergence and growth of new credit institutions may not for some time to come, sufficiently fill up the gap left by the commercial banks. Besides the commercial banks are comparatively long established; they possess a corps of trained personnel, and employ time-tested procedures and principles in their business. They, therefore, have the basic capacity for performing efficiently the financial intermediation role in the economy. Also, in comparison with government sponsored credit institutions, the commercial banks, in spite of indigenisation, are still relatively non-political institutions. All these add up to one thing: properly-oriented, these institutions should be able to perform to the standard of efficiency expected of them.

Of all the numerous functions of the commercial banks, the lending operation constitutes the focus of this study. The most obvious reason for this is that, loans and advances are by far the largest single item in the asset structures of Nigerian commercial banks. Lending also deserves the special attention

offered by this kind of study because commercial banking in Nigeria is still basically a profit making business and loans and advances are the most profitable assets for the employment of banks' funds. At the same time, loans and advances are the most risky assets in a bank's portfolio. Indeed, "in no facet of its operations can a commercial bank suffer sizeable losses as quickly as it can on its commercial lending operation" (Behren, 1974, p. 5). Lending is also important from a different viewpoint. There is no better way in which banks can contribute to the growth and development of their environments than by providing productive investments which result in the promotion of the welfare of the people. The practical problem of measuring loan-deposit feedback, i.e. the new deposits created by new loans, still looms large. Following empirical studies by, amongst others, Robertson (1970) and Bradley and Crane (1975), no one can seriously dispute the evidence that new loans generate new deposits. In addition it is also true that "lending is instrumental in creating and maintaining good deposit relationships which are essential for the furthering of bank lending. The close and continuing contact established with the borrower is also instrumental in broadening the market for other bank services" (Roussakis, 1977, p. 96). From these self-interest viewpoints, lending is important to bank management as much as it might be to the economy as a whole.

4. A NOTE ON INTEREST RATES

In most developed countries

[&]quot;... the range of rates that a bank may charge on various kinds of loans will be largely determined by forces beyond its control, that is, the level of rates in the market and the forces of competition. Within these limits, the individual bank retains a

significant degree of flexibility for establishing interest rate policies that will help to determine the volume and character of the bank's loan portfolio and to bring about changes therein over time."

(Crosse and Hempel, 1973 p. 195).

Given this kind of operations scenario, interest rates policies are an endogenous and important factor in the model of the commercial bank lending decision.

This picture, however, differs wholly from the situation in Nigeria and many other developing countries. In Nigeria interest rates are administered (see Falegan, 1978, pp. 15-30). At the beginning of every financial year (formerly in April but now in January) credit guidelines which also contain the interest rate structure directives are sent to all banks stating that "until further notice, the following interest rate structure shall be in force." (Monetary Policy Circular No. 10 for 1978/79 fiscal year p. 6). This directive on interest rates specifies the minimum and maximum borrowing and lending rates for the banks (see table V-1). Furthermore, the methods for calculating these rates are also specified. For instance, the 1978/79 credit guidelines directed that "only the Reducing Balance Method shall continue to be used to calculate interest charges on loans payable in agreed instalments." (p. 7).

There are arguments for and against administered interest rates in developing countries (see, for, Moore (1968), Ojo and Adewunmi (1980a) and, against, McKinnon (1973) and Shaw (1973)). It is not the intention of this researcher to contribute to this debate here. What is more important to this study is the reality of administered interest rates which Nigerian commercial banks have always and still continue to live with. In the light of this state of affairs, interest rates can, to all intents and

purposes, be regarded as an exogenous factor in lending decision making in Nigeria. It is for this reason that this study has very sparingly been concerned with the role of interest rates in the management of loans and advances in Nigeria and other countries in the comparative studies.

5. OUTLINE OF THE STUDY

This work is divided into 13 chapters. Chapter 2 presents a broad, introductory picture of the methods of analysis employed. The next two chapters are devoted to surveys of the literature. Whilst Chapter 3 is concerned with a review of the literature on the role of finance in economic development, Chapter 4 looks at the literature on lending concepts, principles and practices. These two chapters provide the essential analytical framework for the appraisal of commercial bank lending operations in a developing environment.

For an appreciation of the context of this study, Chapter 5 provides a survey of the Nigerian commercial banks' lending environment. In addition to providing a picture of the economic and financial system within which the banks operate, this survey also highlights the dominant role played by them in the overall financial intermediation activities in the country. Chapter 6 follows this up with an appraisal of aggregate and sectoral analysis of commercial bank lending during 1960-1979.

The empirical results on the liquidity preference of the commercial bankers and the relationship of this attribute to their lending practices are analysed in Chapter 7. Chapter 8 is a comparative study of planning and control of loans and advances in the U.K. and Nigerian commercial banks.

The next three chapters are devoted to simulation

exercises aimed at examining the proposition of the study.

SOFI, the simulation model used for these exercises, is
introduced in Chapter 10. The proposition that Nigerian commercial banks could, without "damage", become more aggressive is evaluated in Chapter 11, and contingency-tested in Chapter 12.

Finally, Chapter 13 concludes with a summary of the main findings and the associated recommendations.

CHAPTER 2

METHODOLOGY

1. INTRODUCTION

This chapter introduces the methodology of the analysis used in examining the hypotheses of this study. These hypotheses are stated in the next section. Section 3 considers the general concept of efficiency and its relationship to the banking industry. This is of paramount importance because of the various interpretations given to this concept. Although the word "efficiency" is an everyday one ".... problems involving ideas of efficiency are so many and so intimately related to each other that it is easy to slip from one sense of the word to another, and so to confuse issues in the discussion." (Hall and Winsten, 1959, p. 71). Finally in Sections 4 and 5, respectively, the samples for the empirical study and the methods of data gathering used are stated.

2. THE HYPOTHESIS OF THIS STUDY

In Chapter 1, the purpose of this study was stated as that of enquiring into the efficiency with which Nigerian banks perform their lending function and thus aid economic development. The basic hypothesis of the study can thus be stated as:

That the Nigerian commercial banks are inefficient in their lending function and thus contribute less than they should reasonably be expected to the country's economic development.

The negative form of this proposition has no special significance and is chosen only for convenience. This broad hypothesis can, however, be broken down into a collection of more easily handled

and verifiable propositions as follows:

- Hypothesis I. That the commercial banks have not sufficiently helped in meeting on the aggregate the finance needs of government development strategies and plans, especially in ensuring that resources at their disposal flow adequately into the "preferred" sectors of the economy.
- Hypothesis II. That the commercial banks have not sufficiently helped in making investment funds available for the development of the strategic sectors of agriculture and manufacturing.
- Hypothesis III. That the commercial banks have not sufficiently provided the essential lending related services to their customers especially in the agriculture and manufacturing sectors.
- Hypothesis IV. That the commercial bankers' attitude to development financing is orthodox and not conducive to required and attainable levels of development.

3. THE CONCEPT OF EFFICIENCY

The need to measure the efficiency of economic systems is important both to the academic and the policy maker. The academic arguments and delates on the relative efficiency of industries and firms must be based on a well defined measurement of the concept. The policy maker will consider as most economically rational the allocation of resources to different uses if he can determine the relative efficiency of the beneficiary.

units. In particular

"the policy implications of studies of economic efficiency in the banking industry extend over both the micro and macro economic levels. If the efficiency of different groups of banks is measured, it is possible to determine by how much banks could be expected to expand their services through appropriate reorganisation or modification of the regulatory environment without absorbing additional resources in the aggregate. One could also draw policy recommendations on the desirability of one type of banking system over another."

(Richard & Villanueva, 1980, pp. 315-316)

This concern of all managers of resources, be it on the economy, the industry or firm level, as well as of the academics, stems from the reality of the scarcity of productive resources. In all, to be able to solve resource allocation problems, some measuring rod, based on a reasonably well defined concept of efficiency, is a prerequisite.

Important as it is from both the academic and practical viewpoints, the concept of efficiency has remained loosely defined in the literature (Farrel, 1957). The concept today means different things to different people in different circumstances. As Lau and Yotopoulos (1971, p. 94) put it "..economic efficiency is an elusive concept in which the economist, the engineer and the policy maker all have great stakes." A few examples will help make the point. The cost accountant, for instance, uses the ratio of standard cost-to-actual cost per cent to measure productive efficiency (see Horngren, 1972, pp. 186-An engineer describes the efficiency of his machine by the relation of output-to-theoretical capacity or output/ theoretical capacity per cent (Amey, 1970). To the economist, the economic efficiency of a firm or industry can be broken down into two separate components - 'price efficiency' and 'technical efficiency'. "The former measures a firm's success

in choosing an optimal set of inputs, the latter its success in producing maximum output from a given set of inputs." (Farrel, 1957, p. 259). However, "once the adjective 'economic' is dropped, efficiency becomes a rather nebulous concept, meaning only 'success in achieving planned objectives' whatever they may be." (p. 259).

3.1 Efficiency in banking. What can be appropriately described as the path-breaking study in this area is the work by Alhadeff (1954) on monopoly and competition in banking. Since then, however, there have been numerous scholarly studies considering the different sizes and structures of banking units and systems, and economies of scale, operating performance and efficiency (see Heggestad, 1979, and Richard & Villanueva, 1980, for surveys). Nearly all of these works have been carried out in the context of developed countries. The recent studies by Ojo (1979) and Richard and Villanueva (1980) are some of the few exceptions, based on developing countries - Nigeria and the Philippines, respectively.

Most of the earlier studies were preoccupied with the estimation and evaluation of the banks' efficiency within the framework of their operating cost functions. It was not until recently that attention came to be focused on the profit function as well (Mullineaux, 1978). In a recent study, Richard and Villanueva (1980) attempted what may be considered the most comprehensive definition of economic efficiency in banks. It is a definition which recognises that economic efficiency in banking is a combination of both technical and price efficiency. They argued that:

"....technical efficiency relates to banks or groups of banks which provide different quantities of services from an identical set of measured endowments of productive inputs. Price or allocative efficiency recognises that different banks succeed in varying degrees in maximizing profits i.e. in equating the value of the marginal product of each variable input to its price."

The interrelationships of the concepts of technical and allocative or price efficiency were explained as follows: "Consider two banks A and B with identical transformation function F(.) except for a neutral displacement parameter, D

$$V^{A} = D^{A}F(X,L)$$
, $V^{B} = D^{B}F(X,L)$,

where V is output

X is the variable factor, and

L the fixed factor of production.

Equal technical efficiency requires $D^A = D^B$ while $D^A > D^B$ implies that bank A is more technically efficient. The marginal conditions are $D^A = D^A = D^A$

Because of the serious problems of methodology and data availability, these studies of bank operating efficiency are smeared with the mark of "nonuniformity and inconclusiveness of evidence." (Mullineaux, 1978, p. 259). Apparently because of these problems too, studies of banks' operating efficiency have been restricted to those quantifiable aspects of banking except in a very few cases (see Abdi, 1977). This is understandable given the environments of most of these studies. But this

approach is not suitable for the evaluation of banks' operating efficiency in developing countries, particularly if employed alone. This study will thus try to remedy this defect in basic methodology.

- 3.2 Definitional problems. Operating efficiency is a relationship of output to input. In practice, however, the measurement problem is complicated by two main factors. The first, which is particularly applicable to banking, is that for many services it is not clear just what the unit of output is. Should loan output, for example, be measured in terms of naira or number of loans? A second problem, which is quite general and is encountered in measuring operating efficiency of any economic unit, is to determine a system of weights for comparing heterogenous outputs and inputs. Even the small banks today provide several types of credit as well as other services; thus labour and other inputs are not homogenous. It is sometimes possible to segregate the inputs attributable to each of several homogeneous outputs (by means of, say, functional cost analysis) but even then, a system of weights is needed to combine the inputs (see Guttentag and Herman, 1967). It is worthy of note that there have been recent attempts to by-pass some of the definitional problems. Mullineaux (1978) has suggested the use of the concept of profit function. "By definition the profit function expresses the maximized profit for a firm in a competitive situation as a function of prices of output and variable factor inputs and quantities of the fixed factors of production." (Mullineaux, 1978, p. 260).
- 3.3 Practical problems. There are a multitude of practical problems as well. The first problem relates to the fact that the meaning

of efficiency varies according to whose point of view we are considering - the different interest units in a firm (managers, workers, proprietors, creditors, etc.); the individual firm or the community. The business firm, for example, will generally be considered as efficient if good returns are earned on its investments at the end of an accounting period. That is profitability will be the measure of efficiency. But not everyone will agree to the use of profitability as 'the' measure of efficiency. Profitability after all, it may be argued, can be achieved at the expense of bad labour relations, a bad maintenance programme or an existing monopoly or monopsony situation.

Many development economists are becoming attracted to the view that profitability does not truly measure the efficiency of commercial banks in developing countries. They, therefore, de-emphasise profitability in the evaluation of financial institutions (see Abdi, 1977). The community will not conceivably measure the efficiency of banks in terms of profitability but rather in terms of the contributions - tangible (i.e. real economic growth and development) and intangible (community social development). Indeed, this is not only true of developing countries but of developed countries as well (see Greenberg, 1975).

Another important practical problem concerns the determination of what kind of standard to use. This is important in view of the fact that efficiency is not an absolute term and must be related to some standard of comparison. In particular, "bank effectiveness is a relative concept and its evaluation implies a comparison of actual performance against standard of some kind." (Kane, 1975, p. 60).

In measuring the efficiency of the Nigerian commercial banks, for instance, does one use internal standards i.e. compare

with similar financial intermediary groups or external standards i.e. compare with banks abroad?

3.4 The measures of efficiency. One can hardly disagree with banking practitioners when they say that

"there are no clear cut standards of 'effectiveness' by which to judge the banks' lending record; the term is a vague one and any overall assessment is bound to be largely subjective Nevertheless, in considering the effectiveness with which banks respond to the demand for finance, it may be helpful to consider five distinct questions (including):

- (i) do banks lend enough in the aggregate?
- (ii) do they allocate their credit appropriately between different sectors of the economy?
- (iii) are the terms on which they lend reasonable?" (CLCB, 1977, p. 93)

Abdi (1977, p. 25) also suggests that

"the effectiveness of commercial banks and other financial institutions in the economic growth of developing countries can only be evaluated with a specific objective in mind. Considering the general scarcity of capital postulated in most developing economies, a maximization of "productive investment" finance subject to bank liquidity and earning constraints will indicate effectiveness."

In the light of these, it appears clear that to undertake a comprehensive, rigorous and realistic evaluation of the efficiency of commercial banks involves the assessment of the quantitative as well as the qualitative aspects of their operations. That is to say an assessment of, not only loans and advances, deposit mobilization, etc., but also of the provision of lending related services such as investment advice, development of local entrepreneurship and assistance in the generation of creditworthy projects.

Hitherto, however, writers, management and policy makers, in-attempting to assess the efficiency of banks, have mostly relied

entirely on quantitative measures. This is because these are easier to produce and defend theoretically. These measures consist largely of ratios drawn from financial statements of banks or central bank returns of the institutions (see Haslem, 1968, and Ojo, 1979). Because they rely on financial statements, the quality of which is sometimes suspect (Greenball, 1971), these measures of efficiency must, by definition, be subject to significant weaknesses. However, so far no substitutes or surrogates have been found and they remain generally acceptable measures of efficiency. In view of the weaknesses of the quantitative measures of efficiency used alone, qualitative measures will be employed wherever possible and useful to complement the quantitative measures in this study. For example, whilst quantitative data on the operations of the banks are used to assess their aggregate and sectoral lending performance and the appropriateness of such lending, the bankers' and customers' responses to questionnaires are used to gauge the quantity and the quality of "the intangible but economically and psychologically important banking service, the offering of information, advice or guidance to business firms." (Katona, 1957, p. 7). It is thus a broad economic efficiency criterion that will be employed here. The aim is to find answers to the central question of this thesis: to what extent do the commercial banks contribute financially and otherwise to the growth and development of the Nigerian economy?

It is noteworthy that questions about the broad economic efficiency of financial institutions have always, traditionally and historically, been asked in a general context (see Singh, 1976, pp. 1-63). To take a recent example, the Wilson Committee in the U.K. was asked "to enquire into the role and functioning...of financial institutions in the United Kingdom and their value to

the economy." Both the enquiry and response of the "clearers" was undertaken in a broad spectrum that covered both qualitative and quantitative aspects.

4. THE SAMPLES

Only a broad picture of the samples selected can be presented here. Detailed descriptions of the samples are deferred to the appropriate places in this study i.e. the relevant chapters where they constitute the basis of analysis. In broad terms, there are two populations from which samples are drawn - the commercial banks on the one hand and the bank customers on the other. There are two samples of banks, one each rom the Nigerian and the U.K. financial systems. The Nigerian sample consists of the 19 individual commercial banks, whilst the J.K. sample consists of the big four clearing banks and Williams and Glyns Bank. The concentration of banks' head offices and even branches in Lagos and the availability of the aggregate and cross-sectional data relating to these institutions at the Central Bank of Nigeria in Lagos influenced the decision to select a sample with the same boundary as the population. Comparability with their Nigerian counterparts on the basis of commercial banking activities was the reason behind the selection of the sample of U.K. banks.

The sample of bank customers consists mainly of manufacturing sector customers. This, as will be fully explained later, is due to the fact that the attempt to select a suitable sample of agriculture sector customers, full-time farmers with banking connections, produced no useful results. The sample of manufacturing sector customers can be broken down into two parts. The first consists of the 44 manufacturing firms quoted on the Nigerian

Stock Exchange (NSE). These represent the large firms. The second part consists of medium and small-scale manufacturing concerns such as are typically located in industrial estates in Nigeria.

5. DATA GATHERING PROCEDURE

The data on the Nigerian banks were obtained from three main sources. Central Bank of Nigeria (CBN) publications - the Economic and Financial Review and the Annual Report and Statement of Accounts - provide the first source. Aggregate statistics on the operations of the banks were obtained largely from these sources. The second source consists of the Research and Bank Examiners Departments of the CBN. This source provided the cross-sectional data drawn from the First and Second Schedules of the individual banks' returns. Questionnaires administered at the branches and head offices of the commercial banks constitute the third source of data. Three methods of information gathering (or types of questionnaires) were used to request information from the lending officers at the operation level. These are:

- (i) Simulated Loan Request Questionnaire
- (ii) Investment Preference Test, and
- (iii) Structured Questionnaire (see Appendix IV.A)

The same questionnaire was used to obtain information about planning and control in both the U.K. and Nigerian banks (see Appendix IV.A). These questionnaires were personally administered at the head offices of the selected banks in the samples except in the cases of banks with head offices outside Lagos. Additionally, however, the Nigerian bank executives were requested to respond to the Investment Preference Test questionnaire.

Although the same structured questionnaire (see Appendix

IVA-5 was used to obtain responses from manufacturing customers, two methods were employed. The large companies were sent the questionnaires by post with stamped, self-addressed envelopes for replies. The smaller manufacturing organisations were visited and the interviews conducted personally by the researcher with their executives.

To enquire about the role and performance of the government sponsored Agricultural Credit Guarantee Scheme (ACGS) a structured questionnaire (see Appendix IV.6) was sent to the Director of the Scheme and this constituted the basis of an interview with him on an appointed date during the field work.

CHAPTER 3

THE ROLE OF FINANCE IN ECONOMIC DEVELOPMENT

INTRODUCTION

The major aim of this study is to find out how efficiently the Nigerian commercial banks operate their loan function and thus contribute toward the general economic development of the country. Implicit in this objective is the assumption that financial systems can contribute significantly to economic development.

Not everyone will accept this assumption without question.

Views on the role of financial institutions in development can be said to lie on a continuum, at one end of which there are students who assert that financial institutions are neither a necessary nor sufficient condition for development; and at the other students holding the viewpoint that financial institutions are not only a necessary but also a sufficient basis for economic development. In between lie moderates who assign varying degrees of importance to financial institutions in the process of economic development.

"In essence three main issues exist regarding the influence of financial intermediaries: first, their impact on the growth of savings, especially of the household sector; second, their role in the financialization of these savings (that is, savings in a financial form); and third their ability to ensure the most efficient transformation of mobilized funds into real capital."

(Bhatia and Khatkhate, 1975, p. 133).

This chapter is divided broadly into four parts. The next section is devoted to a review of the literature and debate on the various aspects of the subject at hand. The third part deals with the analysis of data to investigate the evidence of the relationship between the monetary and real

sectors of the Nigerian economy. Part four concludes with a summary and the implications of the results of the analysis in part two.

FINANCIAL AND ECONOMIC DEVELOPMENT

2.1 Early views

Schumpeter (1934) is generally acknowledged as the first proponent of the view that financial institutions are a necessary condition for, at least, the capitalist economic. development. He asserts that for an economy to develop two conditions are necessary and sufficient - financial institutions and the availability of entrepreneurship. Among the more important followers of this view, though sometimes differing in mphasis, are Goldsmith (1969), Cameron et al. (1972) and Patrick (1966). Goldsmith in his study of 35 developed and developing countries calculated the financial interrelations ratio (i.e. the ratio of financial instruments to the real wealth) for each in an attempt to determine the relative financial development compared to relative real development. He found that high financial structure development defined by a high financial interrelations ratio was also associated with high real development implying that financial development is a prerequisite or must go simultaneously with real development. Although Goldsmith's measure of financial structure development - the financial interrelations ratio - may be criticised on the basis of the fact that not only economic but political, and cultural factors as well influence the levels of financial structure development, the high empirical correlation between financial structure development and real development is suggestive.

By looking at the historical economic development of

developed as well as developing countries, Cameron et al.

were able to reach a positive conclusion on the role of

financial institutions in development. Postulating that the

functions of the banking system are (i) intermediation (ii) to

furnish part or all of the means of payments or money supply,

and (iii) the provision of entrepreneural talent and guidance

for the economy as a whole, Cameron summed up the general think
ing or consensus of the team by saying that:

"The way in which banks perform these functions may well determine the degree of success of the development effort. As intermediaries, they may vigorously seek out and attract reservoirs of idle fund which will be allocated to entrepreneurs for investment in projects with a high rate of social return or they may listlessly exploit their quasimonopolistic position and fritter away investment possibilities with unproductive loans." (p.5)

The basic Schumpetarian thesis was virtually unchallenged until the publication of the work of Gurley in 1967. In a study of the development process of socialist and developing countries he reached the conclusion that financial system development is not a necessary condition for development. His thesis rests on the important point that there are alternatives or substitutes for the role of financial intermediation in the process of development. Though differing thus substantially with the hitherto "established view", Gurley nevertheless admitted that financial institutions might be prominent contributors to development "when there is a decentralization of decision-making, specialization of savings and heavy emphasis on external rather than internal financing of investments" (p. 104) which are features of capitalist economic systems. Gurley's conclusion is therefore true for a particular rather than a general case. For

any of the substitute resource allocation mechanisms such as taxation to be employed in place of financial intermediation the eminent feature of socialist societies must be present i.e. centrally controlled planning. This condition precedent seems to dent the validity of his thesis. One conclusion to be drawn from Gurley's proposition is, however, that for those developing countries such as Nigeria that have chosen the quasicapitalist path of development, it will be "ideal" to take the view of the necessity of financial institutions for development.

2.2 Some empirical evidence

These early works have kindled great interest in the study of the relationship between financial system and institutions and economic development in both developed and developing countries. Most of the empirical studies have set out to investigate the role financial institutions have played in particular environments - a sort of ex-post appraisal. Not unexpectedly, most of these studies have been done as part of doctoral work of developing countries' students. Among these, to name a few, are Ojo (Nigeria - 1974), Taylor (Sierra Leone - 1973), Islam (Pakistan - 1973), Bourne (Jamaica - 1969) and Abdi (Eastern Africa - 1977). All without exception have concluded in the same vein as Taylor (1973, p. 308) who wrote that: "From our study it is evident that the financial system can make a valuable contribution to economic development if appropriate measures are taken, given the balance of payments constraint:

- (a) to mobilize more domestic resources
- (b) to deal with the problem of securities for loans and the special problem of lending to a large number of small operators in the agricultural and small-scale industries sectors; and

(c) to improve the quality of investment so as to increase the productive capacity of the economy."

Given the capitalist economic development strategy adopted in most of these countries and the pre-eminent positions of the financial institutions coupled with the inability and the lack of political will on the part of the government to experiment with other options like taxation as Gurley suggests, these conclusions can be said to be inevitable.

The developed economies have not, however, been entirely left out. Griggs (1971) and Greenberg (1975) have also enquired into the roles being played by financial institutions in selected American communities. Whilst Greenberg's study was concerned with investigating the extent to which commercial banks in Philadelphia carry out their traditional and developmental functions, Griggs' work was concerned with the way selected bank lending officers are aggressive in lending to and otherwise assisting small scale and new businesses in Texas. Even for their own highly developed capitalist economy, the findings of both see an important role for their financial system in general, and commercial banks in particular, in their community's economic development process. Concluding for instance, Griggs (1971, p. 11) notes that "the available information indicates that there is a positive relationship between the ability and willingness of commercial banks to lend credit and regional growth." However, it is noteworthy that Greenberg (1975, p. 1) cautions: "a banking system is only one of many factors that influence economic activity, therefore, an optimal banking system (defined as one that allocates resources towards their most efficient uses) may be necessary but not a sufficient condition for obtaining full employment of a region's resources, attracting new resources and promoting technological change." In all of these recent studies both for developed and developing economies, one striking point is common. Most, if not indeed all, have been highly critical, justifiably based on the evidence revealed by their empirical work, of the role of the financial systems and the commercial banks in the different societies studied.

In spite of these studies, it will appear that this debate on the role of finance and its relationships to real development will continue for some time more. This is because the fundamental question at the centre of the arguments remains unanswered. Which causes or precedes the other - financial development or economic development? These two development processes in practice proceed simultaneously in a highly complex, interacting, and inter-dependent fashion. This makes the identification of any direction of causality, if indeed one is found to exist, difficult. Happily, however, the basic point is not in dispute; that is that "the relationship between the real and monetary variables is undeniable." (Porter, 1966 p. 347).

2.3 Theoretical relationship

This relationship has long been recognised by economic theorists in the growth models. The simplest and earliest known of these theoretical growth models is the now legendary Harrod-Domar model represented by the following equations:

$$K = kY - (1)$$

$$\bar{K} = J \qquad - (2)$$

where K = Capital Stock

Y = National Income

J = Investment

k = dk/dt (the rate of increase of capital stock)

Equation (1) states that there exists a fixed relationship described by the capital coefficient (or capital/output ratio) between the stock of capital and production, and equation (2) merely expresses the theoretically expected equality between the rate of increase of capital stock and investment given that the two phenomena of a gestation lag and of depreciation are assumed away. Undoubtedly this simplified model is patently unrealistic having assumed away the influence of all factors impacting on the level of national income other than capital. Fr the sake of the present analysis, however, two important and relevant messages of this growth function are clear. One is the central role of capital in the production of the national income and the second is the dependent relationship between the two variables via the investment process (dk/dt).

X_{2.4} The direction of causality

As noted earlier the first empirical work to reach the conclusion of a positive relationship is that seminal study of Goldsmith (1969). Recent attempts have gone further to try and determine the direction of the causal relationship between the real and monetary sectors. The current leader of the Monetarist school is the chief proponent of the view that the causality runs from monetary to the real sector; this being part of the continuing debate on whether money matters in economic activities. Beginning with his 1963 study with Schwartz, Friedman has consist-

ently held this view. By also inspecting the relationship between money and the Industrial Production Index for US time series data, Friedman (1969) confirmed further this assertion, having found a high positive relationship between these variables. Sims (1972) has advanced further than Friedman and other Monetarists by asking and answering the question: "Is there statistical evidence that money is 'exogenous' in some sense in the money-income relationship?" (p. 540). The opponents of the view that the causal link between monetary and real sectors runs from the one to the other had argued persuasively to the effect that "money might equally well react passively and very reliably to fluctuations in income" (p.540). Sims' study was aimed at clearing the air by determining the direction of causality between these sectors. With the aid of sophisticated regression analysis using US time series data, Sims (1972) concluded that "the main empirical finding is that the hypothesis that causality is unidirectional from money to income agrees with post-war US data, whereas, the hypothesis that causality is unidirectional from income to money is rejected." (p. 540). This study has been replicated, for the Canadian economy separately by the pairs of Barth and Bennett, and Sharpe and Miller. The first two reached a contrary conclusion after their analysis saying that "although Sims' result for the United States supports the monetarist view of the role of money in the economy, our finding for Canada offers no such support." (1974, p. 310). Sharpe and Miller also using Canadian data got results that contradict this conclusion of Bath and Bennett and support Sims'. Thus they wrote that "contrary to Barth and Bennett's results, the Canadian case conforms to Sims' result for the United States. The results are not conclusive but undirectional

causality is shown to exist between M and GNP and it runs in the direction suggested by the modern quantity theorists." (p.290).

2.5 Patrick's demand-following and supply-leading concepts

A new and interesting dimension to the debate on the relationship between the real and financial sector of an economy was introduced by Patrick in his 1966 paper. This he did by the enunciation of the concepts of demand - following and supply - leading finance. By these phrases he refers to the role of financial institutions in the process of development as being either passive and merely reacting to the demands for financial services of the real sector (demand - following) or positively active in devising and providing financial services for the real sector in anticipation of demand for them (supply - leading). Historically, Great Britain's example is generally claimed to epitomize the demand - following type of financial institutions development. On the other hand Japan and Germany provide examples of supply - leading financial development in which financial institutions are involved in industries not only as bankers but also as entrepreneurs. Patrick, however, did appreciate and note the important fact that these phenomena are not likely to be static and unchanging all through the different stages of economic development. He thus remarks that "before sustained industrial growth gets under way, supply - leading may be able to induce real innovation-type investment. As the process of real growth occurs, the supply - leading impetus gradually becomes less important and the demand-following financial response becomes dominant." (p.177).

In a brief but incisive empirical analysis of the role of financial institutions in the economic development of Hong Kong Stammer (1972) (in a follow-up to Patrick's work) found and

confirmed these phenomena of demand - following and supply leading financial development. He, however, qualified Patrick's
generalization with regard to the need for the development of
new financial institutions to match increasing sophistication of
economic activities. He points out that for Hong Kong "changes
in the structure and operations of existing financial institutions
have been far more important than the development of new intermediaries and the emergence of a complex financial market." (p. 324)
What in practice happens largely

"....depends on whether existing institutions are willing and able to expand their functions to create or respond to the demands for new financial services; if not new institutions will spring up. Willingness depends on perception of opportunities and on attitudes towards risk. The ability is constrained not only by availability of resources, but more importantly, by the legal-institutional structure." (p. 324).

The central theme of Patrick's analysis is not, however, in dispute - that there is an important role for the financial sector at a certain stage of the development process and that this role is growth-inducing. This "positive growth-inducing aspect of supply-leading financial development is attributed to its allocative efficiency and to its encouragement of entrepreneurship." (Patrick, p. 327). More than any substance of the debate, it is this "agreement" that is of paramount interest to us here. This is because we envisage a role for the commercial banks in Nigeria's economic development in view of their unique position in the nation's financial system.

2.6 Financial repression and the structuralist hypotheses

Before concluding this analysis it will be instructive to

mention two widely discussed hypotheses of the role of finance

in economic development. These are the Financial Repression Hypothesis and the Structuralist Hypothesis. The leading proponents of the financial repression hypothesis, unlike most other writers on the subject, are categorical on the role financial systems and institutions play in the development process. assert that it is nothing but growth-inducing except, of course, that they are repressed. According to these apostles of the financial repression hypothesis - Cameron et al. (1972), McKinnon (1973) and Shaw (1973) - the sources of repression are government legislation and policies such as legal restrictions on activities and interest rate policies that distort the full operation of the market mechanism in fixing prices for financial resources. These repressions, they claim, show their effects on the limited savings generated because of interest rate ceilings on deposits, limited loan resources because of loan rate ceilings and sectoral allocation guide rules; and also on the continued existence of rural and modern financial sectors - the so-called "financial dualism".

These advocates of the free interplay of market forces, undoubtedly sound convincing on theoretical grounds but on the practicality of their argument they are less so. One reason for this is that they all based their studies in advanced countries and went on to interpret the result without sufficient qualifications for the developing countries with entirely different environments. The environments differ not only in variety and volume of financial instruments and institutions but also in the interrelations of the different subsectors and the sophistication of activities and operators. These writers apparently think "classical", visualising every financial environment as being perfectly competitive. This apparent false basis of their argument

corrupts their conclusions as the economic and financial environments in the developing countries are far from being perfectly
competitive. It is a fundamental misunderstanding and misconception of the background to lending in developing countries
that can lead to the suggestion that re-aligning interest rates
alone will wipe out financial dualism.

The fact is that the rural/traditional lenders are more flexible in their approach and this is possible because of the excellent knowledge of their customers and of the socio-economic factors that they possess. Similarly, re-alignment of interest rates may not automatically induce savers in these economies to use modern financial institutions for savings either. This is because of the long list of inconveniences associated with such a change. Consider a saver who has to spend one naira in transport and set aside half-a-day or more to reach a bank to save only twenty naira. Finally, nowhere in the Western World, known to this writer, is there complete and unfettered use of loan resources by the commercial banks in particular - the most capitalistic and free economies inclusive. The reason is simple. Credit is so central to economic activities, which in turn is potentially politically sensitive, that no government wants to abandon its allocation and use to the price mechanism without some sort of intervention from time to time. In developing countries with imperfect markets, inadequate information and painfully insufficient resources, the need to "administer" the allocation of financial resources through interest rate structuring and credit guidelines becomes even more compelling.

The second hypothesis - the structuralist hypothesis - is based on the work of Gerschenkron. The kernel of Gerschenkron's (1962) thesis is that the role (and the ability) of financial

institutions in the economic development of a country depends on the structure of the economy at any particular time. Rather ambiguously he tried to classify countries at the threshold of industrialization into a list with the very advanced countries at the top and most backward countries at the bottom. At the top end of this list is Britain, midway Germany, and at the bottom is Russia, indicating down the line the degree of backwardness. Based on his historical analysis of the role of financial institutions at the point of industrialization in Europe, he argues that in highly industrialized economies like Britain the role of financial institutions can be expected to be minimal since great reliance was placed on internal finance by the entrepreneurs. Germany on the other hand - the moderately backward economy - had to rely rather heavily on the financial institutions because of the limited resources available to enterprises and the needs of the large scale-units of business. The unimportant role for the financial system and the prominent role of the public sector in the development process of Russia is perhaps inevitable from his description of that country's economic and financial environment at the point of entry into the industrialization stage:

"The scarcity of capital in Russia was such that no banking system could conceivably succeed in attracting sufficient funds to finance a large-scale industrial-ization; the standards of honesty in business were so disastrously low, the general distrust of the public so great, that no bank could have hoped to attract even such small capital funds as were available, and no bank could have successfully engaged in long-term credit policies in an economy where fraudulent bankruptcy had been almost elevated to the rank of a general business practice." (pp. 19-20).

Gerschenkron's description of Russia then can be repeated today for many developing countries.

Although this description may fit most countries today,

unfortunately his implied prescription is irrelevant for two major reasons. First, commercial banks in these countries already have a substantial stranglehold on the financial resources of the economies as the main financial intermediaries. Second, the governments of these countries, having elected the capitalist path of development, fashionably described as Mixed Economy, have not now the political will to undertake the unpalatable decision of centralising economic decision-making. Apart from being politically explosive, the use of taxation in place of financial intermediation is not humanly possible given the abysmally low levels of income in these countries. Gerschenkron's analysis is nevertheless useful for putting the role of financial institutions in the general process of development in perspective and for identifying a role for the financial system at some stage of industrialization or development. we basically disagree with the implicit view that because of the enormous problems associated with financial intermediation in developing economies such as "business honesty", "fraudulent bankruptcy", etc., the only option or the suitable substitute mechanism is centralization of financial resources. Rather than accept Gerschenkron's alternative,

(Stammer, 1972, p. 318)

[&]quot;.... in many underdeveloped countries, the establishment and nurturing of financial institutions and markets have been deliberate objects of government policy, by widening the range of financial titles available and by making for a more developed capital market, it is hoped that these intermediaries will increase the rate of saving and encourage a more efficient distribution of investment fund. This attitude, at the very least, allows the financial sector more than an entirely passive role."

As noted earlier, most of the revealed historical and empirical evidence of the relationship between the real and monetary sectors of the economy relates to developed societies. With particular regard to the role of commercial banks, which institutions constitute our empirical platform in this study, only very little has been done for either developed or developing economies. The best known in this class is that study by Abdi for the economies of three Eastern African countries - Tanzania, Kenya and Somalia. Like most of its predecessors it is broad based, that is to say, it focuses on all aspects of the wider issue of financial intermediation and its impact on the real sector development.

"The study concentrates on the operations of the commercial banking systems of Eastern Africa with a view of resolving a few key questions about their development and performance. Other questions include how well the banks have met some requirement, indispensable for economic development such as monetization of the subsistence sector and innovations in the services provided to both the monetary and non-monetary sectors." (Abdi, 1977, p.2).

To answer these questions, he analysed the three main functions of these institutions in these countries - savings mobilization, lending, and the provision of banking services outside urban areas. The effectiveness of savings mobilization was measured by the time series analysis of the relation between bank deposits and money supply and bank liabilities and GNP; the extent to which the banks' loans and advances were allocated to the government's defined priority sectors also was used to gauge their performance and contribution to development. Finally, the extent of rural branching measured the banks' conscious move to eliminate financial dualism in the economy and thus contribute to economic development. He concluded to the effect that on all criteria

considered the commercial banks in these East African countries performed poorly due largely to "identifiable economic constraints" - inadequate loan demand, poor entrepreneurship and infrastructure and suggested a concerted effort on the side of both the institutions and the governments to eliminate these constraints.

3. EVIDENCE FROM NIGERIA

The above analytical review of the revealed evidence of some associational and directional relationship between the monetary and real sectors of the economy, we think, is a useful starting point for this study. Evidence of this association from empirical analysis of Nigerian data will however, provide a firmer and more authentic base. In the light of this, the time series data in Table 3.1 were analysed. Since our interest is limited to evidence of association between the real and monetary sectors of the economy, correlation analysis was the obvious choice. The selected important (and available) variables in the two sectors as in the table were correlated as follows:

Money supply and Gross Domestic Product Loans and Advances and Gross Domestic Product Loans and Advances and Manufacturing

The results of computer runs are presented in table 3.2. The first analysis between Money Supply and Gross Domestic Product (GDP) produced results indicating a very high degree of association with a correlation coefficient of .865105 (see table 3.2). Next are the analyses between loans and advances and GDP on the one hand and Manufacturing on the other. These analyses

Table 3.1 Some Monetary and Real Sector Statistics: Nigeria, 1960-1975
(Mmillion)

Year	Money Supply	Commercial Banks Loans & Advances	GDP	Manufacturing
1960	240.8	104.0	2,244.6	80.6
61	243.0	120.0	2,373.4	88.2
62	252.5	153.0	2,630.8	93.4
63	264.7	178.9	2,806.4	151.8
64	305.0	244.8	2,914,0	157.8
65	316.9	242.3	3,080-6	164.8
66	344.8	298.0	3,210.0	192.2
67	312.4	274.9	3,051.8	196.0
68	328.1	225.7	3,140.8	231.2
69	426.8	242.7	3,278.2	270.4
1970	608.4	351.4	3,485.8	311.0
71	628.9	502.0	9,442.1	475.1
72	700.5	619.5	11,177.9	460.3
73	827.1	753.4	11,993.0	570.1
74	1,178.4	938.0	13,135.5	626.5
75	2,044.1	1,427.3	14,410.7	683.9

Sources: (i) Central Bank of Nigeria, Economic and Financial Review (various issues)

(ii) Federal Office of Statistics <u>Digest of Statistics</u> (various issues)

Table 3.2 Summary of results of correlation analysis

Variables 	Correlation coefficient	F - value	D.F.
ION GDP	.865105*	41.6453	1, 14
A GDP	.930551*	90.4199	1, 14
LA MAN	.931840*	92.3225	1, 14

 $\underline{\text{Key}}$ MON = Money Supply (M2)

GDP = Gross Domestic Product

LA = Loans and Advances

MAN = Manufacturing

Significant at the O.Ol per cent level

produced correlation coefficients of .930551 for Loans and Advances and GDP and .931840 for Loans and Advances and Manufacturing. It is noteworthy that all these coefficients are significant at the O.Ol per cent level.

4. CONCLUSION AND POLICY IMPLICATIONS

Although these results are not in any way conclusive nor do they indicate any directional causality, the high correlation coefficients obtained are positively suggestive of some strong association between the real and the monetary sectors of the Nigerian economy.

The policy messages of the analysis are perhaps obvious enough. Given the political and economic path chosen by the country, it appears it has no choice but to assign an important

role to the financial sector in the economic development process. It must be noted, however, that at no stage of her development process has Gerschenkron's description of European economies been appropriate for Nigeria. Consequently, his views on the roles of a financial sector in given development situations can hardly be worthy of more than a cursory note. Given the fact that Nigeria operates a development strategy loosely described as 'mixed economy' - in which an important role is assigned to the private sector - the financial system which is an economically 'efficient' instrument for mobilizing resources in a quasi-capitalist set-up, must be developed if the sector is to play its. role effectively. The Nigerian financial sector is far from depicting a perfect market situation - there is no perfect (or adequate) information, the operators lack skill and experience and there is near complete absence of a financial press to inform the community. In these circumstances, financial intermediation cannot be effective if orthodox. Unorthodox approaches such as borrowing short and lending long, as the German banks have successfully practised, must be employed, albeit with caution.

CHAPTER 4

A SURVEY OF LENDING CONCEPTS, PRINCIPLES AND PRACTICES

1. INTRODUCTION

In the previous chapter the revealed evidence of the relationship between the financial sector and economic development was reviewed. Consideration must now be given to a survey of lending concepts, principles and practices. These have had and will continue to have considerable influence on the modus operandi of the banking industry anywhere in the western world. It is because of this potentiality (influence) that the survey in this chapter is in place.

Section 2 presents an overview of the issues, whilst section 3 is specifically concerned with a review of lending concepts. The next two sections, too, are specific - section 4 on lending principles and section 5 on lending practices.

2. AN OVERVIEW

A cursory survey of the literature will reveal that banking unlike other disciplines, still lacks a consistent and coherent theory or set of theories. In one of the rare attempts at banking theory development, Klein (1971, p. 205) acknowledges this state of affairs when he wrote that:

".... in spite of the importance of commercial banking both as a major financial intermediary and as an important link in the monetary transmission process, there is little consensus as to what constitutes a workable and productive theory of the banking firm."

Some excursion into the banking literature will also confirm Pringle's (1973, p. 990) assertions that:

".... little has been done in the way of developing theories to explain the results of optimizing behaviour on the part of individual banking units. Yet such theories are needed as a basis for research in a number of areas."

From an examination of the few attempts made so far, one can suggest some reasons for the continued absence of a banking theory or theories. Two approaches, in the main, have been taken by those who have attempted to develop banking theories. One group, the mathematically-oriented, has tried to reduce the variables involved into measurable quantities and equations. The other group has restricted itself to pure non-quantitative explanations. To name just a few, Klein (1971) and Hester (1966) belong to the first group; whilst Adam Smith (1937) and Galbraith (1963) belong to the second. As is clear from the above-quoted statements by Klein and Pringle, the first group has not achieved much to date. This is perhaps because the most important variables in the banking firm's behaviour equation and model are simply not sufficiently quantifiable as yet. Such variables, for example, include the quality of bank management and bank-customer relationship. It has not been feasible, either, to find suitable surrogates for these variables given the present state of knowledge. Not surprisingly the product of this group consists of partial explanations of the banking firm's behaviour. Even where such exercises have been concerned with some specific aspects only of the banking operations, the resulting models have failed to capture the total picture of such operations (see Cohen, Gilmore, and Singer, 1966). Generally, it can be said that the more sophisticated these attempts have been, the more divorced from reality the products - i.e. the models of bank behaviour.

Salbraith (1963) is the best known in the other group of students that employ the non-quantitative approach. His and others' descriptive approaches have not been more successful in producing a comprehensive and generally acceptable theory of the banking firm. Whilst, for instance, Galbraith was able to explain admirably the different ways a bank behaves in isolated situations and sometimes offered the rationale behind the decisions, on issues of credit-rationing, credit-worthiness and credit risk, he however failed to tie all these together to make a model of the banking firm's behaviour. That is to say a model sufficiently describing how these interdependent decisions can be synchronized into a predictable behaviour pattern of the bank.

It does not appear as if any of these divergent approaches is likely to produce the much desired banking theory and thus fill an important academic gap for the benefit of bankers and banking students. This is particularly so because, as Friend (1977, p. 117) notes: ".... much of current research in finance seemed more likely to lead to advances in methodological niceties than substantive knowledge." He also warned that "methodological elegance should not be considered a substitute for substance, and by substance I mean solution of real world and not artificial problems." (p. 117). There is thus, apparently, a need for a combination of the best in these two approaches, if fruitful results are to be expected from these efforts.

3. LENDING CONCEPTS

In the area of bank lending, there exists some conceptualizations of banks' behaviour which are commonly inappropriately labelled as theories. These concepts have evolved from the early days of the banking industry. Although not generally of great academic interest or preoccupation, the practical influence of these concepts is enormous. Like folklores they have passed from generation to generation of bankers. More importantly, they have and still considerably influence lending behaviour of bankers including the modern, unorthodox, management—scientist bankers (see Roy and Lewis, 1971, pp. 17-21). The strong influence of these concepts on generations of bankers can be explained by the fact that the concepts are "statements of basic realities of commercial bank lending." Over time the changing circumstances of the lending environment — legal, institutional, monetary and economic — have led bankers to update but not discard these time—tested ideas. Thus today we find

"....many credit managers have one foot in yesterday and the other in tomorrow. The foot planted in yesterday is the commitment to practices that have evolved over the years. The foot poised over tomorrow is the awareness of changed conditions, new techniques and new facilities that have made many of yesterday's practices outmoded"

(Roy and Lewis, 1971, p. 17).

In a logico-historical order, the existing loan concepts can be listed as:

The Real Bill Doctrine
The Shiftability Theory
The Anticipated Income Theory
The Liability Management Theory.

According to Mints (1970, p. 29), "the real bill doctrine was first adequately enuciated by Adam Smith." In essence the real bill doctrine (also known as the productive/commercial loan theory) postulates that if the bank can restrict its assets to real bills of exchange (i.e. bills supported by goods in

transit) this will:

- (a) "Automatically limit, in the most desirable manner, the quantity of bank liabilities."
- (b) "Cause them to vary in quantity in accordance with the needs of business."
- (c) "Mean that bank assets will be of such a nature that they can be turned into cash on short notice and thus place the bank in a position to meet unlooked for calls for cash." (Mints, 1970, p. 29)

It can be appreciated from this statement that the real bill doctrine was conceptualized to have a considerably pervading influence not only on bank lending but also on general economic activities. If adopted strictly, the doctrine was expected to serve as the monetary control mechanism in the economy, adjusting money supply to changes in aggregate economic activity. With the passage of time, the doctrine has become restricted to that aspect emphasising the reasonableness of bankers lending short against short-maturity assets such as bills of exchange. Bankers believed rather strongly, in the early days of this doctrine, that since their resources were repayable at short notice, such depositors' monies should be employed in correspondingly short-term and self-liquidating advances, if they were going to be able to meet calls for such deposits.

At the time this doctrine reigned supreme in the banking industry, it is instructive to note that there did not exist enough secondary reserve assets which could have served as a liquidity buffer for the banks. Even existing government securities were not readily marketable as the secondary markets for them were either very narrow or non-existent. The banks' main source of liquidity, apart from cash was their loan portfolio. Understandably, therefore, banks were wary, and

wisely too, at the idea of advances that did not match, in maturity, their liabilities.

By the 1920s, the commercial banks' attitude to lending was beginning to deviate slightly from the prescriptions of the real bill doctrine (1). A few developments led to this. One of these was the increasing change in the structure of their total deposits towards a greater proportion being accounted for by the less volatile savings and time deposits (2). A second important factor was the gradual but steady growth in government's borrowing from the public. This resulted in increases in volume and variety of securities available and suitable as secondary reserve assets for banks. Furthermore, markets for these gilt-edged securities developed and expanded. All these changes led to the development of the doctrine of asset shiftability - i.e. the shiftability theory. With readily available "shiftable" open-market financial assets, the banks felt that the doctrine of commercial credit need not continue to chain them to short-term loans only. After all, they thought, they could make good their liquidity shortages, if any, by shifting to the market their short-term money market assets i.e. the new government securities. "Actually, the bankers viewed this development not so much as a violation of the productive credit theory but as an extension of it and an improvement on it." (Kreps Jr. and Wacht, 1972, p. 18).

⁽¹⁾ In the U.K. Noticeable changes came later in the early 1960s after the publication of the Radcliffe Report in 1959 (see CLCB, 1977, p. 76).

⁽²⁾ These (savings and time deposits) being largely retail deposits in Nigeria are less volatile.

This doctrine has an important, though not unique, limitation. Like the self-liquidating loans, shiftable assets can only be expected to generate liquidity in 'normal' times. In money or liquidity crisis, the shortest of short-term loans or the most shiftable of reserve assets might fail to yield desired liquidity. This is because during a liquidity crisis, every asset holder wants to shift his illiquidity to other persons and institutions and no one, in the process, succeeds in acquiring cash by shifting assets (loans or securities). doctrine of asset shiftability is thus valid in 'normal' times only or in special circumstances. An important element of the special circumstance is that there must exist a central bank willing to act as a "lender of last resort", either directly to the banks, or in the unique case of the U.K., indirectly through the discount houses, during a liquidity crisis. Nevertheless the birth of this doctrine led to marked changes in the lending attitude of banks, who began to feel more safe and confident to make longer-term advances.

In 1949, Prochnow enunciated a new loan theory known as the "Anticipated Income Theory". This concept is a product of Prochnow's comprehensive study of banks' term loans. He found in this study that

(see Woodworth, 1971, p. 157).

The importance of this theory is that it emphasised a future-

[&]quot;...in every instance, regardless of the nature and character of the borrower's business, the banker planned liquidation of term loans from anticipated earnings of the borrower. It (liquidation) is not by sale of assets of the borrower as in the commercial or traditional theory of liquidity nor by shifting the term loan to some other lenders as in the shiftability theory of liquidity but by the anticipated income of the borrower."

oriented approach to bank advances. It has enhanced what is now popularly known as the cash flow approach to lending. Rather than tie the repayment prospect of a loan to a one-time event such as the importation of a particular commodity, the sale of which repays the loan, a more general system approach is now taken by bankers. Ever since, greater consideration has come to be given to the potential improved income generating ability of the borrower. Following this re-orientation in lending, it has now

*...become more and more accepted that in addition to the short-term, self-liquidating loans, banks could also properly make loans which did not generate their own repayment but were to be repaid instead out of the borrowers' anticipated income. It was the general adoption by bankers of this anticipated income approach to lending that permitted banks to safely begin making the longer maturity, non-self-liquidating loans - term loans to business, real estate, mortgage loans and consumer instalment loans - that now constitute well over half of all commercial bank lending."

(Kreps Jr. and Wacht, 1972, p. 19)

The launching in 1961 of Certificates of Deposit (CDs) by large New York money market banks introduced a new dimension into commercial bank lending and has indeed led to the emergence of "The Liability Management Theory". The possibility of raising substantial deposits by the issue of CDs now means that another source of liquidity is opened up for the banks.

Consequently, the banks need not be unduly constrained as to the size and maturity of their advances by lack of resources.

In a review discussion on this chapter, Mr Maylock, a former Economic Adviser to the Midland Bank Limited and a Director of the Institute of European Finance at the University College of North Wales, Bangor, noted that this "re-orientation" did not become generally observable practice in the U.K. until the late 1960s.

"According to this doctrine, it is unnecessary to observe traditional standards in regard to self-liquidating loans and liquidity reserves since reserve money can be borrowed or 'bought' in the money market whenever a bank experiences reserve deficiency."

(Woodworth, 1971, p. 158).

Although the emergence of CDs brought to birth the concept of liability management, it should be appreciated that this is not the only source of creating or acquiring liquidity by a bank via increases in liabilities. Deposits (savings, time, current), new capital, long-term loans, debentures, Eurodollar markets and Bankers Unit Fund (in Nigeria) are additional sources of liquidity. A proper liability management, the doctrine explains, should generate enough liquid resources to a bank as and when desired; thus eliminating the constraints of any earlier concepts of bank lending. Once again, it should be noted, that like all other sources of liquidity discussed so far, only recourse to the central bank as a lender of last resort is reliable during a liquidity crisis.

An undoubtedly important development relevant to the foregoing analysis, worth noting, is the establishment by banks, mostly in developed countries, of subsidiary credit institutions and instruments. In the U.K., for example,

"....the clearing banks have developed merchant banking services and medium term lending. In the late 1950s all the banks made investments in the finance sector; these interests were rationalised in the early 1970s so that most clearing banks now have a single wholly-owned finance house subsidiary. Specialist subsidiaries have developed leasing and factoring services, and all the banks are involved in credit cards."

(CLCB, 1977, p. 20)

According to Hanson (1979) these developments came about as a result of threats, for different reasons and from different quarters, to the traditional functions of the banks, namely,

deposit-taking, lending and money transmission. The more important aspect of this episode, however, is that the emergence of these institutions and instruments has gone a long way to change the size and the whole complexion of the loan portfolios of commercial banking groups.

4. LENDING PRINCIPLES

It ought to be stated at the outset that one cannot generalize with any measure of authenticity about lending practices in the banking industry. This is because each bank's lending practice is more a variant rather than a replica of the other banks'. Indeed "two lending officers sitting side by side in the same bank may react differently to the same loan request."

(Shapiro et al., 1969, pp. 14-37). In Nigeria, for example, one can, therefore, expect 19 different varieties of lending practices. For a general or global survey, this kind of variety must be multiplied for the number of countries considered. To compound the problem further these practices are constantly changing in response to changes in the lending environment.

Commercial banks are uniquely multi-purpose lenders, satisfying the needs of commerce, industry, agriculture, etc. For their lending practices to be appropriate and useful, these have to be tailored to fit these different functional lending operations. This also further introduces complexities into . loan practices of banks.

Practices, in general, again depend on a number of varying factors such as the economic environment of lending, the experience and expertise of the banker, the 'tradition' and 'culture' of the individual bank, and the personality of the individual engaged in the lending function.

In spite of these complexities and varieties, there still exist some generally accepted basic principles and practices in bank lending. An attempt will be made in the following paragraphs to consider these points of congruency in bank lending practices and to highlight the important differences among countries. The relevance of all these is that we are enabled at the end of the day to see to what extent lending practices in Nigeria are in line and up-to-date compared with the practice in the industry at large. More importantly it will be possible to compare and contrast lending principles and practices in Nigeria with those in other countries and to question the appropriateness of these for a developing environment. Also by this analysis we shall be establishing some kind of criterion for judging the efficiency of Nigerian commercial banks on the ground of adaptiveness.

that guide their lending rather than in the actual practices.

The well-known 4-Cs of bank lending are basically the guiding principles for all bankers irrespective of their experience, environment or orientation. These principles are character, capacity, capital and collateral in a generally agreed order of importance to lending decision-making. Like the loan concepts, these principles have become reliable tools in the hands of lending bankers, young and old. Indeed these "sound principles and standards can be likened to an anchor from which a boat swings with wind and tide. While its position shifts in response to changing circumstance, the boat never breaks its tie with the ground tackle." (Mathis, 1975, p. 25).

5. LENDING PRACTICES

Based on the above principles, bankers' analyses of loan proposals are done from two different but practically complementary

viewpoints. These are the "going-concern" and the "gone-concern" bases (Mather, 1979, p. 23). A going-concern view of a business assumes that the business has a long and even infinite future ahead. Consequently its assets and financial capability are assessed in the light of this outlook. This approach is not only forward -looking but positive and optimistic. The gone-concern approach, on the other hand, assumes the worst event of a liquidation and then assesses the worth of the borrower in that "closing-down" situation. It is a pessimistic and rather negative approach. Bankers, however, defend any criticism of this approach by pointing out that even the most realistic and promising propositions can become a failure for reasons completely outside the control of the business. This calamity may not, with a most intelligent forecast, be foreseeable at the time of the advance. Whilst bankers may not generally allow this pessimistic view to influence too negatively their decisions, it has the distinct advantage of enabling them to assess just how badly they will come off an advance if the worst happens to the loanee. practice, happily enough, both approaches are used in reaching lending decisions by most bankers, particularly in the case of sizeable loans. Thus rather than being mutually exclusive, these approaches are complementary, as they should be.

In the rest of this section, we shall consider the level of delegation of authority, credit evaluation system and security considerations, in lending practices of selected countries. This review is done with specific reference to the observed practices in Germany, France, Italy, Japan, U.S.A. and the U.K. Data availability more than anything else defines the choice of these countries as examples (see IBRO, 1978).

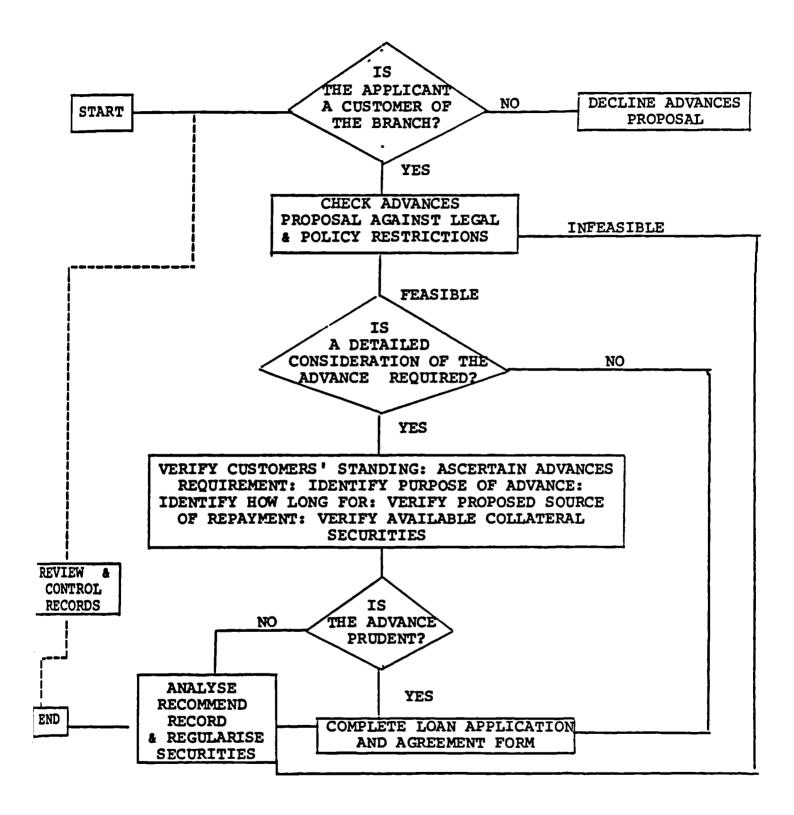
Banking practice with regard to the delegation of authority

is similar in all of these countries. Branch managers have varying credit limits that are usually a function of their experience, qualifications and responsibilities. Proposals beyond their stated 'limits' of discretion go to higher authorities, with the Head Office at the apex of the structure as the final arbiter. Among all these countries, the U.S.A. operates a distinctly different system. Instead of a branch manager and higher officers considering lending proposals in turn, the U.S.A. makes an extensive use of the committee system at all levels of lending decision-making. The important advantage here is that the system considerably enhances the lending limits of the lower levels of management in the hierarchy of loan decision-making process.

Except in Italy, credit evaluation in all these countries is based largely on the analysis of financial statements dating back to five or a minimum of three years. This is supplemented with cash flow analysis and the assessment of the character and other qualities of the proprietors or management (see figure 4.1 for a general flow process of loan evaluation procedure). The Italian exception is due to the general unavailability in the country of reliable financial statements on which any useful analysis can be based. This makes the banks fall back heavily on the knowledge of their customers.

There is a considerable degree of flexibility in the bankers' demand for securities in these countries. Invariably secured advances constitute low proportions of total lending in all countries except in Japan, where the secured advances amount to as much as 40% of all loans. Italy has the lowest proportion with only 4% of all its advances secured. Apparently in these countries as in the U.K. "the banker's experience has

Fig. 4.1 A Commercial Bank's Advances Information/Decision System



taught him to make loans to people rather than upon the security of things." (Sayers, 1967, p. 192).

In the final analysis a bank's contribution to the development of its community must be measured in terms of the increase in the volume and quality of the 'products' and services it is able to provide through its financial and related services. The bank's level of contribution is influenced by both its relationship with the industry and government influence or control. In theory government control of banks exists in all these countries in varying degrees. In practice, it is least pronounced in the U.S.A. For example, credit ceilings or similar restrictions of credit volume and allocation are still unknown to the American bankers. In Italy and France, government influence on the use of credit is well pronounced. This is probably to be expected in view of the fact that government has considerable financial stakes in the banks in these countries. The three biggest banks in France are owned by the government and with the government operated refinancing facilities, it is able to exert considerable influence on the size and allocation of aggregate credit. Similarly in Italy, government ownership of interest in banks is substantial; and with this goes considerable control over credit allocation. In other countries there is little or no government direct equity interest in banks and government control is, at the best, only subtle. The monetary authorities in the U.K. have resorted to credit control intermittently since 1955, rather severely, however, between 1965 and 1971 (Blunden, G. 1975). Competition and credit control (CCC) was introduced in 1971 giving true meaning to the concept of "perfect competition". The free atmosphere of CCC was, however, short-lived as the CORSET the special supplementary deposit requirement - was introduced in

December, 1973.

With regard to lending to an individual borrower, there is in all the countries being considered some restriction on the maximum that can be lent. In the U.S.A., lending to a single borrower is limited to 10% of the bank's capital fund; in Germany, Italy and France, where central credit risk services are organised by either the central bank or a government agency, there are requirements for credits above specified sums (FF22,000 million in France, DM one million in Germany, and Lire 30 million in Italy) to be reported to these institutions, although no outright ceilings are imposed on lending to a single customer.

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Though controls can significantly influence credit creation and allocation by commercial banks, it is the nature of the relationship of banks to industries that substantially dictates the level of financial assistance and co-operation between the two. Due largely to tradition, and financial and economic history, there are to be found differences from country to country in the ways banks relate to and assist industries via their lending and allied services. In the U.S.A. unlike in all other countries, banks are forbidden by legislation from taking equity interests in non-financial businesses. The relationship is limited, therefore, to that of banker and customer. The same formal relationship is largely true for the U.K. and their industrial clients even though there is no legal prohibition on banks taking equity interest in industries. The banks, however, take equity interests in industrial concerns, indirectly, through their subsidiaries and participation in Finance for Industry and similar institutions. It is worthy of note that

[&]quot;....there are good grounds for believing that the traditional relationships between the clearing banks and their industrial customers are undergoing a

permanent change. The banks are much more involved in their customers' affairs than they were a decade ago, and the involvement is likely to increase still further in the next few years."

(Financial Times, June 6, 1981)

In the 1940s, the Italian government acquired interests in the big industrial concerns of the country. With its ownership of interests in commercial banks as well, it is natural that the relationship between these two subsectors be a close one. Traditionally, banks in Germany have always had close association with the industries through their ownership of equity interests in businesses. This close association involves the appointment of bank personnel to the boards of the industrial concerns in which they have financial interests. German shareholders often appoint banks as proxies and these substantially boost the powers of the banks, not uncommonly leading to a situation in which they can conveniently block proposals requiring a threequarters majority. However "it is generally accepted that banks have used their power to promote industrial growth and have also come, when necessary, to the rescue of ailing companies (IBRO, 1978, pp. 38-39).

Although Japanese banks are not as committed on a longterm basis like their German counterparts, "semi-frozen loans are
the rule with usually no serious consideration of full repayment
of short-term loans or periodic clean-ups" (Mathis, 1975, p. 125).
The relationship between industry and the banks in France is close
for the same reasons as in Italy i.e. government ownership of
financial interests in both subsectors of the economy.

"French industrial companies rely heavily on the big banks and the special credit institutions for investment finance, much of which is project related. As a result, the big banks, with the encouragement of the authorities and in close co-operation with the special institutions, have acquired detailed and indepth knowledge of the technical operations of their customers. Following the example of American banks they have set up industrial departments which are staffed by specialists."

(Philip, 1977, p. 25).

In sum it can be said that there is little doubt that these relationships between banks and industries have significantly influenced and enhanced the levels of the banks' contributions - financial and otherwise - to the development of their business environment (see table 6.4).

In passing it is instructive to note that the lending function, like other functions of commercial banks, is not now treated in isolation. Up to the end of the 1950s banks were pre-occupied with "asset management". The major concerns of bank management were the maintenance of "adequate" liquidity and the required reserve asset position; whilst the liability items were treated somewhat as exogenous variables. With the arrival of the CDs and the ability to 'buy' liabilities, attention was turned to "liability management" (Komar, 1971). Because of the interrelationship of the assets and liabilities of the bank these early piece-meal approaches are inadequate in handling bank problems. Also "the computer has made it possible for banks to evaluate multitudinous impacts that alternative decisions have on income statement and balance sheet relationships." (Baker Jr. 1978, p. 43). Thus today, the banks approach is a general systems one. Particularly in advanced countries, banks of all sizes now pay some attention to asset/liability management rather than to any one side or function in isolation. understandable because, after all, loans, investment and other functions are subsets of the total bank and their management policies and tactics must be incorporated into the overall asset/ liability management. The benefit of this approach to bank lending is that it allows a general systems view of this function to

be taken. Management is enabled to see how the loan function affects and is affected by the other functions of the bank. This is the basic approach taken in the simulation exercises in Chapters 11 and 12; and hopefully, the exercises will help make the point more clearly.

CHAPTER 5

THE NIGERIAN COMMERCIAL BANKS' LENDING ENVIRONMENT

1. INTRODUCTION

In this chapter the essential elements of the economic and financial environment of bank lending in Nigeria will be analysed. From this analysis, it is hoped the relative importance of the commercial banking system in the financial intermediation activities in the country will be revealed. As a consequence, the rationale for expecting a more dynamic approach from these institutions will hopefully become better appreciated.

Additionally, a review of the policies and strategies of the government for the agricultural and manufacturing sectors will be undertaken. This will be done in the belief that these issues can have both deleterious and helpful effects on the level and effectiveness of banks' financial and other assistance to their environment.

Section 2 is concerned with an overview of the entire politico-economic system. The Nigerian money and capital markets are considered briefly in Section 3 for one main purpose - to see the role of commercial banks in the savings and credit activities in these markets. The legal framework within which the banks operate is considered in section 4. Sections 5 and 6 deal with government policies and strategies, respectively, for the agricultural and manufacturing sectors.

2. OVERVIEW OF THE ECONOMY

2.1 Size and geography

The Federal Republic of Nigeria came into formal existence in 1914 with the amalgamation of the Northern and Southern British

Protectorates. It is situated in West Africa and bounded by the Republic of Benin to the west, the Cameroons to the east, Niger and Chad to the north and the Gulf of Guinea to the south (see figure 5.1.

The country lies completely in the tropics and its vegetation stretches from dense forest in the south through savannah to semi-desert areas in the far north. Occupying a land area of 913,072.64 kilometers, Nigeria is the most populous country in Africa and the fourth in the Commonwealth (after India, Bangladesh and Pakistan). With a population estimated a over 80 millions, Nigeria has half the population of the sixteen West African States and one of every four black Africans is a Nigerian.

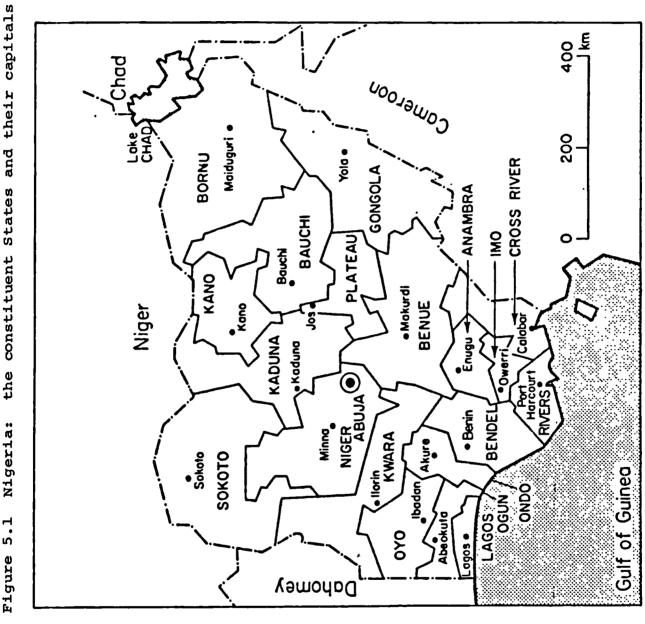
2.2 Political structure

Nigeria was granted political independence by Britain in 1960 and became a Republic within the Commonwealth in 1963.

Throughout the post-independence era, Nigeria's political system has been disrupted four times - thrice in 1966 and once in 1975 - all as a result of coup d'etats and counter-coups. Thus from January 1966 to September 1979, Nigeria had a military government. When the country returned to civilian rule in 1979, it adopted a presidential system of government modelled on the lines of the USA and in contrast to the pre-1966 Westminster type; and it became the fourth largest democracy in the world.

The administrative structure of the country has changed many times since 1914. In 1954, the country was divided into the Western, Eastern and Northern Regions and a Colony of Lagos.

A fourth region, the Mid-Western, was created in 1963. The military rulers restructured the country twice during their reign -



Nigeria:

first into twelve States in 1967 and then into the present nineteen States in 1976 (see figure 5.1).

Nigeria has three tiers of government - the national, the state and the local government authority (LGA).

In foreign policy and relations, Nigeria is non-aligned but it is, partly due to colonial history, transparently pro-West.

2.3 Natural resources

Nigeria is well endowed in natural resources. Among the major mineral resources are petroleum and natural gas, tin-ore, coal, columbite and uranium. The country is also rich in soils and vegetation. The important forest, agricultural and allied resources include cocoa, groundnuts, tobacco, rubber, cotton, palm products, hides and skins, timber, ginger, beniseed and soya beans. The main food crops are yam, rice, plantain, cassava, millet and guinea corn. At present wheat and potatoes are being increasingly grown. Tropical wild-life of all sorts also abounds in the country's forests.

Petroleum is, however, by far the most important resource of the country. Presently, Nigeria is the world's sixth largest exporter of petroleum. It is estimated that petroleum alone earns for the country about N25 million each day and accounts for over 80% of the total foreign exchange resources. This has turned Nigeria into Africa's wealthiest nation, with a total gross domestic product (GDP) that is about one-third of the other 49 black African nations combined and nearly equal to that of South Africa. The GDP has increased phenomenally in recent years. As can be gauged from Table 3.1 (column 4), it has gone up from N9,442.1 million in 1971 to N14,410.77 million in 1975 and nearly doubled within the decade (1971-1980) to N18,740 million by the end of 1980 (see also Vincent, 1980 p.14).

· 2.4 The financial system

Data with which to estimate the size and appreciate the structure of the financial system are paltry. Table 5.1 presents available information on this subject. Total assets of the financial system have grown from %895.5 million in 1969/70 to %3,226.4 million in 1974/75. In the main this growth is attributable to the increased monetization of oil revenues by the government. As a percentage of Gross Domestic Product (GDP), the financial system's assets hovered around the 20% mark during the same period - being 25.2% in 1969/70, 19.5% in 1971/72 and 22.4% in 1974/75.

Table 5.1 Total assets of all main institutions in the financial system as per cent of Gross Domestic Product at factor cost: 1969/70 - 1974/75

Year 	Total assets (M million)	GDP (₩ million)	Total assets as per cent of GDP
1969/70	895.47	3,549.30	25.2
1970/71	1,304.57	5,290.30	24.7
1971/72	1,303.08	6,684.70	19.5
1972/73	1,643.40	7,346.90	22.4
1973/74	1,984.88	8,670.50	22.9
1974/75	3,226.39	14,410.70	22.4

Sources:

- (a) Annual Reports and Statements of Accounts of the Main Institutions in the financial system
- (b) Federal Office of Statistics, Lagos
- (c) Third National Development Plan, 1975-80

2.4.1 The Central Bank

The Central Bank of Nigeria (CBN) is at the apex of the financial system. The CBN was established in 1959 under the Central Bank of Nigeria Act 1958. It is a government-owned and controlled institution with the usual central banking traditional functions. In addition the CBN has developmental functions; that is to say, it has responsibility for the promotion of economic development. These responsibilities - traditional and developmental - are defined precisely by the Act as

"... to issue legal tender currency in Nigeria; to maintain external reserves; to safeguard the international value of that currency, to promote monetary stability and sound financial structure in Nigeria, and to act as a banker and financial adviser to the Federal Government"

(Section 4(1) and (2))

2.4.2 Commercial banks

Commercial banks are next in importance to the CBN in the Nigerian financial system. The commencement of banking operations in Lagos in 1892 by the African Banking Corporation marked the beginning of commercial banking activities in Nigeria. The bank wound up only two years later, however, and was taken over by the Bank of British West Africa (Fry, 1976). As at the end of 1979, there were 19 individual banks - (11 indigenous and 8 foreign) - operating in Nigeria. With indigenisation this dichotomy exists more in practice than in theory.

The assets and liabilities of commercial banks have increased phenomenally in the last two decades (see tables 5.2 and 5.3). Loans and advances, and deposits being parts of these, have also witnessed high growth rates. More importantly, however, the share of commercial banks in total institutionalized savings

Table 5.2 Nigerian commercial banking system: portfolio of assets 1960 - 1979 (W millions)

Assets	1950	1961	1962	1950 1961 1962 1963 1964 1965 1966 196	1964	1965	1966	7	1968	1969	1970	ជខា	1971 1972 1973	1973	1974	1975	926i	1977	1978	1979
Cash & cash items	18.8	22.0	18.8 22.0 24.7	23.3	23.3 28.8 25.7	25.7	29.3 25.	25.1	31.1	37.4	74.6	62.1	75.9	75.9 100.9 331.4		828.7	1094	821.8	741.4	352.6
Balances with other banks		75.4	48.9 75.4 48.7	62.9	41.4	50.9	56.8 37.	37.4	11.5	14.7	20.6	38.1	31.2	59.8	109.8 183.8	183.8	292.3	444.7	394.1	948.3
Treasury securities	3.7	5.9	3.7 5.9 6.7		2.4 10.7 12.9	12.9	22.5 28	κj	195.7	335.4		290.7	376.3 382.0 755.4	382.0		792.8	1064.7	1153.8	953.1	1597.2
Loans and advances	114.0	120.0	154.1	114.0 120.0 154.1 178.9 244.8 270.0	244.8	270.0	298.1 275	o.	225.7	242.7	351.3	502.0	619.5 753.4		938.1 1	938.1 1537.3	2122.9	3074.6	4.109.7 4528.3	4528.3
Other assets	50.4	71.3	50.4 71.3 51.1		57.6 70.1 74.7 86.1 82.	74.7	86.1	82.9	0.96	131.9 205.3	205.3	382.8 334.4	334.4	475.7 676.4 953.3	676.4	953.3	1807.4	3006.1	2907.4	3796.2
																ì				
Total	235.8	.294.6	285.3	235.8 294.6 285.3 325.1 395.8 434.2 492.8 449	395.8	434.2	492.8	449.0	560.1	761.8	1152.0	761.8 1152.0 1275.9 1437.5 1772.0 2811.2 4308.0 6371.4	437.5 1	.772.0 2	811.2	1308.0	6371.4	8530.9 9105.7 11222.5	9105.7	11222.5

(1) CBN Economic and Financial Review (various issues) (2) Research Department, Central Bank of Nigeria, Lagos. Sources:

Table 5.3 Nigerian Commercial Banking System: Portfolio of Liabilities 1960-1979

							X	n11110ns)	(suc										
Liabilities	1960	1961	1962	1960 1961 1962 1963 1964 1965 1966 1967 1968	1964	1965	1966	1 296		1969	1970	1761	1972	1973	1974	1975	1976	1977	1978
Total																			
deposits	137.0	153.8	173.8	137.0 153.8 173.8 191.8 230.0 264.9 297.1 241.6 330.5	230.0	264.9	297.1 2	41.6 3		400.9	624.7	6.959	793.8 1,013.0	,013.0	1,693.9 2,839.2	2,839.2	4,167.3 5,237.2 5,378.1	5,237.2 5	,378.1
reserves	6.5	21.3		28.6 25.5	30.2 29.7	29.7	34.1	21.5 26.8	8.92	54.3	57.5	70.3	76.8	1.98	100.0	127.2	157.0	201.7	Ø7.0
Balances held for other banks	41.7	46.3	18.2	18.2 29.8	50.8	50.8 14.8	61.4	56.8	7.6	7.3	13.3	19.3	. 1.91	13.1	21.7	38.6	68.6	93.7	0 66
Loans & Advances	10.9	16.6	26.4	26.4 27.9	23.3 18.8	18.8	10.1	9.5	5.7	3.7	6.3	20.4	25.2	25.3	57.4	52.9	47.1	20.6	19.6
Other liabilities	39.7	56.6		38.3 50.0		61.6 79.1	90.1 1	19.9 1	90.1 119.9 187.4 292.3	292.3	448.4	507.8	525.0	634.4	936.9 1	936.9 1,250.2	1,931.4 2,977.8 3,3420	. 9.77.8,5	1,342,0
TOTAL	238.5	294.6	285.3	325.1	395.8	434.2	492.8 4	49.0 5	60.1	761.8	238.5 294.6 285.3 325.1 395.8 434.2 492.8 449.0 560.1 761.8 1,152.0 1,275.9 1,437.5 1,772.0	,275.9	1,437.5 1	,772.0	2,811.2 4,308.0	1,308.0	6,371.4 8,530.9 9,105.7	3,530.9	,106.7

Sources: Same as Table 5.2

In the economy has remained proportionately high (see table 5.4). Although the figure has gone down from 91% in 1962 to 86.1% in 1978, the lowest percentage recorded throughout this period was 72.3% in 1967. The predominant position of the commercial banks in savings mobilization as demonstrated by these figures appears to be too obvious to require mentioning. The dominance of the commercial banking sub-system in the financial intermediation process is completed with its significant share of the entire banking system's credit to the private sector. As can be seen from table 5.5 the commercial banks have contributed between 73% and 97.6% of the banking system's credit during 1963-1978.

2.4.3 Merchant banks

Merchant banking activities were conducted in Nigeria between 1960 and 1969 by Philip Hill (Nigeria) Limited and Nigerian Acceptances Ltd. These two merged in 1969 and were the first to be statutorily registered as a merchant bank under the name of Nigerian Acceptances Limited. By 1980 there were five merchant banks operating in the country.

The total assets of these institutions increased from N31.3 million in 1973 to N423.9 million at the end of 1978 (Ojo and Adewunmi, 1980a, Chapter Four). The intermediation role of the institutions has been relatively small. Though savings in the merchant banks have risen from N7.2 million in 1971 to N109.8 million in 1978, these have represented, respectively, only 1.5 and 4% of the total institutionalized savings of the economy (see table 5.4).

Similarly growth in loans and advances has been remarkable in absolute naira terms rising from a mere ¥14.0 million in 1973

Table 5.4 'Institutionalized Savings 1962-1978

December			Amoun	Amounts (Mmill	111on)					Ā	Percentages (%)	(%)	
	Commercial Banks	Federal Savings Bank	National Provident Fund	Merchant Banks	Federal Mortgage Bank	Others*	Total	Commercial Banks	Federal Savings Bank	National Provid- ent Fund	Merchant Banks	Federal Mortgage Bank	Others .
1962	41,644	2,978	1,092			•	45.722	0.16	5.9	2.4			6
1963	47,135	2,964	4,453		242	. 25	54,850	86.0	5.4	8.1	•	0.4	300
1964	54,214	2,949	8,893	1	387	88	66,531	81.5	4.4	13.4		0.5	0.13
1965	70,509	2,745	13,664	1	481	134	87,241	80.8	-	15.7	•	0.5	5.0
1966	81,258	2,657	18,556	•	587	183	103,241	78.7	2.6	18.0	1	9.6	0.17
1967	65,621	2,424	21,769	•	689	211	90,714	72.3	7.0	24.0	•	8	000
1968	183,622	4,930	50,884	•	1,766	188	241,390	76.0		21.0		0.7	2
1969	215,406	5,068	58,596	:	2,014	180	281.264	9-92) a	9 0	, •		3 8
1970	336,718	4,910	67,380		2,640	134	441.782	76.2	9 -		•	9	3 6
1971	371.762	4.550	76.572	7.1.7	800	126	461 193	4 0	•	? .	: ;		3 6
			100	2171	3	770	401,133	9.0	6.0	16.6	1.5	7 .	0.03
1972	456,866	4,322	89,166	10,769	5,356	106	566,535	80.6	8	15.7	9,	6.0	0.02
1973	582,280	4,549	109,725	17,100	5,470	98	720,222	80.8	9.0	15.2	7 6	0.8	0
1974	973,212	4,669	129,806	22,049	7,285		1,137,113	85.6	4.0	11.4		9.0	6
1975	1,572,356	8,070	159,902	63,449	11,839		1,815,708	96.6	9.0	8.8	, r	9.0	0
1976	1,979,159	6,937	193,900	58,910	16,341	06	2,255,337	87.8	0.3	8.6	2.6	0.7	
1977	2,255,093	8,007	230,400	82,360	19,970		2,595,920	6.9	0.3	6.8	3.2	9.0	ı
1978	2,415,470	8,227	252,499	109,796	17,855	06	2, 803,937	86.1	0.3	0.6	4.0	9.0	ı

* Premium Bonds, tec.

Source: CBN Annual Reports and Statement of Accounts (various years)

Table 5.5 Banking system's credit to the private sector (** million)

		By Comme	rcial Banks
Year 	Total	Amount	% of total
1963	104.8	88.9	84.8
1964	121.0	118.1	97.6
1965	141.0	134.3	95.2
1966	156.8	148.5	94.7
1967	148.0	137.4	92.8
1968	148.4	112.0	75.5
1969	162.9	119.8	73.5
1970	478.0	349.0	73.0
1971	591.2	497.6	84.2
1972	750.2	609.2	81.2
1973	845.4	736.9	87.2
1974	1,070.2	919.8	86.0
1975	1,770.1	1,512.1	85.4
1976	2,417.8	1,898.8	78.5
L97 7	3,514.4	3,027.7	86.2
1978	4,623.9	4,093.5	88.5

Sources: CBN, Annual Report and Statement of Accounts (various issues)

to N194.2 million in 1978. This peak figure in 1978, however, represents only 0.02% of the banking system's credit to the economy.

2.4.4 Federal Savings Bank (FSB)

Up to 1972, the Post Office Savings Bank (POSB) was operated as an arm of the Posts and Telecommunications Department. The Federal Savings Bank Act (No. 38 of 1974) changed its name and made it autonomous with retrospective effect. As the Act states the "Savings Bank is established to provide a ready means for deposit savings and so to encourage thrift."

Table 5.4 shows that the savings mobilization impact of the bank has been small. Worse still, it has been declining in relative importance as a contributor to total institutionalized savings - from a percentage share of 6.5 in 1962 to 0.3 in 1978. The bank does not engage in commercial lending. Rather it has always been required under the various statutory instruments governing it, to invest its surplus resources in government securities.

2.4.5 Development banks

There are four principal development banks in Nigeria.

These are the Nigerian Industrial Development Bank (NIDB); the Nigerian Bank for Commerce and Industry (NBCI), the Nigerian Agricultural and Co-operative Bank (NACB), and the Federal Mortgage Bank of Nigeria (FMBN). Except for the NIDB, where 1% of the equity is owned by individual Nigerians, all these banks are owned by the Federal Government.

"From its inception in January 1964 to March 1979, the bank (NIDB) sanctioned a total of N310.2 million..." (Osha, 1979)

p. 23). As at 31st March 1978 the NBCI Board had approved investments in a total of 119 projects or enterprises since its inception. The magnitude of approved investments totalled approximately N146,000,000 (NBCI, Annual Report 1978). The NACB in its first five years of operations approved a total of N286.3 million for 177 projects and disbursed N124.4 million (NACB, Annual Report 1978). Although these institutions have sanctioned huge sums of money their intermediatory role must be measured in terms of the actual disbursements they made. The annual average of disbursements recorded by the institutions has been relatively small - N9.0 million by NIDB, N26.95 million by NACB and N12,0 million by NBCI (Adewunmi, 1980a, pp. 12-13).

As can be gauged from table 5.4, the impact of the FMBN in savings mobilization has been relatively small - accounting for 0.4% of total institutionalized savings in 1963 and 0.6% in 1978. The institution provided %13.3 million for housing finance in 1972, %14.8 million in 1973 and %31.5 million in 1975 (Ojo and Adewunmi, 1980a, Chapter Seven).

2.4.6 Pension funds

The National Provident Fund (NPF) a contributory pension scheme for non-pensionable private sector employees is the major pension/provident fund in Nigeria (Adewunmi, 1980c). The NPF was established in 1961 under the National Provident Fund Act of that year. It has increased its contribution to institutionalized savings from \$1.0 million (or 2.4%) in 1962 to \$252.5 million (or 9.0%) in 1978. Like the Federal Savings Bank, the NPF is statutorily obliged to invest its surplus resources in government securities. Its direct contribution to private sector investment is, therefore, nil.

2.4.7 Insurance companies

Insurance business was commenced in Nigeria as long ago as 1921 when the Royal Exchange Assurance opened an office in Lagos. But the size and impact of this sub-sector of the financial system on financial intermediation remains small. By 1960, total assets of all insurance companies operating in Nigeria were only N2.0 million; eighteen years later, at the end of 1977, the figure stood at \\$532.0 million (see Ojo and Adewunmi, 1980a, Chapter Eight). However, the long-term portion of this sum, that is life fund, amounted to only \$124.1 million. Since the maximum long-term investment the insurance companies can do depends largely on the size of this (life fund), the institutions' financing role in the Nigerian economy has been little. Indeed until 1977 when the Re-insurance Corporation of Nigeria Act was promulgated requiring 20% of the premiums of insurance policies to be re-insured locally, most of the insurance companies' premiums were re-insured abroad.

2.4.8 Finance companies

Bentworth Finance is the biggest and indeed the only officially known finance company in Nigeria. The others are so small and insignificant that they can operate outside the framework of the Hire Purchase Act 1958 (Orimalade and Adewunmi, 1979). With assets/liabilities totalling N18.5 million in 1977, Bentworth Finance's intermediation role in the Nigerian financial system can be described as very small.

3. THE MONEY AND CAPITAL MARKETS

3.1 Money market

The money market was launched in 1960 with the first issue

Table 5.6 Money market instruments outstanding 1960-1978 (N million)

End of year	Treasury bills	Treasury cert.	Commer- cial papers	Cert.of deposit	Bankers unit fund	Eligible dev.loan stocks	Total
1960	18.0	-	2.3	-	-	-	20.3
1961	34.0	-	2.2	-	-	-	36.2
1962	48.0	-	6.2	-	-	-	54.2
1963	60.0	-	14.8	-	-	-	74.8
1964	68.0	-	30.1	-	-	-	98.1
1965	80.0	- •	42.0	-	-	-	122.0
1966	128.0	-	60.1	_	_	-	188.
1967	170.0	-	34.4	_	-	-	-204 . 4
1968	240.0_	20.0	5.1	-	-	-	265.
1969	340.0	142.0	4.5	-	-	-	486.
1970	556.0	236.0	6 . 0	-		-	798.
1971	616.0	256.0	11.2	_	_	-	883.
1972	616.0	286.0	9.3	_	-	-	911.
1973	616.0	286.0	7.9	_	_	_	909.0
1974	616.0	286.0	15.4	-	-	-	917.
1975	616.0	228.0	32.4	2.5	40.0	- ·	918.
1976	616.0	652.0	27.1	40.2	115.0	_	1,450.
1977	691.0	900.0	26.3	35.9	368.6	24.7	2,046.
1978	816.0	1,800.0	45.7	106.8	114.2	27.3	2,910.

Sources: (1) The Bullion, Vol. 2, No. 1 p.12

(2) CBN Annual Reports and Accounts, Dec. 1978

of Treasury Bills by the CBN. From that modest beginning, the money market has grown gradually and by 1978 had six different instruments (see table 5.6). Total value of money market instruments has risen from the small figure of \$\mathbb{R}20.3\$ million in 1960 to \$\mathbb{R}2,910.0\$ million at the end of 1978. It is worthy of note that Certificates of Deposits (CDS), which today constitute a major as well as a growing source of deposits for American and European banks, and which have made their loan supply functions highly elastic, constituted a small proportion (0.04%) of total money market instruments outstanding in Nigeria at the end of 1978.

The CBN, commercial banks, merchant banks, State governments, and others (including NPF, FSB and Insurance Companies) are the principal participants in this market. As is evident from table 5.7 the commercial banks dominate the activities on the market accounting for 74.6% of total assets outstanding as at December 1977.

Table 5.7 Holdings of money market assets outstanding as at December 1977 (in N m)

Name	Central Bank	Commer- cial banks	Merchant banks		Others	Total
 Treasury bills Treasury certificates Bankers' Unit Fund eligible development Ioan stocks Certificates of Deposit Commercial papers 	160.9 79.6 - - -	295.9 808.7 337.1 24.7 35.9 23.7	26.9 4.8 10.3 - - 2.6	23.7	183.5 6.9 21.3	690.9 900.0 368.7 24.7 35.9 26.3
TOTAL	240.5	1526.0	44.6	23.7	211.8	2046.6
PERCENTAGES	11.75	74.6	2.2	1.2	10.25	100

Source: CBN, Annual Report and Statement of Accounts (December 1977)

3.2 The capital market

The Nigerian Stock Exchange was established in 1961.

The narrowness of the market can be gauged from Table 5.8

which shows the size of industrial stocks issued between 1960

and 1975; table 5.9 which shows the value of government stocks

issued between 1960 and 1979; and table 5.10 which shows the

numbers of securities issued and listed as well as of companies

quoted. From these data it will be seen that government stocks

have been dominant on this market. A total of N1,066,710 million

had been raised by government through the Development Loan Stocks

between 1960 and 1975 (CBN, 1979(a), p. 141) compared to

N99.6 million raised by private-sector companies, via the

market.

Table 5.8 Industrial securities issued 1960 - 1975

Year	quoted a	f securities s at end of ear	Cumulativ of public at end of	issues as	Cumulative amount of issues as at
	Equities	Debentures & Preference Stock	Equities	Debentures & Preference Stock	end of year (¾'000)
1961 1969 1970 1971 1972 1973 1974 1975	3 8 9 14 21 25 35 35	1 2 2 2 6 6 6	3 9 10 15 22 26 36 36	1 2 3 3 9 9	1,220 7,775 15,675 59,415 69,159 83,424 98,174 99,625

Source: The Nigerian Stock Exchange

Table 5.9 Nigerian Government Development Loan Stocks, Issues, 1960-1979

Stock .	Amount of issue (in \(\frac{1}{2}\)000)
Federation of Nigeria Development Stocks:	
1st - 4th	30,000
Federal Republic of Nigeria Development Stocks:	
1st - 4th	106,000
5th - 8th	146,000
9th - 12th	320,000
13th - 16th	1,265,000
17th - 18th	1,000,000
TOTAL	2,867,000

Source: The Nigerian Stock Exchange

TABLE 5.10 Cumulative distribution of issues made, securities listed and companies quoted, Nigeria 1960 - 1975

Year			umber of at 31/12	3	of Secu		No. of Companies quoted as at 31/12
Tear	Govt. stocks	Indus- trial	Total	Govt. stocks	Indus— trial	Total	Industrials
1961	2	3	5	6	4	10	3
1962	3	7	10	8	8	16	7
1970	11	15	26	30	19	49	12
1971	12	19	31	32	24	56	18
1972	13	25	38	34	31	65	28
1973	15	28	43	38	34	72	. 28
1974	16	36	52	40	44	84	28
1975	17	39	56	42	44	86	38

Source: The Nigerian Stock Exchange

Overall, the relative contribution of this market to the process of capital formation has been evidently small. A cursory inspection of table 5.11 shows once again the important participation of commercial banks in this market. Other than the CBN, these banks are the most important single-group holders of Development Loan Stocks in the economy.

From the above analysis it appears clear that the commercial banks are by far the most important financial intermediaries in Nigeria. Furthermore, their contribution to money supply and consequently to the levels of economic activities can also be gauged from table 5.12. With so high a proportion of the savings and advances markets in their hands, and so big a role in the money and capital markets being played by them, it is no exaggeration to state that the commercial banks hold the key to the growth and development of the Nigerian economy, given the country's politico-economic structure. In advanced countries of the world, commercial banks are less dominant in the financial systems (see table 5.13) and correspondingly less is demanded of them. But because they are very dominant in Nigeria, as in most developing countries, a rather unique, pivotal role is expected of them.

4. THE REGULATORY ENVIRONMENT OF THE COMMERCIAL BANKS

The period between 1892 and 1952 can be aptly described as a period of unregulated banking in Nigeria. The first initiative at controlling banking activities in Nigeria was taken in 1948 when Mr G.D. Paton was commissioned to "enquire generally into the business of banking in Nigeria and make recommendations to the government on the form and extent of control which should be

Table 5.11 Holdings of Development Loan Stocks (in N'000)

Holder	31.12	2.77	31.1	2.78
	(a)	(b)	(a)	(b)
Central Bank	216,349		826,586	
Commercial Banks	243,489		143,544	
Merchant Banks	6,629		500 `	
Individuals	1,648		1,680	
Insurance Companies	57,151		69,344	
State and Local Governments	3,501		3,894	
Savings-type Institutions	572,893	160	680,023	. 160
Statutory Boards & Corporations	8,909		9,336	
Other Corporations and Companies	16,474		12,380	
Agricultural Credit Guarantee Scheme	-		9,092	
Federal Government	30		30	
Special Funds with CNN (1)	651,519		400,586	
CBN Sales not Classified	36,959		40,556	
TOTAL (Gross)	1,815,711	160	2,197,711	160

- (1) Includes Bankers Unit Fund; Stabilization Securities and Statutory Deposits by Insurance Companies
 - (a) Internal holding(b) External holding

Source CBN Annual Reports and Statement of Accounts (December 1978) p. 47.

Table 5.12 Money supply (1) in Nigeria: 1960 - 1978 (N million)

Year (Dec.)	Currency outside Banks	Demand (2) Deposits	Money Supply	Demand Deposits as Percentage of Money Supply (%)
1960	79.2	38.4	117.6	32.6
1961	79.3	39.3	118.6	33.1
1962	79.8	42.5	122.3	34.7
1963	84.5	47.1	131.6	35.8
1964	98.9	53.6	152.5	35.1
1965	100.5	58.0	158.5	36.6
1966	108.6	63.9	172.5	37.0
1967	207.4	106.0	313.4	33.8
1968	183.1	145.0	328.1	44.2
1969	252.7	174.1	426.8	40.8
1970	342.3	266.0	608.4	43.7
1971	354.5	274.4	628.9	43.6
1972	385.2	314.9	700.1	45.0
1973	435.9	391.3	827.2	47.3
1974	569.8	608.5	1,178.4	51.6
1975	1,030.7	1,013.4	2,044.1	49.6
1976	1,351.2	1,941.8 [.]	3,293.0	59.0
1977	1,940.8	2,853.6	4,794.4	59.5
1978	2,157.2	2,628.6	4,785.8	54.9

Notes: (1) Money supply is defined as currency outside banks plus demand deposits at Commercial Banks plus domestic deposits with the . Central Bank less Federal and State Governments' deposits at Commercial Banks.

(2) Demand (current) deposits with the banking system not of Government (Federal and State) deposits.

Sources: CBN Economic and Financial Review (various issues 1960-1978)

Table 5.13 Market share in financial intermediation: the position in OECD countries and Nigeria: 1975 (in percentages)

Country	Leading financial intermediaries	Deposits	Loans and advances
Uunited Kingdom	London clearing banks	17.0	12.1
Germany	Savings banks	21.5	16.1
France	National banks	18.1	17.5
Italy	Savings Pledge banks	18.4	11.0
The Netherlands	The Big Three	15.2	16.9
Switzerland	Cantonal banks	18.0	22.5
Sweden	Big four commercial banks	24.4	18.4
Japan	City banks	20.5	21.3
The United States	Commercial banks	35.5	31.6 .
Nigeria	Commercial banks	86.6	85.4
_			

Sources: (1) IBRO "Banking Systems Abroad" (London, IBRO, 1975)
Appendix 1A - 9A

(2) Ojo, Ade T. and Adewunmi, 'Wole "Banking and Finance in Nigeria" (Mimeograph) University of Lagos, 1980

introduced" (Paton Report, 1952, p.1). His recommendations led to the enactment of the 1952 Banking Ordinance. In 1958, a banking ordinance was enacted to up-date and countenance the new dimension in Nigerian banking introduced by the birth of the CBN. The current regulatory laws are embodied in the Banking Act of 1969 and the CBN Act of 1958 and their subsequent amendments.

Like the 1952 and 1958 Ordinances which it replaced, the 1969 Banking Act contains important regulatory features concerning bank supervision, and examination, minimum capital requirements, licensing requirements, the observance of liquidity ratio and the maintenance of reserves.

Before considering the system of control, it will be useful to highlight the objectives of the controls exercised by the CBN. These are stated as:

- (1) the development of a sound banking system
- (ii) the protection of depositors and other creditors of the bank
- (iii) the provision of adequate banking services in all parts of the country
 - (iv) the promotion of rapid economic development throughout the country
 - (v) the allocation of bank credit in accordance with government economic guidlines and priorities such as the programme of industrialization and indigenisation of the economy
 - (vi) the maintenance of internationally accepted standards and practices in the banking industry (Olashore, 1977)

The specific regulatory devices employed for these purposes are Credit Guidelines (selective credit control), Liquidity Ratio, Cash Ratio, Special Reserve Requirements, the issue of Stabilization Securities and interest rate structuring.

'Credit guidelines' has since 1964 been the major instrument of monetary control employed by the CBN. This is so, understandably, because all other orthodox market-oriented tools are largely unemployable in Nigeria in view of the narrowness and ill-integrated nature of the money and capital markets (see Falegan, 1978, pp. 15-30). With the credit guidelines, the bank seeks to control the aggregate volume and expansion of credits in the economy as well as the sectoral allocation of these credits. To ensure such loans and advances are available to borrowers at 'affordable' prices, the commercial banks' interest rates structure is annually prescribed by the CBN (see table V.1).

Apart from the initial minimum capital requirement, the CBN seeks to ensure that the banks' capital base grows with their level of operation by requiring the constant maintenance

of a capital fund to deposit ratio of 1:10. A similar ratio is also required to be maintained between loans and advances and capital funds.

5. GOVERNMENT POLICIES AND STRATEGIES

5.1 Government agricultural policies and strategies

In terms of policy, at least, a new and considerable attention is being given to agriculture in Nigeria today. This is in recognition of the role this sector has played in the past, and will inevitably play in the future in Nigeria's economy. Between 1960 and 1970, agriculture accounted for over 50% of the Gross Domestic Product (GDP), recording 63.4% in 1960 and 51.3% in 1970 (see table 5.14). The sector's contribution has regrettably decreased consistently since 1971. agricultural production increased in value from #1,787.4 million in 1970 to \3,399.7 million in 1971, it had only retrogressed to the \3,372.7 million mark by the end of 1975. It will be seen, therefore, that whilst at first one may attribute the decreasing percentage contribution of the agricultural sector to the increased contribution of petroleum, the recorded value of agricultural production in the 70s, in spite of considerable inflation in the economy during the period, clearly demonstrates a reduction in the sector's output. The value of agricultural exports has also not improved significantly over the period. With sufficient allowance for increased use, locally, of agricultural produce, an increase from N282.5 million in 1960 to ₩297.8 million in 1974 is obviously not a satisfactory record particularly for a developing country. As a further confirmation of the poor performance of the agricultural sector, it can be noted that food imports have gone up from \\$57.8 million in 1970

Table 5.14 Agricultural Earnings and Gross Domestic Product (GDP) in Nigeria: 1960 - 1975 (N million)

Year	GDP (1974/5 prices)	Value of Agric. Products	Agricultural Earnings as % of GDP	Value of Agric. Exports
		-		
1960	2,244.6	1,423.8	63.4	282.5
1961	2,373.4	1,465.2	61.7	283.0
1962	2,630.8	1,609.6	61.2.	260.0
1963	2,806.4	1,675.0	59.7	285.9
1964	2,914.0	1,678.0	57.6	303.9
1965	3,080.6	1,691.8	54.9	327.3
1966	3,210.0	1,784.4	55.6	292.5
1967	3,051.8	1,713.0	56.1	264.5 ·
1968	3,140.8	1,726.0	55.0	263.7
1969	3,278.2	1,743.8	53.2	278.7
1970	3,485.8	1,787.4	51.3	280.5
1971	9,442.1	3,399.7	36.0	265.2
1972	11,177.9	3,575.3	32.0	190.1
1973	11,993.1	3,351.8	27.9	278.4
1974	13,135.5	3,246.5	24.7	297.8
1975	14,410.7	3,372.7	23.4	267.3

Source: Olayide, S.O. "Economic Survey of Nigeria," p.26

Annual Abstract of Statistics (various issues)

Federal Office of Statistics, Lagos.

to N439.4 million in 1976 and to N790.3 million in 1977 (Semowo, 1979 pp. 13-16). In spite of these displeasing performances, it is reckoned that "the agricultural sector provides employment for about 67% of the active population" (Olayide, 1975, p. 24) of the country. From all these it is abundantly clear that this sector has constituted the backbone of the economy until only recently. Furthermore

"...agriculture and its related activities will continue to be the mainstay of Nigeria's economy in the foreseeable future. In the first place, the sector will continue to furnish the bulk of the nation's employment opportunities. Secondly, with population growth rate of about 2.5 per cent annually, urbanisation and real incomes projected to rise sharply, the demand for more and better staple food as well as animal products is expected to grow at a rate of about 5 per cent and 7 per cent per annum, respectively. Finally, agriculture will have to meet most of the country's raw material requirements for local industry and for export which will continue to be an important earner of foreign exchange."

(Third National Development Plan, 1975-80, p.8)

Between 1967 and 1970, the country was engaged in a civil war which inevitably came first on the society's list of priorities for the period. Understandably, in the light of this, government gave little or no attention to the sector up to 1970. The end of the war coincided with a great upsurge in revenues from oil. Short-sightedly the country's authorities thought that this new revenue source had made agriculture unimportant. The neglect of agriculture, therefore, continued. By 1975, however, unmanageable inflation, embarrassingly high food import bills and a decline in oil revenue were more than enough to show that the neglect of agriculture up till then was unwise. The urgent need to reverse her priorities having

been realised, the government defined one of its objectives in the sector during 1975-80 plan period as: "....evolving appropriate institutional and administrative apparatus to facilitate a smooth integrated development of the agricultural potential of the economy as a whole." (Third National Development Plan 1975-80, p. 67).

In the revised public sector capital programmes under the 1975-80 plan, the agricultural sector was allocated a total of N1,681.7 million out of a total projected expenditure of N43,314.0 million. Provisions were also made for the development of existing research institutions in the country and the establishment of new ones to undertake comprehensive studies into the problems associated with local crops and to devise scientific methods of getting increased yields from crops and livestocks. Four agricultural production parastatals have also been established during this plan period by the federal government (Obayan, 1977, pp. 19-22).

Another important scheme of the government worthy of note here is the Operation Feed the Nation (OFN) programme. Providing finance is not the primary goal of this scheme. The aim is to arouse the consciousness of Nigerians to the need to be self-sufficient in food production and to point out to individual Nigerians that they can contribute eminently toward the achievement of that goal. The financing aspect of the programme is concerned with the subsidizing of agricultural inputs such as fertilizers, pesticides and improved seedlings.

The Nigerian Agricultural and Co-operative Bank has been mentioned above as one of the development banks. But an analysis of government's agricultural policies and strategies can not be complete, without at least, some reference to the bank.

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As we noted earlier, this bank was established as a bold and deliberate effort of government to enhance agricultural production and related activities by providing direct finance to the sector. Its resources, and consequently its contributions to agricultural finance are, however, relatively small.

There are basically two ways in which the monetary authorities influence the flow of credit to the agricultural sector as part of the government's development effort in the sector. Directly and indirectly. Up to 1968, the CBN rediscounted Marketing Board Produce Bills and gave direct loans to the Boards as well. Since 1968, however, the CBN by virtue of the Central Bank of Nigeria (Amendment) Act 1968, had become "the sole source of credit for Marketing Boards (Commodity Boards from April 1977) purchases of export produce" (Section 29A). By 1970, for instance, total CBN financial support to the Boards amounted to N86.2 million. During 1977 and 1978, the Commodity Boards received advances totalling N250.3 million and N426.0 million respectively from the Bank.

Indirectly the CBN has encouraged commercial banks to lend to agriculture by prescribing in its credit guidelines the minimum proportion of their total loans and advances that should go to agriculture. To ensure compliance with these directives, the Bank with effect from April 1977 decreed that where a commercial bank's total loans and advances fall short of the prescribed minimum of 6%, the shortfall shall be deposited with the CBN at no interest for as long and to the extent that the shortfall continues. Such deposits were not to count towards the determination of the offending bank's liquidity ratio. In the 1979/80 guidelines, it has been stated that such shortfalls shall not be returnable automatically as the CBN will deposit

the amount with the Nigerian Agricultural and Co-operative
Bank to be utilized for agricultural production and development.
As an incentive the CBN allows commercial banks to count out
loans to agricultural sector in calculating the permissible
increase in their individual aggregate monthly increases in
loans and advances (CBN, Credit Guidelines, 1979/80).

Even if commercial banks gave a minimum of 6% of all their loans and advances to the agricultural sector, obviously this would not have, most probably, been adequate. The need to encourage the flow of more credit to the sector led to the establishment of the Agricultural Credit Guarantee Scheme Fund. A statutory instrument titled the "Agricultural Credit Guarantee Scheme Fund" states that the objective of the scheme is to provide "guarantees in respect of loans granted for agricultural purposes by any bank in accordance with the provisions of the Decree" (p.1). The limit of liability of the fund in respect of any guarantees shall apply to loans up to a maximum of N50,000 in the case of individuals and N1.0 million in the case of co-operative societies or companies. The Fund's initial resources of N100.0 million were contributed in the ratio of 60:40% respectively by the Federal government and the CBN.

The scheme began operating on 3rd April 1978.

(ACGS Report 1978, pp. 2-3)

[&]quot;A total of \$17.4 million has been loaned out to Nigerian farmers under the Agricultural Credit Guarantee Scheme as at March this year (1979). In all, 516 loans have been guaranteed during the first year of operation of the scheme. Credit to the agricultural sector of the economy increased in 1978 compared with 1977. The total amount of loans outstanding to the sector at the end of December 1978 was \$230.5 million compared with \$146.2 million at the end of December 1977 an increase of 61.6 per cent ... The Agricultural Credit Guarantee Scheme is expected to have made some impact, however small it may be, on the granting of loans to the agricultural sector during the year."

5.1.1 Future developments

It is the view of the architects of the Fourth National Development Plan 1981-85 that the objectives of the Federal, State and LGAs in this sector will focus on the promotion of:

- "(a) increased production of food and other raw materials to meet the needs of a growing population and rising industrial production;
 - (b) increased production of livestock and fish to meet domestic needs and create a surplus for export;
 - (c) increased production and processing of export crops with a view to expanding and diversifying the country's foreign exchange earnings; in this respect a target of seven years is being set for the revival of our cash crops;
 - (d) the expansion of employment opportunities to absorb the increasing labour force of the nation; and
 - (e) the evolution of appropriate institutional and administrative apparatus to facilitate the rapid development of the country's agricultural potential."

Broadly, the strategies of the government will be unaltered but the instruments will be sharpened to ensure effectiveness. Incentives such as income tax relief for pioneer enterprises, duty free importation of farm machinery, additional investment allowance of 10% and provision for carrying forward of losses for tax purposes will continue to be available.

It is noteworthy that agricultural production and processing has been transferred from schedule II to III of the Nigerian Enterprises Promotion Act 1977 which means that foreigners can now own 60% of the equity in an agricultural enterprise. The hope is that this move will attract foreign private investments to this sector and thus enhance the achievement of the set policy objectives

5.2 Government industrial policies and strategies

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Organised industrial development did not really commence until after independence. In the words of the Nigerian Industrial Policy and Strategy (p.7) "...economic activity before independence was almost entirely commercial." Almost inevitably, therefore, early efforts at industrialization were geared towards import-substitution manufacturing.

With her resource endowments and potentialities Nigeria is now faced with the opportunity and the challenge for significant industrial development.

"The domestic market is large and expanding and can provide the leverage for competition in the export market. The emerging entrepreneural group in the country is dynamic and capable of exploiting the potentials in both the domestic and world markets."

(Third National Development Plan 1975-80, p.147)

Industrial development in general and manufacturing in particular are, however, still at their infant stages in Nigeria. As can be gauged from Table 5.15, the contribution of manufacturing to the GDP during 1960-1975 ranged between 3.6% in 1960 and 9.4% in 1970. The input and output structure of the subsector also confirms the rudimentary nature of the activities. What manufacturing that takes place in the subsector is dominated by mere assembling. Industrial input costs, for instance, average over 50% for the industry and are as high as 90% for motor body building and high technology engineering. Output is dominated by low technology light industry products such as food, beverages and tobacco, textiles and wearing apparels which account for over 50%. The present situation is the product of a lack of foresight by the various governments of the country and their

Table 5.15 Value of Manufacturing Products and Gross Domestic Product (GDP) in Nigeria: 1960 - 1975 (№ million)

Year	GDP (1974/75 prices)	Value of Manf. Products	Manf. Products as % of GDP
1960	2,246.6	80.6	3.6
1961	2,373.4	88.2	3.7
.962	2,630.8	93.4	3.6
.963	2,806.4	151.8	5.8
.964	2,914.0	157.8	5.6
965	3,080.6	164.8	5.6
966	3,210.0	192.2	6.2
967	3,051.8	196.0	6 . 1 '
968	3,140.8	231.2	7.6
969	3,278.2	270.4	8.6
970	3,485.8	311.0	9.5
971	9,442.1	475.1	5.0
972	11,177.9	460.3	4.1
973	11,993.1	570.1	4.8
9 4	13,135.5	626.5	4.8
975	14,410.7	689.3	4.7

Source: Olayide, S.O. "Economic Survey of Nigeria" p. 54.

unwise industrial policies (Ušoro, 1974, pp. 243-254). The colonial government policies restricted industrial activities to the processing of the primary produce of the country for export, whilst preserving the local manufactured products' markets for the outputs of their home industries. At independence, the indigenous government, anxious to attract investors, adopted an ill-conceived open-door industrial policy which cared less about the industrial linkages effect of manufacturing activities, whilst solving the immediate balance of payments problems by import substitution manufactures (Usoro, 1974, pp, 243-254). It was only at the beginning of this decade that the government started to enunciate dynamic industrial development policies and to also put them into operation. Whilst the present policy maintains the package of incentives for investors interested in establishing in the country, it does emphasize the need for sizeable and planned increases in the local value-added , part of production.

The Nigerian Indigenisation programmes have on their part the twin objectives of encouraging foreign investors with high technology know-how into the more sophisticated industrial activities like fertilizer, agro-allied and chemical products manufacturing and preserving the low-technology field for the indigenous persons, as a training ground for budding entrepreneurs.

In addition to creating a favourable atmosphere for industrial development governments of the country have also taken substantial direct interest in industry. In partnership with foreign public and private investors, governments are participating in large industrial ventures such as iron and steel complexes, petrol-chemical plants and motor assembly. In a way this is in recognition of the weakness of the private sector.

The gradual take over of the NIDB and the establishment of NBCI represent important indications of the seriousness of current industrial initiative of the government. These banks have been established, as noted earlier, to provide not only financial assistance to indigenous entrepreneurs but to remove the known bottlenecks of industrial development. These bottlenecks include the acquisition of managerial and technical expertise, articulation of investment projects, the provision of investment advice and guidance including post-investment support and supervision.

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Through the use of Credit Guidelines the CBN has sought to increase commercial banks lending to the sector by prescribing minimum percentage of their loans and advances that must be allocated to the sector. As for the agricultural loans stipulation, any short-fall in the prescribed loan allocation to manufacturing by a commercial bank is passed on to the NIDB for its use and no interest is paid to the commercial bank-owner of the funds.

Finally the small-scale industries schemes (SSIS), administered by the states and the Industrial Development Centres established by the Federal Government are the other notable industrial programmes of the government (see Third National Development Plan, pp. 147-174).

5.2.1 Future developments

The overall objective of government policy with respect to the manufacturing sector includes:

- (a) the removal of identified constraints i.e. restrictive industrial and administrative practice, shortage of industrial manpower, and inadequate infrastructural facilities;
- (b) maximization of local value-added through utilization of local raw materials, backward integration of industries;

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- (c) industrial manpower development and employment
 generation;
- (d) rapid development, acquisition and adaptation of technology;
- (e) promotion of export-oriented industries, and
- (f) industrial dispersal.

In order to achieve these objectives the government has adopted a strategy that seeks to promote and encourage directly and indirectly the development of manufacturing and allied activities. Full recognition is given to the vital role of private enterprise and initiative.

As the principal government agency with responsibility for the formulation and execution of the country's industrial policies, the Federal Ministry of Industries plays two major roles in the sector - the regulation of the pattern and direction of industrial development and assisting the establishment and expansion of manufacturing concerns. To assist industries start and grow to maturity, the government provides a number of incentives and gives effective protection to manufacturers. The incentives and concessions granted to industries include:

- (i) Pioneer Status which qualifies a firm for a tax holiday of 3 to 5 years;
- (ii) Approved Users Scheme under which manufacturing firms are allowed to import certain raw materials either free of import duty or at very concessionary duty rates;
- (111) Accelerated Depreciation of Capital investments;
 - (iv) Customs (Drawback) Regulation which allows manufacturers to reclaim duties paid on imported raw materials used for the manufacture of goods which are exported;
 - (v) Dumped and Subsidized Goods Act 1958 under which the government can impose special duties on imported goods to protect industries in Nigeria if it believes that:
 - (a) the entry of such subsidized or dumped goods will

- threaten or cause material injury to potential or existing industries, and
- (b) such action will not conflict with the country's obligations under international Agreements to which she is a party e.g. GATT;
- (vi) Graduated Excise Tax Reduction for Local Value-Added, a scheme under which the government grants excise duty concessions to manufacturers that achieve increased levels of their local value-added;
- (vii) Fully Integrated Agro-Based and Food Processing
 Industries that can show that they utilize local
 resources to a large extent are entitled to substantial
 concessions in excise duty payments; and
- (viii) Research and Development expenditures are tax deductible where justified to be relevant to the operations of the manufacturing concern and prior permission has been obtained if to be undertaken abroad.

CHAPTER 6

AN APPRAISAL OF AGGREGATE COMMERCIAL BANK LENDING: 1960-1979

1. INTRODUCTION

Appendix I is devoted to the statistical analysis of the determinants of commercial banks' lending performance in Nigeria. This analysis is useful for the understanding of the results of the lending operations of the banks as it sheds light on the background to these activities. A critical examination of the lending operations of these institutions is instructive to the extent that we are enabled to say whether or not they have been efficient in the terms defined.

Against this useful background we shall in this chapter attempt a detailed examination of the results of commercial banks' lending operations for the period 1960-1979. Admittedly, the ultimate aim of every study is the improvement of the system or procedure that is the object of study. Detailed evaluation of performance is also usually a first step in this process. It is this line of thinking that provides the rationale for the exercise in this chapter.

As noted in Chapter 2, financial profitability measured by net return on capital employed (ROCE), return on total assets, or in absolute naira terms, is an inadequate basis for evaluating the efficiency of banks in a developing environment. The performance of Nigerian banks on the basis of these criteria and compared to banks in other parts of the world is, undoubtedly, good. This can be gauged from Tables VI-1 and VI-2.

Since this is not an issue of primary focus here, we shall not spend time examining this aspect of the banks' lending activities

further. Of course, the importance of profit cannot be entirely denied. The very continued existence of a bank, its ability to lend in increasing amounts and to undertake risky investments, depend considerably on good profits being made. However, on its own, in a developing economy where banks maximize their oligopolistic position to earn huge returns, profit ought not to be and is not now generally regarded as a basis for evaluating their efficiency (see ABDI 1977).

The data employed in the following analyses were obtained largely from the aggregate statistics of commercial banking operations as published periodically by the CBN In addition to the time-series data from these sources for the 1960-1978 period, cross-sectional data for 1979, obtained from CBN's Research Department, are also used. Where data availability permits, the analyses include separate considerations of indigenous and foreign banks. These further analyses are undertaken in the hope that they will provide more insight into the variations (if any) in the behaviour of these separable groups of institutions within the system. This dichotomy is, of course, also important in view of the shares of the loans and advances market accounted for by these groups. All through the period under consideration, a very large proportion of the loans and advances activities in the commercial banking industry was accounted for by the foreign banks (see table 6.1). By 1979, in spite of the growth in the number of indigenous banks over the years, the foreign banks were still in control of 64% of this market.

See bibliographical references.

Table 6.1 Share of loans and advances granted by foreign and indigenous commercial banks, 1963-1979 (in percentages)

Wear end	Foreign banks	Indigenous banks	Total
1963	73.0	27.0	100.0
1964	74.4	25.6	100.0
1965	73.9	26.1	100.0
1966	72.6	27.4	100.0
1967	74.1	25.9	100.0
1968	73.5	26.5	100.0
1969	· *	*	*
1970	*	*	*
1971	*	*	*
1972	62.8	37.2	100.0
1973	59.3	40.7	100.0
1974	58.2	41.8	100.0
1975	60.0	40.0	100.0
1976	67.6	32.4	100.0
1977	66.8	33.2	100.0
1978 (1)	66.2	33.8	100.0
1979	63.8	36.2	100.0

Note (1) October

Sources: (1) CBN, Economic and Financial Review (June 1969)

- (2) Ogbe, N.E. "A Comparative Analysis of the Structure of Commercial Bank Credit Operations in Nigerian States: 1972-75". CBN, Economic and Financial Review, (December 1978) p. 53.
- (3) CBN, Research Department.

Section 2 focuses on broad aggregate lending activities of these banks. Section 3 examines these aggregate lending activities in some depth by considering the maturity, security and repayment patterns of loans and advances. Section 4 reports an empirical study of the Agricultural Credit Guarantee Scheme Fund and Section 5 presents the Summary and concluding remarks.

2. AGGREGATE LENDING OPERATIONS

The results of the analysis in Appendix Lindicate some of the determinants of bank lending performance. Before examining the aggregate performance of these banks here it will provide a useful background if we note the trends in the explanatory variables of the analysis. These variables include total assets, total deposits, capital funds and branches.

As can be gauged from table 5.2 the total assets of these banks have grown significantly over the years. From #235.8 million in 1960, total assets increased consistently, except for 1967, until they reached the figure of #9,105.7 million in 1978. The growth rate has ranged between 6.04% in 1967 to 58.6% in 1974, with an average annual rate for the period of 24% (see table 6.2 & figure 6.1). Little if any of this growth, however, is real as inflation has proceeded at about the same pace during this time.

Total deposits of commercial banks have also increased phenomenally - absolutely as well as a percentage of total liabilities - during this period. More importantly, time and savings deposits accounted for over 50% of total deposits during 12 of the 19 years between 1960 and 1978 (see table VI-3). From 40% in 1960, it rose to a peak of 59.4% in 1972; declined gradually thereafter to reach 43.1% in 1977, and picked up to 49.1% in 1978.

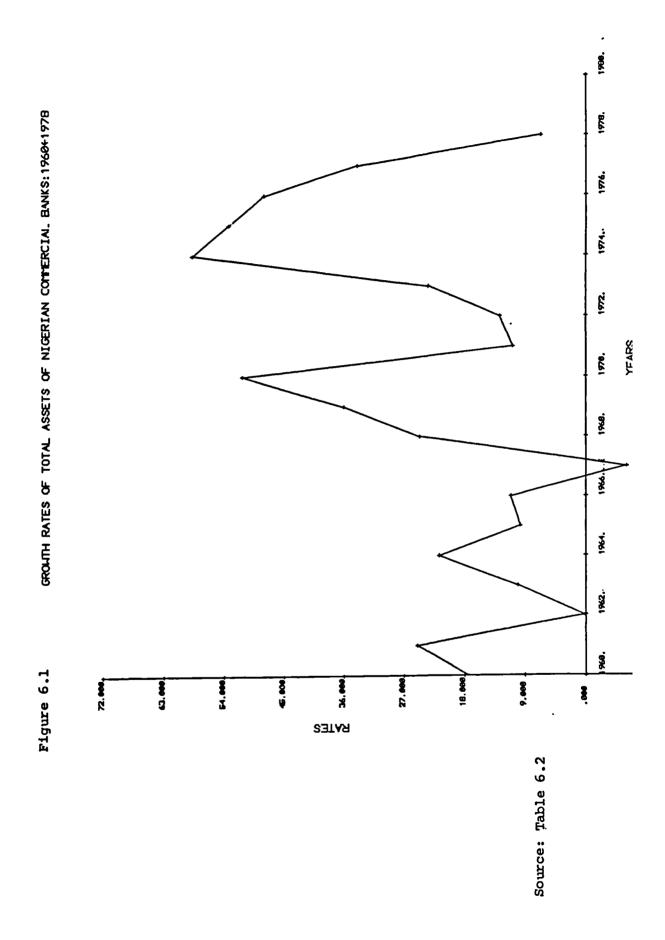
Capital funds were 2.7% of total liabilities in 1960 (see table VI-4). At the end of 1978, these amounted to 2.9%. In between these years, the ratio moved as high as 10.0% in 1962 and was as low as 2.4% in 1977.

In absolute terms the number of bank branches in Nigeria had 307% increase over the 1960-1978 period (see table VI-5).

Annual growth rates ranged between 9.6% in 1970 and 21.6% in 1978.

Table 6.2 Indicators of efficiency of operation by commercial banks for the period 1960-1978

Ratios per cent)	1960 1961	1962	1963	1964	1965	1 9961	1967	1968 19	1969 19	1970 19	1971 19	1972 19	1973 1974	74 1975	5 1976	6 1977	1978	Average 1960/78
	63.2 78.0	98.6	93.3 10	106.4 10	101.7 10	100.3 11	113.8 6	68.3 61	61.6 56	56.1 76	76.4 78	78.0 74.4	.4 55.4	.4 54.1	1 51.0	0 58.7	7 77.5	117
	•	29.1	и.о.	31.3	¥.4.	10.2	40.2 7	72.6 91	91.7 89	89.5 55	55.9 58	58.0 47	47.3 65.4	.4 56.4	.4 47.7	7 38.2	2 31.4	50.6
	48.3 40.7	0.42	92.0	61.8	62.2 6	52.5 6	61.2	40.3 3	31.8	30.5 39	39.3 43	43.1 42.5	.5 33.4	.4 35.7	7 33.3	3 36.0	0 45.1	45.1
	19.8 21.0	23.4	22.0	24.7	25.3	1.6	1.3	1.7	1.8	2.0	1.8	3.1 2	2.9 2.	2.9	2.6 3.8	8 4.5	5 5.6	9.8
	4.3 5.5	7.6	10.0	10.7	10.7	12.8 1	14.4	16.4	17.3 21	21.7	23.8 23	23.2 0	0.08 ^b 27.6	.6 28.6	.6 28.7	7 27.2	2 27.7	16.7
	50.4 45.07	57.44	. 60.73	74.5	69.03 2	27.4 3	33.01 2	22.27 2	21.48 24	24.76 3x	34.7 35	35.4 4	4.8 29	29.35 28.5	.5 34.8	8 43.32	32 52.54	39.4
	•	•	25.3	18.1	13.9	75.9	57.1 5	53.0 5	56.1 4	42.6 50	50.6 38	38.0 319.0	.0 44.0	.0 40.1	•	•	*	64.1ª
	•	•	63.4	65.1	67.3	70.3	73.9	75.4	•			76.3 78	78.2 78.2	.2 79.9	*	•	*	ı
	•	•	8.0	- 4.9	5.0	11.2	9.0	9.6	10.7	10.1	13.0 10	10.01	11.8 13.4	.4 11.7		*	•	10.0ª
,	2.21 2.27	2.84	3.21	4.29	4.62	4.97	4.48	3.58	3.76	5.31	7.37	8.82 10	10.42 12	12.59 20	20.04 27.64	64 39.07	07 50.93	3 11.5
	17.59 5.65	5.39	7.01	8.10	9.11	8.74	12.80	8.42	4.47	6.11	7.14	B.06 B	8.75 9	9.38 12	12.08 13.52	52 15.25	25 15.39	9.6
	- 25.0	0.2	10,1	21.8	9.7	11.11	φ 8.	24.7	36.0 5	51.2 1	10.8	12.7 2	23.3 58	58.6 53	53.2 47.9	.9 33.9		,
	- 5.3	28.4	1.91	36.8	10.3	10.4	- 8.7-	-17.9	7.5 4	44.7 4	42.9 2	23.4 21	21.6 24	24.5 64	64.0 38.1	.1 44.8	.8 33.7	23.3
	- 11.8	43.0	9.0	53.6	13.0	- 93.0 -	-23.6	4.0	13.6	60.03	32.6 10	107.6	12.2 25	25.8 37	37.6 113.1	.1 74.7	7 64.6	31.0
	- 35.7	77.7	52.5	47.0	10.4	35.0	1.2	6.5	13.1 8	82.3 5	56.7 2	20.3 -99	-95.6 4016.0		59.0 48.3	.3 37.6	.6 35.8	252.2
	CBN, Economic and Financial Review (various Appendix Table VI-5. Appendix Table VI-7	and Fir.	metal	Review	(various	1 _	1ssues 1960-1978)	(978)	N N N N N N N N N N N N N N N N N N N	Notes:	a 전 1	average 1963-1975 as a result of genetendant inflations on the This led to a hug demand for lower manufacturers coulurettably dropped	363-1979 Inflations on the on the second representations on the contract of th	sneral si lonary ti the imposi quality ild not s	ortages end, th tation of imp locally elleno	average 1963-1975 as a result of general shortages of goods and the attendant inflationary trend, the Federal Govt lifted the restrictions on the importation of consumer goods in 1973. This led to a huge inflow of imports & a fall in the demand for lower quality locally manufactured goods. Since manufacturers could not sell enough, levels of production inevitably dropped and so their need for borrowed funds.	and the Govt 14 Govt 14 and goods fall in tured goo ils of pr	fted the in 1973 the ds. Sinc oduction



The recent high growth in bank branches, it ought to be noted, is due partly to the Rural Banking Scheme of the CBN (see Olashore, 1979, p. 51). Under this Scheme, commercial banks are obliged to open a certain number of branches in specified rural locations within prescribed periods of time. As can be seen from Table VI-5 branches per bank have doubled in number between 1960 and 1978, and the number of persons per branch has been more than halved from 271,568 to 120,089.

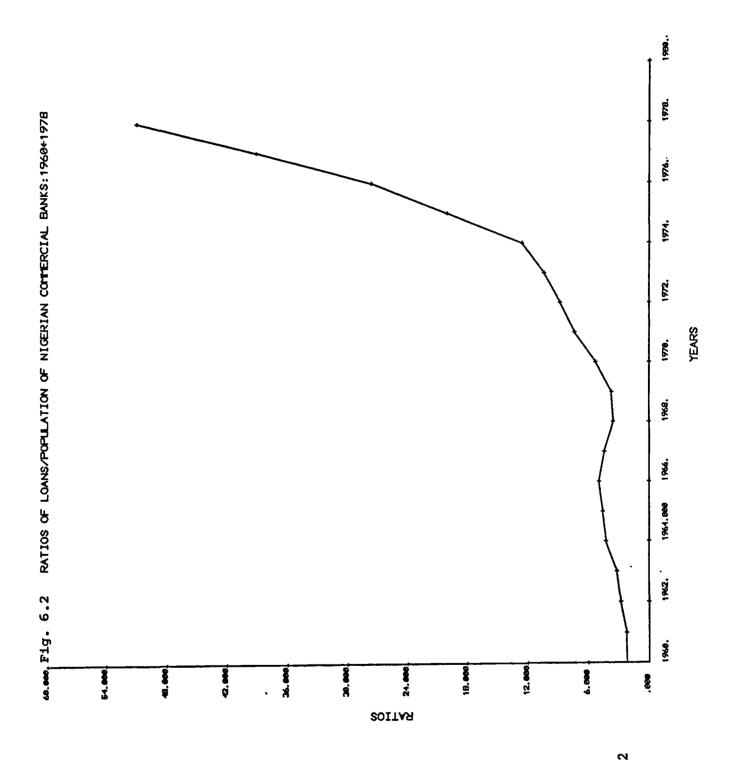
All these developments, as we learnt from the analyses in Appendix I do influence the level and efficiency of bank lending. Having noted briefly these changes in the explanatory variables, as a background to the performance evaluation here, an examination of the lending operations of the banks can now be made.

Total loans and advances have increased from N114.0 million in 1960 to N4,114.7 million in 1978 (see table 6.3). This phenomenal growth is also manifest in the loan penetration ratios (i.e. total loans to population) over this period. This ratio has increased from only 2.21 in 1960 to 50.93 in 1978 (see table 6.2& figure 6.2). Put in another way, loan per capita has increased from N2.21 to N50.93 within this period. Overall, loans and advances increased at an annual average rate of 23.3% between 1960 and 1978. This is, however, slightly behind the 24% rate of growth of total assets for the same period. In two years - 1967 and 1968 - aggregate loans and advances actually declined, whilst investments in Treasury Securities increased. It is noteworthy that the negative growth rate in 1967 was higher for loans and advances than for total assets. In 1968, whilst total assets increased by 24.7% loans and advances declined by -17.9%. (See table 6.2 & figure 6.3).

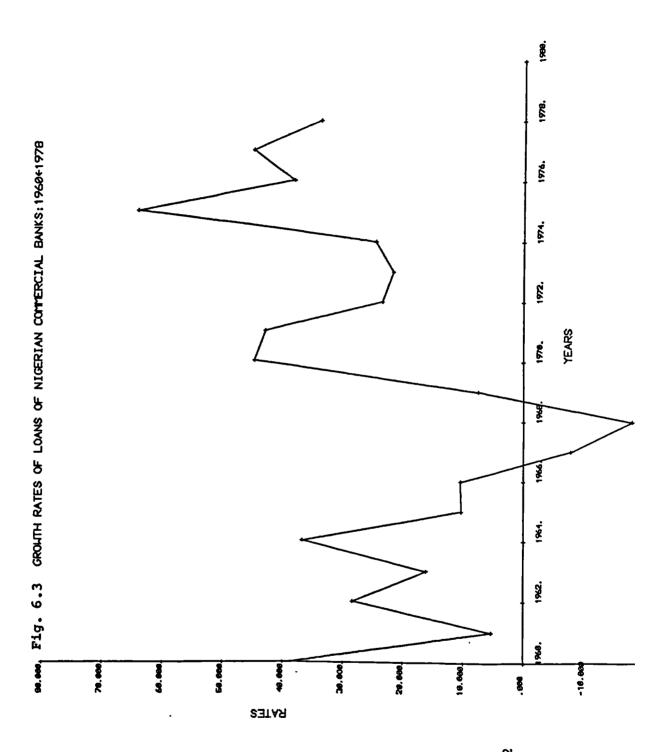
The net result of these developments can be seen in table 6.2

	Table 6.3	e		Na R	analysis	An analysis of commercial		ınks' lo	pue sue	banks' loans and advances (actual distribution)	(actual	distrib	ution)	1960 -	1960 - 1978 (N'000)	(000)			
Sectors/Subsectors	1960	1961	1962	1963	1964	1965	1966	1961	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978
Agriculture, Forestry & Fishing .	22562	2522B	3607B	79 344	S CAAS	9669	7000	130.	97.00	;	3								
Manufacturing		6592	11714	02001	26.26.2	2023	30130	20,00	3040	2,570	2660	7/76	19246	21588	27165	37370	79634	139087	228990
Mining & Quarrying	1086	948	1052	1154	1154	398	37160	2001	37032	9686	-	91/611	14 3984	6280	258484	410683	600609	827804	1137987
Real Estate & Construction	7190	11082	10370	12888	11520	12938	25534	22364	19864	17672	25956	37396	49180	162173	97790	16288	14631	37674	39364
TOTAL - Production	35696	43850	59214	72456		111564	70968	67662	61958		115920	178008	222566	286602	395604	677122	1115567	1676624	2289226
Public Utilities	1044	204	356	1960	1558	3288	1158	3486	2384	1676	678	3642	5162	מסינו	7265	71.77	21463	45667	65069
Transport & Communications			ı	•	•		10274	8722	9160	9828	18974	31786	44378	51748	62639	81950	180711	233587	284545
TOTAL - Services	1044	20 20 20	356	1960	1558	3288	11432	12208	11544	11504	19652	35428	49540	62846	73204	99064	202174	279254	346817
TOTAL - Production & Services	36740	44054	59570	74416	100940	114852	82400	79870	73502	78526	135572	213436	272106	349448	468808	776186	1317741		2636043
Bills Discounted Domestic Trade	2542	2234	9619	14888	30106	42060	60114	36 384	5114	4490	5854	10044	9008	3552	14011	28215	23753		39669
Exports	42034	38870	55472	60164	66934	57692	94638	64338	57742	66.784	32210 69554	91652	90347	86599	98137	144308	210054	297518	409091
Imports								64220	54880	32222	59934	63102	50184	92013	81142	130584	200612	288252	339062
TOTAL - General Commerce	44576	41104	61669	75052	97038	99752	183366	164942	117736	126586	167542	221204	222188	267089	284995	503700	530962	711923	868620
Credit & Financial Institutions	5854	4864	1736	2648	7296	3236	7578	9138	9130	4736	2722	5778	14236	11823	21653	51552	51014	95643	150810
Governments	2122		1474	1388	1866	1980	1258	1672	5866	4890	1292	3592	9016	17639	31693	37306	56384	87842	131492
rersonal & Froressional Miscellaneous	24708	28256	29622	25432	37674	50236	5634	2727	7214	11500	23260	33136	61938	42962	62360	84796	98504	137642	203852
TOTAL - 'Others'	32684	34822	32832	29468	46836	55452	32324	30158	34480	37618	48236	67382	125216	136913	184266	257441	274160	406777	123917
TOTAL - General Commerce & 'Others'	77260	77260 75926	94500	104520	143874	155204	187076	195100	152216	164204	215788	288586	347404	404002	469261	761141	805122	1118700	1478691
GRAND TOTAL	114000	086611	31,900 119980 154,070 178,936	178936	244914	270056	298090	274970	225718	242,730	351,350	50202	619510	753450	938,070 1,	1,437,327	2,22863		4,114,734
						-													

Source: CBM Economic and Financial Review (various issues 1960-1978)



Source: Table 6.2



Source: Table 6.2

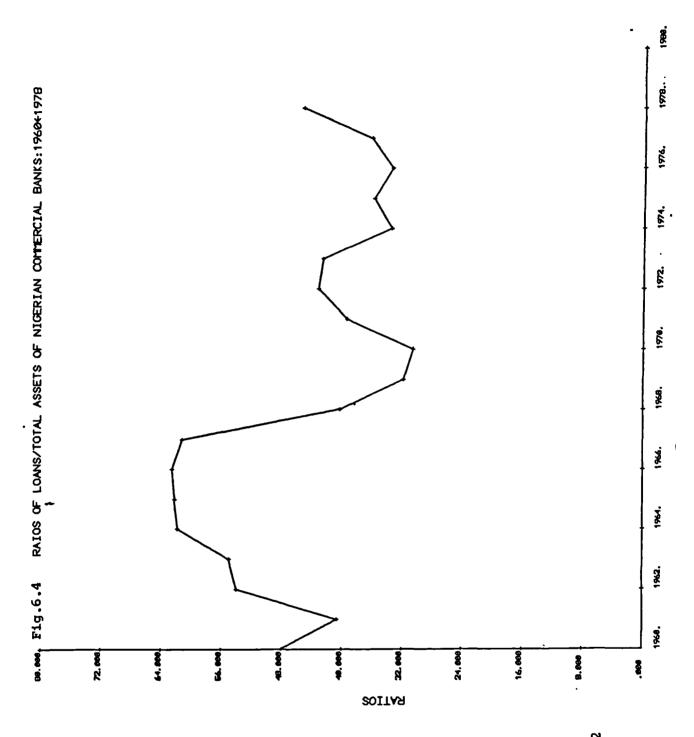
The ratio of total loans-to-total assets rose from 48.3% in 1960 to a peak of 62.5% in 1966. It fell modestly in 1967 to 61.2% but sharply the next year to 40.3, undoubtedly partly due to the war situation in the country. This ratio has fluctuated between 30 and 45% ever since. (See table 6.2 and figure 6.4).

inesses indeed, must have a lot to do with experience gained from practice. If this is true, it would be rational to expect year after year an increasing proportion of commercial banks' resources invested efficiently (i.e. in loans and advances). Unfortunately, the above statistics of the operations of these banks do not suggest that this is happening.

To examine this performance in other dimensions, table 6.4 presents a comparison of the ratio of total loans-to-total assets for five countries including Nigeria. Two of these countries - Japan and Great Britain - are developed; the rest - Jamaica, Ghana and Nigeria - are developing. Of all these countries, only Ghana, a country with an ailing economy, has a set of ratios as low as that of Nigeria for the period 1970-1977. While other members of this group have higher ratios than Nigeria, it does appear that the Nigerian banks are improving this position again in 1977. Nevertheless, these admittedly sparse data do suggest room for improvement in Nigerian banks' lending volume.

With special reference to the agricultural and manufacturing sectors, table 6.5 shows that the percentage allocations of loans and advances have been less than desirable. Loans and advances to agriculture declined from the peak figure of 25.3% recorded in 1965 to 1.3% in 1967 and has only been able to "crawl" back to a

See page 111 for an explanation of this sharp drop.



Source: Table 6.2

Table 6.4 Loans and advances as a percentage of the assets of commercial banking systems in selected developed and developing economies; 1970 - 1977

Country	1970	1971	1972	1973	1974	1975	1976	1977
Japan	*	*	65.1	63.3	62.2	61.5	61.0	*
Great Britain	55.0	52.0	72.5	76.0	77 . 0	70.0	71.0	71.0
Shana	40.0	49.4	36.6	36.1	39.7	32.6	31.2	29.5
Tamaica	•	72.0	76.3	65.4	*	68.8	65.8	55.6
 Iigeria	30.5	39.3	43.1	42.5	33.4	35.7	33.3	36.0

Sources: Computed from:

- (1) Bank of Tokyo, Japan, Semi-annual Reports (various issues)
- (2) British Banking and Other Financial Institutions (London: HMSO, 1974)
- (3) Central Statistical Office, Monthly Digest of Statistics (London: HMSO, various issues)
- (4) Bank of Ghana Quarterly Economic Bulletin (various issues)
- (5) Bank of Jamaica Report and Statement of Accounts (various issues
- (6) Twenty Years of Central Banking in Nigeria (Lagos, Nigeria: Research Department, Central Bank of Nigeria, 1979) p. 12.

An analysis of Commercial Banks' loans and advances (actual distribution) 1960-1978 (percentages) Table 6.5

	1960	1961	1962	1963	1964	1965	1966	1961	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978
Agriculture,																			
Forestry & Fishing	19.8	21.0	23.4	22.0	24.7	25.3	1.6	1.3	1.7	1.8	7.0	1.8	3.0	5.9	5.9	5.6	3.8	4.5	5.6
Manufacturing	4.3	5.5	7.6	10.6	10.7	10.7	13.1	14.4	16.4	17.3	21.8	23.8	23.2	9.0	27.5	28.6	28.7	27.2	27.6
Mining & Quarrying	1.0	9.0	0.7	9.0	0.5	0.5	0.5	0.7	0.5	1.3	1.8	2.3	1.6	24.2	1.3	1.1	0.7	1.2	1.0
Real Estate & Construction	6.3	9.5	6.7	7.2	4.7	4.8	9.6	8.1	8.8	7.3	7.4	7.4	7.9	10.2	10.4	14.8	19.4	21.5	21.4
Total Production	31.4	36.5	38.4	40.4	40.6	41.3	23.8	24.5	27.4	27.7	33.1	35.3	35.7	38.1	42.1	47.1	52.6	54.4	55.6
Public Utilities	6.0	0.5	0.2	1.1	9.0	1.2	0.4	1.3	1.0	0.7	0.2	0.8	9.0	1.5	9.0	1.2	1.0	1.5	1.6
Transport & Communications	•	•	•	•	•	•	3.4	3.2	4.1	4.0	5.4	6.3	7.2	6.9	7.0	5.7	8.5	7.6	6.9
Total Services	6.0	0.2	0.2	1.1	9.0	1.2	3.8	4.5	5.1	4.7	9.6	7.1	8.0	8.4	7.8	6.9	9.5	9.1	8.5
Total Production	32.3	36.7	38.6	41.5	41.2	42.5	27.6	29.0	32.0	32.4	38.6	42.4	43.7	46.5	49.9	54.0	62.1	63.5	64.1
Bills Discounted	2.2	1.9	4.0	8.3	12.3	15.6	20.3	13.2	2.3	1.9	1.6	2.0	1.3	0.5	1.5	2.0	1.1	0.8	1.0
Domestic Trade	J	J	J	J	J	J	J	J	J	9.5	9.5	11.2	11.9	11.2	10.6	10.0	6.6	9.7	10.0
Exports	ه پر	32 4	و پر	9 33 -	, , ,	٠ 7 7	~	- 4 4 4	9	13.3	19.8	18.3	14.6	11.5	9. 8.	7.0	4.5	3.3	1.9
Imports	; ; _	; ; _	} }_			; ; -			; ; -	27.5	17.0	12.6	8.3	12.2	8.6	0.6	9.8	9.4	8.2
Total General	39.1	34.3	.40.0	41.9	39.6	37.0	61.6	60.0	52.2	52.2	47.6	44.1	36.1	35.4	30.5	28.0	25.0	23.2	21.1
Credit & Finan- cial Institutions	5.1	4.0	1.1	1.5	3.0	1.2	2.5	3.3	0.4	1.9	0.8	1.2	2.3	1.6	2.3	3.6	2.4	3.1	3.6
Governments	1.9	1.4	1.0	6.0	9.0	0.7	0.4	9.0	1.3	5.0	0.4	0.7	1.4	2.3	3.4	5.6	5.6	2.8	3.2
Personal & Professional	, 3,-)3 ¢	, ,		ے د	. u	1.9	2.7	3.2	4.7	9.9	9.9	10.0	5.6	9.9	6.0	4.6	4.6	2.0
Miscellaneous			; ; ,	:-	-		0.9	4.4	6.8	6.8	6.0	5.0	6.5	9.6	7.3	5.8	3.3	2.8	3.0
Total Others	28.6	29.0	21.4	16.6	19.5	20.5	10.8	11.0	15.3	15.4	13.8	13.5	20.2	18.1	19.6	18.0	12.9	13.3	14.8
8.81	67.7	63.3	61.4	58.5	58.8	57.5	72.4	71.0	9	67.6	61.4	57.6	56.3	53.5	50.1	46.0	37.9	36.5	35.9
GRAND TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

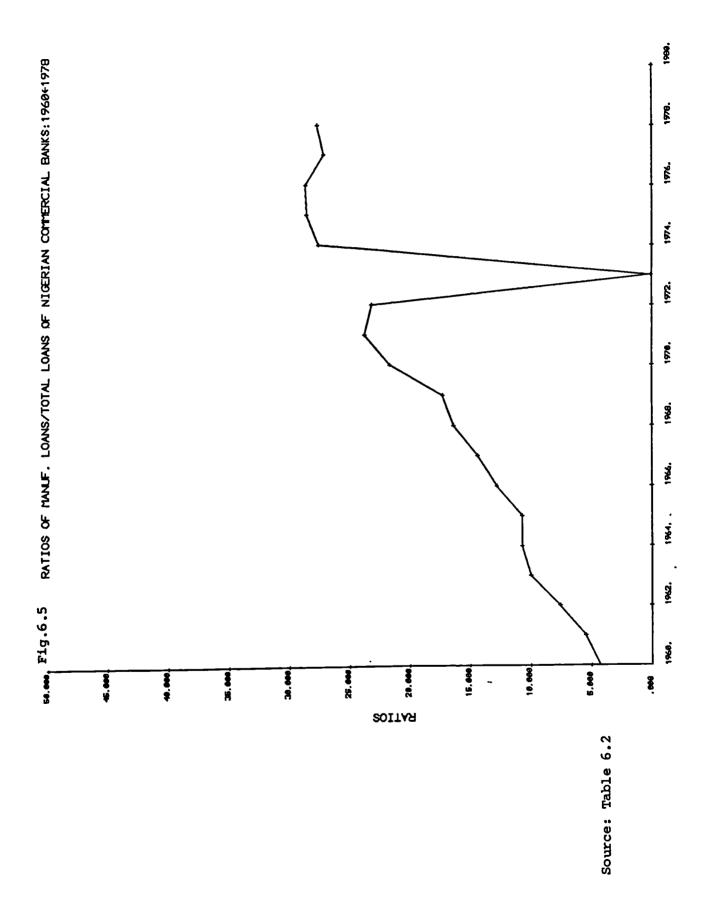
Source: CBN 'Economic and Financial Review' (various issues) 1960 - 1978.

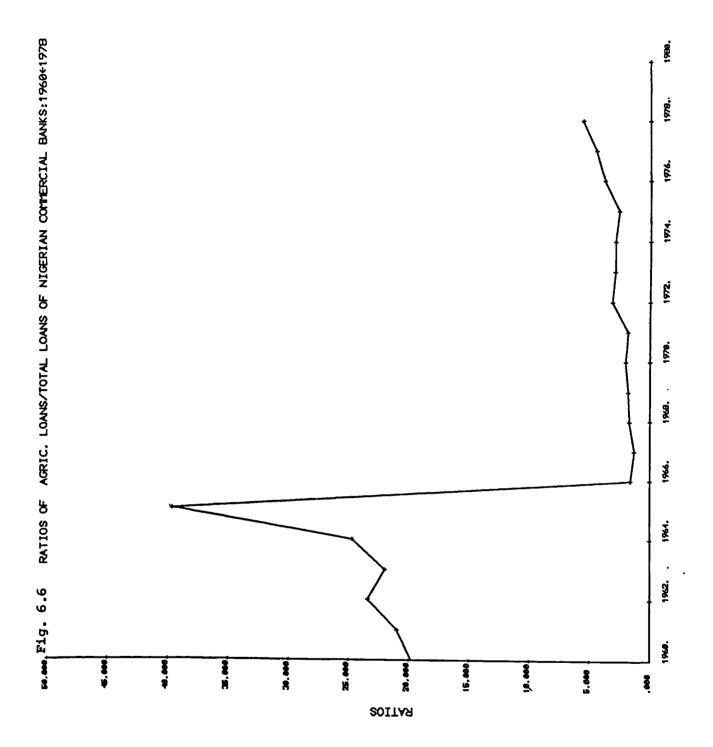
5.6% level in 1978. Manufacturing sector on the other hand has, however, received increasing percentage allocation of loans and advances. Except for 1973⁽¹⁾ when an 0.8% allocation was recorded, there have been steady increases in loans to this sector as a percentage of total loans - from 4.3% in 1960 to 27.6% in 1978⁽²⁾. But how do the growth rates of loans and advances to these sectors compare with those of total loans? The answer to this question will be useful as an indicator of the response of the commercial banks to CBN's "urgings" for increased resource allocations to these sectors. Furthermore, the nature and speed of these responses will undoubtedly measure the efficiency with which the banks perform their lending function.

Loans to agriculture have increased over the 1960-1978 period at an annual rate of 31%; for the manufacturing sector it is 252.2%. In both 1966 and 1967 substantial negative growth rates were recorded for loans to agriculture. This was due to the fact that commercial banks withdrew their advances to Marketing Boards because of the prevailing war situation. These events revealed that commercial banks financed mainly the marketing end of agricultural activities rather than the essential production aspect. The banks' lack of interest or little faith in agriculture can be more clearly understood if it is appreciated that these Marketing Boards' advances were readily rediscountable at the CBN and were therefore first class assets in terms of liquidity and safety. It will be true to say that these banks have not been able to reach their 1965 level of percentage loans allocation to the agricultural sector because they can no longer finance the Marketing Boards (see CBN, Annual Report, 1968).

See note in table 6.2 for an explanation of this sharp drop.

See figure 6.5 See figure 6.6



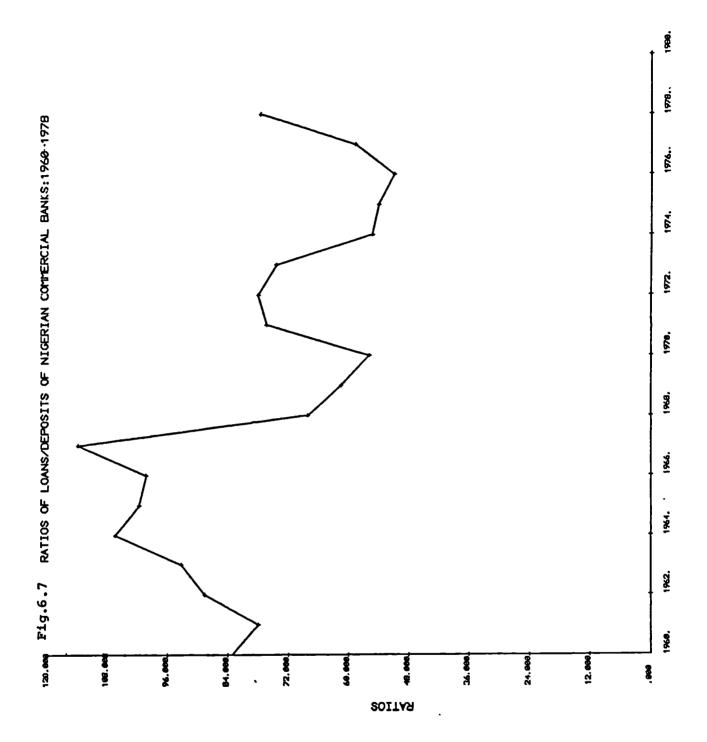


Source: Table 6.2

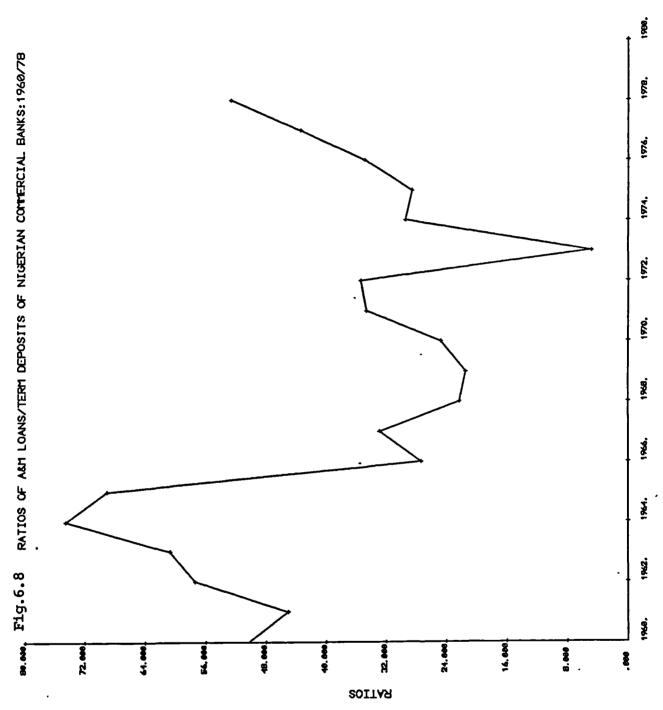
Loans-to-deposit ratio measures the extent to which a bank has invested its internal resources in the most lucrative asset available to it. Also "the loan-deposit ratio constitutes a rather crude measure, although the best available index, of the extent to which different types of banks (meet) local credit needs" (Kohm, 1964 p. 16). In a developing country like Nigeria, where the market for CDS is insignificant and undeveloped, this must be much more true. The aggregate loans and advances-to-deposit ratio of the banks has been relatively high throughout the period, ranging from 113.8% in 1967 to 51.0% in 1976. The average ratio for the period is 77.7% (see table 6.2 and figure 6.7).

Given the Nigerian financial environment with its paucity of long-term financial resources and sources, commercial banks' loans to the agricultural and manufacturing sectors, to be effective, must be as long term as the nature of productive activities in these sectors. Time and savings deposit resources will ideally be required for such advances. But to what extent do the banks use such resources for these purposes? We can obtain an indication of this from the ratios of agricultural plus manufacturing loans-to-time plus savings deposits in table 6.2 The banks' performances were relatively good in the early 1960s. During this period loans and advances to agriculture and manufacturing sectors represented between 45% and 74.5% of time plus savings deposits. Thereafter, in spite of the increases in these deposits, loans to these strategic sectors have not, as will be expected, correspondingly increased. The ratio has, during this later period, been as low as 4.8% in 1973 and as high as 52.54% in 1978. (See figure 6.8).

It has been demonstrated that the commercial banks are the



Source: See Table 6.2



Source: See Table 6.2

dominant financial intermediaries in Nigeria. It was also noted in Chapter 5 that credit guidelines are the principal instruments of monetary control in Nigeria. In the light of these facts and also because the Nigerian economy is operated within the framework of five-year plans, the "adjustments in banks' portfolios in conformance with the development plans and strategies will be considered indicative of their performance" (Abdi, 1977, p. 77).

Table 6.6 shows the specified credit guidelines for the distribution of loans and advances by the banks between 1969 and 1979. Against this expected distribution there are in table 6.5 the actual percentage allocations of loans and advances by the banks. The net result of matching tables 6.5 and 6.6 is presented in table 6.7. These deviations in table 6.7 can best be appreciated against the background of the aims of the credit guidelines. Broadly put, the principal purpose has been to encourage the banks to inject financial resources into the most productive (i.e. job-creating and local value-adding) sectors (see Falegan, 1978, pp. 15-30). Thus minimum allocations have always been specified for the "preferred" sectors - "production" and "services". Maximum desirable allocations have also been set by the guidelines for the "less preferred" sectors - "general commerce" and "others". The philosophy behind all these, it may be useful to note, derives from the recognition of the allocational inefficiencies of the market mechanism in an economic environment in which conditions for the ideal theoretical perfect competition are non-existent. Rather than allow the existing imperfect system to misallocate available resources, countries like Nigeria and Holland, for example, intervene directly through the instrument of development plans. The credit guidelines to the commercial

Prescribed sectoral allocation of Commercial Banks' loans and advances: 1961-1978 (percentages) Table 6.6

	X D M	1969*	1970	1971*	1972/73-	1975/76	1976/77- 197/778	1978/79
	Monetary Circular (MC)	Tow ←	MC2	£C3	₩ 4-6	MC 7	HC 8-9	MC 10
Sector/Subsector								
A. Production		+30.0	+45.0	+30.0	45.0	48.0	48.0	0
Agriculture		+90.0	+100.0	+151.0	0.4	0.9	9	
Mining & Quarrying		+20.0	+32.0	+30.0	0.	2.0	2.0	0.0
Manufacturing		+35.0	148.0	+25.0	30.0	30.0	30.0	32.0
Meal Estate & Construction		+10.0	+27.0	+11.5	7.0	10.0	10.0	10**
B. Services		+11.0	+50.0	; ק	5	9	ç	9
Public Utilities		+ 5.0	+120.0	+100.0	0.6	2.0	2.0	70.0
Transport and Communication		+12.5	+38.0	+ 7.3	8.0	0.0	8.0	0.0
C. General Commerce		+ 5.2	+10.0	+ 5.1	32.0	32.0	30.0	28.0
Domestia manda		+10.0	+14.0	0.0	2.0	2.0	2.0	2.0
Described in State		+ 5.0	0.6	0.0	10.0	10.0	12.0	12.0
Theoreta		+ 5.0	+11.0	+12.3	10.0	10.0	0.9	6.0
		0	+ 7.0	0	10.0	10.0	10.0	8.0
400								
Credit a Winson's Tactition		-10.0	0.0	-33.6	12.0	10.0	12.0	12.0
Control tilaiking tilacitucions		-14.0	o. 0	0.0	1.0	3.0	3.0	3.0
		-10.0	0.0	0.0	2.0	2.0	2.0	2.0
rersonal & Professional		- 5.0	0.0	-50.0	6.0	4.0	0.4	0.4
riscellaneous		-10.0	0.0	-22.0	3.0	1.0	3.0	3.0
TOTAL		. +10.0	+20.0	+ 8.4	100.0	100.0	100.0	100.0

* Desired Percentage changes were specified for these years ** Subdivided into .(1) Residential 5% (11) Others 5% Notes

Monetary Policy Circulars (CBN Credit Guidelines to all Banks) 1969-1978 Sources

Table 6.7 Deviations from prescribed targets of sectoral allocations of Commercial Banks' loans and advances: 1969-1978 (percentages)

Sector	Sectors/Subsectors	1969/70	1969/70 ⁽¹⁾ 1970/71 ⁽²⁾ 1971/72 ⁽³⁾ 1972/73 1973/74 1974/75	1971/72 ⁽³	1972/73	1973/74	1974/75	1975/76	81/1761 17/9161 91/5/61	1977/78	1978/79
A. Pr	A. Production	-18.5		+51.1	- 76	7 9 -	- 1 - 1	0			
Agi	Agriculture	- 75			2 ;	•		0.	0.	+ 0.4	٠ + ٢
		C.#/1		ş	- 1.5	6.0	- 1:0	- 3.4	- 2.2	- 1.5	- 0.4
1	mining & Quarrying	+107.7		+113.9	- 2.2	- 2.5	- 2.7	6.0 -	- 1.3	80	-
Wa	Manufacturing	-18.9		+70.6	- 5.1	- 5.7		7	? .		•
Rev	Real Estate & Construction	-14.9	+13.0	+29.4	+ 1.2	+ 2.7	+ 4.0	+ 4.8	+ 9.4	+11.5	+11.4
e e	Sovering		•	,	,	1					
П	I VICES		+14.0	+62.8	- 3.1	- 3.1	- 3.2	- 3.1	- 0.5	- 0.9	- 1.5
2	Fublic Utilities	5.1	-134.0	+125.8	- 2.3	- 2.6	- 2.1	9.0	- 1.0	- 0.5	4.0 -
Tr	Transport and Communication	- 5.5	40.0	+ 72.1	1 0°8	- 0.5	- 1.1	- 2.3	+ 0.5	- 0.4	- 1:1
C. Ger	General Commerce	-17.7	+ 3.0	+34.5	+ 3.7	+ 2.3	- 2,3	0.4	ر د د	9	9
B1	Bills Discounted	-1415	+23.0	+66.2	8.0	4.0-	1.0	c) o	,	, ,
ğ	Domestic Trade	1 2.5	+31.0	+89.5	+ 2.6	+ 3.2	+) (• •	
EX	Exports	-32.9	-37.0	+12.0	+ 1.0	- 0.1	- 1.8	0.6			7 7
Ä	Imports	ı	463.0	421.4	, +				1	i (
•					;	•			o.	ه د د	+ 0.2
D. Others	ners'	+17.0	+31.0	+81.1	+ 7.0	+ 7.2	+ 7.2	+ 8.0	6.0+	+ 1.3	+ 2.8
ž	Credit & Financial Institutions	-36.6	- 7.0	+66.7	+ 1.4	+ 0.7	+ 1.0	+ 0.6	9.0 -	+ 0.1	+ 0.6
Ś	Governments	+87.0	-36.0	4.00.4	9.0 -	+ 0.1	+ 0.8	+ 0.6	+ 0.6	8.0	+ 1.2
Pe	Personal & Professional	+59.3	+89.0	-121.8	+ 2.9	+ 1.3	+ 0.5	+ 2.0	9.0+	9 0	- +
MT	Miscellaneous	+16.0	+25.0	-51.8	+ 3.3	+ 5.1	4.9	4.8	+ 0.3	- 0.2	0.0
TO	TOTAL	- 7.8	11+	+46.3							
Notes:	(1) Deviations of monthly average up to May from target (2) Deviation of monthly average up to March 1971 from (3) Deviation of monthly average up to March 1972 from	up to May from target pp to March 1971 from target up to March 1972 from target	t target target								

Falegan, S.B. "Instruments of Monetary Policy: Their Applications and Effectiveness", The Bullion Vol. 3 No. 2 (April-June 1978) pp. 15-30. Tables 6.5 and 6.6. Ξ Sources:

⁽¹¹⁾

banks are thus given to ensure that credit resources are allocated to support planned productive activities in various sectors of the economy. It appears rational that the efficiency of these banks be measured in terms of their compliance with these directives. Non-compliance of the banks is sure to frustrate and disrupt the overall plan for the economy and no banking system, so acting, can be adjudged efficient, however profitable.

The banking system's allocations of credit to the production sector deviated from target throughout the 1969-79 period - five times positively and five times negatively. Since minimum credit allocation is set for the sector, one may be tempted to consider the positive deviations as desirable. But the desirability depends very much on the source of the deviations. Real estate and construction have been a major contributor to these deviations. More of the advances to these sectors have, however, been in respect of government construction contracts for roads, bridges, etc., rather than for residential accommodation. That this is so is partially supported by the action of the CBN in its 1978/79 monetary circular. In it and in subsequent ones, the CBN has specified that advances for residential buildings should constitute, at least, half of the 10% for the sub-sector.

Whilst the banks have been eager to finance short-term advances to construction firms with guaranteed payments by governments, they have been transparently reluctant to support the agricultural sector. The banks have failed to meet all prescribed targets of credit allocations to this sector. Negative deviations were as high as -74.3% and -85.5%, respectively, in 1969/70 and 1971/72. To be properly appreciated, the seemingly small deviations between 1972 and 1977 must be related to the

percentage allocations prescribed for the sectors. Monetary circulars 4-6 for 1972/73 - 1974/75 directed that a minimum of 4% of all the banks' loans and advances be allocated to agriculture. Subsequent circulars since then have asked for a minimum of 6%. It seems an evidence of the inefficiency of these banks that these rather low targets have not been met once. Not only that, margins of deviations have been as wide as -3.4% and -2.2% respectively, in 1975/76 and 1976/77.

The performance of the banks in the other subsector of specific importance to this study (i.e. the manufacturing sector) has been equally uninspiring. In 1970/71 and 1971/72 the banking system allocated more to this subsector by 19.0 and 70.0% respectively. In all other years the deviations have been negative.

"Services" sector and the "production" sector both make up the "preferred" sectors of the economy. Thus minimum credit allocations have also always been prescribed for this sector. As can be gauged from table 6.7 the banks have given less than the minimum required in all the years between 1969 and 1979 except for 1970/71 and 1971/72.

Of course, as may be expected, the failure of the banks in the preferred sectors is made up in less preferred sectors. The "others" sector has consistently had more than the prescribed minimum credit allocation. There is, however, a desirable trend of increasing under-allocation of credit to the "general commerce" sector in recent years. From -2.3% in 1974/75, the decline has gradually proceeded to reach -6.9% in 1978/79. Whilst it is easy to see this as a sign of improvement in the allocational efficiency of the banks, an informed observer may realise that this development is likely to be, at least, partly due to the continued strict control of imports by the government. The

economically desirable activity of exporting has not, for instance, had the expected financial assistance from the banks as the data in table 6.7 will show. A significant proportion of the negative deviations in credit allocations to the "general commerce" sector has, indeed, been contributed by shortfalls in credits to the "exports" sub-sector. It is probably against the background of this trend and to underline the importance of the "exports" sub-sector that it is now included in the preferred sector of the economy (see Credit Guidelines for 1979/80).

In all, the analysis in table 6.7 shows that Nigerian banks have deviated undesirably from credit targets set by the CBN in conformity with the development priorities of the government. it should be mentioned, is in spite of the growth in their resources and facilities. Undoubtedly this makes the growth in aggregate and sectoral loans and advances noted earlier in this chapter much less impressive and an indication of efficiency. To the extent that these deviations hamper rather than help planned economic activities, it is fair to say that the banks have been inefficient in their lending function. In defence of this kind of view, it is common for banks to claim that they have been responding to the particular demand function facing them. can be easily countered by reference to the fruitful business development activities of banks in Japan, Germany, America, and, to some extent, Britain (Gaulton, 1973) 1. The examples of these countries demonstrate beyond doubt that banks can stimulate the "right" kind of demand for their resources, and thus satisfactorily alter the "undesirable" demand function they are faced with. Indeed "there is growing evidence that progressive bank practices are

See also Bibliographical reference Nos.

antecedent to a vigorous demand for credit" (Crosse and Hempel, 1973, p. 192).

3. MATURITY, SECURITY AND REPAYMENT PATTERNS

The usefulness of any advance depends on the appropriateness of such advance. The appropriateness can be defined in terms of the type of advance - overdraft, short-medium-or long-term; the conditions for and the repayment programme of, the advance. An important criterion for judging the efficiency of a lending function is, therefore, the "appropriateness".

It is a common paradox in many financial systems of the world to have huge unused lines of advances at the same time as industries are acutely short of funds. For an example, the London clearing banks were able to demonstrate, almost convincingly, in their submission to the Wilson Committee, that they have substantial unused advances waiting for use by industries (CLCB, 1977, p. 89). Unilever in their own submission to the Committee stated, inter alia, that one of their financing problems arises from the fact that "longer-term, fixed rate finance has not been available in the past 5 years in adequate amounts or on acceptable terms" (Unilever's Submission, 1977, p. 9). The company is not short of financing offers: "As a result of our strong balance sheet, the banks and financial institutions are keen to lend more to us than we need to borrow" (p. 7). But such advances as are offered are often inappropriate. It is only when this kind of paradox is resolved, when the advances demand and supply functions are sufficiently synchronised, that the banks' lending activities can be said to be efficient. This is why an examination of the maturity, the security and the repayment patterns of loans and

¹ Of course government policies that fostered a high interest rate environment during this period were also relevant in this connexion.

advances by these banks is useful here.

3.1 Maturity pattern

Table 6.8 presents the maturity pattern of the commercial banks' loans and advances for the period 1963-1979. The first thing to observe in these statistics is that the maturity pattern has hardly altered over the period.

"Although the banks have been more active in providing finance for industry, the maturity structure of commercial banks loans and advances has remained virtually unaltered throughout.... They have remained preponderantly short-term of the orthodox self-liquidating type."

(Vincent, 1980, p. 17).

Between 1963 and 1975, the proportion of the banks'advances maturing within one year ranged between 86.6 and 95%. Of the remaining 20% or less, about 17% mature in 1-5 years and the rest after 5 years.

During this period, the indigenous banks' loans and advances maturing after one year were proportionately more than the foreign banks. In 1963 and 1968, respectively, 17.3 and 17.6% of the indigenous banks' loans and advances had maturity of over one year (see table 6.9). Comparatively, the foreign banks' proportion of loans maturing after one year was 5 and 4.7% respectively for these years. Although both groups of banks had modestly improved on this maturity pattern by 1979, the indigenous banks still had a thin edge over the foreign banks. This can be seen from the cross-sectional data in table 6.10. The average proportion of indigenous banks' loans and advances maturing at the end of 1979 - 78.55% - is slightly below the industry's average of 79.51%. On the other hand, their loans maturing between 1-5 years and after 5 years are above the industry's average. The foreign banks' performance is a

Maturity pattern of Commercial Banks' loans and advances 1963-1979 Table 6.8

(in percentages)

Maturity pattern	1963	1964	1963 1964 1965 1966 1967 1968	1966	1967	1968	1969	1970	1971	1972	1973	1974	1969 1970 1971 1972 1973 1974 1975 1976 1977 1978 1979	1976	1977	1978	1979
Within l year	91.9	91.9 93.6 95	95	88.8	88.8 91.0 90.4	90.4	89.3	6°68	87.0	0.06	89.3 89.9 87.0 90.0 88.2 86.6 88.3	96.6	88.3	*	*	*	79.51
1-5 years	8.1			.0	9.0 7.0 7.6	7.6	8.5	4.6	11.9	0.6	8.5 9.4 11.9 9.0 10.9 11.9 10.3	11.9	10.3	*	*	*	16.92
After 5 years	0	6.4	5.0	2.2	2.2 2.0 2.0	2.0	2.2	0.7	1.1	1.0	0.9	1.5	2.2 0.7 1.1 1.0 0.9 1.5 1.4	*	*	#	3.57
Total	100	100	100 100 100 100 100	100	100	188	91	100	. 81	. 100	001 001 001 001 001 001	100	100				001

Sources: (1) CBN Economic and Financial Review (June 1969)

Ojo, Ade T. and Adewunmi, 'Wole "Banking and Finance in Nigeria" University of Lagos (June 1980) (Mimeograph). (2)

Ogbe, N.E. "A Comparative Analysis of the Structure of Commercial Bank Credit Operations in Nigerian States: 1972-75" CBN, Economic and Financial Review (December 1978) p. 54. (3)

(4) CBN, Research Department

A comparative analysis of the m turity pattern of commercial banks loans and advances: indigenous vs foreign banks for selected years between 1963-1979 (in percentages) Table 6.9

	Total	100	100	100	
banks	Maturing after 5	e.	9.	3.72	
Indigenous	Maturing between 1-5 years	17.3	17.6	17.72	1
	Maturing within l year	82.7	82.4	78.55	
	Total	100	100	100	
anks	Maturing after 5	5.00	4.7	3.35	
Foreign banks	Maturing between 1-5 years	5.	4	15.82.	
	Maturing within 1 year	95.0	95.3	80.83	
Year		1963	1968	1979	

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CBN "Economic and Financial Review" (June, 1969) Sources:

(2) CBN Research Department

Table 6.10 Maturity pattern of Commercial Bank's loans and advances, 1979 (in percentages)

4- •		Mati	uring period	
Banks (1)	Within	1-5	After	Total
 	l year	years ·	5 yrs	
A	85.46	7.62	6.92	100
В	73.44	22.54	4.02	100
С	83.08	10.24	6.68	100
ם	71.29	22.98	5.73	100
E	73.74	26.26	0.0	100
F	78.93	18.60	2.47	100
G	95.60	4.40	0.0	100
H	85.09	13.92	0.99	100
I	80.26	19.74	0.0	100 -
J	85.18	13.25	1.57	100
K	93.17	5.83	1.00	100
L	95.34	3.82	0.84	100
M	91.44	5.27	3.29	100
N	81.37	14.00	4.63	100
P	79.17	12.73	8.10	100
Q	57.09	41.60	1.31	100
R	82.51	13.04	4.45	100
S	39.14	51.57	9.29	100
T	79.43	14.10	6.47	. 100
III banka Maan	70 51	16.02	2 57	
All banks (Mean (A-T) S.D.	79.51 13.40	16.92 12.40	3.57 2.96	
. 				
oreign Mean	80.83	15.82	3.35	
oanks (S.D.	7.60	7.46	2.71	
,				
indigenous Mean Danks (78.55	17.72	3.72	
(I-T) S.D.	15.80	14.47	3.00	

Source: Appendix Table VII-1

⁽¹⁾ For desirable anonymity the alphabet has been used instead of actual names.

reverse of the indigenous banks'. Proportionately more of their loans and advances mature within one year than the average for the industry and less mature between 1-5 years and after 5 years.

Although international comparisons may be of limited guidance in banks' efficiency evaluation given the considerable differences in institutional and environmental factors, the performance of selected OECD countries presented in table 6.11 is sufficiently indicative of the fact that the Nigerian banks' advances maturity patterns are the exception rather than the rule. None of the banking systems in this table has less than 40% of its loans in medium-plus long-term advances. This figure is more than double that recorded by Nigerian banks in their best performance year - 1979.

Table 6.11 Maturity distribution of loans and advances in selected OECD countries, December, 1975 (in percentages)

	Germany	France	Country Japan	USA	UK	
Short-term Medium-term Long-term	(⁴⁰ (₆₀	59 18 23	26 50 24	60 (40 (53 (47 (
Total	100	100	100	100	100	

Source: Inter-Bank Research Organisation (IBRO) Banking Systems Abroad London 1978.

Lending to the agricultural and manufacturing sectors to be 'appropriate' must be long-term. This is so that the resources might match the long-term productive activities in these sectors.

As a way of assessing to what extent the banks lend 'appropriately' to these activities, it may be helpful to relate loans and advances maturing after one year to total loans and advances to agriculture and manufacturing. Evidently in this way the numerator of the resulting ratio is inflated. It assumes that all loans maturing after one year are made to these sectors. In reality this is most unlikely to be true. Thus the ratios in table 6.2 are a positive exaggeration of the banks' operating statistics. Even discounting this exaggeration as we do, the ratios range between 13.9 and 75.9% in the 1963-1975 period. This record does not seem wholly commendable. Judged on the evidence here, the banks hav not apparently provided these sectors with the appropriate advance.

3.2 Security pattern

The second 'appropriateness' factor to be considered is security i.e. the requirement of security for advances. This is a very important issue in bank lending in all less developed countries (LDCs). In LDCs the collateral standards are inevitably, however undesirably, foreign. It has to be because these are imported as part of the banking practices of foreign banks. It is not the fact that the standards are foreign that makes them unsuitable. What makes them practically and functionally abhorrent is that they do not fit the banking and financial environment into which they have been transplanted. Life policies, conveyances, stocks and shares certificates and similar collateral are usually available from the borrower when requested in advanced countries. They are available and almost commonplace because these financial instruments have been systematically developed by business practices and customs in these countries.

In LDCs, however, these are a rarity. If the availability of these collateral is a prerequisite for advances in these countries, it will only serve to restrict aggregate credit.

In addition to insisting on rather hard collateral standards, Nigerian commercial banks put excessive emphasis on security for advances. This is not so even in advanced countries where they can be furnished with relative ease. example in the UK "the greater part by amount of the clearing banks' lending is advanced to customers without any security being taken" (CLCB, 1977, p. 111). Similarly in all OECD countries, "the large banks usually prefer good lending on an unsecured basis to loans that need to be supported by some form of security" (IBRO, 1978, p. 37). Contrast these statements with the practice in Nigeria as succinctly put by a distinguished Nigerian banker: "Our environmental constraints have made us make rather ingenious contribution to the world's banking practice by our insistence on valuable security as a necessary precondition for an advance" (Olieh, 1979 p. 47). That this is truly the situation is borne out clearly by data in tables 6.2 and 6.12

The ratio of secured loans-to-total loans has been increasing steadily over the last two decades. From 63.4% in 1963, it rose to 79.9% in 1975 and by 1979 was at a relatively high level of 88.3% (table 6.2). As can be seen from table 6.12 most of these securities are in the form of real estate, plant and equipment. Others in the "otherwise secured" category include financial assets such as treasury securities, stocks and share certificates.

Ideally all business practices must be adapted to suit the operating environment. Unless this is done, the operations are not likely to be efficient, socially or economically. This

Security pattern of commercial banks' loans and advances: 1963-1979 (in percentages) Table 6.12

Type of security	1963	1963 1964 1965 1966 1967 1968	1965		1961	1968	1969	1969 1970 1971 1972 1973 1974 1975 1976 1977 1978 1979	1971	1972	1973	1974	1975	1976	1977	1978	1979
I. Secured against plant, equipment & other real estate	29.3	29.3 24.4 22.3 27.0 25.5 27.	22.3	27.0	25.5	27.5	*	*	*	31.1	30.9	31.1 30.9 28.5 28.0	28.0	 *	*	*	40.2
II. Otherwise secured	34.1	34.1 40.7 45.0 43.3 48.3 47.	45.0	43.3	48.3	47.9	*	-	*	45.2	47.3	45.2 47.3 49.7 51.9	51.9	*	*	*	48.1
III. Unsecured	36.6	36.6 34.9 32.7 29.7 26.1 24.	32.7	29.7	26.1	24.6	*	*	*	23.7	21.8	23.7 21.8 21.8 20.1	20.1	*	*	*	11.7
·	8	100 100 100 100 100	월	81	g	g				l g	8	100 100 100 100	81				131

CBN, Economic and Financial Review, June 1969 (for 1963-68 data) (] Sources:

(2) J.A.T. Ojo (for 1972 data)

(3) CEN, Research Department (for 1979 data)

is just as true of banking as it is of any other business.

Consequently, Nigerian bankers must appreciate the role of collateral in credit operations. As Crosse and Hempel (1973, p. 202) advise: "A realistic collateral policy should serve to improve credit-worthiness enough to enable bank management to make economically desirable loans and should not be used to restrict credit."

3.3 Repayment pattern

The maturity and repayment patterns of loans are undoubtedly intricately related. The repayment schedule, as distinct from the maturity of a loan, is an important factor of "appropriateness" in lending. Whilst the maturity pattern may be suitable for a borrower, the repayment schedule may not. An advance that has a repayment schedule out of tune with the cashflow ability of a bor ower is not likely to be very helpful to him. There is little doubt that "companies often find it desirable to receive a term loan with repayment schedule tailored to their cashflow" (Mathis, 1975, p. 72).

As table 6.13 shows, a high proportion of Nigerian commercial banks' advances are of the overdraft type. In 1972 and 1979, the percentage of advances repayable by specifically agreed instalments were, respectively, 19.4 and 28.6%. All these leave a very small part of total loans payable at the end of the term of the loans in one single instalment.

The disadvantages of overdrafts have been noted in all the major commissions of enquiry into the British economy in recent years (Radcliffe Report, paras 941 and 942; Bolton Report, paras 12-20 and 12-21, and Wilson Report, para. 147). In response to the criticisms of overdrafts as a source of finance,

Table 6.13 Distribution of commercial banks' loans and advances by method of repayment 1972 and 1979

Method of repayment	Amor	unts n)	Perce	ntages
	1972	1979	1972	1979
I. Overdraft	463.4	3,068.61	76.6	67.8
II. Repayable by specifically agreed instalments	117.5	1,296.75	19.4	28.6
III. Repayable by one single instal- ment .	24.0	162.96	4.0	3.6
TOTAL	604.9	4,528.32	100.0	100.0

Sources (1) Ojo, J.A.T. "Financial Sector and Economic Development - with Special Reference to the Nigerian Capital Markets". Ph.D. Thesis, University of Wales (1974).

(2) Central Bank of Nigeria, Research Department, 1980.

banks have always been eager to point out that whilst in theory
the overdrafts are short-term, repayable on call, in practice most
of them can be regarded as medium-and long-term lines of finance.
This is because "the overdraft facility of a viable firm is rarely
terminated completely and some advances run until they become in
effect medium or long-term finance, so the borrower may come to
rely on them as a permanent part of the firm's capital" (Bolton
Report, para 12.20). But in 1969, the credit squeeze revealed
"the unwisdom of allowing overdrafts to be regarded as in effect,
medium term or even permanent capital" (Bolton Report para. 12.21).
It is also noteworthy that the above statement makes it clear
that only "viable firms", in the main, can hope to use overdrafts
in this way. Yet it is the "unviable firms" that most need the
facility.

In a developing country like Nigeria, the number of "viable firms" can nearly be counted on the fingers. More importantly,

the presently small, struggling, unviable firms, which are in the majority, hold the key to the growth and development of these and indeed most economies (Bolton Report para. 3.7). indeed as the banks claim, overdrafts are implicitly medium-tolong-term advances, what stops them from explicitly making them so? In the US, for example, "the development of the term loan as a uniquely and appropriately 'bankable' loan classification can ... be viewed mainly as a result of a more realistic approach toward resolving a situation which already had existed" (Kreps and Wacht, 1972, p. 71). Also in the UK there has "been increasing tendency for lending to industry to take the form of term loans with periods of between two and seven years and sometimes longer and with repayment geared to particular circumstances." (Wilson Report, para 147). Table 6.14 which shows the records of the clearing banks' lending over 1973-76 period bears testimony to this statement. Nigerian commercial banks can emulate these examples of development-promoting bank lending practices to great advantage. For one, their lending will be more efficient than it is now.

Table 6.14 London Clearing Banks: term lending, 1973-1976 (in percentages of total loans)

Category of recipients	1973	1974	1975	1976
Contractual lending to non-personal borrowers Special export finance schemes	26.9 8.7		36.7 7.5	
Percentage of contractual lending and special export schemes to total lending	35.6	35.5	44.2	47.4

Source: CLCB p. 276.

4. THE ROLE OF THE AGRICULTURAL CREDIT GUARANTEE SCHEME FUND (ACGS)

The Nigerian authorities employ a "stick and carrot" approach to the banking system with regards to agricultural credit. The ACGS represents the carrot which the authorities dangle before the banks as an inducement to make credit; and the credit guidelines and the attendant penalties for non-compliance represent the stick. Earlier in this chapter the credit guidelines were appraised. The role of the ACGS will be examined here. As noted in Chapter 5 the ACGS Fund is managed by the CBN. To obtain official view of the role of the Scheme, a structured questionnaire was used (see Appendix IVA-3). Before analysing the interview responses it will be instructive to consider the record of performance of the ACGS.

Table 6.15 shows the loans guaranteed by the ACGS between 1978 and 1980. It will be noticed from the table that there has been significant increases in agricultural loans, probably induced by the Scheme. Total loans granted under the Scheme have increased from %11.3 million in 1978 to %33.6 million in 1979; and had recorded %20 million by the end of the first half of 1980. Apparently, therefore, one can say the carrot is working successfully as a bait to entice commercial banks into a field of lending they have always been reluctant to move into. But are these credits reaching the real farmers?

Many studies including Oluwasanmi and Alao (1965). Galletti et al. (1956) and Osuntogun (1980) have indicated that the scale of production of Nigerian farmers is very small and the credit requirements also correspondingly small. For instance, Osuntogun (1980, p. 42) found that "the average amount of credit used per borrower varied from N92.4 in Ondo State to N155.9 in Oyo State."

Table 6.15 Loans guaranteed by the Agricultural Credit Guarantee Scheme Fund by State: 1978-1980

State	No.	of l	oans		Amount (%''000)	
	1978 (1	L) 1979 ⁽	²⁾ 1980 ⁽	3) 1978	1979	1980
Anambra	16	50	32 ·	247.4	1,283.1	319.2
Bauchi	15	132	101	1,271.2	1,543.3	986.9
Bendel	18	96	35	558.2	6,701.3	1,641.0
Benue	3	5	3	290.5	140.5	13.0
Borno	12	21	4 ·	178.4	739.2	53.0
Cross River	13	13	22	483.5	288.8	404.2
Gongola	- .	15	7	-	501.5	244.0
Imo	26	88	35	605.3	1,704.4	571 .7
Kaduna	77	170	89	985.6	3,138.6	668.5
Kano	22	229	48	627.8	3,185.4	1,904.7
Kwara	44	38	18	2,043.1	814.8	307.9
Lagos	5	16	21	300.0	3,203.1	3,437.8
Niger	3	12	9	83.0	202.6	157.0
Ogun ·	15	22	10	772.8	2,291.0	1,162.6
Ondo	1	14	9	25.0	358.9	1,546.0
Оуо	22	84	45	1,013.6	3,976.9	3,911.2
Plateau	8	41	16	688.7	854.3	1,029.0
Rivers	16	18	13	434.6	2,036.0	1,155.2
Sokoto	25	41	23	657.7	633.0	264.7
TOTAL	341	1,105	540	11,284.4	33,596.7	19,773.6
*~ T13F1	771	1,103	340			
			•	341	÷_1,105	÷ 540
Average size of loan	(in N'000)			33.1	30.4	36.6

Sources: (i) ACGS Fund, Annual Report and Statement of Accounts for 1978 and 1979.

Notes:

⁽ii) Central Bank of Nigeria, Agricultural Finance Department.

⁽¹⁾ April - December(2) January - December

⁽³⁾ January - June

In contrast table 6.15 shows that the average loan under the ACGS has ranged between \%30,400 in 1979 and \%36,600 in 1980. the general smallness of Nigerian farmers, it can be stated with a high degree of confidence that this Scheme has hardly touched Yet this group of farmers account for over 90% of agricultural outputs in Nigeria (see West Africa, 16 March 1981 p. 567). Two unintended consequences are likely to emerge as a result of this trend. The Scheme may not succeed in increasing food and other agricultural outputs as the credits are likely to be diverted by the absentee farmers who apparently now benefit most from the Scheme. Even if success is attained, new economic and social problems are likely to emerge as a result of the operation of the Scheme. Food and other agricultural products may be aplenty but paradoxically many will be starving at the same time. is because small holder farming will become uncompetitive and unattractive. A huge proportion of the labour force currently engaged in agriculture will be tempted to join the presently growing migration to the cities for jobs. The unplanned nature of the release of labour from agriculture, the size of the labour force involved and the near suddenness of the developments will inevitably lead to unmanageable unemployment and urban problems.

4.1 Opinion survey

Against this background let us now examine the official view on the ACGS as put in an interview with an Assistant Director of the Scheme during the researcher's fieldwork.

- Q1. What concrete evidence exists of the nature and size of agricultural credit gap in Nigeria?
- A. (a) . Number of applications made under the Scheme so far.

- (b) Comparison of loan applications and loan approvals by the NACB.
- (c) Lack of compliance, by the commercial banks, with the CBN credit quidelines on credit to the sector.
- (d) Generally agriculture being a growing sector will always need finance.
- Q2. What, do you feel, is the rationale for the choice of the ACGS as a means of improving agricultural finance and development?
- A. Banks were reluctant to lend to the sector as evidenced by deviations of loans granted from loans prescribed under the credit guidelines. So the Fund came to guarantee and remove or minimize the risk element in agricultural lending.
- Q3. Some people feel that an agricultural credit refinance scheme will be a better means of motivating the commercial banks to expand credit to the agricultural credit sector. What is your view?
- A. "This step was taken because the CBN is sure, from the records in its hands, that the banks are very liquid and thus the need for refinancing does not arise. The problem is with the attitude of Nigerian bankers."
- Q4. Do you think that the commercial banks are doing enough to promote agricultural. development in Nigeria? If yes, in what ways?
- A. "We can answer this question by looking at the deviations in loans to agriculture and the prescribed minima."
- Q5. Agricultural credit is of the nature of development finance, do you think commercial banks in Nigeria should be actively involved in this kind of business?
- A. "Yes, and loans to agriculture must be medium and long-term in nature."
- Q6. In what other ways, do you think, commercial banks can be encouraged to increase their commitments to the agricultural sector?
- A. (a) Establishment of agricultural insurance schemes.
 - (b) Increase in the interest rates, which presently are too low, especially for the small banks.
 - (c) Provision of extension services to assist the farmers.
 - (d) Provision of infrastructural facilities storage facilities for produce, water, electricity, good roads and general development of the rural areas.

But banks must also accelerate the training of agricultural credit analysts to help appraise loans properly. All of these will make lending and borrowing smoother.

- Q7. The provision of collateral is the most stringent condition of credit-worthiness small borrowers find hard to meet in most developing countries like Nigeria. Given the financial weakness of the average Nigerian farmer how can he raise a loan from the bank today in spite of the Guarantee Scheme?
- A. "Attempts are being made to solve some of these problems. For example, the banks have been told that a letter or certificate from the district or village head, a Chief Agricultural or Extension Officer could be accepted as evidence of the right of a farmer to cultivate a particular piece of land."
- Q8. Everything considered, it appears that under the present arrangements in the Scheme only the 'big' farmers can benefit from the operations of the ACGS. What can be done to extend the benefits of the Scheme more widely to cover the large number of needy farmers who in the end hold the key to the country's agricultural development?
- A. (a) Banks must establish their presence in the rural areas by opening branches.
 - (b) Farmers must form and/or be formed into viable co-operatives to facilitate lending.
- Q9. To what extent would you say the ACGS has begun to achieve its aims?
- A. "There is difference in credit to the sector as per the Fund's reports; it has gone from N11.3 million in 1978 to N33.6 million in 1979."
- Qlo. What can you suggest as a bank aid for the development of agriculture in Nigeria?
- A. Increased credit facilities plus increased support services advice on finance, on agricultural projects, etc.

4.2 Observations

It appears clear from the above interview that the premise on which the ACGS leans is neither sound nor well informed. To be able to solve the agricultural output problem, the constraints must be identified and well-defined. Obviously the authorities have based their decision to establish the Fund on a number of

'ifs'. For instance, as can be seen from the answer to question one, one is that if the banks do not comply with the credit guidelines then they can be induced to by a scheme such as ACGS. Osuntogun's (1980) study has, however, shown that whilst the agriculture sector is thirsty for credit and will absorb almost as much as it can get, this may not necessarily lead to increased production and availability of agricultural produce. This, as he notes, is because some of the credits are more likely to be used for purposes other than those aimed at increasing agricultural production.

It is true that banks are generally reluctant to lend to agriculture in Nigeria as in most developing countries. But is it mainly because of the risks? Maybe not. The typical farmer in these environments is small, and on the whole they number in millions requiring small credits. This is a core administrative credit problem that is real and daunting in these countries. It has little, if anything, to do with risks in lending. Thus it is doubtful whether eliminating the risks in agricultural lending alone will do as much as dent the problem.

Furthermore, there is no doubt that banks are in business to undertake risks. If not, there may be no justification for their handsome profits. The banks on their part appreciate this and have developed lending principles, procedures and practices that enable them assess, minimize and thus profitably undertake these risks. The banks' traditional defence of their unwillingness to lend on term basis to agriculture and indeed to any sector is premised on the fact that they borrow short, in the main, and cannot thus prudently lend long. A Scheme such as the ACGS which seeks to minimize agricultural credit risks is not likely to solve this kind of problem. What it will appear the banks

need is a 'window' for rediscounting portions of their term loans' portfolios as and when the need arises. This facility guarantees for them the desirable liquidity of their term loan assets and consequently gives them confidence, as well as boosts their willingness to part with their deposit resources on a term basis. This approach has been successfully tried in a number of developing countries such as India (see Bhatia and Khatkhate, 1975), Pakistan (see Islam, 1973) and Ghana (see Ogbe, 1975).

Another daunting credit problem is that of the creditworthiness of farmers. The concept of credit-worthiness, though highly central to the process of credit appraisal, is a wide and ill defined one in the literature (Murray, 1959, pp. 74-75). Algebraically, it can be described as follows:

$$C_w = f(C_s, E_c, A_1, M_a, Q_c)$$

where:

 $C_w = credit worthiness$

C_q = credit standard

 $E_{C} = economic conditions$

 A_1 = ability to lend

M_a = Management attributes

 $Q_c = Quality of credit risks$

The credit standard (C_s) is determined by conditions set for collateral and interest; economic conditions (E_c) refers to the prevailing optimism or pessimism in the business environment; ability to lend (A_1) depends on government's credit control and the bank's deposit base; management attributes (M_a) are the lending officers' attitudes towards different types of credits, their motives and experiences. The quality of credit risks (Q_c)

is determined by the financial health of the borrower, the prospects for revenue generation and the rating of the borrower's character.

Provided a customer is adjudged credit-worthy, a bank may be expected to lend willingly in the absence of 'stick and carrot'. Thus any strategy or tactics aimed at improving credit flows to the agriculture sector must be preoccupied with the solution of the credit-worthiness problem. The ACGS can help in improving the credit-worthiness by acting on some of the determinants i.e. C_s , E_c , etc. For example, if the provision of collateral is deliberately and prudently deemphasised and/or steps are taken to improve the acceptability of the available collateral, the credit standard (C_s) will become more easily att inable. However, the ACGS does not in any way improve the credit-worthiness of the borrower. Nor does it attempt to do so. Rather it requests banks lending under the Scheme to ensure that all their lending criteria are satisfied by borrowers, which condition puts more pressure on the banks and makes them more meticulous and stringent in their assessment of the creditworthiness of their customers.

5. SUMMARY AND CONCLUDING REMARKS

The last two decades have seen tremendous growth in the assets/liabilities of Nigerian commercial banks in general. As will be expected, and as indeed we have seen in the foregoing analysis, there has been corresponding growth in their aggregate loans and advances. Over the period, however, there have been less than desirable structural changes both in the assets and loan portfolios of the banks. For instance, compared to other banking systems, these banks continuously allocated a lower and

decreasing proportion of their resources to loans and advances. An undesirably high proportion of their loans and advances remains short-term, showing no expected correlation between their lending experiences and the "appropriateness" of their lending.

Whilst banks elsewhere the world over are progressively de-emphasising security as a basis of loan approval, the Nigerian banks are taking the reverse view of security. The ratio of secured loans-to-total loans is continually rising. There are two main dangers this trend poses for bank lending. First, many economically desirable loans with good prospects for not only financial but social returns may fail to pass their credit evaluation test. Second, this practice may lead to over-reliance on collateral to the neglect and detriment of other important credit evaluation criteria such as cash flows, bank-community relations, and loan-deposit relation. All these are sure to injure rather than enhance the efficiency of loan management in these banks.

"Today's banker cannot serve the legitimate credit needs of his community unless he is prepared to deal with the many different types of loans demanded by the bank's borrowing customers (Crosse and Hempel, 1973, p. 33). Where a bank offers short-term advances for use in long-term resource-needing economic sectors such as the agricultural and the manufacturing, the bank will not be meeting the credit needs of its customers. In spite of a load of incontrovertible evidence of high profitability, no such bank should be adjudged efficient in a developing environment.

CHAPTER 7

BANKERS'"LIQUIDITY PREFERENCE"AND THEIR LENDING PRACTICES

1. INTRODUCTION

An attempt was made in Appendix III to enquire into the 'liquidity preference' of Nigerian commercial bankers. This enquiry was carried out by subjecting the results of their investment actions to statistical test. Through the use of multiple regression analysis an attempt was also made in Appendix II to identify the determinants of commercial banks' attitude to risk. In that analysis, as in the analysis of AppendixIII only the banks' characteristics were used. Not surprisingly the results, though positively suggestive, were not entirely and satisfactorily definitive. One reason for this was that some of the factors influencing bankers' propensity to take risks were not incorporated.

A banker's decision to accept or avoid risk in lending is a function of many factors. These include the important lending concepts, principles and practices he has learnt and applied (see Chapter 4). It also depends on his experience and the information available to him. To a great extent, his psychological make-up - his values, motives and attitudes - play an important role. Indeed, empirical evidence suggests that "in a large measure, whether a bank will lend or not is a function of the personality of the banker involved." (Luckett and Lages, 1964, p. 42). In the light of these important operational facts, it will be useful for our research to understand the level of bankers' willingness to accept or avoid risks in personal investments. That understanding or knowledge can provide guidance to management to take the right steps to improve lending officers'

performances by re-orientation and/or changes in procedural rules and the policies relating to advances. This exercise is important because, willy nilly, riskylending must be done in a developing environment if there is to be growth and development. More so that "numerous writers have suggested that a loan officer's decision to lend in uncertain, unfamiliar and marginal situations is strongly influenced by the loan officer's personal proclivity to accept or avoid risks." (Griggs, 1972, p. 125).

In this chapter an attempt is made to measure
this 'personal proclivity' to accept or avoid risks by Nigerian
loan officers at all levels of management. An enquiry is also
made into the lending practices and attitudes of loan officers.
Thirdly, the level (if any) of relationships between lenders'
liquidity preference or 'personal proclivity' to accept risk
and their lending practices are examined. If indeed a significant
relationship is found to exist between these attributes of loan
officers, bank management can better 'manage' the advances
function given the liquidity preference of their operational—
level officers. It is hoped too that the results of the
analyses here will complement and enrich the findings in Appendices
II and III and facilitate better understanding of the micro-level
factors influencing lending efficiency.

The measurement techniques used in these enquiries are presented in Section 2. Section 3 discusses the samples and Section 4 explains the data gathering procedures. The results of the analyses are presented in Section 5 and Section 6, whilst Section 7 concludes the chapter with a summary of the foregoing and remarks on the findings.

2. MEASUREMENT TECHNIQUES

Three measurement techniques are employed:

- (a) The Investment Preference Test (IPT)
- (b) Simulated Loan Request Questionnaire (SLRQ)
- (c) Structured Questionnaire Interview (SQI)

The IPT was 'invented' by Litzinger (1963) and has been used subsequently by Griggs (1972); the SLRQ was first used by Shapiro et al. in 1969. Because of environmental and institutional factors, in particular, these techniques have been substantially redeveloped for use in this enquiry. As necessary, these differences will be noted in the description of each technique below.

The IPT was used to assess the personal risk-taking preferences of the individual lending officers. The questionnaire (a copy of which is presented in Appendix IVA-2) consists of four sets of financial assets. Although the four asset portfolios in the questionnaire differ in the actual financial instruments contained, they are all basically identical in structure. Each portfolio contains five financial instruments varying from one to five in descending order of safety, profitability and liquidity. For an example set 1 consists of:

- A 4% Treasury Bills
- B 4% Commercial Bank Deposits
- C 7% Federal Government Development Loan Stocks 1996
- D 9% Guiness Nigeria Limited Debentures 1990
- E Bata (Nigeria) Limited Ordinary Shares

Financial assets C, D, and E in all the portfolios are those listed on the Nigerian Stock Exchange (see Daily Official List for 1/2/80). The private sector securities - debentures and shares - included were among the 'Blue Chips' on the Stock Exchange at the time of this exercise.

The respondents were asked to assume that they had saved up the sum of ¥100,000, and wished to invest this in financial

assets. They were requested to indicate how they would prefer to allocate that saving to the different assets available in each of the portfolios considering them to be mutually exclusive.

The request for the completion of this questionnaire assumed that the loan officers were capable of recognising and appreciating the differing nature of each of the assets in the portfolios. This assumption was based on the fact that the indigenisation exercises that took place prior to this study had generated tremendous country-wide interest in financial assets. In addition, as many of the sales of shares were by public issues, the commercial banks, as "collecting bankers" were centrally involved. Because many of the buyers of shares were doing so for the first time, they looked to their bankers for advice on the investment of their funds in these assets. All of these circumstances were enough to 'force' the bankers to take interest in the subject of stocks and shares and to equip them with the basic understanding required for dealing with this questionnaire. Happily nothing turned up from the responses received to contradict this assumption or indicate it to be overestimating.

The SLRQ consists of four separate loan proposals (see Appendix IVA-1. These proposals were prepared drawing on the writer's working experience in the bank, particularly as an advances clerk, and on the knowledge of the lending environment in Nigeria. Whereas the SLRQs of previous studies employing this technique are the same for different applicants, the four proposals here are significantly different, one from the other. Four classes of borrowers and the two sectors of special concern to this study were covered by the set of SLRQs. To highlight an environmental peculiarity, two of the loan proposals had no financial history.

The first proposal is a request for an agriculture advance. Mr Sanni Fasasi, the proposer, represents an "affluent" peasant farmer in Nigeria, who should, by his financial standing, obtain the most favoured treatment, if any peasant is to get one, from the bank.

The next loan proposal is from a would-be industrialist.

Mr Christopher Adebiyi, the prospective loanee is at the point of embarking on a 'vertical' expansion of his business. In Nigeria, the big names in manufacturing today - UAC, PZ, Nigerian Breweries - have graduated from import-wholesale-retail business. Thus Mr Adebiyi can be seen to be following known precedents. The important difference, however, is that he is a small operator.

The third case is another agriculture borrowing proposal. This time it is from a farming concern, with industry-type organisation and management. This is a rare case in Nigeria. With recent government emphasis on large-scale agricultural production, this class of application is most likely going to grow.

Loan proposal iv is from an established manufacturing company. It is typical of the aggressive entrepreneurship among the indigenes who are anxious to participate effectively in the growth and development of the economy. Because of the boom in the market for the company's products, the proprietors are contemplating an ambitious expansion plan.

In writing up these cases, an attempt was made, deliberately, to make the proposals as 'rosy' and acceptable as possible. If these fail to gain the sympathy of the bankers, then the fate of millions of undoubtedly worse cases can be imagined.

The last technique used is the SQI based on structured questionnaire (see Appendix IVA-3). Twenty-two questions on

various issues relating to lending policies, practices and problems were asked. The questionnaire at the end also requested for bank branch and respondents' statistics. As most respondents were reluctant to complete the section relating to educational background, this section was cancelled out to avoid rejection of questionnaires.

3. THE SAMPLE

The sample can be broken down into two. The first, that of operations - level lending officers and the second of top-management - level lending officers. The operations-level loan officers include branch managers, sub/assistant managers and advances officers. The 38 respondents in the first sample come from these main groups of lending officers who have primary responsibilities for the analysis, assessment and either approval or recommendation of advances proposals to top management. The second sample consists of 28 top-management - level lending officers.

From the profile of the first sample of respondents in table 7.1 it can be seen that the age range is between 27 and 45 years, with mean and standard deviations being 37.4 and 4.3 years, respectively. The average number of banks they have had working experience in is 1.7 with standard deviation of 0.7.

The banks the respondents belong to range in size from small to big banks. The biggest amongst these had total assets of %2,621.4 million and total loans and advances of %813.82 million at the end of 1979. At the lower end, the smallest bank had assets worth %104.04 million and a loan portfolio of %52.2 million.

In terms of number of staff at the branches covered, the

Table 7.1 Profile of respondents (Operations-level lending officers)
backgrbund characteristics

Note (years) No Size (total sests and total loans) State (total sests and total loans)							
Age (Vears) (A) Size (total assets and total loans) (A) State coverage Loans Loans State		Personal	- -	Institutional		Environmental	•
Name	()		Size (total		loans)	State	en!
S.D. 4.3 Largest N 2,621.42 m N 813.82 m Dayon Oxdo Oxdo Oxdo Oxdo Oxdo Oxdo Oxdo Oxdo		Mean 37.4	Class	Assets	Loans	State	% of total response
Notice Page 27 - 45 Page 2 Page 2 Page 2 Page 2 Notice Page 2 Page 2 Page 2 Page 2 Page 2 Notice Page 2 Page 2 Page 3 Page 3 Notice Page 3 Page 3 Page 3 Page 3 Notice Page 3 Page 4 Page 3 Page 3 Page 3 Notice Page 3 Page 4 Page 3 Page 3 Notice Page 3 Page 4 Page 3 Page 3 Notice Page 3 Page 3 Page 3 Page 3 Notice Page 3		S.D. 4.3	Largest	N 2,621.42 m	N 813.82 m	Lagos	63.1
Smallest N 104.04 m 52.2 m Denote Deno			Medium		M 468.2 m	Sign Sign	ຸ ເດັກ ເວັດ
Norking experience No. of staff) Notal (5) Notal Columber of banks No. of staff) Notal (5) Notal Columber of banks No. of staff) Notal Columber of banks S.D. 0.7 S.D. 61.0 Classification Range	į	;	Smallest			Bende]	2.6
S. D. O.7 S.D. 61.0 Characteristic	(B)	Working experience				Total (5)	100.0
S.D. 0.7 S.D. 61.0 Characteristic				nches (No. of	staff)		
S.D. 61.0			Mean	88.07	0		rage
Parge 15 - 200 Number of banks		; ,	s.D.	61.0		Characteristic	& of total response
(C) Size of branches (No. of accounts) Savings		ı	Range			Number of banks	53.0
Nean Savings Deposits		(5)		nches (No. of	accounts)	Assets	83.2
S.D. 11,219 5,854 Classification Range 500 - 45,000 1,300 - 18,000 Percentage of manufacturing accounts Nean 6.4 S.D. 3.2 Range 2 - 10 Percentage of agriculture accounts Nean 2.7 Nean 2.7 S.D. 2.9 Range 0.01 - 10				Current	Savings	Deposits	82.9
Indigenous banks Mean 6.4 S.D. 3.2 Range 2 - 10 (E) Percentage of agriculture accounts Mean 2.7 S.D. 2.9 Range 0.01 - 10			Nean S.D. Range	500 - 45,000	7,353 5,854 1,300 - 18,000	Classification	
Mean 6.4 S.D. 3.2 Range 2 - 10 Percentage of agriculture accounts Mean 2.7 S.D. 2.9 Range 0.01 - 10		(a)	Percentage	of manufacturi	ng accounts	Indigenous banks Foreign banks	
S.D. 3.2 Range 2 - 10 (E) Percentage of agriculture accounts Mean 2.7 S.D. 2.9 Range 0.01 - 10			Mean	6.4			100
(E) <u>Percentage</u> Man S.D. Range			S.D. Range	3.2 2 - 10			l
Mean S.D. Range		(B)	Percentage	of agriculture	accounts		
S.D. 2.9 Range 0.01			Mean	2.7			
Range 0.01			S.D.	2.9			
			Range				

Source: Collected questionnaires

sizes also range from the very big to the very small. The size range is from 15 to 200 staff; the average being 88. Measured in terms of the number of accounts, branch sizes vary between those with 500 and 1300 current and savings accounts, respectively, and those with 45,000 current and 18,000 savings accounts. Of all current accounts, manufacturing and agriculture accounts represent between 2-10% and 0.01-10%, respectively. On the average, manufacturing accounts represent 6.4% (standard deviation 3.2%) and agriculture accounts 2-7% (standard deviation 2.9%) of current accounts.

Five states were covered in the sample. Lagos State had a lion's share of respondents with 63.1%; Oyo State had 23.7%, Ondo State 5.5%, and Borno and Bendel 5.3% and 2.6% respectively. This will appear to be a fair representation of the country in the light of the state distribution of loans and advances. As table 7.2 shows, Lagos State alone took 39.9% of agriculture loans and 66.5% of manufacturing loans for the whole country during 1972-1975. Together these five states in the sample accounted for 60.3% of all agriculture loans and 75.9% of all manufacturing loans.

The industry coverage is also significantly wide. In terms of the number of individual institutions, 53.0% of all banks were covered by the sample. These institutions between them held 83.2% of total assets; 83% of total loans and advances; and 82.9% of total deposits. (See table VII-1).

Finally, 50.0% of the sample banks were indigenous and the other half foreign banks.

The mean age of the respondents of the second sample is 39.2 years (standard deviation 6.2 years) and the ages range between

State distribution of Commercial Banks' credit to selected sectors: annual averages for 1972-75 (percentages) Table 7.2

Economic sector	Benue Plateau	Benue East PlateauCentral	Kano	Kwara 'Lagos	Lagos	Mid- West	North Central	North East	North West	Rivers	South East	Western	The whole economy
Agriculture	$\frac{3.4}{(8)}$	3.1	7.1	3.6	39.9	7.3	10.2	3.1	2.8	3.3	7.2 (5)	10.0	100
Manufacturing	2.5	3.6	7.7	0.1	(1)	3.8	3.4	0.1	9.0	5.3 (4)	1.0	5.4	100
Real Estate	2.5		3.9	0.3	51.4	7.4	6.4	2.4	2.1	4.7	2.8	8.6 (2)	100
Exports Imports & domes-	0.8	2.9	19.9 (2)	2.4	9.9	10.8	5.5	5.8 .		0.8	2.3	33.3	100
tic trade	1.3	8.1	6.7 (4)	1.2 (11)	63°8 63°8	3.3 (6)	1.6	1.8	0.8	2.5 (6)	1.8	8.4	01
Transportation & communication	0.7	3.7	7.9	0.9	55.6	4.5	6.9	3.2	0.5	4.1	1.6	10.6	100
Government	3.6	8.2 (7)	(3) 12.5 (3)	0.1 (12)	8.4 (6)	(5) 17.9 (1)	(4) 11.4 (4)	13.4	8.6 (5)	(6) 6.7 (9)	(3) 2.6 (11)	8.2 (7)	100

Ogbe, N.E. A Comparative Analysis of the Structure of Commercial Bank Credit Operations in Nigerian States: 1972-1975. CBN Economic and Financial Review, Dec. 1978. Source:

Note:(1) Rankings in parentheses.

30 and 50 years (see table 7.3). It will be noticed that this mean is higher than for the operations-level loan officers; the age range also differs with slightly higher starting and finishing points. The working experiences of these respondents in terms of the number of banks they have worked is very similar to what was recorded for the first group. Over 76% of the respondents earn N2O,000 and below indicating that many of these top management loan officers are located in the lower half of the top management hierarchy (see Appendix IVA-7). The concentration of head offices of banks in Lagos is demonstrated by the percentage of total response in this sample coming from Lagos State - 89.4%. Oyo State and Kano State share the balance equally with each accounting for 5.3% of total responses.

Table 7.3 Profile of respondents (top-level management staff) background characteristics

	Personal	En	vironmental
(A)	Age	(A) State cov	erage
	Mean 39.2 S.D. 6.2 Range 30-50	<u>State</u>	% of total response
(B)	Working experience (Number of banks) Mean 1.7 S.D. 0.7 Range 1-3	Lagos Oyo Kano	89.4 5.3 5.3 100.0
(C)	Salary Class (N) % of respondents 0 - 1,500 52.9 1,500-20,000 23.5 20,000-25,000 17.6 Above 25,000 6.0 100.0		

4. DATA GATHERING

The three measurement techniques - IPT, SLRQ and SQI were employed in gathering the data. To these three questionnaires were attached a general letter of introduction from my Supervisor (see Appendix IVB-1) and another letter dealing with procedural issues relating to the questionnaires from the researcher (see Appendix IVB-2). These documents were delivered personally to the sample lending officers and appointments for collections made. In a significant number of cases, particularly among branch managers and sub/assistant managers, the questionnaires were refused on the ground that prior permission had not been sought and obtained by the researcher at the banks' head offices. In consequence of these experiences, approaches for permission were made to the banks' head offices and/or their training schools (see Appendix IVB-3). Two of the training schools and a number of head offices obliged by either providing a letter of introduction to specifically named managers or by sending the questionnaires directly to managers for me to follow up (see Appendix IVB-4). These methods of delivering the questionnaires were, of course, in addition to the personal calls the researcher was also making at the same time on lending officers. Given the high initial-rejection rate, and the very low probability of getting the questionnaires completed by respondents, no scientific sampling method could reasonably be employed. The researcher had to knock at as many managers! doors as possible both directly and indirectly.

In only two cases did the researcher succeed in "retrieving" the partly or fully completed questionnaires on a second visit.

Number of calls in all other cases ranged between three and six with distribution of the number of calls highly skewed to the

right. In all about 100 questionnaires were distributed to these operations-level lending officers. With 38 total response received, this gives a moderately successful response rate of 38%. If, however, only the fully completed and useable questionnaires are counted, the response rate drops to 24%.

On the assumption that the top-management level lending officers would be better disposed towards attending to research questionnaires and given the very small size of their questionnaires (the IPT), names of the head office advances management staff were gathered from the banks' annual reports and from interviewees the researcher met for the completion of the questionnaire used for the analysis in Chapter 8. The IPT questionnaires were mailed, along with letters of introduction and stamped addressed envelopes, to 44 of these lending officers. In addition each of the 19 head office questionnaires (see Appendix TVA-4 had attached to it an IPT questionnaire for the interviewee. This was done under the assumption that the respondent to that questionnaire will in all probability be, in some important way, connected with advances management. Out of the total of 63 IPT questionnaires (44 plus 19) sent to this class of respondents, 28 were received back directly by the researcher and via the post. Thus the response rate for this sample was 44.4%.

5. THE RESULTS

5.1 The IPT. Twenty-six of the thirty-eight loan officers who responded to the set of questionnaires completed useable IPT questionnaires. Their responses are listed in table VII-2.

Table 7.4 gives a summary of these responses. Since the assets A and B in the IPT can properly be regarded as liquid assets, they have been grouped together. The other assets,

Table 7.4 Investment preference test: operations-level lending officers' responses (summarised)

Respond-		Financial	Assets	· · · · · · · · · · · · · · · · · · ·
ent	A + B	С	D	E
1	44.5	5.0	20.0	32.5
2	12.5	12.5	42.5	32.5
2 3 4	30.0	10.0	10.0	50.0
4	51.25	18.75	18.75	11.25
5	77 . 5	6.25	7.5	8.75
6	53.75	8.75	11.25	26.25
6 7 8	58.75	18.75	8.75	13.75
	-	-	25.0	75.0
9	60.25	10.5	1.75	25. 0
10	58.75	20.0	13.75	7.5
11	22.5	12.5	35.0	30.0
12	80.0	5.0	10.0	5.0
13	50.0	10.0	20.0	20.0
14	40.0	6.25	22.5	31.25
15	35.0	`25.0	22.5	17.5
15	70.0	7.5	15.0	7.5
17	52.5	20.0	16.25	11.25
18	75.0	10.0	7.5	7.5
19	2.5	7.5	62.5	27.5
20	62.5	10.0	21.25	6.25
21	45.0	16.25	21.25	17.5
22	48.75	20.0	23.75	7.5
23	60.0	1.25	17.5	21.25
24	72.5	7.5	10.0	12.5
25	77.5	6.25	6.25	10.0
26	26.25	32.5	21.25	20.0
N	26	26	26	26
Mean	48.74	11.85	18.91	20.50
S.D.	22.10	7.43	12.38	15.32
Range	0 - 80	0 - 32.5	1.75 - 63	

Source: Computed from collected questionnaires

although being generally long term in nature have been left separate because each possesses some distinctive feature with regard to safety, maturity or profitability.

As evident from table 7.4 the respondents would prefer to invest a substantially high proportion of their resources of \$\text{N100,000}\$ in liquid assets such as treasury bills, treasury certificates and commercial bank deposits. On the average they would put nearly half (48.74%) of their savings in these liquid assets. Sums to be invested by individual respondents range from \$\text{N0-N80,000.}\$ Table 7.5 also shows that 11 or 42.3% of the respondents would prefer to invest up to 49% of their cash resources in liquid assets A + B; 9 respondents or 34.6% of this sample would invest between 50 and 69% and 6 or 23.1% would invest between 70 and 100% in A + B.

The Federal Government Development Stocks were the least favoured financial assets. The mean allocation of resources by the respondents was 11.85% (standard deviation 7.43%). The unattractiveness of this asset to the respondents is also evident from the range of individual allocations - between 0-32.5%.

Table 7.5 Investment preference test: percentage distributions of lending officers' preferences

Allocation of funds (percentage of total)	Financial Assets							
	Number of respondents				% of total response			
	A+B	С	D	E	A+B	С	D	E
0 - 49 50 - 69	11	26	25	24	42.3	100	96.2	92.4
70 -100	9	0	0	1	34.6 23.1	0	3.8 O	3.8 3.8
	26	26	26	26	100	100	100	100

On the average, the respondents would invest 18.91% (standard deviation 2.38%) of their resources in debentures of various first class companies listed in the IPT portfolios.

Individual allocations to these assets, however, vary from a low of 1.75% and a high of 62.5%. As table 7.5 shows, 25 respondents or 96.2% of the sample would invest between 0 - 49% in this asset whilst only one respondent or 3.8% of the total would invest between 50 and 69% of his resources.

Finally, 20.5% (standard deviation 15.32%) of the respondents' resources would, on the average, be allocated to private companies' shares. Amounts allotted for these assets by individuals varied between 5.0 and 75%. Notably, a high proportion of the respondents, as with debentures, would put less than half of their savings in these assets. Twenty-four respondents or 92.4% would allocate between 0 and 49% whilst 1 or 3.8%, each, would allocate between 50 and 69% and between 70 and 100%, to these assets.

Almost convincingly, these responses indicate, once again, the "liquidity preference" of the commercial bank lending officers. It is clear from the above analysis how, using their personal savings, they would prefer the safe, short-term low-yielding financial assets to high-yielding, first class, long-term private and public securities.

5.2 The SLRQ. The simulated Loan Request Questionnaire was put to the lending officers to obtain their reactions to specific loan proposals. Table 7.6 gives a summary or broad picture of the responses. Only 5.7% of the respondents would give approval to all the advances requested; 31.4% would approve three out of the four proposals; 42.8% two proposals, 17.1% one proposals and 3%

Table 7.6 Simulated loan request questionnaire: percentage distribution of responses

Respon	ses	Percentage of total
4 positive 3 positive 2 positive 1 positive 0 positive	responses responses response	5.7 31.4 42.8 17.1 3.0
		100.0

would say 'no' to all the proposals.

The reasons given for these decisions could be instructive in assessing the pattern of responses (see table 7.7). For example, some of the respondents said 'yes' to the agriculture advances with the qualification that the advances are granted under the CBN operated Agricultural Credit Guarantee Scheme (ACGS) (see Chapter 6). This may be regarded as a useful indication of the fact that the ACGS is helping to alter bankers' attitudes to agriculture lending and may in the long-run prove an effective 'bait'.

Various reasons were also given for the bankers 'no' answers. One of these was the poor financial position of the applicant. This is surprising in view of the apparent good financial picture of the applicants painted in the proposals. It would appear that these kinds of responses reflect the depth of the conservatism of the bankers. One of the most intriguing reasons given for the rejection of loan proposals was "no security offered". This reaction can be interpreted as meaning that, however good a proposal is on its own, it may still fail to get bankers' sympathy just because it lacks collateral support. As the kinds of collateral traditionally demanded by bankers are invariably unavailable to small and growing businesses in a developing environment, this emphasis on collateral must be

Table 7.7 Simulated loan request questionnaire: lending officers responses

Respond-	I		oposals		No. of
ent	1 	2	3 	4	positive responses
1	No ·	Yes	No ^e	Yes	2
2	No	Nod	Nod	Yes	1
3	Yes	Yes	No	No	2
Ă	37	Yes	No	No	ī
1 2 3 4 5	Yes ad	Yes	No	Yes	2 1 2 1 3
6	Yes	No de	Yes	No	2
7	Yesd	Yesd	No	No	2
Ŕ	No	Yes	NO e	Yes	2
6 7 8 9	No		Yes Noe Nod No	Yes	2
10	No	Yes Yes ^d	Yes	Yes	2 2 2 2 3
11	No	No	Yes	Yes	. 2
12	Yes	Yes	Yes No	Yes	3
13	No	Yes	Yes	No	2
14	No	Yes			2
15	Yesa	Yes	Noe No	Yes No	2 3 2 2 2
16	Noc	Nod	$_{\mathtt{Yes}}^{\mathtt{No}^{\mathtt{d}}}$	Yes	7
17	Yes	Noa	Yesd	Yes	3
18	No	Yes	No	No	ĭ
19	No	Yes	Yes	Yes	2
20	No	Yes	Yes	Yes	1 3 1 3 3
21	No	Yes.	Yes	Yes	3
22	No	Yes Yes	No	Yes	2
23	Yes	37 -	Yesa	No	3 2 2 3
24	No	Yes ^d	Yes	Yes	3
25	Yes ^a	No	-	<u> </u>	J
26	No	Yes	-	_	
27	Yes	Yes	Yes	Yes	4
28	$_{ t NO}^{ t NO}$ f	Yes	Yes	No	4 2 2
29	ИOI	Yes	МО	Yes	2
30	Yes	Yesd	Yes	Yes	$\frac{\overline{4}}{4}$
31	No	No ^d Yes ^d	No a	Noe	O
32	No	Yes ^a	Yeş	Yesd	3
33	110	No	$\operatorname{Yes}^{\mathbf{d}}$	· Yes	0 3 1 3
34	Yes	No	Yes	Yes	3
35	No	-	No	-	•
36 37	Yes	No	No	Yes	2 1 3
	No	No Yes ^d	Yes	Nog	Ţ
38	Yes	Yes -	Yes	No	3

Source: Computed from collected questionnaires (Re - Appendix II.1)

Notes: a = Under Agricultural Credit Guarantee Scheme b = Poor financial position of client . c = Client should join a co-operative society

d = Overdraft only
e = Excessive f = Personal loan only
g = No security offered

regarded as a matter of great concern and a formidable impediment to aggressive lending in Nigeria.

The responses of the loan officers can be understood more with the aid of table 7.8. It can be seen from this table that only 35% of the respondents said 'yes' to the first proposal which required a term loan. On the other hand, 67% of the respondents said 'yes' to the second proposal which asked for an overdraft facility. A very similar pattern of response is repeated for the other two proposals. Whilst 46% gave approval to the term loan in proposal III, 68% approved of proposal IV, an overdraft advance.

Table 7.8 Simulated loan request questionnaire: Type of advances granted by respondents

Proposal	Type of advance	Perce	es	
		Positive	Negative	Total
1 2 3 4	Term loan Overdraft Term loan Overdraft	35 67 46 68	65 33 54 32	100 100 100 10

At the end of each loan proposal, seven identical questions were asked to learn two main things - the conditions under which the advances would be granted and the factors influencing the lending officer's decision.

Irrespective of the sum applied for, respondents were asked to indicate the maximum amount they would lend to the applicants. For loan proposal I, 73.3% would lend the applicant the full amount requested, 20% would offer various sums below the sum applied for, and 6.7% would grant sums above that amount (see

table 7.9). As the table shows, this pattern of response is repeated for proposals II and III. In the case of proposals IV, however, 80% would approve the exact sum required, 8% and 12% respectively would grant sums below and above the request. On the average 66.3% would grant the loan amounts, 22.9% amounts below and 10.8% amounts above the request.

In practice it is not in all cases that customers are able to estimate precisely their financial needs. The loan ultimately approved on the basis of an application is usually the result of a thorough appraisal of the customer's needs by both the banker and the customer in collaboration. Arbitrarily higher or lower sums than called for in the application are undesirable from the points of view of both the banker and the customer. Apart from this note of caution these responses cannot form the basis of any strong inferences or conclusions.

Table 7.9 Simulated loans request questionnaire: Amount of advance offered by respondents (in percentages)

	Loan Proposals				
•	I	II	III	IV	Average
Full request Below request Above request	73.3 20.0 6.7	64.0 20.0 16.0	47.8 43.5 8.7	80.0 8.0 12.0	66.3 22.9 10.8
•	100.0	100.0	100.0	100.0	100.0

How appropriate were the advances offered by the respondents? To enable one to answer this question, the respondents were requested, in the questionnaire, to indicate the maturity, security and repayment patterns they would call for if the advances were granted. Table 7.10 presents the analysis of the maturity terms the lending officers would request. The Mean

Table 7.10 Simulated loan request questionnaire: analysis of maturity term required by respondents (in years)

					· · · · · · · · · · · · · · · · · · ·
Respond- ent	1	Loan pro	posals	4	Average maturity
1 2 3 4 5	- 1 - 1	2 1 3 2 1	2 1 - -	1 1 - 1	1.7 1.0 2.0 2.0 1.0
6 7 8 9 10	1 2 - -	0.5 5 1 4	2 1 - 0.75 6	- - - 1	1.2 2.7 1.0 2.4 2.3
11 12 13 14 15	1.5	1 2 1.4	2 1 - -	1 1 1	1.5 1.1 2.0 1.2 1.0
16 17 18 19 20	- 2 - -	1 2 5 5	1 2 - 5 6	1 1 - 5 1	1.0 1.7 2.0 5.0 4.0
21 22 23 24 25	- 2 -	2 0.5 1	2 - 3 1	. 1 1 1 1	1.7 0.75 2.0 1.0
26 27 28 29 30	3 1.5 1	- 4 5 5 2	5 3 - 4	- - 1 1	- 4 4 2.5 2.0
31 32 33 34 35	1 - - 2 4	3.5	5.25 1 1	1 3.8 2 1	1.0 4.2 1.5 1.3 4.0
36 37 38	1 1.5	- - 2	- 5 4	1 - -	1.0 5.0 2.5
N = Mean S.D.	16 1.65 0.85	28 2.32 1.58	23 2.78 1.83	23 1.34 1.00	·

Source: Computed from collected questionnaires

maturity period requested for loan proposal I was 1.65 years (standard deviation 0.85 years). The maturity period ranges from one to four years. For loan proposal II, the Mean maturity period was 2.32 years (standard deviation 1.58 years). Loan proposal III had the highest maturity period at 2.78 years (standard deviation 1.83) and the last proposal had the lowest with an average of 1.34 years (standard deviation 1.0 year). As the last column of table 7.10 shows, the average maturity pattern specified by respondents for proposals I-IV ranges between 1 and 5 years. This pattern does not differ noticeably from what was observed in the analysis of the banks' loan portfolios in Chapter 6 thus confirming these bankers' preference for short-term advances.

The repayment pattern specified by the respondents is as presented in table 7.11 For loan proposal I, 17.6% of the respondents wanted repayments by way of overdraft; 64.8% by specific instalments and 17.6% would determine repayment only on the basis of cash flow projections. The repayment patterns for loan proposals II and III are, as can be seen from the table, similar to that for loan proposal I, with the majority of respondents wanting repayments by specific instalments. In the case of loan proposal IV, 79.2% of respondents wanted repayment by way of overdraft; 4.2% by specific instalments and 16.6% on the basis of cash flow.

Repayment by specific instalments can be found to be very popular with these bankers. The danger in this, however, is that it is too rigid an approach to loan repayment. Cash flows of businesses, in general, do not have either the regularity or steadiness which this pattern of repayment apparently envisages. Specific repayment schedules are thus unlikely to fit the repayment ability of the borrower and to this extent may be a very unsuitable

Table 7.11 Simulated loan request questionnaire: repayment terms specified by respondents

espond- ents	1	Loam prop	osals 3	4	Moratorium specified
1		SI	SI	OD	Yes
2	_	OD	OD	OD	No
3	OD	SI	_	_	Yes
4	_	SI	_	- .	No
2 3 4 5	OD	OD	-	OD	Yes
6 7 8	sı	OD	SI	-	No
7	SI	SI	OD	-	No
8	-	OD	-	CF	No
9	-	SI	-	OD	No
10	-	SI	SI .	OD	No
11	-	_	SI	OD	No
12	-	OD	OD	OD	No
13	-	SI	SI	OD	No V
14	~ CT	SI	_	OD	Yes
15	SI	CF	-	_	No
16	-	OD	OD	CF	No
17	CF	-	SI	OD	No
18	-	SI	-	-	No
19	-	SI	SI	_	Yes
20	-	SI	SI	OD	No
21	-	SI	SI	OD	No
22	_	-	-	OD	No
23	SI	_	SI	OD	No
24	~	SI	_	<u>-</u>	No
25	SI	SI	-	_	No
26	_	CF	-	_	No
27	SI	SI	SI	-	Yes
28	-	SI	SI	-	Yes
29	SI	SI	_	OD	No
30	CF	CF .	CF	OD	No
31	OD	OD	-	OD	No
32	-	SI	SI	SI	Yes
33	_	-	SI	CF	No
34	SI	-	OD	OD	No
35	SI	-	-	••	Yes
36	SI	-	-	CF	No
37	CF	-	-	OD	No
38	SI	SI ————	SI 	-	Yes
D = Overdraft	17.6%	24.2%	23.8%	79.2%	
= Specific Instalment		65.5%	71.4%	4.2%	
f = Cash flow	17.6%	10.3%	4.8%	16.6%	
tal	100.0	100.0	100.0	100.0	

Moratorium specified - Yes
Total

73:78

Source: Computed from collected questionnaires

practice in lending. It is noteworthy that less than 18% of the bankers recognised the need to tailor loan repayment to cash flow. Ideally, however, the repayment pattern of a loan should fit the customer's cash flow expectations. If this is not the case, the customer is likely to find himself in a situation in which he either has too much or too little cash resources, thus creating a cash management problem for him and his bankers.

All the advances requested in the loan proposals are in connection with long-term investments. It will thus be expected that it would take time before the increased earning ability of the borrower, ex-post investment, is realised. Repayment schedules should ideally, therefore, take this gestation period into consideration. Only 26.3% of the lending officers would, however, offer the borrowers a moratorium to enable the newly injected inv stment funds to work through the production - sales - collection process to generate cash for repayment. (See table 7.11).

Security for advances, as has been noted in Chapter 6 is an important issue in bank lending in developing countries. Respondents were asked if they would request that the proposals they approved be secured, and if so, by what kind of security? In case of loan proposals I and IV, 11.8 and 4.2%, respectively, would lend unsecured (see table 7.12). None of the respondents would, however, lend unsecured to loan proposals II and III. These once again reflect the near obsession of the bankers with security.

Where advances are to be secured, an average of 17.1% of the lending officers would want simultaneously three different types of securities; 49.5% would want two types of securities; and 29.4% one type (see table 7.12). Types of securities include

Simulated loan request questionnaire: type of securities called for by respondents Table 7.12

Respondents			osals .		Total No.	Average No.
	1	2	3	4	of securities	of securities
1	_	D,A	J,A	D,A	6	2
2 3	_	ס	D,A	D,A	5	1.7
3	A	D	~		2	1.0
4	-	D	_	_	ī	1.0
5	B,C	D,C	-	H,J,A	8	2.7
6	D,B	P	H,A	_	5	1.7
7	D	D	D,A	_	4	1.3
8	-	A	-	H,C,A	4	2.0
9	-	H,A	-	H,C	4	2.0
10	-	H,A	H,C	H,C,A	2	1.0
11	-	-	D	D D	2	1.0
12	E	D	č	C,H	5	1.7
13	-	č	H	-	2 5 2	1.0
14	-	H,A	-	C,H	4	2.0
15	D,B	D	_	-	3	1.5
16	-	H,C,A	H,C,A	H,C,A	9	3.0
17	D	-	D,H	D,A	5	1.7
18	-	Ħ	-	-	í	1.0
19	-	Ď	D	_	3	1.0
20	-	H,A	E,H	H .	5	1.7
21	-	D,C,A	D,C	D,C	7	2.3
22	-	D,H,B	H,A		5	2.5
23	F,G	-	D,A	J,A	6	2.0
24	-	D,C,A	E	D,C,A	7	2.3
25	E,D,C	D	-	-	5	2.5
26	-	_	-	_	_	_
27	K	H,F,A	H,A	-	5	1.7
28	-	A,H	A	_	3	1.5
29	-B,D	F,A,H	-	F,A	7	2.3
30	A,H	H,C,A	J,C,A	A,H	10	2.5
31	F,A	-	-	H,C	4	2.0
32	-	D,A	E,J,A	H,C,A	8	2.7
33	-		D,A	H,A	4	2.0
34	E,B	-	J,E	J,A	6	2.0
35	E,D	-	-	-	2	2.0
36	E	-	-	H,C	3	1.5
37	-	-	H,A	K	2	1.0
38	K	С	E	_	3_	1.0
ling 3 securities	5.9	25.0	12.5	25.0.	liean	17.1
		25.0		25.0)	rean	
4	52.9	28.6	58.3	58.3)	_	49.5
1 security	29.4 11.8	46.4 0.0	29.2 0.0	12.5) 4.2)	-	29.4 4.0
Total	100.0	100.0	100.0	100.0		

Key:

- A = Personal guarantee of proprietors/directors
 B = Personal guarantee of third parties
 C = Floating change over current assets
 D = Mortgage of real estate
 E = Agricultural Credit Guarantee Scheme

- F = Lien on deposits
 G = Lien on vehicle
 H = Mortgage of fixed assets
 J = Mortgage of all assets

- K = Unsecured

quarantees, mortgage of real estate, etc. (see table 7.12)

Finally this questionnaire asked respondents to state the factors influencing their decisions to lend or not to lend by assigning weights to some listed factors. The responses of the lending officers are as summarised in table 7.13. The financial position of the applicants is rated highest with 19.5%. This can be interpreted to mean that the financially strong applicant stands a better chance of obtaining advances than the weak ones. In an environment with many nascent business units, this approach is unlikely to help the process of constructive lending and the growth and prosperity of business on which the lenders ultimately thrive.

Table 7.13 Simulated loan request questionnaire: Factors in lending decision (summary of responses)

	Factors	Wei	ghtings
		Mean	Standard deviation
(a)	The applicant's financial position	19.5	8.2
(b)	The applicant's management	18.8	12.1
(c)	The potential growth of the industry	12.7	7.4
(d)	The potential place of the applicant's	•	
• •	business in the community	5.8	5.8
(e)	Established bank loan policies	16.3	11.0
(f)	The bank's financial position	9.3	17.6
(g)	Security offered	8.6	12.4
	•		
		100.0	

Source: VII-3

The applicants' management also rated high in the respondents' list of considerations for advances. This undoubtedly is a very prudent thing to do by a banker who is not only interested in recovering other peoples' monies he lends but in helping his clients to success. But in a situation in which management

expertise is a rare commodity, the availability of high-class management to a growing business that can hardly afford it must not be rated unduly high a factor in lending decisions.

The potential growth of the industry and the potential place of the applicant's business in the community were rated 12.7 and 5.8% respectively. In a developing business environment, the forward-looking and aggressive banker should give much higher weighting to such factors as these rather than the first two factors, which demonstrate the present and not the potential 'strengths' of the borrowers. The reality of the moment is that most of the borrowing businesses in Nigeria are 'enterprises-of-tomorrow' and unless a banker is able to share this vision with them and provide necessary support today, neither the bankers nor the businesses can expect to realise their full potentials for growth and development.

Established bank policies and the bank's financial position were also considered as important factors. With excess liquidity in the banking system (see CBN Annual Report 1979) it is not easy to see how the respondents can rate the bank's financial position as high as nearly 10%.

Given the bankers' observed interest in security, it is a little surprising that only 8.6% weighting was given to this factor here. The inference probably is that having given so much weight to the applicant's financial position and management, once the applicant fails on those considerations the security offered really would not make any difference to the lending decision.

5.3 The SQI. This structured questionnaire for lending officers at the branch level was prepared to elicit some related information that neither the IPT nor the SLRQ could provide. Some clarifications

of issues could also be obtained from responses to the questions posed here.

On the average, the respondents to the SQI had been managers for 4.5 years (standard deviation 3.4 years); the periods, however, range between 1 and 12 years (see table 7.14). At the time of the survey, the respondents had been in their branches for between 0.4 and 3 years, and on the average 1.4 years (standard deviation 0.9 year). The average period the managers stay in the branch is 2.6 years (standard deviation 1.0 year); but the periods could be as short as 1.5 years and as long as 5 years. (See table 7.14).

- 5.3.1 Loan policies. The respondents were asked if they operate with written loan policies, and what they thought the advantages and disadvantages were. Thinking that the CBN credit guidelines are loan policy documents, most of the managers answered in the affirmative. When asked to produce the loan policy documents, it became clear that something other than CBN "credit guidelines" was implied by the question. On the whole none of the respondents operated with a written loan policy. Under the false impression that the credit guidelines represented loan policies, some managers noted the advantages and disadvantages which might be useful in assessing the role of the CBN credit guidelines. The advantages of credit guidelines include "standardization; consistency; and objectivity of lending." Among the disadvantages are "robs manager of his discretion; reduces flexibility; and reduces initiative."
- 5.3.2 Marketing of loan services. The bank managers' responses to questions on this subject indicate that little is done by

Table 7.14 Structured questionnaire interview for Branch Managers-responses

Respondent	1	Questions 2	3
1	4.0	0.75	2.0
2	1.0	1.0	-
3	12.0	1.0	5.0
4	4.0	2.0	2.0
5	4.0	1.6	2.5
6 7 8 9 10	2.0 7.0 1.0 3.0 2.0	1.5 2.0 0.5 0.7	2.5 1.5 - 2.0 3.0
11	12.0	1.25	3.0
12	3.5	1.3	2.0
13	5.0	0.6	2.0
14	6.0	1.0	2.0
15	3.0	3.0	5.0
16 17 18 19 20	2.5 5.0 6.0 2.0 12.0	1.5 2.0 0.25 2.0 0.5	2.5 2.5 3.5 3.0
21	1.3	0.4	1.5
22	2.0	0.25	2.0
23	4.0	2.5	2.5
Mean	4.5	1.4	2.6
Standard Deviation	3.4	0.9	1.0
Range	1-12	0.4-3.0	1.5-5.0

Source: Computed from collected questionnaires (Re - Appendix II.3)

Nigerian banks to market their lending services. Advertisements and personal calls by bank officials on clients are said to be the major media of loan marketing. That little is done is revealed by their answers to the question which asked them to state their role in the marketing activity. None of the respondents could state anything more precise than "solicitation", "exploitation", "customer visitation" and "personal contacts".

Many of the respondents, however, are aware of the benefits of "visitations" to customers:

- "It provides banks with up-date information on clients";
- "it makes the customers feel wanted"; and
- "it enables bankers to advise customers e.g. on the introduction of fertilizers to farmers."

7.15 shows the percentage of respondents providing the different types of itemized information to the clients. Whilst a very high proportion indicated that they provide advice and information, only 17% provide more. Among the other types of information are advice "about government policies" and "need to keep accounting records." Provision of information and advice is a vital supporting service banks in LDCs must provide. Many of the borrowing customers simply lack the capacity to generate this information or obtain it direct. Even in a developed society like Britain this is considered an important aspect of bank lending as it has been found that branch managers provide as many as 15 different types of advice to their borrowing customers (Back, 1977, pp. 222-3).

But do customers call for the banks' advice? As many as 83.0% of the respondents said their clients often call, and 17%

Table 7.15 Structured questionnaire interview: Information provided to loan customers

-	Respondents				
Type	Providing	Not providing	Total		
on general economic conditions	78	22	100		
n specific industry or business	78	22	100		
dvice on expansion, reconstruction, etc.	74	26	100		
dvice on investment of surplus funds	69	31	100		
redit information	82	18	100		
)thers*	17	83	100		

- * Includes (a) "about government policies" (b) "need to keep accounting records"
 - (c) "company organisation"
 - (d) "staff matters"
 - (e) "marketing and on products"
 - (f) "general advice"

said they seldom call. One reason given for some customers' tendencies not to call was "ignorance". This should not be surprising however. Banks and bankers are strange elements in Nigeria and generally in developing societies (see Pant, 1971, p.87). That is to say that they are not part of the evolution of the socioeconomic systems. Even in advanced countries, however, customers, particularly the small ones, shy away from their bankers. (1977, p. 223), for instance, found that "just on half of the owner/managers considered they required no advice from their bank managers"

Only a few of the banks have business advisory units. Many, however, employ agricultural officers who provide some advisory services to agriculture customers. All the respondents said they make business calls on their customers. Although the purposes of calls were not all too clear, a distinction must be made between ex ante and ex post investment (or credit) visits.

which seeks to break new ground is more in the nature of marketing activity. It is inspiring that most of the respondents (87.0%) believed that bankers should act as advisers to businesses.

How do the bankers get to know their customers intimately?

'Social clubs' was the most frequently mentioned forum of meeting and knowing customers. Given the paucity of social clubs outside the major cities, this must be an inadequate means of contact.

Furthermore, the main users of these social clubs are known to be government employees and employees of private big businesses rather than the small to medium sized business proprietors the bankers really need to know more intimately.

5.3.4 Response to credit applications. Hooker (1970) has suggested that "loan applications tend to be an inverse function of the incidence of loan rejections." In the light of this suggestion it is instructive to know whether the respondents answer 'yes' or 'no' to loan applications from the manufacturing and agriculture sectors. Half of the respondents answer 'yes' or 'no' to applications for advances from these sectors; 40.0% advise on "alternative credit facilities and institutions" and 10% send such requests to their head offices. There was no indication in the responses that the bankers offered help in improving the creditworthiness of the loan proposals. In sharp contrast, however, the president of an aggressive bank in the United States proudly notes that "....everyone of our town's industries grew up here from smallscale beginnings....Our bank financed each one in its early stages sometimes employing considerable ingenuity to find ways of keeping the loan bankable." (Crosse and Hempel, 1973 p. 208).

5.3.5 Security for advances. There was apparently a general

awareness among the respondents about the reasons for the banks' demand for securities on making a loan. Some of the answers are:

"something to fall back on in case of default"; and
"to guard bank's position in case of adverse developments".

A significant number (26%) of the respondents apparently see the role of collateral rather differently. This second group believes security is taken

"to keep the customer aware of the loan agreement"; and
"to check on customer's wanton disregard for loan
agreements".

If bankers take these kinds of view of security, they are likely to be tempted to ask for as much collateral as they can obtain irrespective of the value of the loan. That this supposition may be true in practice is indicated by the data in Table 7.16.

This attitude is typical of the 'judgemental' banker identified by Shapiro et al. in their study: "He tended to impose conditions which assured the bank of a superior position with regard to other creditors in the event the company would fail." (Griggs, 1971, p.63).

This kind of attitude has very adverse effects on the borrowing customer. Firstly, he will be denied that "excess" part of the security mortgaged to his banker for use as collateral support for other advances elsewhere. Secondly it will hurt psychologically as the borrower believes that excessive collateral is taken from him because the banker has little or no faith in him and his business. However, there is little doubt that the banker-customer relationship must be wrapped up in sufficient mutual trust and confidence for it to be smooth and fruitful. After all, trust begets trust.

Table 7.16 Structured questionnaire interview: Collateral as a percentage of loans

Collateral percentage of loan (%)	Proportion of total respondents asking
50 - 99	18.2
100 - 150	59.1
151 - 200	4.5
Depends on proposal	18.2
Total	100.0

The kinds of collateral accepted by the bankers have been shown in the SLRQ above. Their responses to question 16 confirm their preferences as stated earlier in table 7.12. But what kinds of collateral do they reject? These include "house furniture", "cars", "trinkets" and "untitled land". Judged by the traditional collateral standards, these items are normally not acceptable to bankers. Operating on these standards, however, will represent "arm-chair" banking. Without any doubt these are valuable items in Nigeria. The values bestowed on these assets go beyond the monetary to include intrinsic. As one respondent-banker said, "the banks' best security in agricultural lending is that while the street trader can run away tomorrow, the last thing a dedicated farmer will do is abandon his land." This can also be said for an 'untitled' building. It will appear that, in these (trinkets, untitled land and buildings) there exists a large quantity of collateral for advances in Nigeria. It only needs to be made acceptable to lenders. This will require that bankers change their standards, by fine-tuning rather than lowering, to suit the business environment. There is little doubt that government support in the form of facilitating legislation will be forthcoming if the bankers take the initiative.

noteworthy that the signs of change in this area are emerging, however slowly. For an example, one of the respondent-bankers is already doing the unorthodox for according to a manager:

"... farm crops are now accepted as collateral after inspection by agricultural officers."

5.3.6 Problem loan. An important aspect of lending is the management of problem loans. With answers such as:

"erratic movement in account";

"failure to keep repayment terms"; and

"reduced turnover"

the bankers indicated that they are well aware of the signals for identifying problem loans. Of all the respondents, however, only 4.3% would:

"invite customer, discuss and advise him".
The rest would:

"draw up a call programme"; and

"ask for repayment of advance."

It is the conservative banker, however, who tends to look at a firm from the viewpoint of likelihood of failure - the gone-concern approach - rather than offer the borrowing firm counsel and take action to ensure the success of the firm. The efficient and effective banker will not abandon his client's ship at the sight of the weakest storm. Moreso in an environment in which most of the borrowing firms are just going through their teething period with consequent and inevitable fluctuations in their financial fortunes.

Whilst it is important for the banker to identify problem loans as early as possible, it is essential for the bankers'

experience and the benefit of their clients to know the causes, for this is an important way of taking the effective corrective actions aimed at attacking the problems at the roots. The causes of lending problems identified by bankers are listed in table 7.17. The highest percentage of respondents identified managerial incompetence as a cause. Another 21.7% named a closely related cause of loan problem as overtrading. These are not completely unexpected in view of the nationwide shortages of management expertise (Fourth National Development Plan).

Table 7.17 Structured questionnaire interview: Causes of lending problems in agriculture and manufacturing sectors

Causes	Percentage of respondents ⁺
Diversion of funds Managerial incompetence Failure of projects(2) Overtrading Bad faith Government action/inaction Collateral requirements High production costs	39.1% 65.2% 52.2% 21.7% 21.7% 30.4 17.4% 4.3%

⁽¹⁾ includes lack of technical know-how

Failures of projects due to 'bad harvests', 'bad weather', 'act of God' were mentioned by over half of the respondents. The 'inertia effect' of the experiences of the 1973/74 drought must have contributed to the high popularity of this cause among respondents. Nevertheless, it is an important cause that demands attention and action such as, for example, crop insurance.

'Diversion of funds' and 'bad faith', two closely related causes were mentioned by 39.1 and 21.7% of the respondents,

⁽²⁾ includes poor harvests due to 'act of God' and bad weather

⁽³⁾ includes unpredictability of policy changes on imports and infant industry protection

⁺ totals do not add up to 100 because some respondents identified more than one cause

respectively. These are important issues that must be noted in the light of the suggestion that one of the reasons why no banks could engage in long-term lending in Russia was that the "standards of honesty in business were so disastrously low" (Gerschenkron, 1962, pp. 19-20). In this regard the recent Bankruptcy Act 1979 is a step in the right direction.

Particularly for the manufacturing sector, government action and inaction were frequently mentioned by respondents as a major cause of problem loans. In a rather directionless manner, the government has been known one day to shut the doors against competing imports to give the infant industries the desirable protection, only to throw them wide open the next day, thus exposing these industries to foreign competition that sometimes takes the form of dumping.

6. CORRELATION OF LIQUIDITY PREFERENCE AND LENDING PRACTICES

The analysis of the IPT questionnaires above showed that the lending officers involved possess a high preference for liquidity in investing their private savings. The analysis of the SLRQ has also pointed to the lending officers' attitudes and practices concerning such issues as security, and other terms of lending. Two behavioural aspects of the lending officers have been revealed. These are very instructive. But the more important question appears to be: is there a significant relationship between a lending officer's investment taste and his propensity to lend as well as his lending practice? For example, will the lending officers with the investment tastes revealed by the IPT engage in the lending practices indicated by the SLRQ? The answers to these questions are attempted in this section by correlating the liquidity preferences of the lending officers

and their propensity to lend and also their lending practices (see Table VII-4).

Because the data come from a population about which nothing is known regarding the distribution (this being a pioneer study on the Nigerian environment) and because also the respondents to both the IPT and the SLRQ 'ranked' their answers, a suitable statistical method for this analysis is the spearman rank-order correlation (1). By using this method the analysis will benefit from the advantages order statistics have "for data in behavioural sciences in which 'numerical' score may be precisely numerical in appearance only", as in the case here (see Siegel, 1956, p.3). For instance an advantage of this technique is that it does not require "numerous or stringent assumptions about parameters" and therefore fewer qualifications in drawing inferences from the results. It is nevertheless an efficient technique, however. "The efficiency of the Spearman-rank correlation when compared with the most powerful parametric correlation, the Pearson r, is about 91.0%" (Siegel, 1956, p.213).

Siegel (1956, p. 210) suggests that

"...if the subjects whose scores were used in computing rs were randomly drawn from some population we may use those scores to determine whether the two variables are associated in the population. That is, we may wish to test the null hypothesis that the two variables under study are not associated in the population and that the observed value of rs differs from zero only by chance."

Thus some hypotheses will be raised and examined for the purpose of the enquiry being undertaken in this section. On the whole, nine hypotheses are raised and tested. The first deals with the liquidity preference and the observed propensity to lend of the respondents. The other eight deal with the liquidity preference and lending practices relating to maturity, security, concern

⁽¹⁾ The Chi-square test could also have been used but this produced no different results.

for the bank's financial position, etc. The t-test will be used to examine the significance of the observed relationship. A hypothesis will be accepted if the observed t value is significant at the 0.05 level. Broadly the null hypotheses can be stated as: the bankers' liquidity preference is not related to propensity to lend; and their liquidity preference is not related to lending practices.

The hypotheses to be tested are stated specifically as:

- (1) The greater the liquidity preference of a lending officer in making personal investment decisions, the greater his propensity to lend.
- (2) The greater the liquidity preference of a lending officer in making personal investment decisions, the greater the average maturity of the advances he makes.
- (3) The greater the liquidity preference of a lending officer in making personal investment decisions, the greater his concern for the applicant's financial position.
- (4) The greater the liquidity preference of a lending officer in making personal investment decisions, the greater his concern for the applicant's management.
- (5) The greater the liquidity preference of a lending officer in making personal investment decisions, the greater his concern for the future growth of the industry of the applicant.
- (6) The greater the liquidity preference of a lending officer in making personal investment decisions, the greater his concern for the potential place of the applicant's business in the community.
- (7) The greater the liquidity preference of a lending officer in making personal investment decisions, the greater his concern for established loan policies of the bank.
- (8) The greater the liquidity preference of a lending officer in making personal investment decisions the greater his concern for the bank's financial position.
- (9) The greater the liquidity preference of a lending officer

in making personal investment decisions, the greater his concern for security for the advances he makes.

The results of the Spearman rank-order correlation analysis are presented in table 7.18. As can be seen from this table, the null hypothesis is accepted in only one of the nine cases, i.e. in the case of hypothesis 7. That is to say that this analysis shows that there exists a significant relationship between a lending officer's liquidity preference and the established loan policies of his bank. All the other hypotheses are rejected as the observed t-values of the correlated variables are not significant at the chosen 5% level.

T ble 7.18 Results of rank correlation analysis

Hypothesis	Spearman rank-order t (1) coefficient of correlation	
1	0 .12 06	.570
2	0.0406	.213
3	-0.1166	.551
4	-0.1067	.503
5	0.0726	.398
6	0.0997	.565
7	-0.4020	10.550*
8	- 0.1848	.882
9	0.2641	1.284

^{*} Significant at the 5.0% level

Note (1)
$$t = rs \sqrt{\frac{N-2}{1-rs^2}}$$

Because these variables may be related to the liquidity preference of bankers in off-setting or complementing ways, the one-to-one analysis above cannot be considered final. It is useful to consider simultaneously the effect of the nine variables on

liquidity preference. Multiple regression analysis is one method of doing this.

Although an overwhelming number of the hypotheses were rejected in the light of the evidence above, the result of a multiple linear regression indicates that there exists some strong relationship between the liquidity preference of a lending officer and his lending practices. Table 7.19 shows that the multiple correlation coefficient of this relationship, R, is 0.73035. This coefficient is also significant at the 10% level.

Table 7.19 Results of multiple linear regression

riables being hypothesised to lated to liquidity preference	be	R	R ²	F
Propensity to lend Lending practices			0.00495 0.53341	0.1095 2.144*

^{*} Significant at the 10.0% level

That is to say, it is in 10 out of 100 cases in which one may be wrong in assuming a strong relationship between the liquidity preference of lending officers and the totality of their lending practices, if samples of Nigerian bankers are randomly taken and examined for this relationship. The coefficient of multiple determination, R², which is 0.53341, also shows that 53% of the variations in the lending practices of Nigerian lending officers can be explained by their preferences for liquidity.

However, the relationship between the liquidity preference of the lending officers and their propensity to lend is very weak as demonstrated by the coefficient of this relationship, which is 0.07037. Apparently the rather strong presence of

requests for overdraft advances (50% of the advances proposals) in the SLRQ must have made the lending officers more willing to approve applications in this exercise and thus boost their observed propensity to lend.

The direction of the relationship of the variables hypothesised to be related can be observed from the signs of the rank-order coefficients in table 7.18 Do the observed relationships as indicated by the coefficients support, at least basically, these statements of hypothesis?

Hypothesis 1. The sign of the coefficient of relationship between the two variables is positive indicating that this statement is basically true. In interpreting this result, however, the influence of the presence of overdraft proposals amongst the four applicants must be countenanced.

Hypothesis 2. Surprisingly, the sign of the coefficient of relationship of the variables of this hypothesis is positive.

A priori thinking would suggest that a lending officer with a high preference for liquidity would make short maturity advances. This result indicates the reverse to be true for the data of this analysis.

Hypothesis 3. The statement of this hypothesis is contradicted by the sign of the coefficient of relationship between the variables. This relationship is also at variance with the high rating given to the applicants' financial position in lending decisions as observed in the analysis of SLRQ above.

Hypothesis 4. As in Hypothesis 3, the sign of the coefficient of relationship of the variables is negative, thus indicating the

statement of the hypothesis to be untrue. This result deviates from the observed high rating given to the applicant's management by respondents in the SLRQ. In practice it may be that the inability of lending officers to assess properly the applicant's financial position and his management might lead to his being less concerned for these issues as these results indicate.

Hypothesis 5. The coefficient of relationship of these variables is positive indicating that the statement is basically true. This is unexpected however, as a lending officer with high liquidity preference is not likely to be the futuristic kind of banker who will give much thought to the long-term prospects of the borrowing customer's industry. His concern will be for the present and at best the immediate rather than the future prospects.

Hypothesis 6. The concern here is again with the future potential of the borrowing customer. The sign of the coefficient of relationship is, however, the same as in the last hypothesis.

Thus the comments made there are equally valid here.

Hypothesis 7. The coefficient of the relationship of the variables has a negative sign. This indicates that the more a banker is interested in liquidity, the less concerned he is for the lending policies of the bank. Ordinarily, however, one would expect a lending officer with high preference for liquidity to be conservative and to be more likely to play the lending game strictly according to the rules rather than the spirit of the bank policy.

Hypothesis 8. The coefficient of relationship between the variables of this hypothesis has a negative sign. This means the statement

of the hypothesis is not supported by the result of correlation analysis. This result, however, corroborates the evidence in Chapter 6 where it was found that a negative relationship exists between the ratio of time plus savings deposits-to-total deposits and loans and advances to agriculture

Hypothesis 9. In the light of the results of the analysis in Chapter 6 and the analysis of the SLRQ above, the positive relationship found to exist here between the lending officer's liquidity preference and his security requirements is not unexpected.

6.1 Top+Level Lending Officers' Responses to IPT

When a loan proposal is above the lending limit of an operations-level lending officer, it is passed on, with recommendations, to higher levels of management. In Nigeria, this higher level invariably means the head office as area and regional offices are not often used for this purpose. To a significant extent, therefore, the investment behaviour of these higher level officers does influence lending. Because of this it is useful to examine their preferences for investments as was done for their counterparts above. The primary aim, however, should be to answer the question: are the liquidity preference attitudes of these top-level lending officers? (1) If no significant differences are found, in the light of the observed relationship between liquidity preference and lending practice, it will be

⁽¹⁾ This obviously important question was never raised by earlier studies employing similar IPT techniques.

reasonable to expect the lending practices of these officers to be similar to those observed in the case of operations-level officers above. If, however, they differ, one would expect different lending practices and lending decisions from these higher lending officers.

In examining the question posed above, a basic hypothesis is subjected to empirical testing. This hypothesis is that the Means of the distribution of cash resources to financial assets by operations-level lending officers (\bar{X}_{Oi}) do not differ from those of the top-level lending officers (\bar{X}_{Ti}) , that is $\bar{X}_{Oi} = \bar{X}_{Ti}$ (i = A + B, C, D, E).

A t-test using a two-tailed test of significance was employed in determining whether there were significant differences between these Means, that is, determining the probability of "t" f om the ratio:

$$t = \frac{\bar{x}_{0i} - \bar{x}_{Ti}}{O(o_i + T_i)} \qquad \qquad 9.1$$

where $(0_i + T_i)$ is the estimated standard error of the difference between the two sample means.

First, however, let us examine the distributions of cash resources to financial assets by the top-level lending officers and note how they differ from those of the operations-level lending officers. Table 7.20 shows that on the average, the top-level lending officers would allocate 39.8% (standard deviation 27.2%) of their resources to liquid assets. Although this is lower than was observed for the operations-level officers, this mean allocation to assets A + B is still much bigger than the mean allocations to either of assets C, D or E. In other

Table 7.20 Investment preference test: Top-level lending officers' responses (distribution of %100,000)

Respondent		Financial			
	A+B	C	D	E	
1	45	0	0	55.0	
1 2 3 4 5	57.5 33.0	0 · 36.25	30.0 21.0	12.5 9.75	
4	13.75	10.0	22.5	53.75	
5	14.5	14.25	28.75	42.5	
6	0	0	0	100.0	
6 7 8	0 53.75	O 16.25	25.0 18.75	75.0 11.25	
9	0	0	100.0	0	
10	25.0	25.0	37.5	12.5	
11	45.0	20.0	25.0	10.0	
12 13	92.5 72.5	0	5.0 15.0	2.5 12.5	
14	40.0	0	45.0	15.0	
15	60.0	8.5	15.0	16.5	
16	37.5	21.25	25.0	16.25	
17 18	40.0 25.0	15.0 27.5	32.5 25.0	12.5 22.5	
19	20.0	30.0	25.0	25.0	
20	83.75	5.0	6.25	5.0	
21	70.0	13.75	7.5	8.75	
22 23	88.75 27.5	6.25 27.5	5.0 7.5	0 37 . 5	
24	0	0	50.0	50.0	
25	71.25	. 0	27.5	1.25	
26	30.0	23.75	26.25	20.0	
27 28	27.5 41.25	21.25 20.0	30.0 22.5	21.25 16.25	
20	71,23	20.0	& & • J	10.23	
N	28	28	28	28	
Mean S.D.	39.8 27.2	12.2 11.5	24.2 19.4	23.8 24.2	
Range	0-92.5	0-36.25	0-100	0-100	

Source: Table VII-5

words, both groups of lending officers possess high preference for liquidity. The smallest share of cash resources, as with the operations-level officers, go to Federal Government Loan Stocks. About the same share of cash resources was allocated here to debentures and shares of quoted companies - 24.2% (standard deviation 19.4%) and 23.8% (standard deviation 24.2%) respectively. These are higher than were recorded for operations-level lending officers and make for the differences in the groups' liquidity preferences as expressed in the resource allocations to A+B financial assets.

On the basis of this comparative analysis, one can only expect marginal differences in the investment behaviours of the to groups of lending officers. Are these differences statistically significant? The results of the analysis in table 7.21 povide the answer to this question. Using P = 0.05 and degree of freedom n = 52, none of the t-ratios in this table is as high as either 1.684 (for n = 40) or 1.671 (for n = 60) (see Croxton and Cowden, 1955, pp. 750-751). Therefore we conclude that these differences are not statistically significant and accept the stated hypothesis.

Table 7.21 Differences of the means of responses to investment preference test

inancial	Ioan offiœrs	Head office	Mean difference	t-ratio
assets (I)	(2)	management (3)	(4)	(5)
A+B	48.74	39.80	8.94	1.30
	(22.10)	(27.20)		
C	11.85	12.20	-0.35	-0.13
	(7.43)	(11.50)		
D	18.91	24.20	- 5.29	-1.16
	(12.38)	(19.40)		
E	20.50	23.80	-3.30	-0.58
	(15.32)	(24.20)	• • • • • • • • • • • • • • • • • • • •	

It can be concluded from this result that the investment behaviour of all levels of lending officers in Nigeria is the same. Given that there is a correlation between lending officers' liquidity preference and their lending practices, it can be expected that lending officers at all levels of management in Nigeria will make similar lending decisions. Since tables 7.4 and 7.20 indicate that these lending officers of all levels of management have high preference for liquidity in making personal investment decisions, long-term loan proposals will be expected to get a 'cold' reception from them. This is not only a rational and logical inference, but it is a restatement of the lending attitudes of Nigerian bankers observed in Chapter 6.

7. SUMMARY AND CONCLUDING REMARKS

In the foregoing pages of this chapter an attempt has been made to examine the personal investment behaviour of lending officers in Nigerian commercial banks. Employing a set of hypothetical loan requests (the SLRQ) and a structured questionnaire (SQI), the lending practices and attitudes of these officers have also been examined.

The findings provided additional evidence that lending officers at all levels of management have a high preference for liquidity. The analyses also indicate that there exists a high correlation (R = 0.73035) between the liquidity preference of operations-level lending officers and their lending practices. The individual lending practices (except 'concern for established loan policies of the bank') and the propensity to lend were, however, found not to be significantly related to lending officers' preferences for liquidity.\frac{1}{2}

These findings reinforce the observations on the results of

¹ See pages 183-184 for a suggestion of a reason for this result.

the analysis in Chapter 6. These pointedly suggest that Nigerian lending officers have a high preference for liquidity and that they engage in 'undevelopmental' lending practices. The implications of these results for both the banks' and the country's growth and development are far-reaching. More so because the current Fourth National Development Plan 1981-85 places great responsibilities on the shoulders of the banks. In the words of the Plan (West Africa, 16 March, 1981, p. 560): "....banking institutions will be expected to play a more dynamic role in the area of stimulation of investment and channelling of such investment to priority sectors of the economy." A fulfilment of this obligation implies that present approaches and attitudes to development financing by the bankers must alter significantly because investing in priority sectors of the economy calls for unorthodox, aggressive banking.

CHAPTER 8

PLANNING AND CONTROL OF LOANS AND ADVANCES: A COMPARATIVE STUDY OF NIGERIAN AND U.K. COMMERCIAL BANKS' PRACTICES

1. INTRODUCTION

In any industry or organisation, success in today's uncertain and competitive business environment rests crucially on planning and control. This is particularly true for banks given their operating environment that is characterised by "increasing competition from bank and non-bank sources; technology; increasing scarcity and cost of deposits and capital; pressures from employees for higher salaries and stockholders for better market performance or higher dividends." (Conover, 1976 p.18). It is, indeed, plausible that the rather excessive liquidity preference as well as the less aggressive attitudes of Nigerian bankers observed in the previous chapters of this study may be the result of inadequate planning. Without good planning and control, bankers, in theory at least, will tend to be overcautious, providing for more buffer stock of liquid resources than can be justified by potential requirements and consequently be reluctant to provide term loans and advances.

Relatively, in recent times the need to plan and the way to do it have engaged the attention of both academics and management so much that planning has been elevated to the status of a discipline and a science (see Cohen and Hammer, 1966; Eilon and Fowkes, 1974). Although banks have not been in the forefront of this "race", they have demonstrated sufficient interest by developing and employing highly sophisticated planning and control techniques for the management of their institutions (see Bradley and Crane, 1975; for a brief review of formal bank

planning see Gardener, 1979 Chapter 5).

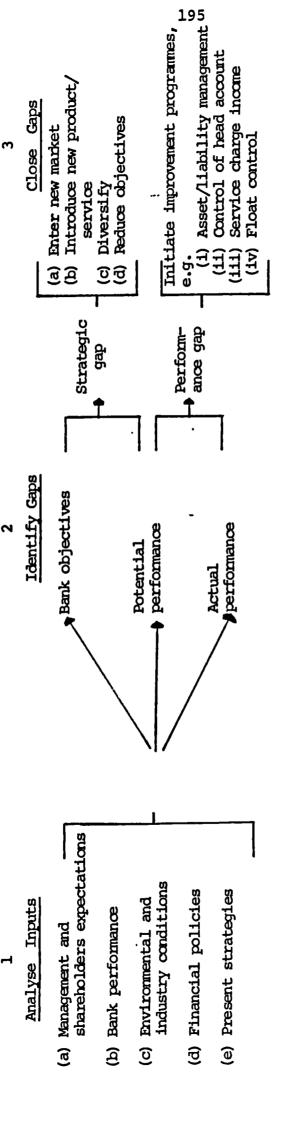
Although planning and control are, in practice, closely intertwined activities, there are some fine distinctions between them as can be gauged from table 8.1. Planning is usually divided into two parts - strategic planning and operations planning. Strategic planning is the process by which a bank defines its long-term objectives as well as the strategies and tactics that will help attain them. Three distinct but related processes can be identified in a strategic planning activity. The first involves the determination of the goals to be attained during the plan period and given all the "circumstances" resources, and constraints - under which the bank will have to operate. The second entails the specification (generally in quantitative terms) of the set of actions that are envisaged to help achieve the set goals. Finally the third step is an attempt to realistically consider the plan and make allowances for estimable deviations and gaps. (These processes can be seen clearly from figure 8.1.

Whilst strategic planning is concerned with the broad long-range prospects of a bank, the operations planning activities are focused on the detailed annual budgets for the various functions and variables in the bank's management model - the sizes and structures of loans and investment portfolios, levels of revenues, costs and profits, etc. To all intents and purposes the operations plan is a subset of the long-range plan. Figure 8.2 depicts a typical commercial bank's planning and control system.

Because of the useful role the planning and control exercise plays in the smooth and efficient management of a bank, it is important in a study which seeks to enquire into the performance

TABLE 8.1 CONCEPTUAL DISTINCTION BETWEEN STRATEGIC PLANNING AND OPERATIONAL CONTROL

	STRATEGIC PLANNING	OPERATIONAL CONTROL
1.	Non-programmable decisions	Programmable decisions
2.	Mainly external but also some internal information required	Internal information largely required
3.	Information designed for plann- ing purposes	Information mainly for control
4.	Top management's responsibil- ity	Middle and line management's responsibility
5.	Information essentially futuristic	Information mainly historical
6.	Information requirement rarely explicitly defined	Information requirement essentially explicitly defined
7.	Activity non-routine even if continuous	Activity is very routine in nature
8.	Activity usually affects whole organization and may mean 'life or death' for it	Activity usually affects sections of the organization and essentially not crucial
9.	Types of activity: setting marketing policies; setting personnel policies; new products development; analysis of competition; strategy development; analysis of business opportunities; general environmental studies; etc.	Types of activity; stock control; recruiting; dismissal; placements; production control; etc.



A typical bank strategic planning process

8.1

Figure

Source: Conover, 1976, p. 46.

A typical commercial bank's planning and control system

-	STRATEGIC PLANNING (Head Office)				
Determine the overall objectives of the organizations Determine aggregate balance sheet management involving:	g: (a) aggregate	advances policies investment policies	(G)	aggregate deposits policies general liquidity policies	policies policies
Determine rates of interest (minimum paid and charged) Determine Branching policies Determine Personnel policies involving recruitment, Training, Welfare and remunerations	d) Training, Welfare and re	munerations			
Determine public relations policies Feed forward information about the foregoing planning	g decisions and outline	and outline broad strategies for achieving the plans	or ach	deving the plans	
	MANAGEMENT CONTROL (Regional & Area Offices		! ! ! !		
Interprets for implementation some of the Head Office policy instructions Decides on general resource allocation and acquisition such as:- (a) lev	e policy instructions on such as:- (a) levels	uctions (a) levels and types of deposits (aggregates only)	sits (aggregates only) for	or or
Feed forward management control and strategies decisions		regions and areas (b) levels and types of advances	nces		
. Feedback information acquired independently as well as those feedbacks from the branches	as those feedbacks from	the branches			
	OPERATIONS CONTROL (Branches)				
Operationalize Head Office policy decisions with regard (a) Personnel (b) Advances, and (c) Deposits Feedback information obtained from operations and those Feed forward relevant information to the 'environment's policy on bank notes and coins	to acg ascg	say: uired by contact with the 'environment' for example, change in the rates of interest or the Bank of England	ent' Inter	est or the Bank of	England
				-	

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of a banking system to probe the level and quality of this key organisational input. For this purpose a comparative study of the Nigerian and U.K. commercial banks was conducted. The aim was that of killing two birds with one stone. First the exercise will aid the study of the weaknesses and strengths of the Nigerian commercial banks' practices in this field. Secondly it will enable a comparison with the practice in an older and more advanced banking system for whatever lessons can be learnt therefrom.

Many things make this comparative exercise appropriate. The traditional political and economic links between Nigeria and the U.K. are long and strong. In terms of training and technology, the Nigerian banking system borrows and buys from the U.K. Directives and central bank guidelines on the allocation of credit resources are employed as a tool of monetary regulation in both countries albeit with varying degrees of severity (see Falegan, 1978 pp. 15-30 (for Nigeria), and Hanson, 1979 p. 5 (for the U.K.)).

Although many environmental, institutional and legal differences exist between the two banking systems, these do not invalidate a comparison of this nature. This is because planning and control are management techniques adaptable to suit environments that may vary widely in socio-politico-economic elements and conditions. And after all, the essence of planning and control is that through the exercise attempts are made to predict, control and contain (if possible) these environmental and other influencing factors.

In the rest of this chapter, the sample and the data gathering procedure are discussed in section 2. The responses of the bank executives interviewed are analysed in section 3

and in section 4 a short summary with concluding remarks is presented.

2. THE SAMPLE AND DATA GATHERING PROCEDURE

Five of the six clearing banks in the U.K. and the 19 operating banks in Nigeria were selected as the sample. This selection enables the closest practical comparison of like with like i.e. typically commercial banks with country-wide branching networks and advances organisational structures in both countries (see figures 8.3 through 8.7).

The interviews were conducted on the basis of a structured questionnaire (see appendix IVB). The U.K. questionnaires were administered first. A request was made to each of the banks' head offices for an interview based on the questionnaire sent out previously. Just as these banks did in 1976 when this researcher contacted them for interview on a similar study (see Adewunmi, 1977), all of the banks responded indicating willingness to discuss the questions. Appointments were made and, to the researcher's delight, ready and well prepared bank executives were met each time in the 5 banks.

For the Nigerian survey the same questionnaire was used. One each was sent to the 7 banks with head offices outside
Lagos with a request to respond by post. This was done because there were no funds available to the researcher for the field work. Only 3 responded eventually. The questionnaires for the other banks, 11 in Lagos and 1 at Ibadan, were delivered personally and interview appointments made. In half of these cases only were interviews given on the second visit. Among this half of 6 respondents were 3 expatriate bank executives
French, British and Indian. In other cases a minimum of

Figure 8.3 Broad structure of advances management system in the Bank

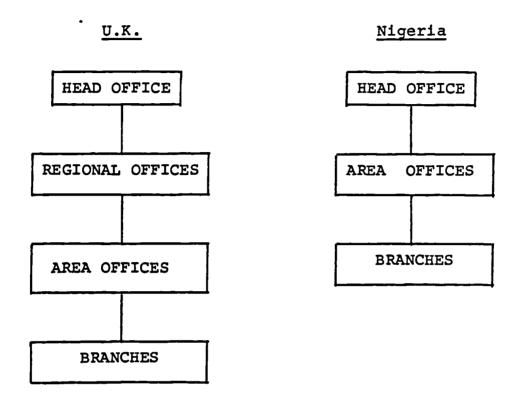


Figure 8.4 Structure of advances management system: Head Office (U.K. and Nigeria)

(Strategic Planning Level)

Board of Directors

Chief Executive

Deputy Chief Executive

Senior General Managers

Divisional General Managers

Deputy General Managers

Regional Managers

Advances Staff

Figure 8.5 Structure of advances management system: Regional Office (U.K.)

(Management control level)

Executive & Non-Executive Director

Deputy Executive Director

Advances Manager

Assistant Advances Manager

Advances Staff

Figure 8.6 Structure of advances management system:
Area Office

(Management control level)

U.K.

Nigeria

Local Directors

Area Managers

District Managers

Assistant Area Managers

Assistant District Managers

Advances Managers

Advances Manager

Assistant Advances Managers

Assistant Advances Manager

Advances Staff

Advances Staff

Figure 8.7 Structure of advances management system: Branch

(Operational control level)

U.K. and Nigeria

Manager

Sub-Manager

Accountant

Sub-Accountant

Advances Staff

two and a maximum of four calls were required before an interview was finally granted. On the whole, 15 banks in Nigeria responded to the questionnaire. The remaining four, however, do not represent a significant proportion of the banking system. These accounted for 3.4% of the system's assets, 4% of the deposits and 4.2% of the loans and advances as at the end of 1979 (see table VII-1).

3. ANALYSIS OF THE RESPONSES

The questionnaire covers the areas of advances such as

(1) planning; (2) management and control; (3) lending problems;

and (4) lending services. The analysis below is presented

under these headings and in this same sequence.

(1) Planning of advances

The overall corporate plan provides a basic framework for loans and advances planning and control. A bank that does not think of a total organisation plan is not likely to consider planning for advances. If it does, the exercise is unlikely to be very productive as piecemeal plans ignore the essential organisational interfaces and interdependence (Warren, 1973). The first question was thus naturally directed at this basic of planning.

Q. Do you operate a planning department in your bank? When was it established and what is its existing strength?

Table 8.3

	Nigeria (per cent)	U.K. (per cent)
Yes	60.0	100.0
No	40.0	_ 0.0
	100.0	100.0

Planning Department?

All the U.K. banks and 60% of the Nigerian banks in the sample responded affirmatively to this question. Planning departments were established by the U.K. banks 10-11 years ago. The first bank to do this in Nigeria started a department in 1972; and as many as 50% of the banks with a planning department opened them between 1979 and 1980. The staff strengths range widely in both countries - between 8 and 50 in the U.K. banks and 2 and 40 in Nigerian banks.

Given the central bank guidelines and directives in both countries, what is the manner and duration of loans and advances planning in the banks? The bank executives were asked:

Q. How do you plan for your loans and advances given the central bank directives in this regard? And for how long ahead?

Table 8.4 Planning for loans and advances?

	Nigeria · (per cent)	U.K. (per cent)
Yes	33.3	20.0
No ·	<u>_66.7</u>	80.0
	100.0	100.0

Only 20% of the U.K. banks' and 33.3% of the Nigerian banks' executives said they plan for the levels of their advances. Even in these cases, planning is limited to the establishment of budget targets. The remaining large majority of institutions in the two banking systems do not plan their loans and advances. One or two respondents in both countries even felt that it is impossible for them to plan because of the volatility in the changes in the demand function they face from time to time. Not unexpectedly only one of the respondents, a

U.K. bank executive, said his bank engages in five-year plans that are annually rolled over; that is to say at the end of each year, another year is added to the 'tail' of the five-year plan. The others who plan or budget for loans and advances do so for only one year ahead.

What is the level of employees' involvement in the planning process? Is it in planning parlance a 'bottom-up' or 'up-bottom' approach or both?

Q. To what extent do bank officers outside the planning department participate in the planning exercise?

In banks where planning or budgeting are done, the participation of managers is limited to the supply of inputs in the form of estimates of their expected levels of loans and advances in the coming year. Standard 'returns' forms are used in a majority of cases. On one side of this kind of form are the details of the year's operations of the branch; and on the other are the specified expected changes in performances in the next year. As the managers said they do not usually have to supply the assumptions for their estimates, all that conceivably happens is that each year's performance figures will be simply, and many times unrealistically, extrapolated.

The next question relates to loan policies. Policies provide the essential guidance for the planning exercise and credit operations. "Credit management makes two kinds of decisions in the process of credit granting. The first establishes the quality of credit granting the organisation chooses to accept. This is called a policy decision." (Roy and Lewis, 1971, p. 19). In the light of these the bank executives were asked:

Q. Does your bank operate its loan function with a written loan policy? Any loan policies specifically for agricultural and manufacturing lending?

In both the U.K. and Nigeria, none of the respondents' banks operates with a written loan policy. The CBN credit guidelines are widely assumed to constitute enough lending policies for the banks in Nigeria. How then do the banks provide guidance of any kind to their loan officers? The directives of the central banks are copied to the loan officers for their guidance. In addition they are supplied with the 'Handbook', a bank encyclopaedia on all issues including lending, which is occasionally supplemented with head office circulars.

The bankers were next asked:

Q. To what extent do these policy guidelines aid or constrain lending at the operational levels of management?

As they did not operate with loan policies, the answers were obvious and predictable - no opinion.

Another important issue in planning for any operation is the definition of the objectives (see Terleckyj, 1970). Unless the goals of a process, a system or an operation are clearly defined, the efforts to reach those goals may be directionless. It is also true that "the main risk we run in incorrectly identifying our objectives is that we may choose a wrong target of attack." (Adewunmi, 1977 p. 78). These considerations prompted the researcher to ask the question:

Q. What are the objectives of your bank's lending function?

Profit maximization was very frequently mentioned by the bank executives. All the U.K. bank executives and 66.7% of their

Table 8.5 Objectives of lending function

	Nigeria (per cent)	U.K. (per cent)
Profit maximization Development of the economy	66.7 80.0	100.0

Nigerian counterparts listed this as the important goal of their lending functions. In nearly all of these cases, profit maximization was said to be not only an important but a primary objective of the banks' lending activities. The other important objective mentioned was the development of the economy; 60 and 80%, respectively, of the U.K. and Nigerian bank executives mentioned this, (see table 8.5).

(2) Advances management and control

The basis of all planning and control activities is information. Without appropriate and timely information no tangible success can be achieved in these activities. It was then considered in place to ask:

Q. What are the main kinds of information required for your lending function and activities of planning, control and operations?

Table 8.6 Sources of lending information

	Nigeria (per cent)	U.K. (per cent)
Cashflow/feasibility reports	60.0	80.0
Business financial records	40.0	80.0
Project related information	100.0	100.0
Environmental - the economy/industry	20.0	20.0

In view of the fact that most of the banks in the U.K. and Nigeria do not plan for their loans and advances, it was not

surprising that only 20% in either sample mentioned environmental information. Rather they were more interested in the business and project related information required for the management and control of their advances. Cash flow was commonly mentioned by the U.K. bank executives whilst the Nigerians, saying the same thing, used the term, "feasibility reports." It is noteworthy that in spite of the great attention currently given to cash flow/feasibility reports, the scrutiny and analysis of business records by bankers are still very important. Whilst 80% of the U.K. bank executives mentioned this, however, only 40% of the Nigerians did. The basic nature of the need for advances to satisfy the time-honoured principles was underlined in the bankers' responses to this question. All respondents in both countries said they would call for information on capital, ch racter, collateral and capacity - the 4-cs of bank lending. Also mentioned by all respondents was information for the verification of the purpose, the amount, and the lengths of advance.

What are the bankers' sources for this information? Do they rely entirely on their customers or do they make an effort to obtain information by themselves?

Q. How do you presently obtain this information?

Table 8.7 Sources of information

	Nigeria	U.K.
	(per cent)	(per cent)
Customers	100.0	100.0
Internal sources	26.7	80.0

As it would probably be expected, customers were a major source of this information as noted by all bank executives. The

other main source of information mentioned by respondents was internal - 80% and 26.7%, respectively, of the bank executives in the U.K. and Nigeria. These will appear to indicate the levels to which bankers in both countries try to augment customers' information with internally generated information. It is paradoxical and rather unfortunate too that it is in Nigeria, where customers have comparatively less capacity for generating information, that the bankers apparently rely more on them for this.

Given the state of information supply the question was asked:

Q. Does lack of information ever constrain your lending activities?

Table 8.8 Information is a constraint in lending

	Nigeria (per cent)	U.K. (per cent)
Yes No	80.0 20.0	100.0
	100.0	100.0

All the U.K. bank executives said that lack of information is a constraint but added that this is from the point of view of their customers. That is to say, problems arise only when their customers are either unable or unwilling to supply required information. On the other hand 80% of Nigerian bank executives consider that lack of information is a constraint. The other 20% were of a different opinion as they believe that "you can always ask for more from the customers."

Can an outside organisation such as a central credit bureau help to increase the information resource of the banking system

and of the individual banks? Specifically the question was:

Q. To what extent, do you think, a central credit bureau would help improve the information resource of the banking system, and in particular your bank?

Table 8.9 Usefulness of a central credit bureau

	Nigeria (per cent)	U.K. (per cent)
To a great extent To some extent Will not help No opinion	66.6 20.0 6.7 6.7	0.0 0.0 100.0 0.0
	100.0	100.0

Noticeably, all the U.K. bank executives said it will not be of any help. Most are satisfied with the services of private agencies such as Dun and Bradstreet which they presently use.

Others opined that an attempt to organise a central credit bureau will come against legal and political problems as many people will see it as an assault on individuals' privacy.

The absence of any private or indeed any type of credit bureau in Nigeria probably explains the responses of the bank executives. Only 6.7% felt that it will not help; and another 6.7% have no opinion. All the rest thought it will be useful - 66.6% "to a great extent," and 20% "to some extent."

There is little doubt that the quantity and quality of the information resource of the banking system and of the individual banks can be greatly enhanced by the exchange of information among the institutions. Do the bankers appreciate this? If they do, to what extent do they collectively and individually work for it? Thus the bank executives were asked:

Q. To what extent do commercial banks presently co-operate in the exchange of credit information?

Table 8.10 Co-operation in exchange of credit information

	Nigeria (per cent)	U.K. (per cent)
To a great extent To a little extent Hardly No opinion	26.7 53.3 6.7 13.3	50.0 50.0 0.0 0.0
	100.0	100.0

Over half (53.3%) of Nigerian bank executives in the sample felt the co-operation between the banks in this regard existed only to a small extent. About 27.0%, however, felt the banks co-operate to a great extent. Amongst these, many thought that the co-operation worked particularly well with the big five banks. Half of the U.K. bank executives on the other hand felt that their banks co-operate to a great extent but the other half thought it is only to a little extent. As for the quality of information, all respondents with an opinion on the issue described the information exchanged as terse and inadequate. A U.K. bank executive succinctly put the opinions of most respondents when he said that: "... reading the reports is an art."

To some extent the maintenance of customer credit files helps to build a useful data-resource on individual loan customers of the bank. So the bank executives were asked:

Q. Does your bank maintain customer credit files? What kinds of information are available therein?

Table 8.11 Maintenance of customer credit files

	Nigeria (per cent)	U.K. (per cent)
Yes No No opinion	86.6 6.7 6.7	100.0 0.0 0.0
	100.0	100.0

All the U.K. bank executives and 86.6% of their Nigerian counterparts said their banks keep customer credit files. Half or 6.7% of the remaining Nigerian respondents said their banks do not; whilst the other half or 6.7% had no opinion on the issue. The files kept are said to contain general information relating to the advance. These include the application forms completed for the advance, cash flow analysis, correspondence and all available financial records of the business and the project against which advances are made.

An overwhelming majority of advances are processed and administered at the branch. In the light of this the branch managers are an important factor in lending. To be able to deal with customers in an informed way, they need to know them sufficiently well. So we asked the bank executives who control the movements of these branch managers:

Q. How long, on the average, do your branch managers stay working in a branch? Do they stay long enough, you think, to get to know their customers?

Table 8.12 Managers' tenure in the branches

		Nigeria (per cent)	U.K. (per cent)
Minimum: 2-3 years		46.7	0.0
Average: 3-4 years		0.0	50.0
Maximum: 4-5		20.0	0.0
Until promoted As long as he has a	good report	26.6 6.7	⁵ 8:8
are more and the man to		100.0	100.0

The respondents indicated the minimum, the average and the maximum period their branch managers stay in a branch before being moved to another one. (See table 8.12). A small number of respondents, 6.7% among the Nigerian bank executives said their managers remain in their branches as long as they have good reports and until they are promoted. Each executive believes that the practice is suitable for his bank's policies and experiences. All the U.K. bank executives noted that in the specific case of agriculture, their managers tend to stay longer in their branches and even when moved, this movement is within the same agricultural region as much as possible. other cases too, these bank executives said that conscious efforts are always made by their banks to develop specialist bank managers by keeping them in specific agricultural or industrial areas.

Because of the uncertainties of the business world, government action, "act of God", the human element, etc., the best thought-out plan may still get out of course. It is because of this that control is necessary. In the particular case of lending, control is essential to ensure the safety of the bank's money and its liquidity position. Thus the bank executives were asked:

Q. How does management in your bank control the quality and the quantity of advances? And how successfully do you think?

The banks' practices, in this area of lending in both Nigeria and the U.K. are identical. The main means of control of quality frequently mentioned by all respondents are manager's discretionary limit, inspections by auditors and head office staff. Quantity control is exercised by way of monitoring the lending activities at the branches and providing feedback

to managers and requesting them to keep in line with existing credit guidelines. All consider the methods successful.

As managers' "discretionary limits" are one of the important means of controlling the quality of advances, the executives were asked if these are reviewed to take account of changes within the banks' environments.

Q. How often do you review the credit limits of your credit officers, mainly the branch managers?

Table 8.13 Review of managers' discretionary limit

	Nigeria (per cent)	U.K. (per cent)
Annually Between 2-4 years As necessary	53.4 13.3 20.0	60.0 20.0 20.0
No opinion	13.3	100.0

Branch managers' discretionary limits are reviewed annually according to 53.4 and 60%, respectively, of the Nigerian and U.K. bank executives. These limits are reviewed between two and four years according to 13.3 and 20% respectively, of the Nigerian and U.K. bank executives, whilst 20% of respondents in both countries said reviews are undertaken when considered necessary only. Factors such as inflation, competitiveness and managers' performance are taken into consideration in the reviews.

As part of the control of the quality of advances, banks may want to check the use of the discretionary limits by their branch managers. The bank executives were, therefore, asked:

Q. Does your bank routinely review the loans and advances granted by its loan officers? What form does this review take?

Routine checks are made on branch managers' lending operations in both banking systems. These are done as part of the review of periodical returns on advances from the branches. Bank inspectors, auditors (external and Internal) and head office advances control staff also make checks on their routine visits to branches.

In spite of good advances planning and control, some loans may still go bad i.e. unpaid when due. A proper loan collection procedure not only helps loan recovery but discourages potential defaulters. The following questions were thus put to the bank executives in this regard:

Q. What is your bank's defaulted loan collection procedure? How effective is this procedure in recovering defaulted loans as well as discouraging loan default by customers?

Once again the procedures are very similar in both countries. It is a process that usually begins with inviting the customer to discuss his financial problems, followed by one, two or three letters of formal demand. If these first two steps fail, most banks' procedures require that the dossiers on such loans be sent to the recovery/legal departments for further action. The debt recovery department, as appropriate, realises the securities and sues for the balance, if any. Some banks in the U.K. and Nigeria take steps, usually at the end of the recovery exercise, to inform 'the world' of the defaulters' failure to make good their obligations to the banks. In the U.K. names of defaulters are notified to the private credit agencies and in Nigeria their names are published in the national dailies.

A report in the form of the age analysis of loans may help

to call attention to overdue loans. This way recovery activities are stepped up early enough to be helpful. If deemed necessary the loan can be declared bad so that the loan portfolio balance can represent truly realisable assets. In view of these, the bank executives were asked:

Q. Does the bank request its lending officers to submit a periodical age analysis of loans? Any other periodic reports on loan portfolio?

In neither the U.K. nor Nigeria are periodical age analyses of loans called for by management. The reason given by the bank executives is that the ages of loans are normally noted on the various advances returns.

(3) Lending problems

One good way of solving lending or indeed any problem is to identify it and the causes. Two questions were asked - one to identify the problems and the other to define the causes. As very interrelated responses were given, these two questions are presented and analysed jointly here.

- Q. What, in your view, are the causes of loan losses particularly in the agricultural and manufacturing lending sectors? Could you give me any idea of your respective loan loss ratios?
- Q. What are the special problems of lending to the agricultural and manufacturing sectors? How could these problems be alleviated or completely eliminated and what, do you think, should be the role of commercial banks in the exercise? How much more could you have lent, say, last year without these problems.

As may be expected, some of the problems mentioned are common to both countries and to both the agriculture and manufacturing lending. Bad management was mentioned by all

Table 8.14 Lending problems

General (U.K. and Nigeria):

Bad management Unwillingness to repay Government policies, actions and inaction

Nigeria (Agriculture and manufacturing):

Over-diversification
Bad lending judgement
Inadequate monitoring by banks
Concentration on collateral rather than cash flow
Funds diversion

Nigeria (Agriculture only):

Crop failure
Secondary or absentee farmers
Inadequate infrastructure - storage facilities, etc.
Lack of inputs - fertilizers, animal feeds, etc.
Lack of rural branches
Demand for feasibility reports under ACGs

respondents in both countries. Another problem mentioned by all respondents is government policies, actions and inaction which result in interest rate changes, inflation and wide fluctuations in demands and prices. Lastly in both countries, about one-quarter of respondents talked of the unwillingness of customers to repay their loans.

In addition to these common problems, the Nigerian bank executives highlighted other problems. Those which apply to both the agriculture and manufacturing sectors include over-diversification and funds diversion. Encouragingly enough the banks' executives were able to note the faults in themselves that are part of the causes of the overall lending problems. Concentration on collateral to the detriment of cash flow was one of these faults in the banks' lending practice. The others are bad lending judgement and inadequate monitoring of loan use by

customers.

Six categories of problems were mentioned by the Nigerian bank executives with particular reference to agriculture. Crop failure and secondary or absentee farmers were most frequently mentioned by respondents. Other important problems are lack of rural branches, inadequate infrastructural facilities such as roads for transporting farm produce to markets, and storage facilities; lack of inputs such as fertilizers and animal feeds; and the request for feasibility reports for lending under ACGS which leads almost inevitably to the production of many bad and substandard reports even when farmers are able to produce one.

Having diagnosed the problems, the bank executives also offered some 'prescriptions' that could help are some of these ills of bank lending. There are two principal ways in which the

Table 8.15 Solutions to bank lending problems

U.K.: Better marketing of bank services
Banks to set aside funds to help small
businesses

Nigeria: Education of entrepreneurs in business management
Closer contacts between banks and customers
Provision of more advice and assistance by the banks

Farmers to form co-operatives to enable banks lend to them in bulk

U.K. bank executives view the solution to these problems. One is the better marketing of bank services. Half of the respondents also suggested that the banks, in lieu of increased long-term lending to the agriculture and manufacturing sectors, should create a special fund out of profits and reserves for lending to small businesses. (See table 8.15).

The Nigerian bank executives suggested that there is need

to educate the entrepreneurs in general business management.

Closer contacts with their customers and the provision of more advice and technical assistance were also mentioned. A very important suggestion made by a large number of the bank executives was put by a representative respondent as: "farmers to form co-operative societies to enable banks to lend to them in bulk."

Given the small size of the average Nigerian farmer this suggestion is not surprising but more importantly, it should be well considered by the authorities.

All respondent bank executives in Nigeria and the U.K. were very reluctant to talk about their loan loss ratios for the agriculture and the manufacturing sectors. The truth probably is that the banks do not prepare this kind of statistics. Neverth less, the U.K. bank executives were absolutely certain that the loss ratio for the agriculture sector is lower than for the manufacturing sector and in most cases negligible. This is because of the various governments' guarantees and 'supports' (see Ministry of Agriculture1979). The reverse was the case in Nigeria, where the agriculture loan loss ratio is said, by all of the bank executives, to be many times higher than in manufacturing.

None of the bank executives in both countries could give an idea of the level of loans and advances that could have been achieved had the problems mentioned above not existed. This is undoubtedly due to the fact that the banks do not plan for their loans and advances. To get a general impression of the difference between the potential and actual aggregate loans and advances to these sectors for Nigeria the permissible level of loans and advances can be compared to the actual loans and advances reported by the banks. When this is done it will be found that the Nigerian commercial banks could have lent \$141.0 million and

#10.8 million more, respectively, to the manufacturing and agriculture sectors.

(4) Lending related services

The success of lending operations may be enhanced considerably by the quantity and quality of lending-related services provided by the banks. If banks lend and provide financial and management advice in addition the chances of the success of such borrowers are better than without such help especially in an environment where alternatives in this regard are hard to come by. Several key questions were therefore raised to enquire about banks' efforts in this field.

What kinds of lending-related services do you offer your customers?

All the U.K. bank executives and 60% of Nigeria's said their banks provide some lending related services. In the U.K., however, use is made rather extensively of the specialist units -

1. Total loans and advances, Dec.1977	= ₹3,074,578,000
CBN credit guidelines permissible increase as at Dec. 1978 = 30% of M3,074,578,000 Permissible aggregate loans & advances Dec. 1978	= 922,373,400 $= 33,996,951,400$
CEN credit guidelines prescribed allocation of credit to the manufacturing sector, Dec. 1978 32% of N3,996,951,400 Actual commercial banks recorded loans and	= 1,279,024,400
advances, Dec. 1978 Shortfall in loans and advances to manufacturing	1,137,987,000 141,037,400
CBN credit guidelines prescribed allocation of credit to the agriculture sector, Dec. 1978	
6% of №3,996,951,400	= 239,817,140
Actual commercial banks recorded loans and advances, Dec. 1978	= 228,990,000
Shortfall in loans and advances to agriculture	10,827,140

departments and/or subsidiary companies (see also Hanson, 1979). The sort of services offered were broadly defined as pre- and post-investment advice by agriculture officers and other specialist staffs. In Nigeria the provision of information on foreign partners was very frequently mentioned. Money management advice especially to the small and medium sized businesses was said to be an important service by bank executives of both countries.

The reasons given by the 40% bank executives in Nigeria who said their banks offer no lending related services include:

"we are in a seller's_market"

"we have no business advisory unit"

"because we are a small bank".

Do banks have an organisational unit for the provision of these services? The question asked was:

Q. Do you have a business advisory services unit? When was it established and what is the staff strength?

Table 8.16 Business advisory services unit

	Nigeria (per cent)	U.K. (per cent)
Yes No	20 80	80 20
	100.0	100.0

Only 20% of the Nigerian bank executives said their banks have a business advisory services unit. These units are manned by between four and ten senior staff and have been in existence between one and seven years. A large majority of banks in this sample - 80% - however, have no business advisory service units. The reverse is the case in the U.K. where 80% of the respondents answered this question in the affirmative. Many of these units

are relatively long established with the earliest being
12 years ago and the latest three years. Comparatively these
units are also better staffed than their Nigerian counterparts.
It is the practice amongst these banks to have, at least, one
advisory service officer in every regional or area office.

In banks where there exist business advisory units, what help do they give to the branches?

Q. What kinds of support services are provided by the bank's advisory services unit to the branch managers?

Both in Nigeria and in the U.K., these units help branch managers' and customers' relationships. Where new customers are going in to a manager's district, for instance, advance information on this is provided to the manager concerned by the unit. Also the officers of the unit visit old customers and provide written reports on their businesses to the branch managers concerned.

Apart from the business advisory services unit, is there any 'task force' with specific respondibility for acquiring new clientele?

Q. Do your bank's business promotion officers (if any) make business calls on new and old customers? Of what benefit, do you think, are these calls to the bank as well as to the customers?

None of the Nigerian respondents' banks have business promotion officers. In the U.K. 60% have, whilst 40% rely on their branch managers, area and regional offices' management staff for their business promotion. The primary responsibility of these promotion officers is to engage in "cold calls to establish relationships" between the banks and new customers.

As an alternative or in addition to banks' initiative in offering advice to old and new customers, do these customers ask the banks for advice?

Q. Do customers call on your bank for advice? If yes, what types of advice?

Table 8.17 Types of advice customers call for

	Nigeria (per cent)	U.K. (per cent)
Reliability of intending partners/supplie Advice on government regulations - import		0.0
etc.	6.7	0.0
Financial advice e.g. loan or overdraft	53.3	100.0
Investment advice e.g. use of surplus		
cash	53.3	100.0
T chnical viability of projects	26.7	20.0
Market conditions for products	6.7	20.0
Administration of their business	20.0	.20.0
Legal advice	6.7	0.0
Accounting	6.7	20.0
Taxation	0.0	100.0
Insurance	0.0	100.0
Debt recovery	0.0	20.0

All respondents in both countries answered this question in the affirmative. The lists of advice offered by the banks are similar to a large extent. Financial and investment advices are usually called for by customers in both countries as can be seen from the percentage of respondents mentioning these - 53.3% in Nigeria and 100% in the U.K. The offer by U.K. banks of taxation and insurance services accounts for the fact that all the U.K. respondents said their customers call on them for advice on these services.

Except during a liquidity squeeze, banks are always able and willing to support bankable projects. In all economies, the problem is usually that of lack of enough creditworthy projects.

This explains why banks, today, engage in business advisory services and the marketing of their loans and advances. What do the U.K. and Nigerian banks do in this regard?

Q. In what positive and concrete ways do you feel your bank helps to increase the volume of creditworthy projects in the economy?

Less than 25% of respondents in both countries provide any help towards increasing the volume of creditworthy projects. Those who help in Nigeria, for example, responded thus:

"we assist in reformulating projects"

"by reshaping projects and making them bankable".

In the U.K. the responses were sometimes less positive and varied widely too. For instance, one respondent said:

"a good proposal is given careful attention and moulded into a better one"

and another said:

"we only help projects with over 50-50 per cent chance of doing well."

The other respondents said their banks provide no help aimed directly at increasing creditworthy projects. Some Nigerian respondents in this group said:

"customers have to meet our requirements or we throw the proposals back to them"

"we don't advise on viability, we ask them to see consultants."

In the same vein a representative U.K. bank executive said that:

"we are not involved in new projects, we wait for on-going ones to come along."

A similar question was asked in relation to the creditworthiness

of bank customers.

Q. In what ways does your bank help to improve the creditworthiness of your clients?

The U.K. banks, according to the respondents, try to help but this is largely by way of referring customers to the banks' subsidiary companies and the advisory services units. In Nigeria where these specialist units are uncommon, branch managers are expected to provide as much help as they can.

Noticeably, in all, there was no specific mention of a way in which banks help improve their customers' creditworthiness.

Do the banks engage in marketing activities and in particular with regard to the agricultural and manufacturing sectors?

Q. How does your bank positively market its loans and advances services especially to the important agricultural and manufacturing sectors?

Between 60 and 70% of respondents in both countries said their banks engage in the marketing of the loans and advances services. In both countries, from the bank executives' responses, it is clear that the banks engage mainly in image building advertisements. However, in addition, about 20% of U.K. banks hold seminars for farmers.

The other 30 to 40% of bank executives said their banks do not engage in the marketing of loans and advances. The reasons for this include:

[&]quot;no need because demand exceeds supply"

[&]quot;a bank markets its loans only when it is over-liquid."

Given the obvious fact that the agriculture and manufacturing sectors are the backbone of any economy, do the banks consider they have a part to play in financing development in these sectors?

Q. What, do you think, should be the role of commercial banks in development financing?

Table 8.18 Role of banks in development financing

	Nigeria	U.K.
	(per cent) (per cent)
Positive	40.0	40.0
Passive	40.0	60.0
No opinion	20.0	0.0
	•	
	100.0	100.0

Two out of every five of the bank executives in the samples consider that the banks have a positive role to play.

One Nigerian bank executive described this as a "leading role" and a U.K. respondent went further by saying that the obligation is "crucial to banks' survival today."

A significant number of the U.K. bank executives - 60% - and 40% of their Nigerian counterparts said that the banks should have no part in development financing. In the words of a U.K. bank executive:

"development should be a major concern of the government."

But would any incentives make the banks change their attitudes to development financing?

Q. Would more incentives from the government induce your bank to lend more to the strategic sectors of agriculture and manufacturing? If yes, what kinds of incentives do you have in mind?

Table 8.19 Incentives will induce more lending?

Table 0.12		•	
		Nigeria (per cent)	U.K. (per cent)
Yes No		80.0 20.0	60.0 40.0
		100.0	100.0
Table 8.20	Types	of incentives	
Nigeria	8	U.K.	ક
Tax incentives Increase in interest	33.3	Refinancing ECGD-type	33.3 [.]
rates Increase ACGS to 100%	20.0	guarantees	66.7
& extend to mfg	33.3		
Rediscount facilities	6.7		

A majority of respondents in both countries thought some incentives from the government might induce bankers to undertake more development financing. This was the view of 80 and 60%, respectively, of the Nigerian and U.K. bank executives. The types of incentives called for are as in table 8.20. The Nigerian bank executives will want more tax incentives such as accelerated write-off of losses on rural branches, increase in lending rates, increase in ACGS and extension of it to cover the manufacturing sector and rediscount facilities. Guarantees such as are offered by the ECGD and refinancing facilities are the main incentives the U.K. bank executives thought might encourage increase in development financing.

4. SUMMARY AND CONCLUDING REMARKS

A number of important issues are raised in the above comparative analysis of the practices of commercial banks in

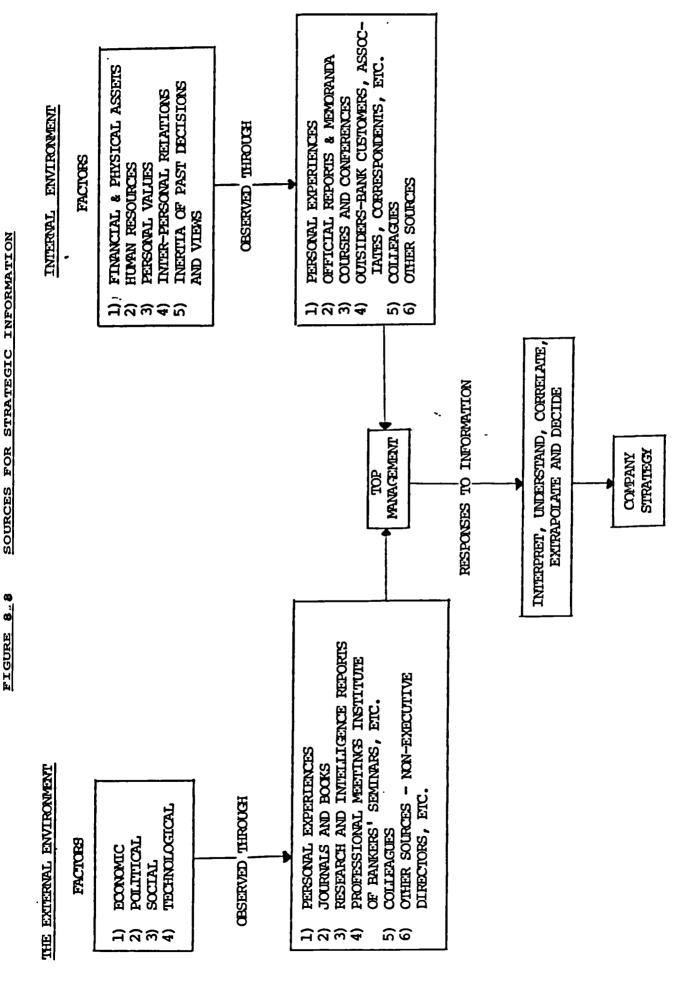
the U.K. and Nigeria with regards to planning and control of advances. Although it can be said that the U.K. commercial banking system as portrayed in this analysis is far from the 'ideal' (if indeed the 'ideal' exists) some useful lessons can, however, be learnt by the Nigerian commercial banking system from it.

In both countries, planning specifically for the levels of advances is rarely done. In the U.K., however, corporate planning as a part of the overall management of the banks is undertaken more widely than in Nigeria. This is clear from the existence of planning departments that are well staffed with specialists.

with regard to the provision of information, it appears evident that the U.K. banks make greater efforts to generate more internally. On the other hand the Nigerian banker would rather lean harder on the customer to obtain the quantity of information required for advances. In the two banking systems, however, it will appear that more can still be done to improve their information resources by intensively tapping the numerous available sources as identified in figure 8.8.

As the Nigerian bank executives noted there is great need for a central credit bureau in the financial system particularly because of the absence of private agencies such as Dun and Bradstreet in the U.K. The level of co-operation in the exchange of information amongst the Nigerian banks leaves a lot to be desired. For example, an enquiry into three sister banks in 1976 revealed that a large number of customers borrowed simultaneously from more than one of these banks without one bank knowing of their customer's relationship with the others.

The basic methods for the control of the quality and the



quantity of advances in both countries are identical. With the extensive use of computers in the U.K. banks, it has been possible to control the quantity of advances satisfactorily. The weakness in the system of quantity control employed shows up clearly in the Nigerian case. Because it is an after-the-event type of control, the banks have found their advances out of control many times as can be seen from table 8.21. Without computers capable of providing daily balances for loans and advances for the banking units as in the U.K., there is greater need in Nigeria to engage in planning, which is an effective control-in-the-future.

The U.K. commercial banks recognise the peculiar nature and requirements of each area of the country with the predominance of industry, agriculture, mining or manufacturing. This is shown in their conscious efforts to develop and use specialist managers who by virtue of their long and continuous stay in an area become adept in dealing with the typical lending problems of the areas. This apparently good idea has not yet gained recognition and acceptance among the Nigerian bank executives for managers are very frequently transferred from one corner of the country to another.

Unlike in the U.K., only a few banks in Nigeria have a business advisory unit. None of the banks engages business promotion officers either. Although many claim to have marketing departments, little marketing beyond corporate image building is being done. The generally held view that banks market their services when supply exceeds demand is patently erroneous. The marketing of services differs from that of physical products. Whilst the marketing of physical products encourages you to buy

Table 8.21 Commercial banks' lending-related infringements of bank regulations (throughout the lives of individual banks)

Bank	Number of years			
	of existence (range)	Liquidity ratio deficiency	Ioans in excess of statutory maximum	Increase in advances during liquidity ratio deficiency
1	2	3	4	5
7	over 30	43	0	20
A	10-20	43 5	9	39
B C	10-20	56	41	3 · 42
D	over 30	_	ī	
E	20-30	2	2	1
F G	20-30	4	1	3 1
G	1-10	1.	-	1
H	1-10	-	-	-
I	1-20	10 16	-	7 3
J	over 30	70	-	3
K	10-20	6 1	3	5 1
L	1-20	1	1	_1
M	1-20	22	-	16
N	20-30	11	4	6
0	1-20	11	-	10
P	over 30	6	4	5
Q	over 30	- •	6 .	-
R	over 30	3	18	-

Source: Classified information - (columns 3, 4 and 5) - not to be referenced.

and will be deemed successful if demand increases significantly as a result, the marketing of bank lending services does not only inform and encourage customers to demand the services but it also assists in their proper and efficient use, thus increasing the product quality. The difference arises from the fact that the former subject of marketing is an end product whilst the latter is an input factor.

It is gratifying that bank executives in both countries noted the fact that the methods of their operations may cause some of the problems in lending. It can be expected that the solutions suggested may help in the amelioration of the problems. The success of the efforts to solve lending problems, however, will depend largely on the bankers' willingness to change their attitudes to development financing. At the present a large number of bank executives in the samples for this enquiry appear to see only a passive role for the banks in development financing. Given the experiences of India (see Adewunmi, 1981a) and Ghana (Ogbe, 1975), there is little doubt that the introduction of refinancing and guarantee schemes will go a long way to alter the bankers' view and attitudes to development financing.

The Nigerian bank executives have suggested that farmers should form co-operatives so that they can be enabled to lend to them in bulk. This suggestion is not novel for it has been put forward by conferences and seminars in the recent past in Nigeria (see Ijere and Osuntogun, 1981). The small size of business units in both the agricultural and manufacturing sectors in Nigeria justifies this repeated emphasis. Given that situation, it will be near impossible for banks to

increase their lending significantly to these sectors except this important step is first taken. Thus the governments of the country must now give greater attention to the co-operative sector to enable it organise into viable and creditworthy units.

CHAPTER 9

THE PERCEPTION OF NIGERIAN COMMERCIAL BANKS' LENDING FUNCTION BY INDUSTRY

1. INTRODUCTION

So far this study has focused on one side of the opinions and picture of the lending function - the bankers' side. The statistics of bankers' operations and their response to questionnaires have been analysed and interpreted. To obtain an independent opinion of the efficiency of their lending, it seems only appropriate to ask the recipients of these services. In this way a balanced view of the lending operations of the banks should be obtained. As the researcher is an outsider to the banker-customer relationship, it is hoped that many of the candid opinions that customers will hesitate to put to their bankers can be expressed in response to his questionnaire. Hopefully these views of the customers so obtained might provide a basis for self-examination for the banks and lead to desirable improvements in their operations.

The sample of respondents and the data gathering procedure are discussed in sections 2 and 3, respectively. In section 4 the responses obtained are analysed and a summary plus concluding remarks are given in section 5.

2. THE SAMPLE

All the organisations interviewed, it ought to be noted, belong to the manufacturing sector. This is because farming, organised in the same way as industries, is still a rarity in Nigeria. A few responses were obtained from people who described their businesses as "farming and civil engineering", "produce-buying, trading and farming" and "import-export and

farming". The fact is that many of the sizeable private farming activities in Nigeria today are carried on by, in the words of a banker, "absentee farmers". Most of these farmers see agriculture as no more than a hobby. Many are taking advantage of and abusing the intentions of the government in encouraging banks to lend to the agriculture sector without however doing any serious farming (see West Africa, 18th May 1981 p. 1077). Otherwise, how can one explain the 40% share of agricultural loans being accounted for by Lagos State which has little or no farm land, in which (from personal knowledge and experience of 25 years) little farming is done. Undoubtedly, responses by these types of "farmers" are most likely to be 'distorted' because their relationships with the banks are not based on their agriculture business. (See Appendix IX-A, a sample of responses ob ained).

The real farmers in Nigeria are the smallholder, peasant farmers (see Agboola, 1979). As a son of one of these farmers and coming from the most typically agricultural state of the country, the writer knows that nearly all of these farmers are illiterate and too poor to have a customer relationship with the banks. In the words of Oluwasanmi and Alao (1965, p.35): "African farmers are, in the main, small state operators who live in remote villages in the countryside and are too poor to operate bank accounts or own assets that are readily acceptable to bankers as security." An interview survey of 5 towns and villages - Ikare, Arigidi, Okeagbe, Irun and Afin-in Akoko North Division of Ondo State reaffirmed this view. It is for these reasons that studies of Nigerian farmers have always been within the context of the co-operative movement (see Osuntogun, 1980). In the light of these circumstances, the farmers could not serve as appropriate respondents to the questionnaire used here.

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There are, of course, a few large-scale farming organisations in Nigeria. These are either government farm settlements, government sponsored co-operative farming groups, or farm settlements financed by institutions such as the International Development Association, an affiliate of the World Bank, and the Commonwealth Development Corporation. Because of the nature of the sponsorship of these farming organisations, they do not have the kind of banker-customer relationship that will make them fit into the framework of this study.

Table 9.1 presents the overall picture of the sample and table 9.2 gives details of the profile of respondent organisations. The sample of the large organisations consists of all the manufacturing businesses listed on the Nigerian Stock Exchange as at 1.2.80. Of the 81 small businesses selected, 77 were taken from the 1980 Directory of the Manufacturers Association of Nigeria (MAN) and the other four randomly during fieldwork. As most of Nigeria's manufacturing concerns situate in planned industrial estates, a majority of these sample firms were conveniently clustered in the estates. Thus 21 companies were listed from the Ilupeju Industrial Estate; 18 from the Apapa-Iganmu Industrial Estate, 7 from Oluyole Industrial Estate in Ibadan. Only 8 of the small firms and 16 of the large firms were ultimately interviewed.

94% of the large firms are foreign and the rest indigenous. On the other hand, only 25% of the small firms are foreign; 75% indigenous.

It is common practice for firms to have more than one banker. This provides an advantage to this kind of study as the respondents' views are made more 'global'. Among the large firms, 37.5% have one or two bankers, 31.25% three or four bankers;

Table 9.1 The sample

	Large	Small	Total
Number of firms selected Number of firms interviewed	44 16	81 8	125 24
Percentage of responses (%)	36.4	10	19.2

	Table 9.2	Profile of respon	dents
(a)	Size Total Assets - range	Large - N3.0-N161.0 million	Small ¥65,000-¥1.8 million
(b)	Distribution		
	Foreign firms Indigenous firms	93.75 6.25	25.00 75.00
		100.00	100.00
(c)	Number of bankers		
	1 or 2 3 or 4 5 or 6	37.50 31.25 31.25	75.00 12.50 12.50
		100.00	100.00
(d)	Average relationship wit	h bankers	
	O- 9 years 10-19 years 20-30 years	18.75 56.25 25.00	50.00 37.50 12.50
		100.00	100.00
(e)	Industry coverage (by produc	:ts)	
	Textiles and thread Food and drinks Chemicals, paints &	18.75 31.25	-
	pharmaceuticals Metal and wire	18.75 12.50	_ 25.00
	Rubber and foam	12.50	12.50 25.00
	Stationery Miscellaneous	6.25	37.50
		100.00	100.00

and another 31.25% five or six bankers. Being small, the other group of firms could not possibly match this widespread use of banks by large firms. Thus 75% of the small firms have one or two bankers, 12.5% three or four bankers and the last 12.5% five or six bankers.

The views of the respondents will, most expectedly, be influenced by the length of their relationship with their bankers. The longer such relationships the better is likely to be any assessment by the customers. Among the large firms, 18.75% have had relationships of between 0-9 years; 56.25% between 10-19 years and 25% of between 20-30 years. Fifty per cent of the small firms have had relationships with their bankers of between 0-9 years; 37.5% between 10-19 years and 12.5% between 20-30 years.

The companies interviewed in both the small and large classes vary in size. In the large class, for instance, the firms vary in assets size from N3.0 to N161.0 million. In the small firms class, the range is between N65,000 and N1.8 million.

The industry coverage is considerably wide as can be seen from table 9.2. In the large firms class, a big majority of the companies are engaged in food and drinks manufacturing. Half of the small firms are engaged in metal and wire (25%) and books and stationery (25%), manufacturing.

3. DATA GATHERING PROCEDURE

A structured questionnaire was employed for the data gathering (see Appendix IVA-3). The questionnaires with two covering letters (one each from the supervisor and the researcher) (see Appendices IVB-1 and IVB-2), and a stamped self-addressed envelope were sent to each of the 44 quoted manufacturing

companies of the large class of the sample. Only two of these came back, as requested, via the post duly completed. One was returned through post with the comment "Mr Adewunmi, Sorry no time." With this discouraging response, two months after the date of dispatch of the questionnaires, the researcher proceeded on a door to door collection of the questionnaires. After two or three visits a-piece within a period of 3 months, another 14 questionnaires were "retrieved".

The questionnaires for the small firms were delivered personally to each firm, and after, at least, two additional visits, only 8 completed questionnaires were collected. In about half of the cases, the questionnaires were returned to the researcher with no explanation for non-completion; in another 25% of the cases, specific requests were made to the researcher not to bother to call back as the questionnaires would be mailed directly to him! Although these experiences are unpleasant, they are not entirely unusual particularly with studies involving small businesses and banker-customer relationships. For instance, of the two questionnaires sent by the Bolton Committee to small businesses one had a response rate of 22%, the other 13% (Bolton Report p. 5 fn 2). Katona's (1957, p. 11) experience in a United States study is also demonstrative of this general apathy:

"There were very few instances of outright refusal consisting of requests by the selected firms that they should not be interviewed. Most of the few cases were among the smaller firms in the sample. In somewhat more firms, however, executives asked for delays or postponements of interviewing. In this respect again difficulties with small firms were more frequent than with large firms."

In Professor Sayers' (1940, pp. 23-31) study of "businessmen

and their terms of borrowing" only "about 25% of the businessmen gave some answer to the questionnaire." He suggested four reasons why the "other 75% throw the questionnaire into the waste-paper basket," which are very illustrative of the attitudes of businessmen to academic studies such as this.

These are:

- (1) that the firms just couldn't be bothered with more forms than the government compels it to complete;
- (2) that the answers might be used for some ulterior purpose;
- (3) that the whole business was just a toy of "word-spinning theorists"; and
- (4) that the terms of borrowing had never affected the firm.

(p. 23)

I is worthy of note that this was in spite of the fact that the covering letter to the questionnaire was "designed to overcome such objections as these" (p 23). The Nigerian situation is made more difficult by a lack of understanding of and appreciation for research. Because of these there is an element of resentment, bordering on hostility at times, in the reception accorded to researchers. Some of these are also based on the erroneous beliefs that researches are invariably undertaken on behalf of competing firms. The latter was very frequently mentioned to this researcher.

4. THE RESULTS

The responses of the interviewees (the firms' executives) concerning their relationship with the banks are analysed in this section. The responses are presented in four sub-sections each dealing, sequentially, with the respondents' (a) general perception of their bankers; (b) of differences among banks;

(c) of bank lending related services; and (d) of banks' credit facilities.

4.1 General view of banks

Particularly for the banks, views on how business executives elect and change their bankers can be useful and guiding. As this is the start of any banker—customer relationship, the questionnaire focuses on these issues first and foremost.

Q. How do you evaluate, originally, the banks with which you want to do business?

Table 9.3 Factors in initial evaluation of bankers

	Large (per cent)	Small (per cent)
Efficient services	50.0	12.5
International network	25.0	0.0
Financing facilities	18.75	25.0
Location	12.50	12.5
Parent company's/friends' recommendation	6.25	12.5
Image	6.25	12.5
No opinion	18.75	12.5

Six principal factors were named as influencing the respondents' choice of bankers. As many of the big firms have international business connections, it was not surprising that 'international networks' was named as an important factor by 25.5% of the respondents, whilst on the other hand none of the small firms mentioned this factor. 'Efficient services' was mentioned by half of the big firms and by 12.5% of the small ones. Financing facilities were thought important by 25% of the small firms but only 18.75% of the large firms' group mentioned these. Location, parent company's/friends' recommendation and image are the other factors mentioned by a few of the respondents of both the large

and the small groups.

Having chosen a bank, a customer sometimes decides to change to another bank. What factors do these executives take into account in deciding on such a change? All the respondents consider operating services and credit facilities as very important factors. No less than 87.5% of respondents in both groups consider these factors important (see table 9.4).

Q What considerations influence your choice of or decision to change to a bank?

Table 9.4 Considerations in decision to change bankers

	Large (per cent)	Small (per cent)
O erating services	100	87.5
C edit facilities	93.75	87.5
Advice received	56.25	37.5
Personal friendship	43.75	50.0

Over half of the respondents in the large firm class consider advice received to be important whilst 37.5% of the small firms do so. Personal friendship and relationship play a part as mentioned by 43.75% of respondents in the large firms' group and 50% of the small firms.

In fairly general terms, how do the executives see their bankers? They were asked:

Q. Some bank users feel that Nigerian banks are too conservative and safety minded, whilst others feel that the banks try to encourage expansion and innovation in enterprises. What do you think?

Table 9.5 General view of bankers

	Large (per cent)	Small (per cent)
Too conservative and safety-minded Encourage expansion and innovation Partly both No opinion	75.00 6.25 12.50 6.25	75.00 25.00 0.00 0.00
	100.00	100.00

Three-quarters of all respondents consider their bankers to be "too conservative and safety minded." Only 6.25% of the large firms' executives believe they encourage expansion and innovation, and 12.5% think they do a bit of both. Among the small firms 25% are of the view that the bankers encourage expansion and innovation but some of these, however, think this would happen "only if headed by a white man."

4.2 Differences in banks

Do the executives perceive differences among banks? If yes, in what ways? The questions asked were:

Q. Would you say that Nigerian banks are more or less alike so that it does not really matter which one deals with or that there are great differences among banks?

Table 9.6 Perception of differences among banks

	Large (per cent)	Small (per cent)
Banks differ Banks are rather the same	87.5 12.5	75.0 25.0
	100.0	100.0

Q. What do you have in mind?

Table 9.7 Perceived ways in which banks differ

	Large (per cent)	Small (per cent)
Services offered Efficiency Credit policies and facilities Whether foreign or indigenous No opinion	37.50 31.25 12.50 0.00 18.75	62.50 6.25 0.00 6.25 25.00
	100.00	100.00

A significant majority of the respondents consider that there are differences among banks - 87.5% of the large firms and 75% of the small firms. The rest in both groups consider the banks to be the same, for in the opinion of some executives they are "in a seller's market" and can afford to be equally slipshod in their operations.

The types and quality of services offered and their efficiency are the distinguishing features of banks as perceived by the industries' executives. It is noteworthy that only a small proportion of respondents consider that banks differ with regard to credit policies and facilities - 12.5% of large firms and none of the small firms. This might be because these banks have no written lending policies and operate uniformly within the broad framework of the Central Bank's credit guidelines. It is also worth noting that only one respondent holds the view that there are differences between banks on the basis only of the indigenous-foreign banks dichotomy.

Ceteris paribus the more competitive a business environment is, the more efficient the participants. In the light of these the market-economist will argue that competition is desirable. The question was then asked:

Q. Would you say there is much competition or rivalry among banks in trying to get new business?

Table 9.8 Opinion of competition among banks

	Large (per cent)	Small (per cent)
There is competition There is no competition	56.25 43.75	75.00 25.00
	100.00	100.00

Most of the small firms' (75%) and over half of the big firms' (56.25%) executives consider that there exists much competition among the banks. Others, however, think otherwise and their reasons are revealing:

4 3 Lending-related services

Given the fact that clients seek various services from their bankers a more general introductory question was first posed:

Q. Would you say that the Nigerian commercial banks, as they now operate, satisfactorily provide all services business firms can expect from them? Or can you suggest some areas that are not fully satisfactory?

Table 9.9a General satisfaction with services

	Large (per cent)	Small (per cent)
Everything satisfactory Satisfactory with some reservations Some banks more satisfactory than others Unsatisfactory No opinion	12.50 25.00 6.25 50.00 6.25	0.00 12.50 0.00 75.00 12.50
	100.00	100.00

[&]quot;there is ready business"

[&]quot;seller's market"

[&]quot;businesses chase bankers not bankers chase businesses" -

[&]quot;have more business than they want"

[&]quot;couldn't care less attitude prevails".

As many as 50% of the respondents in the large firms and 75% in the small firms' group feel the services they get from their bankers are unsatisfactory. On the other hand, 12.5% of the large firms and none of the small firms' respondents agree that everything is satisfactory. One-quarter of the executives in the large firms sample and one-eighth in the small firms sample consider all the banks' services satisfactory with some reservations. One area of services frequently mentioned as unsatisfactory is lending. 'Loans and overdrafts', 'credit policies' and 'credit facilities' were specifically named. Some respondents who cared to express their dissatisfaction rather strongly did so in this vein: "A lot treat customers as if they are at their mercy."

More specifically, what kinds of services do these executives seek from their bankers? The question put was:

Q. What kinds of services do you seek from your bank(s)?

Table 9.9 Types of services sought from banks

•	Large (per cent)	Small (per cent)
Information on general economic conditions Information on specific industry or	31.25	50.00
business	37.50	12.50
Advice on foreign business	31.25	12.50
Credit information	75.00	87.50
Advice on investments	43.75	37.50
Others	18.75 ·	0.00

About one-third of the large firms seek information on general economic conditions, on specific industry and on foreign business (see table 9.9). In both groups of respondents, assistance is very commonly sought on credit information - 75% of the large firms and 87.5% of the small firms do this. A

significant proportion also ask for advice on investment.

"Forecast of possible changes in government policy", "financing arrangements" and "bank rate" are the other types of information sought from banks by 18.75% of the respondents in the large firms sample.

Logically the next question asked was:

Q. Do you get all the services and advices you would like to.
have from your bank(s)?

Table 9.10 Are the services sought provided?

	Large (per cent)	Small (per cent)
Yes No No opinion	75.0 18.75 6.25	12.50 87.50 0.00
	100.00	100.00

Three-quarters of the large firms' executives answered this question affirmatively but only 12.5% of the small firms' did so. In contrast 87.5% of the small firms' executives said they do not get these services. It is instructive that advances were again frequently mentioned, specifically as an area of services not satisfactorily provided. A significant few among the respondents of the two groups who answered the question in the affirmative added the phrase: "but slow in coming."

As the most accessible financial experts and advisers to clients, it is common for bankers to be consulted by their customers on financial matters. Is it the practice with Nigerian bank customers? Specifically the question put was:

Q. Before deciding on important financial matters, do you turn to your bankers for advice?

Table 9.11

Request for financial advice

	Large (per cent)	Small (per cent)
Yes No No opinion	43.75 50.00 6.25	50.00 50.00 0.00
	100.00	100.00

Q. If yes, do you get a satisfactory response on such a request?

Table 9.12

Responses satisfactory?

	Large (per cent)	Small (per cent)
Yes	42.80	25.00
No	14.30	0.00
Occasionally satisfactory	14.30	25.00
No opinion	28.60	50.00
	100.00	100.00

Q. If no, why?

Table 9.13 Reasons for not requesting for financial advice

	Large (per cent)	Small (per cent)
Company's policy	25.00 25.00	0.00 25.00
Company is capable Overseas partners used	12.50 0.00	0.00 25.00
Banks are incompetent No opinion	37.50	50.00
	100.00	100.00
•		

Half of the small firms' and 43.75% of the large firms' executives said they consult their bankers routinely for financial advice (see table 9.11). Only 42.8% of the large

firms and 25% of the small firms' respondents, however, get satisfactory responses (see table 9.12) "Company's policy", "company is capable" are some of the reasons given for not consulting with bankers on financial matters. (See table 9.13)

How do the respondents consider the provision of information and advice as a function of the banks?

The respondents were asked:

Q. In your opinion, is giving information and advice to business firms and individual customers an important function of the banks?

Table 9.14 Provision of information as an important function of the banks

	Large (per cent)	Small (per cent)
Yes No No opinion	81.25 12.50 6.25	100.00 0.00 0.00
	100.00	100.00

All the respondents in the small firms' sample and 81.25% of the large firms' sample consider the provision of information and advice as an important function for banks to perform. Ordinarily therefore, these respondents will in their relationships with their bankers expect these services. The great lack of alternative sources of supply for these services, undoubtedly, is responsible for this implicit demand being made on banks.

Business promotion visits by bankers are an important marketing strategy and customer service in the banking industry today in many advanced countries of the world. Nigerian bankers,

going by their responses noted in Chapter 7, appreciate the benefits to the bank and the customer of business calls. Does this appreciation exist only in theory or is it translated into practice? These executives were, therefore, asked:

Q. Have you ever had business promotion visits from your bankers and/or other bankers soliciting business?

Table 9.15 Have had business promotion visits by bankers?

	Large (per cent)	Small (per cent)
Yes	37.50	25.00
Routine visits only	18.75	0.00
No visits at all	37.50	75.00
Only some bankers	6.25	0.00
		
	100.00	100.00
		

Three-quarters of the small firms' executives claimed they never had business promotion visits from their banks, the same goes for 37.5% of the executives of the large firms' sample. One-quarter of the small firms' respondents and 37.5% of the large firms' have had business calls from their bankers. A small proportion of the big firms' executives (18.75%) consider calls by their bankers as routine only.

How do the executives consider such calls? They were asked:

Q. How beneficial to your firm are business calls by commercial banks?

All respondents consider the calls beneficial but their views vary from "very beneficial" to "not very important."

Benefits specifically mentioned include:

4.4 Credit facilities

Do respondents' companies borrow regularly from the banks? This question is basic here because only borrowing customers can better appreciate and assess banks' attitudes and the quality of their services in the field of advances. Thus the first question was:

Q. Does your business regularly or usually borrow money from the commercial banks? If not why not? If yes for what purpose and maturity?

Table 9.16 Uses of funds borrowed from banks

	Large	Small
	(per cent)	(per cent)
Purchase/import of raw materials	18.75	. 0.00
Capital expenditure	43.75	37.50
Working capital	62.50	50.00
No opinion	12.50	12.50

A high proportion of all respondents in both classes of firms (87.5%) borrow regularly from the banks. This is assuring as it is clear from this that the respondents are those who regularly experience the treatment of the banks with regard to advances. The others do not borrow, however, because of such reasons that "the company is liquid" and "the company requires long-term funds." As the banks, apparently, would not entertain requests for long-term advances, some firms have come to disregard them as a source for these kinds of funds. This is usually the damaging, though unintended, consequence of loan rejections (Hooker, Jr. 1970).

[&]quot;Smoothens relations"

[&]quot;Quick ways to resolve problems"

[&]quot;Opportunity for banks to offer advice"

[&]quot;Opportunity for communication of unsatisfactory aspects of bank services"

Considering the different lending facilities of the banks, do they differ as perceived by the responding executives?

On the basis of a list, respondents were asked:

Q. Would you say there is much difference in the lending facilities of the various banks with particular regard to:

Table 9.17 Perception of differences in lending facilities

	Large	Small
	(per cent)	(per cent)
Access to credit ·	81.25	62.50
Dura tion of credit	62.50	37.50
Charges for loan	75.00	12.50
Security required	75.00	37.50
Time to negotiate	75.00	62.50
Compensatory balance	56.25	37.50

Over 56% of the large firms consider that banks differ in all aspects of their lending services. "Access to credit" and "time to negotiate" are noticeably the two areas in which a large proportion of the small firms' respondents (about 60%) perceive differences among banks.

What are the judgements of the respondents of their banks with regard to specific lending issues? The industry executives were asked, given a list:

Q. How does your bank rate in your view, on the following factors in bank lending?

Table 9.18 Perception of respondents' banks lending practice

-	Large (per cent)	Small (per cent)
(i) Access to credit: Liberal Restrictive No opinion	56.25 43.75 0.00	0.00 87.50 12.50
	100.00	100.00
(ii) Duration of credit: Long enough Too short No opinion	75.00 18.75 6.25	50.00 37.50 12.50
	100.00	100.00
(iii) Charges for loan: Comparatively inexpensive expensive No opinion	50.00 50.00 0.00	50.00 37.50 12.50
-	100.00	100.00
(iv) Security required: Excessive Inexcessive No opinion	37.50 62.50 0.00	50.00 25.00 25.00
	100.00	100.00
<pre>(v) Time to negotiate: Long</pre>	50.00 43.75 6.25	62.50 0.00 37.50
	100.00	100.00
(vi) Compensatory balance: Liberal Restrictive No opinion	62.50 18.75 18.75	25.00 25.00 50.00
	100.00	100.00

About 56% of the large firms' executives, but none of the small firms' consider access to credit in their banks liberal. A significantly high proportion of the small firms (87.5%), but only two-fifths of the large firms' executives reckon access to credit in their banks is restrictive. Rather

surprisingly, many respondents in both groups consider the maturity of credit long enough - 75% of the large firms' and 50% of the small firms' respondents. Half of all respondents consider charges for loans to be inexpensive comparatively. The other 50% of the large firms' executives and 37.5% of the small firms' feel the charges for loans made by their bankers are comparatively expensive.

Significantly, half of the small firms' respondents and 37.5% of the large firms' consider the security required by their banks as excessive. In view of the fact that the large firms are more likely to own the kinds of assets the banks would require, it is noticeable that they still consider their bankers' demands for securities as excessive.

Like justice, advances delayed are as good as advances denied. It thus becomes significant that half of the large firms' respondents and 62.5% of the small firms' said that the time to negotiate advances with their bankers is too long. Whilst 43.75% of the large firms' respondents feel that the time to negotiate advances is short enough, none of the small firms' executives thinks so.

With regard to compensatory balance, as many as half of the small firms' respondents had no opinion. This was probably because, given their thin resource bases, they are hardly asked to provide compensatory balance for advances. Among the large firms' respondents, 62.5% consider the compensatory balance terms of their bankers as liberal; 25% of the small firms' respondents also feel the same. On the whole, only a small proportion of all respondents - 18.75% of the large firms' and 25% of the small firms' - think their bankers' compensatory balance terms are restrictive.

What effects do these commercial banks' lending conditions have on the industry's consideration of source of funds? First they were asked:

Q. Have you ever obtained funds from sources other than commercial banks such as through issues of additional share capital or insurance company?

Table 9.19 Respondents' use of sources of funds other than the banks

	Large (per cent)	Small (per cent)
Yes No No opinion	75.00 18.75 6.25	50.00 50.00 0.00
	100.00	100.00

Q. Why were these other sources chosen?

Table 9.20 Reasons for using other sources of funds

	Large (per cent)	Small (per cent)
Indigenisation Size of funds Others	31.25 12.50 56.25	25.00 25.00 50.00
	100.00	100.00

In both the large and the small firms samples, at least half use other sources of funds. Among the large firms, indigenisation was the main reason for using other sources of funds. The size of funds was mentioned by 12.5% and 25% of the large firms' and small firms' executives, respectively. The mention of the size of funds by the executives appears indicative of the fact that the banks do not seem to engage in loan syndication as a way of getting round the loan size problem.

In any given business situation financing is always a

problem faced by management. That is, questions about when, where from and how. But finance as an input, should not be a constraint on a company's growth. Unfortunately, however, this is often the case in many poor developing countries.

Given the resources at the command of the Nigerian commercial banks, finance should not, all things being equal, constrain the growth of Nigerian industries. The executives were, therefore, asked:

Q. Is credit unavailability a constraint on your enterprise's development and growth?

Table 9.21 Credit a constraint on business development?

•	Large	Small
	(per cent)	(per cent)
Yes	43.75	75.00
No	50.00	25.00
No opinion	6.25	0.00
	100.00	100.00

An overwhelming proportion of the small firms' respondents (75%) and 43.75% of the large firms answered this question in the affirmative. Half of the large firms and one-quarter of the small firms' respondents think finance is not a constraint. Some of the large firms' respondents commented thus: "Afterall we are a Blue-chip company and banks are always willing to oblige with funds."

The conditions for obtaining credit are perhaps just as important as credit availability. Unless the conditions are right, credit availability may not by itself ease finance problems. So the question was put to the executives:

What are the usual conditions under which your enterprise obtains loans and advances from the bank e.g. rate of interest, guarantee, compensating balance, etc.? Which of these do you find most difficult to meet or even repugnant?

Table 9.22 Difficult conditions for obtaining credit

Large (per cent)	Small (per cent)
37.50 62.50	62.50 37.50
100.00	100.00
	(per cent) 37.50 62.50

The usual conditions for obtaining credits such as security, guarantee, interest rate etc., were frequently mentioned by all respondents. Excess collateral was, however, the most commonly mentioned by the small firms' respondents. It is significant enough that 37.5% of the big firms' executives also talked of excess collateral in their answers to this question.

To what extent has this difficult condition hurt? In order to find out, these questions were asked:

Q. Have you ever failed to get a loan because of a lack of the right quality and/or quantity of collateral? What kinds of securities do you have to offer for a loan but which are unacceptable to the bank? What amount of loan and for what purposes?

Table 9.23 Collateral is a cause of failure to obtain loans?

	Large (per cent)	Small (per cent)
Yes No No opinion	0.00 81.25 18.75	25.00 62.50 12.50
	100.00	100.00

None of the large firms' executives had failed to obtain an advance because of lack of collateral but 25% of the small firms' executives had. In some of these failure cases "titled land" had been rejected by the banks. It is also noteworthy that these rejections were experienced according to a respondent "in the early stages of the firm's development and only \$\$100,000 was required."

5. SUMMARY AND CONCLUDING REMARKS

Of all the points made by respondent executives the most important appears to be that a high proportion of them could easily describe their bankers as "too conservative and safety-minded." Although a large number of the respondents feel there are differences between the banks, they do not think that efficiency is the basis of these differences. This can, perhaps, be explained by the fact that, (and as the respondents also feel), there appears to be little or no competition among the banks.

Overall, the above analysis seems to indicate that the banks' customers are less than fully satisfied with the quantity and quality of the services they receive. Credit services were very frequently mentioned as areas of dissatisfaction. It is little wonder that half of the executives do not care to consult their bankers for financial advice.

Although both bankers and clients appear to appreciate the benefits of business promotion calls, the impression from the responses of these executives is that this is neither adequately nor efficiently done. This is sad particularly as management expertise required for project articulation and development is not easy to obtain in Nigeria, making it almost obligatory for banks to fill in the gap as much as feasible for the mutual benefit of banks and customers.

Many of the respondents consider that there are differences among banks as regards their lending facilities. Bank lending

practices with regard 'to duration of credit', 'access to credit', 'charges for loans', 'security' and 'time to negotiate' are considered by a significant proportion of respondents, particularly in the small firms' sample, to be restrictive. Obviously this is 'undevelopmental' banking and patently undesirable. undesirability of these, however, was not the main reason for obtaining funds from other sources. Indigenisation, for example, was the main reason for the big firms. Given the paucity of alternatives in Nigeria, it should not be surprising that many respondents have not used other sources of funds in spite of the difficulties encountered with their bankers. It is important from the point of view of economic development that a large majority of small firms' respondents and a significant number of th large firms' consider finance as a constraint on their firms' growth and development. This is also highly intriguing given the continual liquidity position of the banks.

There is a clear message here for the banks as this will appear to represent the perception of their most important function - lending - by their most important customers - the industry. In a developing environment like Nigeria, a more aggressive, forward-looking and unorthodox banking approach is called for. Like in all LDCs, most of the business customers are, perhaps, inevitably young, and struggling enterprises. In recent times and in all parts of the world, the authorities have begun to come to grips with the fact that these nascent businesses hold the key to their economies' growth and even development (Wilson Report, paras 2.7-2.10). Partly as a matter of self interest, since their growth depends on the growth of their environment, the banks must aid industry with the appropriate form of finance - term loans. They also need to do more than this. Like the

traditional development banks, the banks must additionally provide supportive services in the form of post-investment advice and supervision, and guidance to businesses on the acquisition, management and control of factors of production. Given the dominance of the commercial banks in the Nigerian financial system, it will be substantially true to say that unless the banks are able to 'make, oil and grease' the industry satisfactorily, they will not be deemed efficient. More importantly, the economy will neither be able to grow nor develop to its full potential and as an inevitable consequence the banks' growth, if any indeed, will be stunted.

CHAPTER 10

SIMULATION EXERCISES: INTRODUCTION TO SOFI

1. INTRODUCTION

In the previous chapters of this study historical and empirical data have been analysed to test the hypothesis that Nigerian commercial banks are not sufficiently efficient in their lending operations and thus do not contribute enough to the economic development of the country. The analyses point to, among other things, the fact that the bankers have a high preference for liquidity. In practical terms, that is, they prefer short-term to long-term advances, and gilt-edged securities to loans and advances. This study contends that in the general circumstances of Nigerian commercial banks (i.e. their deposit resources and mix, and the regulatory and overall economic environment) they could have been more aggressive and yet still remain safe at the same time. To test this hypothesis empirically requires a bank or the banking system accepting the proposition and accordingly restructuring its assets' portfolios for a test-period and observing the results. This kind of approach to hypothesis testing is hardly ever feasible because the "guinea-pig" of the required experiment is not easily available! The usual exception, however, is when a consultant is invited by a firm or an institution to study and solve a problem. In such a situation more detailed information is at the disposal of the investigating team; and because the staff of the firm participate in the work leading to the recommendations, the willingness to experiment may be more easily obtained. Even in this kind of situation, full experimentation is preceded by trial runs and simulation exercises. In all other cases, including such

as in this study, researchers have to rely on simulation techniques to test their preconceptions about, and recommendations on the working of, systems. These provide the rationale for the exercise in the next two chapters. First, however, in the present chapter, the theoretical background is prepared for those exercises.

2. SIMULATION

Simulation is a tool of analysis. It is a symbolic or numerical abstraction of the system under study. This abstraction is necessary because it is usually not feasible or indeed desirable, at times, to undertake life experiments. For example, the experiment may be too costly; it may be 'dangerous' (such as if it leads to the collapse of the banking system); and sufficient time and money may not be available for the tests.

However:

"stimulation models are significantly useful in a number of ways. They are useful in formulating and testing hypothesis about the behaviour of a business They can be used to formulate propositions about the effects upon the behaviour of the firm of the changes in some important and influencing variables of the model under study. Secondly we can use simulation to test propositions about business organisations, conceptually and theoretically advanced about such organisations in the literature." (Adewunmi, 1981b, p.16)

It is noteworthy that the simulation model could not be used to disprove or confirm these propositions but to add some measure of confirmation to, or a shadow of doubt on, them. And this is the objective of the exercise in this part of the study.

In carrying out a simulation exercise, the essential steps that need to be taken can be listed as follows: (Adewunmi, 1981b, pp. 17-18):

- " (1) Problem formulation. This is the process of identifying, defining and specifying the problem to be studied.
 - (2) Data collection. After specifying the problem, the essential data to be used for the exercise will be defined and specified and collected.
 - (3) Model formulation. A suitable model for the simulation exercise is formulated. It will usually be as complex or as simple as the problem and the system under study is. It should be noted, though, that complexity is not a measure of the 'goodness' or 'badness' of a model. A good model is the one that contains the important and relevant variables and is free of all irrelevant factors and variables that may distort the result.
 - (4) Evaluation of the model. Before putting the model to use a reassessment of the formulation is usually helpful in making sure that it is a tolerable representation of the system under study.
 - (5) When the computer is to be used, a computer programme is formulated as a fifth step.
 - (6) Report generation and analysis of results. The reports that are generated by simulation runs are analysed.
 - (7) Validation. First of all there are two important points to note regarding validation. The objective of the exercise is to validate a specific set of insights not necessarily the mechanism generating the insights. Secondly, there is no such thing as the appropriate validation procedure. The procedure varies according to the problem under study; it is problem dependent. The validation process could be:
 - (a) Construct a set of hypothesis and postulates for the process using all available information, observations, general knowledge, relevant theory and intuition.
 - (b) Attempt to verify the assumptions of the model by subjecting them to empirical testing.
 - (c) Compare the input-output transformations generated by the model to those generated by actual system performance.
 - (8) Implementation. If the results predict desirable changes then those (results) may be implemented. Since a simulation model can only approximate reality, it must be evaluated by its power to test propositions and hypotheses and to analyse the specific means to achieve the ends."

3. SOFI (SIMULATION OF FINANCIAL INSTRUCTIONS)

This is the particular model to be employed here and it is, therefore, instructive to analyse its features, its structure

and its capabilities, albeit briefly. "SOFI is a general purpose computer simulation model of financial institutions that has been developed by the Institute of European Finance, supported by a grant from the Social Science Research Council."

(Galitz, 1979, p. 1-1). With this model a user can conveniently simulate the behaviour of many types of financial institutions (including banks and insurance firms) and observe that behaviour through a number of sets of economic scenarios and/or management strategies.

3,1 Features of SOFI

SOFI is a descriptive rather than an optimizing model.

That is to say that it helps to describe the behaviour of the system under study, given the basic position of the system, a set of assumptions about its environment, and, where necessary, a set of decisions desired by the user. Unlike an optimizing model, therefore, SOFI does not provide the user with a strategy rather it enables him to make decisions relating to those variables under his control and, more importantly, alter them in reaction to the behaviour of the system.

SOFI is a deterministic and not a stochastic model. This means that it does not incorporate uncertainty. Its predictions are specific to the assumptions input by the user. It does, however, make up for this 'deficiency' in that the user can learn how the system reacts to different situations by rerunning the simulations with changed sets of assumptions.

An important feature of SOFI is that it is an interactive model. During the simulation process, a user is enabled to communicate, in a conversational manner, with the computer, this model serving as an interface. A bank or an insurance

executive, for instance, can in the convenience of his office, input data, assumptions and decision alternatives into the computer and almost instantaneously obtain detailed analysis reports on the whole organisation or on its sub-system. In the alternative approach - the batch mode - the computer receives the data, runs them and outputs results. If the user desires to effect changes in any of the input data, the whole batch must be re-entered into the computer. This makes the "turn-round" time in the batch mode many times longer than in the interactive mode. Consequently, it makes the batch mode less convenient and attractive particularly to practitioners in the financial industry in general and in banks in particular where, for instance, money market investment or disinvestment decisions may need to be taken within a very short space of time.

Simulation models may be either top-down or bottom-up.

A top-down model deals with the aggregates in the simulated system, whereas the bottom-up model will be concerned with its sub-systems individually. A bottom-up model of a bank will, for instance, consist of sub-models of the lending function, the planning function, the foreign exchange function, etc. SOFI is a top-down model. It, however, has capacity for enabling the user to input assumptions data that would have been produced by subsystems of the model, had it been bottom-up in nature.

Because SOFI has been designed for multi-purpose use (i.e. for various types of financial institutions) it is rather inevitably sophisticated. To enable non-computing experts to benefit from its tremendous potentials, the architects of this model have designed it to be easy to use. It is in this regard that the importance of the interactive nature of SOFI comes to the fore. This feature enables the user to respond instantly

and positively to the questions and answers from the model. Although this kind of model may be less exciting to the mathematician, they are known to have proved much more intelligible to management. More importantly, they have been found to be capable of validation against actual operations (see Gardener, 1979).

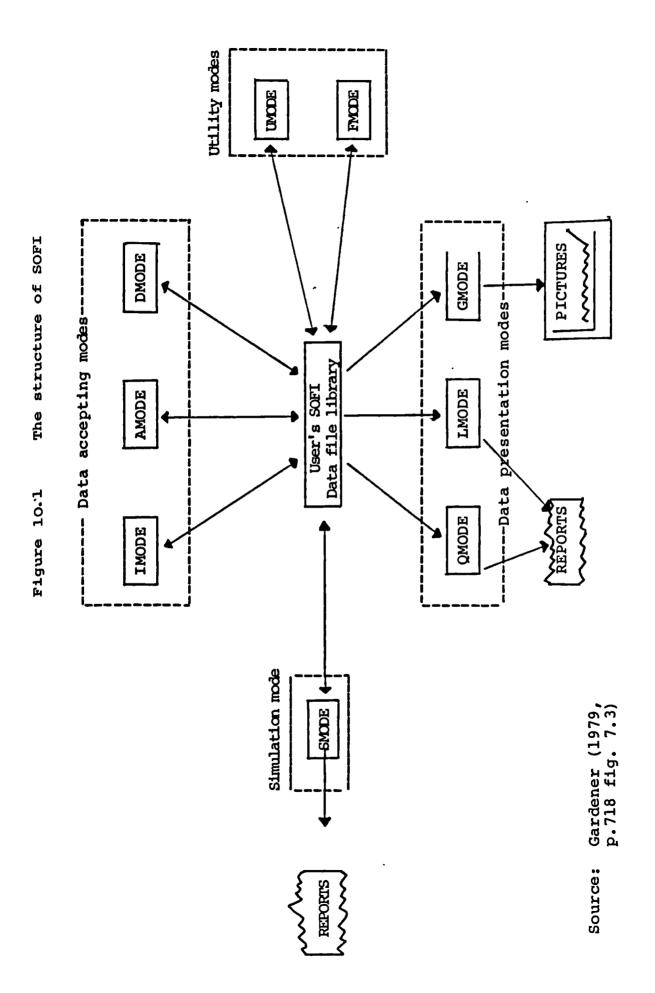
3.2 The structure of SOFI

The "User's SOFI Data File Library" is at the centre of the overall structure of SOFI (see figure 10.1). This File Library contains four main subsections, namely:

- (1) a Balance Sheet (BAL) file
- . (2) a Constant Assumption (CON) file
 - (3) a Variable Assumption (VAR) file, and
 - (4) a Decisions (DEC) file.

The BAL file provides the basis for executing all simulations. In essence the file consists of a listing of specified balance sheet items (see Table X-1) as well as other details of the starting financial position of the financial institution to be simulated (e.g. investment portfolio array). The CON and VAR files contain the parameters that "make up" the environment, the scenario, of the institution being simulated. As the name implies, the constant assumptions remain unchanged over a simulation time, whereas the variable assumptions change, if desired, with each decision period. Examples of constant assumptions include taxation and depreciation rates, and loan turnover rates. Variable assumptions include forecast loans and deposits levels, and loan loss rates.

As can be seen from Figure 10-1, the SOFI model is made up of nine major modes. These are sub-divided into four groups, viz:

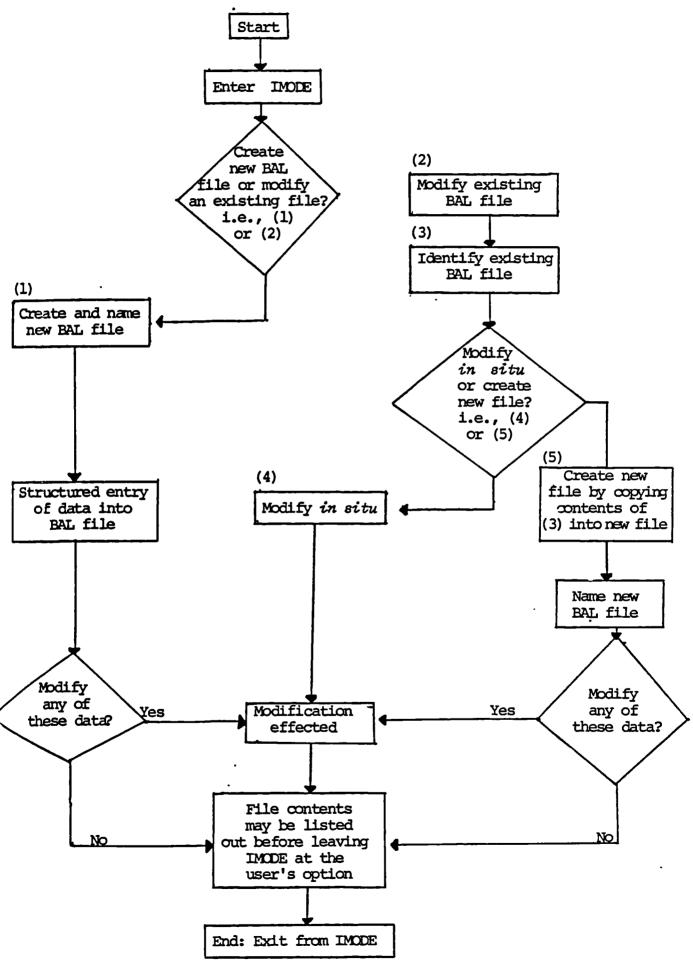


- (a) Data accepting modes (IMODE, AMODE and DMODE)
- (b) Simulation mode (SMODE)(c) Data presentation modes (QMODE, LMODE and GMODE)
- (d) The utility modes (FMODE, UMODE)

All these modes perform different tasks associated with a simulation exercise and related functions.

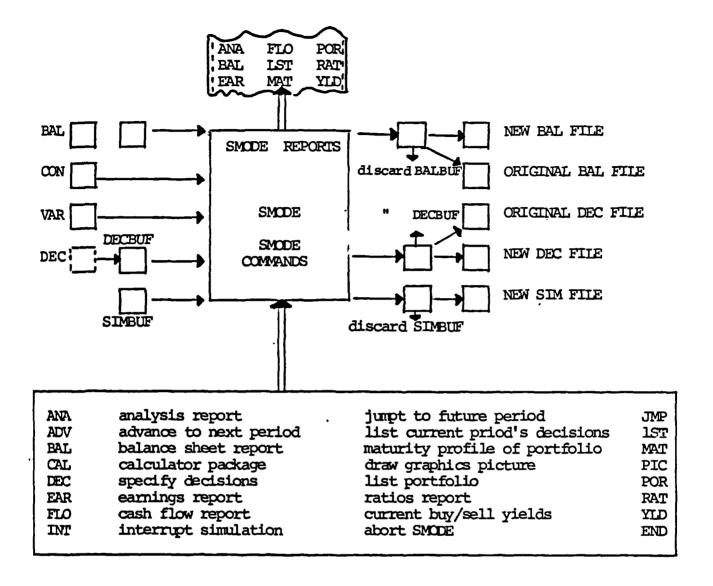
- (a) Data accepting modes. IMODE is used for initiating SOFI exercises as it enables the user to build the first important file - the BAL file (for a typical process through IMODE figure 10.2). Thereafter the user must move out of IMODE and into AMODE to build up the required CON and VAR files. ne essary, the user enters next into the DMODE to build up a DEC file as well. DEC files are more usually built up during a simulation experiment in SOFI as the experimenter steers the financial institution through the scenario. As can be seen in figure 10.2 a user can also enter data accepting modes to modify or copy an existing data file in SOFI.
- (b) Simulation mode. Once these basics have been settled, the user is ready to perform a simulation exercise. Thus he enters the SMODE. At his command, this mode runs the bank through the simulation period from one decision point to another. On request the user can obtain at each decision point a whole range of output including a series of balance sheets, maturity profiles for portfolios assets and liabilities, ratios report and performance analyses. Figure 10.3 depicts the available cycle of operations in SMODE.
- Data presentation modes. The first of these, the queries mode (QMODE) is employed for the purpose of finding out the contents of the user's SOFI file library; redundant files

Figure 10.2 The typical flow of a data-accepting mode



Source: Gardener (1979, p. 7-22, figure 7.4).

Figure 10.3 A detailed overview of SMODE



Source: SOFI (1979, p. 42, figure 4.1)

can also be deleted when in this mode. If there is need to list data files or library catalogues on line printers, LMODE is used. Lastly the GMODE enables the user to output in graphical form some of the data used for the simulation work (see figures X-1 and X-2 for examples of data presentation by this mode).

(d) The utility modes. FMODE is used for recording any faults detected in the SOFI model during use and/or comments for the attention of SOFI system administrators. UMODE on the other hand is used in obtaining up-to-date information on the latest developments in SOFI. There is a tenth mode (not shown in figure 10.1) called the TMODE. This mode enables user to transfer files between the central SOFI library and his own library (see table X-2 for a full list of modes available in SOFI).

CHAPTER 11

SIMULATION EXERCISES: AN EVALUATION OF THE PROPOSITION OF THE STUDY

1. INTRODUCTION

whether Nigerian banks can be more aggressive than they presently are and still remain safe and profitable. That is to say an attempt is made to answer the question: will it be both prudent and safe for Nigerian banks to alter their observed high liquidity preference in lending? Although it has been vigorously argued in the previous chapters that the suggestions made in this study with regard to the aggressiveness of Nigerian banks have been successfully tried elsewhere, efforts will additionally be made here to provide further concrete support for the feasibility and prudence of the propositions. As noted earlier, a simulation exercise is not aimed at proving or disproving any theory or hypothesis; it can only, and ideally, add support to or cast a shadow of doubt on them.

1.1 The approach

In order to achieve the above aim, a typical (though hypothetical) Nigerian commercial bank was first "created" for use as the test-bed. This is usually the option available to most researchers in this field in view of the fact that banks will hardly ever make all the relevant data required for this kind of exercise available (Gardener, 1979 pp. 12.2 to 12.3), nor will they agree to serve as the "guinea-pig" of the experiment. In the next stage of the experiment, this bank was "made" more aggressive (less liquid), first by increasing its loans-to-deposit ratio and second, by lengthening its term loans maturity pattern. A comparison between the "aggressive" bank and its predecessor

(the typical bank) may then provide details of the benefits and the disadvantages of the hypothetical bank's aggressiveness. To further test the prudence of the aggressive thrust of the test-bank, loan losses were increased simultaneously with the increased loan portfolio and the lengthening of the maturity of term loans. This consequence (i.e. increased loan losses) is to be expected in such circumstances in real life and will thus, hopefully, strengthen the reality of this exercise.

2. THE DATA OF THE ANALYSIS

The test-banks employed for this exercise have been labelled Bank 1 and Bank 1(A). Bank 1 is, given the information, the nearest approximation to a Nigerian commercial bank. Bank 1(A) is this typical Nigerian bank "made" more aggressive.

The primary bank, Bank 1, has been carefully and realistically "built-up" to approximate as much as possible a real bank.

To construct this bank, detailed historical financial information on a number of banks (both from published and the banks' sources) were obtained and combined for use (1). Because existing banks' data were used, with alterations to the figures rather than the essential features, this bank conforms to a typical Nigerian bank in most respects. For example, a comparison of the balance sheet structure and the maturity patterns of its term loans and investments portfolios with similar features of Nigerian banks observed in Chapter 6 will reveal how atypical the test-bank is.

It may be worth noting that there is some evidence in Appendix III

⁽¹⁾ For desirable anonymity, the method of construction will not be discussed here.

which points to the fact that there appears to be no significant variations in the balance sheet and portfolio structures of Nigerian banks, over time and among banks of different classifications.

Guesstimates have been used as the basis of computing the loan loss rates. This became necessary in view of the fact that these rates are neither published nor willingly revealed by bankers. However, the researcher has been aided greatly in this by the information obtained during field work. Although the bankers were less than specific in their responses to the question on loan loss ratios, they nevertheless revealed enough to provide a basis for an informed estimation.

Bank 1 is a commercial bank whose main business is retail banking. As it is also a "licensed" bank, it is subject to all the existing Nigerian banking and financial legislations including the Banking Act of 1969 (as amended) and the Central Bank of Nigeria Act of 1958 (as amended). It is also subject to all the directives, controls, and supervision of the CBN. In the exercises, as in real life, Bank 1 is subject to the ruling 25% liquidity ratio specified by the CBN. This ratio is computed on the basis of the bank's cash and primary reserve asset balances (i.e. 'eligible' assets).

The time structure and the horizon of the proposed simulation are sketched out in figure 11.1 and table 11.1 respectively. There are three decision periods of 1, 2, 2 year durations, over a total time horizon of 5 years.

2.1 The opening balance sheet

Table 11.2 presents the opening balance sheet of the test bank. To enable one to co-relate this presentation with outputs

from the SOFI model, the structure of the balance sheet has been made to conform as closely as possible to that within SOFI (see Table X-1). Because this balance sheet is the basis of all the simulation works that follow hereafter, it will be useful to consider (albeit briefly) its structure and related issues.

2.1.1 Assets

- (a) The test bank proposes to maintain its holdings of liquid assets (i.e. cash and primary reserve /eligible/ assets) at precisely 25% as required by the CBN.
- (b) 'Other investments' is an account used to accommodate all investments that may be required to meet increases/decreases in liquidity and/or loan demands. The structure of this portfolio, as noted earlier, is atypical. It may also be instructive to note that the Federal Development Loan Stocks with three years to maturity are eligible for favourable rediscounting at the CBN and can be used to meet the liquidity ratio requirement.
- (c) The size of the term loans in relation to other assets as well as to overdrafts reflect the pattern observable in the industry. The maturity structure of this portfolio is computed on the basis of the maturity trend for the banking system (see Chapter 6).
- (d) Overdrafts. These are advances that are not for a fixed term. Although overdrafts may be renewable many times and thus take on the complexion of term loans, the fact that this is not automatic distinguishes them from fixed period loans.
- (e) Fixed assets. These are assumed to be net of any depreciation.

Figure 11.1 The time structure of the simulation

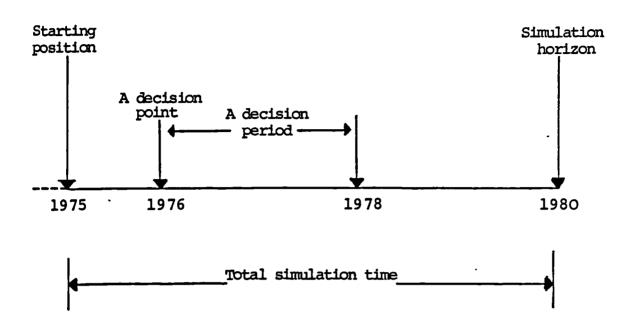


Table 11.1 Decision periods for the analysis

Period No.	Period length	Cumulative time
1	1 year	l year
2	2 years	3 years
3	2 years	5 years

Table 11.2 Bank 1: Opening balance sheet position

Liabilities			Assets	
	•	(-)	•	•
<pre>Issued and paid-up share capital</pre>	15.0	Cash (a)		20
Capital reserves ,	10.0	Primary r assets(211
Revenue reserves	8.4	Other inv	estments: (b)	
Provisions (f)	0.0	Maturity	Amount	
Taxation	6.9	1	102	
Deposits (g)		3	170	
Demand deposits (h)	548.3	10	_68	340
Time deposits (j)	110.6	Term loan	_ (c) _	
Savings deposits $^{(k)}$	220.6	Maturity	Amount	
		1	65.60	
		3	13.94	
		5 -	2.46	82
		Overdraft	s (d)	249
		Fixed ass		17
Total	919.8		Total	919.8

2.1.2 Liabilities

- (f) Provisions. In SOFI this account records the cumulative loan losses charged in the income statement to date during the simulation exercise. In view of this, it was considered desirable to set this account at zero in the opening balance sheet. All general (non-tax deductible) provisions for loan losses are assumed to be grouped under SOFI revenue reserve category (RRES).
- (g) Deposits. The structure of deposits (i.e. the size relationships of demand, time and savings deposits reflect the actual for the operating banks whose data form the basis of the test bank.
- (h) Demand Deposits. As a member of the Clearing House System in Nigeria, Bank 1 has adequate facilities to enable it to offer competitive current account services. Customers (existing and prospective) are encouraged to operate interest free current accounts for the benefits of banking and related services offered by the bank.
- (j) Time deposits. These are mainly fixed term deposits. In Nigeria, where the big business sector is yet developing, the retail portion of these deposits is significant.
- (k) Savings deposits. These are 7-day deposits collected mainly from the retail sector. A savings account is generally regarded as a "small man's" account in Nigeria and so the corporate sector portion (if any) of this account must be very small.

2.2 The operating environment of Bank 1.

The operating period of primary concern in this exercise is that starting at the end of 1975 and terminating at the end of 1980.

This period has no particular empirical significance although it was selected on the basis of data availability and the fact that it closely reflects the current position in Nigeria.

The major characteristics and operating parameters of the test bank for this period of analysis are summarised in table 11.3

The fact that this period was characterised by steady rises in interest rates can be seen from that table. It was also a period of high balance sheet growth with the balance sheet footings rising from N1,354.8 million in 1976 to nearly twice as big at N2389.6 million in 1980.

As may be expected in a modern free market economy this growth in both assets/liabilities and interest rates is ac ompanied by a steady growth in incomes and expenditures (see tale 11.3.

Almost inevitably, lending activities give rise to loan losses. The loan loss rates for this operating period are as specified in table 11.3. The dip in 1978 can probably be explained by the coming into existence of the ACGS Fund (see Chapter 5) which guarantees losses on loans to the agricultural sector.

3. THE INITIAL SIMULATION RESULT

3.1 The balance sheet

Table 11.4 gives the summarised time-series balance sheets resulting from the initial simulation using the starting balance sheet position in table 11.2 (stored in the respective SOFI BAL file) and data on the environment in table 11.3 (stored in SOFI CON and VAR files).

The test bank (of table 11.2) was simulated through the scenario (of table 11.3 and the experimenter made appropriate

Table 11.3 Basic assumptions of the analysis

1 Variable Assumption

1.1 Interest rate structure (1) (1/2)	. 1976	1978	1980
Investments			
Maturity: 1 year	3	4.5	5.5
3 years	3.125		
10 years	4.0		
30 years	5.875		8.0
1.2 Other rates			
Short-term securities (Treasury Bills)	3.125	4.5	5.75
Overdrafts	9.0		10.5
Time deposits	5.0		6.0
Savings deposits	4.0	5.0	5.0
1.3 <u>Income/expenses levels</u> (in Nm)			
Operating expenses	24.6	41.9	67.9
Miscellaneous expenses	2.4	10.2	13.4
Miscellaneous income	18.0	23.5	52.0
1.4 Balance sheet items (in Nm)			
	252 2		
Overdrafts	352.2	550.1	
Demand deposits	690.3	881.1 1	
Time deposits	228.0 365.6		
Savings deposits		331.2	
Fixed assets	20.0		
Balance sheet footings	1,354.8	1,539.9 2	, 309.0
1.5 Loan loss rates (2) (% per annum)	•		•
Term loans	3.5	3.0	3.0
Overdrafts	2.0	1.5	2.0

2. Constant assumptions

2.1 <u>Taxation</u> rates

Company tax = 50% Capital gains tax = 50%

2.2 <u>Turn-over rates</u> (% per annum)

Savings deposits = 30.25%

- Notes: (1) It is assumed that all interest rates are paid semiannually
 - (2) These were computed on the basis of information obtained during the researchers field work reported in earlier chapters.

Table 11.4 Bank 1: Summarised balance sheet positions (in M million)

Liabilities	1975 	1976 —————	1978	1980
Issued and paid-up share capital	15.0	20.3	35.2	45.3
Capital reserves	10.0	14.3	32.0	52.0
Revenue reserves	8.4	13.0	24.2	41.5
Provisions	0.0	7.4	24.1	55.8
Taxation	6.9	15.8	44.7	82.0
Demand deposits	548.3	690.3	881.1	1196.7
Time deposits	110.6	228.0	167.4	484.2
Savings deposits	220.6	365.0	331.2	432.0
Totals	919.8	1,354.8	1,539.9	2,389.6
Assets				
Cash	20.0	109.0	154.9	188.0
Primary reserve assets	211.0	230.0	230.0	410.0
Other investments	340.0	543.2	433.5	688.9
Term loans	82.0	100.4	146.3	294.3
Overdrafts	249.8	352.2	550.1	778.2
Fixed assets	17.0	20.0	25.1	30.2
Totals	919.8	1,354.8	1,539.9	2,389.6

decisions in SOFI at each decision point to ensure that the required Central Bank liquidity ratio of 25% was maintained.

The maturity structure of the loan and investment portfolios are as presented in tables 11.5 and 11.6 respectively.

Table 11.5 Bank 1: Term loans portfolio-maturity distribution (summary) (in percentages)

Maturity (in years)	1975	1976	1978	1980
-2	80.0	85.0	82.5	79.8
2-3 -4	0.0	9.6	0.8	0.0
-4	17.0	1.9	15.7	18.0
4-5	0.0	2.0	0.0	0.0
over 5	3.0	1.5	1.0	2.2
	100.0	100.0	100.0	100.0

Table 11.6 Bank 1: Investments portfolio - maturity distribution (summary) (in percentages)

Maturity (in years)	1975	1976	1978	1980
1-2	30.0	29.5	29.4	29.9
2-3	0.0	31.3	0.0	0.0
3-4	50.0	19.5	43.4	46.5
4-5	0.0	0.0	0.0	0.0
over 5	20.0	19.7	27.2	23.6
	100.0	100.0	100.0	100.0

SOFI, however, produces more detailed breakdowns of these portfolios, than these summaries show (see tables XI-1 and XI-2). It will be noticed (as has been observed many times in this study)

that the maturity pattern of this hypothetical bank remains virtually the same over the simulation period. About 80% of its term loans are short-term; between one and three per cent over 5 years and the balance medium-term. On the average about one-third of its investments are short-term, another 20% maturing over 5 years and the balance (50%) medium-term. As can be gauged from table 11.4 overall, there was a steady growth in the individual balance sheet items. This trend mirrors the actual Nigerian banking environment of this period.

3.2 The performance reports

SOFI is capable of producing a large number of key performance and condition indices which are output instantaneously on demand by the user. However, the ratios to be tracked during the simulation will need to be defined and pre-specified and this is done in the respective SOFI BAL file (see table XI-3 which shows the ratios pre-specified for these simulation exercises). Table XI-4 shows the detailed ratios report for Bank 1 simulation. The performance indices in table 11.7 are obtained from the Analysis Report and the Ratios Report produced by SOFI, on request. These indices were selected among those

Table 11.7 Bank 1 - Performance indices

Index (1)	1976	1978	1980
Net income/equity (%) Net income/assets (%) Equity/deposits (%) Earnings per share (EPS)	26.7	30.3	20.4
	0.7	0.9	0.8
	3.7	6.6	6.6
	59K	71K	53K
Loans/deposits (%) Assets/equity Loans/assets (%)	35.3	50.5	50.8
	28.5	16.9	17.2
	33.4	45.2	44.9
Term loans/deposits (%) Term loans/term deposits (%)	7.8	10.6	13.9
	16.9	29.3	32.1

⁽¹⁾ All the ratios are annualized

produced on the basis of their relevance for evaluating the efficiency of commercial banks in Nigeria (as defined in this study) as well as their safety.

The profitability ratios - net income-to-equity and net imcome-to-assets - lie within the range observed for the banking system in table VI-1 (a third profitability index, the EPS is also tracked). These, however, though enormously important for the continued stability and growth of the banks, are not of primary concern in this study. Rather this study focuses more on the efficiency ratios i.e. the ratios of loans-to-deposits, loans-to-assets, and term loans-to-term deposits. These ratios for Bank l are similar to the ones for the Nigerian banking system over the test period (1975-80). (See table 6.2).

Two additional indices - the equity-to-deposits and assetsto-equity ratios - have been monitored for the purpose of evaluating the resilience, or prudential strength, of the bank through the simulation.

3.3 Bank 1 vs Bank 1(A)

Bank 1 has been successfully 'created' and simulated over a pre-specified operating horizon. This bank, in most important respects, is a replica of a typical Nigerian commercial bank. Because it conforms in operational performance and in attributes to banks in Nigeria, this thesis argues that this is also an excessively conservative bank. Having made the point that it is desirable that Nigerian commercial banks should change their modus operandi, (particularly in the area of lending) and become more aggressive, an attempt will be made here to test the general reasonableness and prudence of this argument. Thus Bank 1 is "made" more aggressive and the results of this action appraised. For

ease of identification, the aggressive Bank 1 is to be known as Bank 1(A).

To simulate Bank 1(A), desirable changes are made to the data (the assumptions) of Bank 1 and the earlier simulation simply re-run. For these tests, three assumptions of the Bank 1 analysis shall be altered; the first two aimed at making Bank 1 more aggressive and the third to test its resilience in the new aggressive posture it assumes. In three successive steps and separate re-runs of the model, alterations will be made to the loans-to-deposit ratio of Bank 1 (the first definition of aggressiveness); to the maturity pattern of its term loans (the second definition of aggressiveness), and the loan loss rates (a kind of sensitivity test).

3.3 l What if the loans-to-deposit ratio increases to 60%?

Table XI-5 shows the balance sheet positions of Bank 1(A)

i.e. Bank 1 with a loans-to-deposits ratio of 60%. This increase is assumed to be distributed, in the existing proportion, to term loans and overdrafts; and all other things - the BAL, the CON, the VAR and the DEC files - remain the same.

Bank 1(A)'s ratios report in table XI-6 shows the changes that result from this action. Table 11.8 compares these with Bank 1's. It can be seen that ratios 3, 4, 5 and 6 have increased significantly, demonstrating improved operational efficiency. Table XI-7 shows the performance indices of Bank 1(A) and table 11.9 compares these with corresponding indices for Bank 1. By these indices, Bank 1(A) has performed better than Bank 1. This is true considering the traditional indices of efficiency - the profitability ratios and EPS; measures of stability - equity-to-deposits and assets-to-equity ratios - and the primary measures of

Table 11.8 Bank 1 vs Bank 1(A): Comparative ratios report

	19	1976		1978		80
	Bank 1	Bank 1(A)	Bank 1	Bank 1(A)	Bank 1	Bank 1(A)
Ratio 1	25.0	25.0	25.0	25.0	25.0	25.0
Ratio 2	35.3	60.0	50.5	60.0	50.8	60.0
Ratio 3	33.4	56.1	45.2	52.5	44.9	51.9
Ratio 4	7.8	13.3	10.6	12.6	13.9	16.5
Ratio 5	7.4	12.4	9.5	11.1	12.3	14.3
Ratio 6	16.9	28.8	29.3	35.0	32.1	38.1
Ratio 7	46.2	46.2	36.1	36.1	43.4	43.4
Ratio 8	3.7	4.2	6.6	7.7	6.6	7.6

Table 11.9 Bank 1 vs Bank 1(A): Comparative performance indices

	1976 1978		1980			
	Bank 1	Bank 1(A)	Bank 1	Bank 1(A)	Bank 1	Bank 1(A)
Net income/equity (%)	26.7	46.I	30.3	34.0	20.4	20.8
Net income/assets (%)	0.7	1.1	0.9	1.2	0.8	0.9
Equity/deposits (%)	3.7	4.2	6.6	7.7	6.6	7.6
Earnings per share						
(EPS)	59X	₩ 1.02K	71K	90K	53K	62K
Loans/deposits (%)	35.3	60.0	50.5	60.0	50.8	60.0
Assets/equity	28.5	25.4	16.9	14.9	17.2	15.3
Loans/assets (%)	33.4	56.1	45.2	52.5	44.9	51.9
Term loans/assets (%)	7.8	13.3	10.6	12.6	13.9	16.5
Term loans/term			1			
deposits (%)	16.9	28.8	29.3	35.0	32.1	38.1

efficiency defined for this study - the loans-to-deposits, loans-to-assets, term loans-to-assets, term loans-to-term deposits ratios. It may be useful to note that the ratio of assets-to-equity declined systematically over the three periods. This is as it should be as it indicates bigger growth in the denominator than the numerator and corresponding potential improvement in the ability of

the bank to withstand stressful situations - that is, a potential improvement in the bank's underlying prudential strength, a financial resiliency.

3.3.2 What if term loans' maturities lengthen?

Next one may consider as a further increase in the aggressiveness of Bank 1(A), a lengthening of the maturity pattern of its term loans. This is a particularly useful test because one of the major criticisms of the loans and advances of Nigerian commercial banks is that they are generally too short-term to be of optimum use, especially in the agricultural and manufacturing industries. Bank 1(A), in this simulation, continues to retain a minimum loans-to-deposits ratio of 60% established in the previous run. Apart from a lengthening of the maturity pattern of the term loans, indeed, no other parameter of the last set of simulations is altered. Again for the purposes of easy identification, Bank 1(A) with a lengthened term loan maturity pattern becomes Bank 1(A)-1.

Table 11.10 shows the new maturity pattern of this bank's term loans. This indicates a considerable shift toward longer

Table 11.10 Bank 1(A)-1: Term loans portfolio: maturity distribution (in percentages)

Maturity (in years)	1975	1976 54.6	1978 52.6	1980 55.2
1-2 2-3	80.0 0.0	54.6 5.6	7.9	0.0
3-4	17.0	10.0	9.9	14.8
3 -4 4 - 5	0.0	14.9	0.0	0.0
over 5	3.0	14.9	29.6	30.0
Total	100.0	100.0	100.0	100.0

maturity loans. For example, loans maturing over 5 years have increased from 3% of all term loans in 1975 to 14.9% in 1976; 29.6% in 1978; and 30% in 1980. Whilst the proportion of medium term loans have not altered radically, the increases in long-term loans have been compensated for by decreases in short-term loans.

How does the more aggressive Bank 1(A)-1 perform compared to Bank 1? Table XI-8 presents the performance indices of Bank 1(A)-1 and table 11.11 compares these to similar indices for Bank 1. By lengthening the maturity pattern of its term loans, the new bank has performed better compared to Bank 1 rather than worse. All the indices of performance, as can be seen from table 11.11 have shown improvements. Bank 1(A) also improves on itself after lengthening its loan maturity and becoming Bank 1(A)-1. This can be observed from the comparative performance indices presented in table 11.12.

3.3.3 What if loan loss rates increase?

It will appear reasonable and prudent in banking to assume that taking up a more aggressive stance as Bank 1 has done in two successive stages above necessarily involves some elements of risk. Indeed actual losses can be incurred, at least, over the short run. It is in the light of this that this analysis proceeds to examine a situation in which the loan loss rates of the hypothetical bank are increased.

Thus we substituted the loan loss rates in table 11.13 for those in table 11.3. All other things remain unchanged.

The 'new' bank - Bank 1(A)-2 - is, therefore, Bank 1 with a 60% loans-to-deposits ratio, a lengthened term loans maturity pattern, and increased loan loss rates. With these alterations to the structure and operations of Bank 1, will it still be

Table 11.11 Bank 1 vs Bank 1(A)-1: Comparative performance indices

	1976		1	978		1980
	Bank	1 Bank 1(A)-1	Bank 1	Bank 1(A)-1 Bank	1 Bank 1(A)-1
Net income/equity (%) Net income/assets (%) Equity/deposits (%) Earnings per share	26.7 0.7 3.7	46.1 1.1 4.2	30.3 0.9 6.6	35.8 1.2 7.8	20.4 0.8 6.6	21.8 1.0 7.8
(EPS) Loans/deposits (%) Assets/equity Loans/assets (%)	59K 35.3 28.5 33.4	• •	71K 50.5 16.9 45.2	95K 60.2 14.7 52.4	53K 50.8 17.2 44.9	66K 60.0 14.9 51.5

Table 11.12 Bank 1(A) vs Bank 1(A)-1: Comparative performance indices

	1976		1978		1980	
	Bank	Bank	Bank	Bank	Bank	Bank
	1(A)	1(A)-1	1(A)	1(A)-1	1 (A)	1 (A) -1
Net income/equity (%) Net income/assets (%) Equity/deposits (%) Earnings per share	46.1	46.1	34.0	35.8	20.8	21.8
	1.1	1.1	1.2	1.2	0.9	1.0
	4.2	4.2	7.7	7.8	7.6	7.8
(EPS) Loans/deposits (%) Assets/equity Loans/assets (%)	№ 1.02K	1.02K	90K	95K	52K	66K
	60.0	60.1	60.0	60.2	60.0	60.0
	25.4	25.4	14.9	14.7	15.3	14.9
	56.1	56.2	52.5	52.4	51.9	51.5

Table 11.13 Bank 1(A)-2: Loan loss rates (per cent per annum)

Type of advance	1976	1978	1980
Term loans	4	4	4
Overdrafts	3	2	3

safe and profitable? The performance indices for the simulation run for this 'new' bank are as in table XI-9. For comparative purposes these are matched with Bank 1 indices in table 11.14 and with Bank 1(A)-I indices in table 11.15. It can be seen from table 11.14 that the increased loan losses experienced by Bank 1(A)-2 still do not appear to make it unsafe and unprofitable. Neither is it comparatively worse off in this position than Bank 1 is. Indeed, on the contrary, it appears to be more efficient, more resilient and more profitable than Bank 1 on the basis of the comparative data in table 11.14.

When increased loan losses are allowed to accompany the aggressiveness of Bank 1(A)-1, how does it withstand the stress? Rather well, as table 11.15 will appear to show. The levels of performance marked by the seven indices have depreciated slightly but not significantly. More importantly, however, this has occurred without any appreciable damage to the efficiency, resiliency and profitability of the bank.

4. SUMMARY AND CONCLUDING REMARKS

In the circumstances of these analyses, and indeed in most research-oriented simulation exercises, no attempt can defensibly be made to 'prove' anything. The above analyses, however, appear to have strengthened the belief expressed throughout this study that it will be prudent, safe and above all in the best self-interest of commercial banks to become more aggressive. It also leads to greater efficiency; i.e. efficiency as broadly defined in this study.

The results of these analyses obviously do not provide a "working paper" for commercial bank loan management. They do, it is hoped, provide a useful indicator on the possible consequences

Table 11.14 Bank 1 vs Bank 1(A) -2: Comparative performance: indices

	1.	976	1:	978	1980		
	Bank	Bank	Bank	Bank	Bank	Bank	
	1	1 (A) -2	1	1(A)-2	1	1(A)-2	
Net income/equity (%) Net income/assets (%) Equity/deposits (%) Earnings per share (EPS) Loans/deposits (%) Assets/equity Loans/assets (%)	26.7	37.0	30.3	34.4	20.4	18.5	
	0.7	0.9	0.9	1.1	0.8	0.8	
	3.7	4.0	6.6	7.3	6.6	7.0	
	59K	82K	71K	86K	53K	52K	
	35.3	60.1	50.5	60.2	50.8	60.0	
	28.5	26.9	16.9	15.7	17.2	16.6	
	33.4	56.2	45.2	52.4	44.9	51.5	

Table 11.15 Bank 1(A)-1 vs Bank 1(A)-2: Comparative performance indices

	1976		19	78	1980		
	Bank	Bank	Bank	Bank	Bank	Bank	
	1(A)-1	1(A)-2	1(A)-1	1(A)-2	1(A)-1	1(A)-2	
Net income/equity (%) Net income/assets (%) Equity/deposits (%) Earnings per share (EPS) Loans/deposits (%) Assets/equity Loans/assets (%)	46.1	37.0	35.8	34.4	21.8	18.5	
	1.1	0.9	1.2	1.1	1.0	0.8	
	4.2	4.0	7.8	7.3	7.8	7.0	
	№ 1.02K	82K	95K	86K	66K	52K	
	60.1	60.1	60.2	60.2	60.0	60.0	
	25.4	26.9	14.7	15.7	14.9	16.6	
	56.2	56.2	52.4	52.4	51.5	51.5	

of altering Nigerian bank lending strategies in the areas tested. Another side effect, or "spin off", of these exercises could be to suggest the potentials of a SOFI-type tool in Nigerian bank planning and balance sheet management.

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SIMULATION EXERCISES: CONTINGENCY TESTING OF THE PROPOSITION OF THE STUDY

1. INTRODUCTION

In the previous chapter an attempt was made to question the feasibility and prudence of this study's assertion that Nigerian commercial banks can be more aggressive and still remain safe and profitable. A typical, though hypothetical, Nigerian commercial bank operating under the economic and financial circumstances of 1975-1980 was created as a test bed. With the aid of SOFI this 'bank' was subjected to various tests of aggressiveness. The results of the simulation exercises appear to indicate positively that the bank can stand these tests and come off not only unscathed but more efficient, more resilient and more profitable.

Banks today, like all businesses, operate in a highly volatile and uncertain environment, with potentially severe pressures such as high inflation rates and violent alterations to the interest rates structure. In recent years even big banks have collapsed under these kinds of pressures. There are also less tragic cases in which banks and banking systems have suffered hiccups sufficiently strong enough to shake their very foundation and call for panic, rescue actions (see Gardener 1979, Chapter 9).

It is true to say that in a banking and financial system like Nigeria's, where the commercial banks are so dominant, it is inconceivable that the Monetary Authorities will fold their arms whilst banks collapse under stress. Nevertheless, it is prudent and reaslistic to appreciate the probabilities and devise strategies and tactics to overcome or ameliorate their effects.

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After all, planning is nothing if it cannot help identify possible problems and gaps so that efforts can be made in advance to eliminate or plug them. It is, indeed, only then that it (planning) can truly be said to be "control-in-the-future".

Thus it is considered instructive to subject the testbanks of these analyses to reasonable and realistic pressures and examine how they perform - collapse or survive. The banks that will be tested are Bank 1, the typically "unaggressive" bank and Bank 1(A)-1, the "aggressive" Bank 1 with a 60% loans-to-deposit ratio and a lengthened term loans maturity pattern.

Another key motive for appraising more rigorously the prudential capabilities of our test banks (especially the more aggressive test bank) is that ratios by themselves may be unsatisfactory measures of a bank's real or underlying prudential strength. In the previous chapter it was shown that our more aggressive bank appeared to be prudentially stronger than the "typical Nigerian bank" (Bank 1), using conventional balance sheet ratios like capital ratios. This result, however, may be misleading if prudential ratios alone are themselves sometimes misleading guides to bank prudential soundness. As a result the following contingency tests (stress situations) will avoid this possible weakness in our Chapter 11 results by analysing our test bank's prudential soundness in a more realistic and rigorous system framework using SOFI.

Three stress situations will be 'created' for these banks.

These include the one in which

- (a) loan loss rates are doubled;
- (b) inflation rates jump by 20%; and
- (c) liquidity crisis occurs as the result of a 10% run off on all deposits in 1978.

2. CONTINGENCY TESTING

The method of analysis to be employed for these exercises is known as 'contingency testing'. Contingency tests are defined as "a collection of financial shocks applied to a bank's planned financial positions" (Gardener, 1979 p. 8-1). Although these shocks may be subjective in nature, they help to satisfy the primary purpose of contingency testing which is that of an early warning system, identifying in advance, gaps and weaknesses in the planned financial positions of the bank. It is undoubtedly a reliable means of avoiding management by crisis' in that it helps the setting up of a number of relevant and relatively severe "what if..." tests. Where alternatives are available to management, contingency tests can also help their evaluation and thus aid them in reaching rational decisions. In the particular · area of lending function, this kind of exercise is helpful in identifying possible and/or potential excessive mismatching in the balance sheet. With the aid of an advanced computer simulation model such as SOFI, management is enabled to contingency test and appraise their bank's financial plans for resilience, prudence and profitability.

Broadly, a system of contingency testing a bank's financial position will involve the following processes (Gardener, 1979, pp. 8-15 and 8-16):

- (a) Generation of the contingency test programme to be simulated on the plan. A contingency test programme refers to the collection of contingency tests set up specifically to test the banks' strengths and weaknesses. (In these exercises, the contingency tests are, as noted in (a), (b) and (c) in section 1 above).
- (b) Explicit identification of the constraints, like ratios and performance measures, that are to be met under each single contingency test run for the plan under analysis.

In this analysis, one ratio that must be met for both banks is the liquidity ratio of 25%. Additionally for Bank 1(A)-1 to possess the desired aggressive posture, it must maintain a minimum loans-to-deposit ratio of 50% and the maturity pattern of the term loans established in Section 3.3.2 of Chapter 11. With regard to operating performances, the point of interest to be carefully observed is whether the contingency tests produce performance indices that deviate significantly and precariously from those recorded prior to simulation.

- (c) The simulation of each contingency test in turn on the plan. As these exercises involve the comparison of an 'aggressive' and an 'unaggressive' bank, there will be three separate contingency test runs for each of the banks, making a total of six separate runs.
- (d) Evaluation of the simulation results obtained for each test run. Sometimes these results may dictate the need to reformulate parts of the plan being tested once the complete contingency test programme has been run and evaluated. The profit targets set may for instance be too ambitious given the resources (both existing and potential) available to the bank or alternatively because the estimate of the revenues and provisions for losses, too conservative.
- e) When the bank is generally satisfied with the financial plan, the assignment of a suitable quantitative measure that reflects management's assessment.

2.1 Contingency test 1 - (doubled loan loss rates)

One of the probable pressures that a Nigerian bank may be faced with is a sudden doubling of its loan loss rates. This can arise, for example, as a result of natural disaster caused by drought such as occurred during 1973/74. The fact that banks are likely to increase their credits to the agricultural sector and also that there may be a repeat of that drought (since little has been done to stop the Sahara desert shifting south or in form of

dams and irrigations to counter its effect) make the probability more real.

Loan loss rates could also be doubled as a result of the exposure of the country's mascent manufacturing industries to international competition. On occasions in the recent past when the government has adopted open-door import policies, many local factories have been forced to close down or reduce production - both with consequent likelihood of firms defaulting in their loan obligations to the banks. It is thus most probably a reasonable assumption that loan loss rates could be doubled for a Nigerian bank. If this probability turns into a reality, the question is, what will be the consequences for the operating performances and/or safety of Bank 1 and Bank 1(A)-1? (The assumed loan loss rates are as in table 12.1).

Since all other things are unchanged, the balance sheet and the ratios report for these banks remain the same as they were pre-contingency testing. Changes in loan loss rates will affect, among other things, the performance indices. The post-contingency testing performance indices for Bank 1 and for Bank 1(A)-1 are as presented in tables XII-1 and XII-2 respectively. There are two distinct but complementary ways in which one can evaluate the observed changes in these indices. One is to compare these indices with those for the respective banks before contingency testing, and the other to compare one bank to the other post-contingency testing.

Table 12.1 Contingency tests (1): Loan loss rates (per cent per annum)

Type of advance	1976	1978	1980	
Term loans	7	6	6	
Overdrafts	4	3	4	

In tables 12.2 and 12.3 it will be observed that two important indices of lending efficiency were highlighted in this study i.e. loans-to-deposits and loans-to-assets ratios have been virtually unaffected all through the horizon of this simulation. As will be expected all the indices of profitability performance have been adversely, though not damagingly, affected. In the worst cases, the profitability ratios and the EPS have been nearly halved to their pre-contingency testing levels. is worthy of note, however, that the obtained profitability ratios for both banks, post-contingency testing, still compare favourably with those for banks outside Nigeria (see table VI-1) and are, therefore, acceptable. Because the profits have diminished due to higher loan losses, the shareholders' funds have been correspondingly affected. This has led to potential adverse effects on the resiliency of the banks as measured by the ratios of equity-to-deposits and assets-to-equity. ratios have not been significantly altered, however, as the maximum reduction in either bank is less than five percentage points.

It can thus be concluded that neither bank has been too severely affected by even a doubling of loan loss rates in this contingency test. The levels of their performances, post-contingency testing, appear to remain acceptable. But an important question that could be asked is: Which of the two banks performs better under this kind of pressure - the "aggressive" or the "unaggressive" one? The answer to this question can be found in table 12.4 where the banks' performance indices, post-contingency testing, are compared. As can be gauged from this table (considering the criteria of efficiency, safety and probability as defined in these analyses), Bank 1(A)-1, the "aggressive"

Table 12.2 Contingency test (1): Comparative performance indices for Bank 1

	1976		1978		1980	
	BCT (1)	ACT ⁽²⁾	BCT	ACT	BCT	ACT
Net income/equity (%) Net income/assets (%) Equity/deposits (%) Earnings per share (EPS) Loans/deposits (%) Assets/equity Loans/assets (%)	26.7 0.7 3.7 59K 35.3 28.5 33.4	15.6 0.4 3.4 34K 35.3 30.9 33.4	30.3 0.9 6.6 71K 50.5 16.9 45.2	23.4 0.7 5.8 50K 50.5 19.4 45.2	0.8 6.6 53K 50.8 17.2	5.3 30K 50.8

Notes: (1) BCT = Before contingency testing
(2) ACT = After contingency testing

Table 12.3 Contingency test (1): Comparative performance indices for Bank 1(A)-1

	1976		1978		1980	
	BCT (1)	ACT (2)	вст	ACT	BCT	ACT
Net income/equity (%)	46.1	27.5	35.8	28.0	21.8	14.1
Net income/assets (%)	1.1	0.7	1.2	0.9	1.0	0.5
Equity/deposits (%)	4.2	3.7	7.8	6.5	7.8	
Earnings per share (EPS)	1.02	61K	95K	66K		35K
Loans/deposits (%)	60.1	60.0	60.2	60.0	60.0	60.0
Assets/equity	25.4	28.67	14.7	17.6	14.9	19.58
Loans/assets (%)	56.2	56.1	52.4	52.5	51.5	51.9

Notes: (1) BCT = Before contingency testing
(2) ACT = After contingency testing

Table	12.4	Contingency	test	(1)	_	Comparative	performance	indices
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		1976	1	1978	1980	
	Bank	Bank	Bank	Bank	Bank	Bank
	1	1(A)-1	1	1(A)-1	1	1 (A) - 1
Net income/equity (%) Net income/assets (%) Equity/deposits (%) Earnings per share (EPS) Loans/deposits (%) Assets/equity Loans/assets (%)	.15.6	27.5	23.4	28.0	13.5	14.1
	0.4	0.7	0.7	0.9	0.4	0.5
	3.4	3.7	5.8	6.5	5.3	5.9
	34K	61K	50%	66K	30K	35K
	35.3	60.0	50.5	60.2	50.8	60.0
	30.9	28.67	19.4	17.6	21.5	19.58
	33.4	56.1	45.2	52.5	44.9	51.9

one, performs better than Bank 1.

-2.2 Contingency test 2 - (a 20% jump in inflation rate)

In contingency test 2, it is assumed that there is a sudden 20% rise in the rate of inflation. The major source of inflation in Nigeria is government's monetization of oil revenues. A very large proportion of government revenue comes from taxes and royalties on petroleum and is earned in foreign currencies.

(CBN, Twenty Years of Central Banking in Nigeria, 1979, p. 125)

Thus if the government decides to engage in substantially increased expenditure, this can very rapidly lead to a rise in inflation rate of the magnitude being suggested here. In Nigeria, therefore, this assumption will appear to be both reasonable and plausible.

[&]quot;The rapid monetization of such inflow of funds to finance an unsustainable level of government expenditure has posed the greatest threat to monetary stability in the nineteen seventies."

If this assumption is accepted, the immediate effect on the banks is the inflation of their balance sheet footings.

For Bank 1 and Bank 1(A)-1, the new balance sheet series will appear as presented in tables XII-3 and XII-4, respectively.

It may be true that in the real world of business there does not exist a one-to-one relationship between the size of a firm on the one hand and the costs and revenues on the other. For convenience of analysis, however, it is being assumed here that a linear relationship exists between these variables for the test-banks. Operating income, operating expenses and miscellaneous income are thus supposed to rise proportionately with inflation to the levels in table XII-5. When one considers the fact that the major sources of income and expenditure of banks are, respectively, loans and deposits and that with interest rates and loan losses unchanged, these (income and expenditure) will move proportionately with the size of these portfolios (loans and deposits), the above assumption will seem to approximate reality.

The major effects of this kind of change in inflation rate of concern to management will be those on operating performance indices. As before interest is focused on the transformations that have occurred in these indices - pre-and post-contingency testing situations compared for the banks (see tables XII-6 and XII-7). The comparison of Bank 1 and Bank I(A)-1, from this point of view, is also of interest as it enables the evaluation of their relative strengths and weaknesses.

Using the ratios of equity-to-deposits and assets-toequity as measures of the strength of the banks to withstand adversities, the changes observable in tables 12.5 and 12.6

Table 12.5 Contingency test (2): Comparative performance indices for Bank 1

	1976		1978		. 1980	
	BCT (1)	ACT (2)	BCT	ACT	BCT	ACT
Net income/equity (%) Net Income/assets (%) Equity/deposits (%) Earnings per share (EPS) Loans/deposits (%) Assets/equity Loans/assets(%)	26.7 0.7 3.7 59K 35.3 28.5 33.4	24.1 0.5 3.0 53K 42.2 34.8 40.3	30.3 0.9 6.6 71K 50.5 16.9 45.2	43.5 1.1 6.1 100K 55.0 18.4 49.4	20.4 0.8 6.6 53K 50.8 17.2 44.9	25.8 0.9 6.4 75K 55.3 17.8 48.7

Notes (1) BCT = Before contingency testing (2) ACT = After contingency testing

Contingency test (2): Comparative performance indices for Bank 1(A)-1 'Table 12.6

	1976	1978	1980	
	BCT (1) ACT (2)	BCT ACT	BCT ACT	
Net income/equity (%) . Net income/assets (%) Equity/deposits (%) Earnings per share (EPS) Loans/deposits (%) Assets/equity Loans/assets (%)	46.1 40.8 1.1 0.8 4.2 3.4 1.02 90K 60.1 62.6 25.4 31.48 56.2 59.3	35.8 50.6 1.2 1.4 7.8 7.1 95K 1.30K 60.2 62.9 14.7 16.09 52.4 55.2	60.0 63.2	

Notes (1) BCT = Before contingency testing (2) ACT = After contingency testing

indicate a deterioration. The reductions in these ratios, however, are small and insignificant. The profitability of the two banks dipped in 1976. This is because the expenses increased immediately they were assumed to but incomes from term loans and term investments take time to materialise and match the expenses. The situation was reversed (as can be seen from the tables) in the next two simulation periods, with profitability after contingency testing being higher than before it. The lending efficiency of both banks was also improved upon as their loans-to-deposits and loans-to-assets ratios increased post-contingency testing.

Turning to table 12.7 one finds that Bank 1(A)-1 performs better than Bank 1 after this contingency test, just as before it. This is shown through considering all the measures of efficiency, resiliency and profitability.

Table 12.7 Contingency test (2): Comparative performance indices

	1976		1978		1980	
	Bank	Bank	Bank	Bank	Bank	Bank
	1	1(A)-1	1	1 (A) - 1	1	(1(A)-1
Net income/equity (%)	24.1	40.8	43.5	50.6	25.8	27.1
Net income/assets (%)	0.5	0.8	1.1	1.4	0.9	1.1
Equity/deposits (%)	3.0	3.4	6.1	7.1	6.4	7.5
	53K	90K	100K	1.30K	75K	92K
Earnings per share (EPS) Loans/deposits (%)	42.2	62.6	55.0	62.9	55.3	63.2
Assets/equity	34.8	31.48	18.4	16.09	17.8	15.52
Ioans/assets (%)	40.3	59.3	49.4	55.2	48.7	54.3

2.3 Contingency test 3 - (liquidity crisis)

The final stress situation that is "created" for testing the hypothetical banks is one in which there is a sudden deposit run-off amounting to 10% of all deposits in 1978. It is assumed

that all deposits are equally affected. It might be argued that the deposits that will be most affected in this kind of situation are current deposits. Empirical evidence, however, points to the fact that all deposits are nearly equally vulnerable during depressions (Morrison and Selden, 1965). It will thus appear that the assumption of this contingency test is a valid one to make.

If there is a deposit run-off on these banks, it is suggested that their adjusted balance sheet series will appear as in tables XII-8 and XII-9. The changes in the structure of these balance sheets can be gauged from the separate ratios report for Bank 1 and Bank 1(A)-1 in tables XII-10 and XII-11. For comparative purposes these ratios are matched in tables 12.8 and 12 9 with the pre-contingency testing ratios obtained for the banks. These tables show that in 1978 when the liquidity crisis occurred, all the lending efficiency ratios (i.e. Nos. 2, 3, 4, 5 and 6) were improved upon after contingency testing for both banks. The comparative ratios report (one bank with the other) in table 12.10 shows that Bank 1(A)-1, as in earlier cases, performs better than Bank 1 throughout the simulation periods inclusive of 1978, the year of the assumed liquidity crisis.

Tables XII-12 and XII-13 show the performance indices for Bank 1 and Bank 1(A)-1, respectively. Tables 12.11 and 12.12, however, look at the comparative indices for the respective banks. All through the periods of simulation these banks recorded better performance indices after contingency testing. Considering 1978, in particular, it will be found that both banks performed relatively better after the liquidity crisis than before it. This may appear paradoxical at first. The reason for this is not very obscure, however. It is due to the way in which these banks

Contingency test (3): Comparative ratios report for Table 12.8 Bank 1

	1	976	:	1978	19	80
	BCT (1)	ACT ⁽¹⁾	BCT	ACT	BCT	ACT
Ratio 1	25.0	25.0	25.0	25.0	25.0	25.0
Ratio 2	35.3	35.3	50.5	56.1	50.8	50.8
Ratio 3	33.4	33.4	45.2	49.6	44.9	45.0
Ratio 4	7.8	7.8	10.6	11.8	13.9	13.9
Ratio 5	7.4	7.4	9.5	10.4	12.3	12.3
Ratio 6	16.9	16.9	29.3	32.6	32.1	32.1
Ratio 7	46.2	46.2	36.1	36.1	43.4	43.4
Ratio 8	3.7	3.7	6.6	7.5	6.6	6.5

Notes (1) BCT = Before contingency testing
ACT = After contingency testing

Contingency test (3): Comparative ratios report for Table 12.9 Bank 1(A)-1

	1:	976		1978	1	980
	BCT (1)	ACT ⁽²⁾	BCT	ACT	BCT	ACT .
Ratio 1	25.0	25.0	25.0	25.0	25.0	25.0
Ratio 2	60.1	60.1	60.2	66.8	60.0	60.0
Ratio 3	56.2	56.2	52.4	57.4	51.5	51.6
Ratio 4	13.4	13.4	12.8	14.2	16.4	16.4
Ratio 5	12.5	12.5	11.1	12.2	14.1	14.1
Ratio 6	28.9	28.9	35.3	39.2	37.9	37.9
Ratio 7	46.2	46.2	36.1	36.1	43.4	43.4
Ratio 8	4.2	4.2	7.8	8.8	7.8	7.7

Notes (1) BCT = Before contingency testing (2) ACT = After contingency testing

Table 12.10 Contingency test (3): Comparative ratios report

		1976	1	.978	1	.980
	Bank	Bank	Bank	Bank	Bank	Bank
	1	1 (A)—1	1	1 (A) -1	1	1 (A) -1
Ratio 1	25.0	25.0	25.0	25.0	25.0	25.0
Ratio 2	35.3	60.1	56.1	66.8	50.8	60.0
Ratio 3	33.4	56.2	49.6	57.4	45.0	51.6
Ratio 4	7.8	13.4	11.8	14.2	13.9	16.4
Ratio 5	7.4	12.5	10.4	12.2	12.3	14.1
Ratio 6	16.9	28.9	32.6	39.2	32.1	37.9
Ratio 7	46.2	46.2	36.1	36.1	43.4	43.4
Ratio 8	3.7	4.2	7.5	8.8	6.5	7.7

Table 12.11 Contingency test (3): Comparative performance indices for Bank 1

	19	976	1	.978	· 1	980
	BCT ⁽¹⁾	ACT ⁽²⁾	BCT	ACT	BCT	ACT
Net income/equity (%)	26.7	26.7	30.3	31.6	20.4	18.3
Net income/assets (%)	0.7	0.7	0.9	1.1	0.8	0.7
Equity/deposits (%)	3.7	3.7	6.6	7.5	6.6	6.5
Earnings per share (EPS)	59K	59K	71K	74K	53K	48K
Loans/deposits (%)	35.3	35.3	50.5	56.1	50.8	50.8
Assets/equity	28.5	28.45	16.9	15.16	17.2	17.45
Loans/assets (%)	33.4	33.4	45.2	49.6	44.9	45.0

Notes (1) BCT = Before contingency testing (2) ACT = After contingency testing

Table 12.12 Contingency test (3): Comparative performance indices for Bank 1(A)-1

	· ·	976	1	978	19	980
	BCT ⁽¹⁾	ACT ⁽²⁾	BCT	ACT	BCT	ACT
Net income/equity (%)	46.1	46.1	35.8	37.0	21.8	19.9
Net income/assets (%)	1.1	1.1	1.2	1.4	1.0	0.9
Earnings per share (EPS)	4.2	4.2	7.8	8.8	7.8	7.7
Loans/deposits (%)	1.02K	1.02K	95K	98K	66K	61K
Assets/deposits (%)	60.1	60.1	60:2	66.8	60.0	60.0
Assets/equity	25.4	25.4	14.7	13.3	14.9	15.1
Loans/assets (%)	56.2	56.2	52.4	57.4	51.5	51.6

responded to the reductions in their deposit resources. These ban's met the increased demands for liquidity occasioned by this crisis by selling off some of their investments. In the process capital gains were made. Also because loans were not called-in the banks' lending efficiency measured by ratios 2,3,5 and 6 was enhanced. As returns on loans are higher than those on investments, the banks' relative profitability would be enhanced after-contingency testing i.e. during the years after 1978. Stretched further this enhanced profitability will boost the shareholders' funds and make the banks financially stronger, with proportionately more capital funds now supporting less deposits and less of total assets, in the year of crisis.

It appears clear from the comparative performance indices for Bank 1 and Bank 1(A)-1 in table 12.13 that the latter retains its comparative superiority after this contingency test. This is not only true for all the performance indices in 1978 but for all the simulation period.

Table 12.13 Contingency test (3): Comparative performance indices

	1	976	19	78	1	980
	Bank 1	Bank 1(A)-1	Bank 1	Bank 1(A)-1	Bank 1	Bank 1(A)-1
Net income/equity (%)	26.7	46.1	31.6	37.0	18.3	19.9
Wet income/assets (%)	0.7	1.1	1.1	1.4	0.7	0.9
quity/deposits (%)	3.7	4.2	7.5	8.8	6.5	7.7
Earnings per share (EPS)	59K	1.02K	74K	98K	48K	61K
Loans/deposits (%)	35.3	60.1	56.1	66.8	50.8	60.0
Assets/equity	28.45	25.4	15.16	13.3	17.45	15.1
Loans/assets (%)	23.4	56.2	49.6	57.4	45.0	51.6

3. SUMMARY AND CONCLUDING REMARKS

With the aid of contingency-testing technique, Bank 1 and Bank 1(A)-1 have been subjected to relatively severe pressures and evaluated. Loan loss rates were 'doubled', inflation rate was 'raised' by 20%, and deposits were 'made' to shrink by 10% in 1978. In all these stressful situations, both banks appeared to survive satisfactorily. The more important point to emerge, however, is that the more 'aggressive' bank - Bank 1(A)-1 - which incidentally has been found to be safer, more efficient and more profitable in the previous chapter, came through all these stresses just as well as the 'unaggressive', safety and profit conscious Bank 1. It does appear that on the basis of this, albeit restricted investigation, one can safely state that more aggressive bank lending does not necessarily lead to adverse repercussions for the efficiency, strength, and profitability of a commercial bank. Since aggressiveness in lending enhances these (i.e. efficiency, strength and profitability) and will commend a bank to its

community, there is thus more to be gained in turning prudently aggressive in this (lending) function. Aggressive commercial bank lending also has a multiplier effect: it enhances the success of the bank's customers, enabling them to provide the bank with greater deposit resources for more aggressive lending.

In conclusion, therefore, all of the foregoing simulation experiments have added further strong support for our hypothesis that Nigerian commercial banks are generally too conservative in their lending and that they may become more aggressive without excessive sacrifices of profit and prudence. We have not identified how much more aggressive Nigerian banks could be and this is not necessary for present purposes. Nevertheless the essential point has been made that Nigerian commercial banks may move toward significantly more aggressive lending stances and still retain competitiveness, profitability and resiliency.

CHAPTER 13

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

1. SUMMARY

This study has attempted to enquire into the efficiency of commercial bank lending in Nigeria, given the basic a priori reasoning that there is an important role for the institutions in the process of the country's growth and development. As the review of literature reveals there is considerable and growing consensus among development economists that money matters, even in an important way, in development. This view is supported strongly by the analysis of the relationship between the real and monetary sectors of the Nigerian economy (Chapter 3).

The important place of commercial banks in the Nigerian financial and economic system appears clear from the brief description of the lending environment in Chapter 5. In the light of this, it is most improbable that society will not expect the institutions to play a leading role in financial intermediation in the economy.

The principles and practices of bank lending have been shown to be changing rapidly in developed countries. This trend has helped the relationships between banks and their customers and more importantly, the contributions of banks to their communities. Also the growing awareness among consumers and governments of the importance of banks and their potential capacity to influence economic activities, has led to questions being raised about their efficiency. These have in turn led to efforts directed at defining the measures of the efficiency of banks.

It is against this background that the analyses in Chapters 6 through 12 have been undertaken. A statistical analysis of the determinants of bank lending performance in Nigeria (in Appendix 1) indicates total assets, deposit mix, capital funds, interest paid on deposits and number of branches as important explanatory variables. Although the evidence was not wholly conclusive, it was sufficiently suggestive.

Equipped with this knowledge of some of the factors influencing lending performance it was easier to proceed to an evaluation of the aggregate lending operations of the banks in Chapter 6. Although there had been phenomenal growth in the total assets and other variables accounting for efficiency in commercial bank lending during the last two decades, there were no corresponding improvements in their lending operations. example, the structure of their loans and advances portfolio did not change significantly, remaining mainly dominated by shortterm assets. There was also clear evidence that the banks did not lend enough to the important economic sectors particularly the agriculture and the manufacturing. These being areas of high priority in the development strategy of the government, the banks have, at least, to the extent of their deviations from the CBN credit guidelines targets, been less than helpful and demonstrably sympathetic to the development goals of the economy. From many points of view, even the loans granted have been inappropriate. The repayment, the security and the maturity patterns have been undesirable, reflecting neither the needs nor the capacities of the borrowers.

In order to appreciate 'the why' of commercial bankers' lending behaviour, it is both useful and instructive to understand the determinants of their attitude to risk taking. Statistical

analysis was employed for this purpose in Appendix II. The analysis shows that the selected explanatory variables are highly correlated to the dependent variables. However, the former were unable to provide large proportions of the explanations for changes in the latter. Be that as it may, some useful insight was gained into the background to bankers' risk decision thought process. AppendixIII provides compelling evidence indicating that the Nigerian bankers have over time become more and more liquidity-oriented. With the growth in their total resources, capital funds and other confidence and capacity boosting factors, they have become more risk-shy. Consequently, they have put decreasing proportions of their total resources in loans and advances. To the extent that investments in assets other than loans yield and contribute less to the development of the economy, the banks' allocative efficiency has been below expectation.

Using three types of questionnaires, an attempt was made, empirically, to enquire into the 'liquidity preference' and lending practices of the commercial bankers. The analyses in Chapter 7 indicate that Nigerian commercial bank lending officers, at all levels of management, possess a high preference for liquidity. On a one-to-one basis, the statistical analysis shows that there exists a significant relationship between only one of the lending practices and the bankers' liquidity preference. However, the multiple linear regression analysis results in a high degree of correlation between the lending practices on the one hand and the liquidity preference variable on the other. This leads one to expect that these bankers will favour short-term loans and decline long-term loans given their high preference for liquidity. This is, however, not likely to serve appropriately

the development needs of strategic sectors of the economy, namely, the agriculture and the manufacturing.

The limited and inadequate extent to which the banks provide lending-related services; market their loans and advances; and generally assist their customers is also evident from the analyses in Chapter 7.

The management and control of the banks' lending function was found to leave a lot to be desired. In general they do not have an organised and systematic approach to corporate planning and control. Not surprisingly, none of the banks operates with a written loan policy.

The general scarcity of relevant and reliable information, which is a feature of most developing countries, coupled with an unwillingness to co-operate on the exchange of credit information among the banks, apparently makes them undertake greater risks and suffer more losses than are warranted. In sum the banks are in a situation in which they are able to control neither the quantity nor the quality of their advances.

Unlike the situation in the U.K. only a few banks in Nigeria have a business advisory services unit. Marketing of bank lending services is limited to advertisements aimed at image building. Because of these they are not in a position to provide the lending related services their customers ordinarily expect to get.

The views or perception of the bank customers as presented in Chapter 9 confirm the observed attitudes and lending practices of the bankers. The customers neither get the quantity nor the quality of lending services they need and ask for from the banks. It is for this reason that a significant proportion of bank users interviewed consider their banks "too conservative and safety

minded."

Given the foregoing analyses, it was thought desirable to examine the feasibility of Nigerian commercial banks becoming more aggressive in their lending function. SOFI, the simulation model employed in the exercises was introduced in Chapter 10. In Chapter 11 the aggressive stance of our hypothetical bank was improved (rather significantly) by increasing its loan deposit ratio and by lengthening its loan maturity pattern. This bank was examined under stress conditions by contingency testing in Chapter 12. The main finding of these exercises was that Nigerian commercial banks would not necessarily become less safe, profitable or resilient because of being more aggressive in their lending operations.

2. conclusions

The analyses in Chapter 6, in sum, indicate that the banks

have not lent enough in aggregate, that they have not lent enough
to the important sectors of agriculture and manufacturing, and that
their lending has also been 'inappropriate'. In the light of
these, there thus appears to be sufficient premise for the
acceptance of the hypotheses I and II of this study.

In the analysis of lending practices in Chapter 7 and of the planning and control activities in Chapter 8, there is empirical evidence coming from the banking practitioners that they do not provide enough supporting services along with their lending operations. This is further confirmed by the evidence from the analysis of the responses of bank users in Chapter 9. On the basis of these it will appear reasonable to accept the hypothesis III of this study.

· From the results of the statistical analysis in Appendices

I, II and III, the analyses of empirical evidence of lending practices, and lending planning and control, respectively, in Chapters 7 and 8, and of the responses of bank customers in Chapter 9, it appears clear that the lending attitudes of Nigerian bankers are orthodox and conservative. That is to say, that the bankers are not clearly development-oriented and sufficiently sympathetic to the aspirations of the economy. This being so, hypothesis IV appears to find sufficient support from our research.

Finally, the results of the simulation exercises in Chapters 11 and 12 appear to bear testimony to the implicit assumption of the hypotheses of this study - that the Nigerian commercial banks could be more 'efficient' in their lending furction; and without deviating from prudent banking too.

3. RECOMMENDATIONS

All of the foregoing appears to show that the Nigerian commercial banks are inefficient in their lending function and thus contribute less than they can to the country's economic development and growth. The logical question at this point appears to be obvious: what can be done to improve the efficiency of these institutions and ensure they contribute to economic development to the maximum of their ability? It will be unrealistic to think that once the management techniques and tools have been well sharpened and intelligently applied, all the lending problems will disappear. In advanced countries where the banking environments possess, at least, most of the essential elements such as infrastructural facilities, skilled manpower, efficient and well integrated financial systems, this may be so. This is not true of Nigeria like most developing countries, however. Because these environmental

factors influence the level of efficiency attained by banks, it will be necessary to consider improvements in these areas. It will also be necessary to take cognisance of and attend to some of the customer-attitude related problems such as unwillingness to pay and diversion of funds.

3.1 Macro-level efforts

3.1.1 Government infrastructural support. 'Lack of know-how', 'bad management' and similar terms were frequently used in the interviews by both the bankers and their customers to describe a major problem of bank lending in Nigeria. It goes without saying that lending cannot be efficient unless the right technical ab lity exists in the borrowing firms to make effective use of the financial resources; or alternatively, unless technical services support is provided by the banker or a third party such as the government. For this reason the government must come out with a bold and ingenous programme of technical services support for the budding entrepreneurs in the country. There are many ways in which government can do this. Effective dissemination of technical know-how and technical services information, good use of foreign aid assistance, feasibility studies, projects identification and articulation can all play a part. "In some countries (India, for instance) the achievement of such objectives is sought through 'lead bank' schemes under which lending policies are accompanied by technical services to the borrowers' (Bhatia and Khatkhate, 1975, p. 138).

With particular reference to agriculture, where because of the smallholder nature of production units and the level of literacy of the farmers, the need for technical support is crucial, the provision of extension workers must be substantially

increased. The level of provision at present is grossly inadequate. Whilst in India the ratio of extension worker to farmer is 1:200; and in Kenya it is 1:250; the ratio in Nigeria is a poor 1:2,500. The extension workers can help with technical services to improve the cropping techniques of the farmers, their farm management and produce marketing. These will undoubtedly help to make farming more efficient and consequently, the farmers become more credit-worthy to the bankers.

Happily the basic ingredients for success are available in the economic system as the World Bank experience suggests:

"... small farmer receptivity as such does not tend to present a constraint to project success. Where a well-tested, low-risk package of technical recommendations is available at the outset and continues to be profitable during implementation, small farmers are responding quickly and positively."

(Pickering, 1981, p. 59).

Similarly with regard to the other major sector of the economy,
Kilby (1971, p. 354) asserts that "Nigerians have responded
quite promptly to profitable opportunities in industry they have
the capability to exploit."

3.1.2 Loans rediscount/refinance facilities. In addition to the foregoing indirect approaches to enhancing the credit-worthiness of projects and customers, the government can also help directly. This is by way of establishing facilities for rediscounting/ refinancing the term loans of the commercial banks. Bankers have traditionally talked of the unwisdom of lending on a long-term basis the funds they have borrowed on short-term. In general they do not, therefore, want to lend long. When they do lend long, they tend to raise their standard of credit worthiness to ration the available resources for this class of loans

(Luckett, 1970, pp. 420-34 and Scott, 1957, pp. 41-8). If refinancing facilities are available, the banks are likely to become more confident to hold a higher proportion of their loan portfolio in term loans. The present guarantee scheme - the ACGS - does not meet either the needs of banks or those of the customers adequately. It is worth remarking here that rediscount/refinancing schemes have enhanced lending to the priority sectors of the economy in developing countries with similar problems, such as India (Joshi, 1972), Pakistan (Islam, 1973) and Ghana (Ogbe, 1975).

3.2 Micro-level efforts

3.2.1 Planning. The Nigerian commercial banks even in today's uncertain business environment do not engage seriously in corporate planning. As a result, they can only respond impulsively and spasmodically to emerging opportunities and problems. This will not lead to efficient operations.

The banks as a first step to efficient loan management must begin to plan for their organisations as these corporate plans provide the framework for the functional plans. Next, within the framework of the CBN credit guidelines, the banks must plan aggregate and inter-sector and intra-country distribution of their loans and advances. An important part of this exercise will involve drawing up and communicating in writing the lending policies of the banks.

3.2.2. Management and control of advances. For several reasons noted in the study the advances management and control of the banks leave much to be desired. Improvements will thus be required in key areas. First the banks must make greater efforts

to co-operate in the exchange of information. In this way a customer cannot dupe two banks, one after the other, because he will be exposed by the first bank to suffer. Secondly all banks must begin to maintain comprehensive customer credit files. This can yield a lot of dividends in terms of available information on customers. A new lending officer will, for instance, be enabled to assess and take decisions on credit customers on the basis of a well kept credit file and in this way changes in lending officers can be as painless as possible both for the banks and their customers.

In the U.K. banks engage in the custom of including on their boards as non-executive directors, experienced individuals from commerce and industry. The big advantage of this is that they bring their wealth of experience to enrich the policy decision thought process. They also serve as (informal) links between the banks and the community. This appears a useful way in which Nigerian banks can make an 'intensive' use of the available entrepreneural resources in the economy as well as get closer to their customers.

In order to be able to offer the appropriate lending facilities to their customers, Nigerian commercial banks must engage in more vigorous marketing strategies and tactics. To this end they must develop their business advisory services and/or marketing departments; define their objectives and the operational means of achieving such objectives.

Because of the limited use to which computers are put in the few banks that own one, the supply of basic lending information such as outstanding balances, age of loans, value of collaterals for loans, etc., covering the whole operations of individual banks are not output from the computers. In the

light of this, no controls can be exercised over lending as quickly as desirable. There are enormous benefits to be gained from automating loan information systems in the banks (see Carr and Duffy, 1970; Geisco, 1980; Hasley, 1971; Sangster and Raguso Jr., 1973; and Popadic, 1973).

3.3 Joint efforts

3.3.1 Training. The area of manpower training is one in which both the commercial banks and the CBN as agents of the government ought to combine efforts to facilitate the desired increase in the pool of available skilled manpower for the industry. Overall the supply situation is unsatisfactory (see Otiti, 1978). Yet the demand is urgent in view of the rapid growth in the industry (s e Otiti, 1976). In addition to widening the scope of the present facilities for producing skilled manpower for the industry, it will be helpful to establish an institution along the lines of the Indian Institute of Management. This institution can design and carry out short, medium and long-range programmes to accelerate manpower training for the industry. It might also be assigned the responsibility for co-ordinating manpower development strategies for the industry so that the efforts of the universities, the Nigerian Institute of Bankers and the CBN can be streamlined. Finally, the Institute should be able to conduct applied research into the problems of the industry and make the resulting literature available to all interested persons and institutions.

It appears clear from this study that the need to change the lending attitudes of Nigerian bankers is just as urgent as the need to improve their skills. Therefore an important part of the training efforts must be directed at helping to re-orient the approach of the bankers. Among others, their view of collateral must be drastically altered so that they appreciate its role in lending decision-taking. There is also need to make the bankers aware of the economy-wide implications of the lending activities so that the need for development financing can be better appreciated by them.

As is done in the U.K. there is need to organise seminars for bank customers particularly those in the manufacturing and agriculture sectors. These will provide the essential fora for discussing and seeking mutually beneficial solutions to the numerous lending problems in Nigeria.

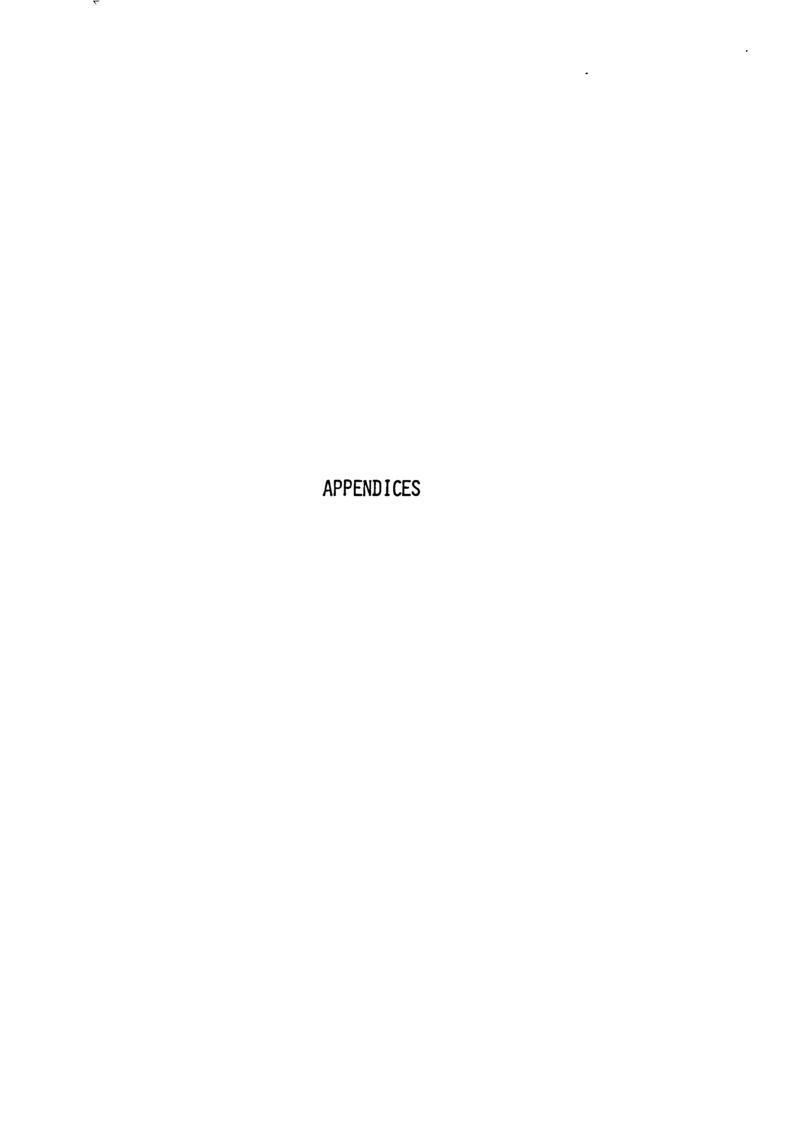
- 3.3.2 Credit bureau. Another important area of joint effort is that of the provision of a central credit bureau. The lack of adequate co-operation between the banks, the tarseness of the information exchanged and the general paucity of credit information in economy, make the establishment of this institution an urgent one (see table XIII-1 and Wright, 1976).
 - 3.3.3 Co-operatives. The basic units of production in developing countries like Nigeria are typically small individual craftsmen and artisans, small-holder farming. Given all the goodwill on the side of the banks, and costs and profits considerations apart, sheer number will make the attempt to extend credit facilities to these small units impossible and the conception of such an idea even a joke. The formation of these units into co-operative organisations with larger resources and increased credit-worthiness will provide a desirable answer. Thus the government must give more attention and devote greater resources to this strategy than hitherto. The banks as a friend and

financier of the community can also help a great deal as the example of Shell's "Uboma Development Project" has demonstrated (see Ijere, 1975).

3.4

Direction of future research. Like many studies of this nature, this has raised many more questions than it has been able to answer. It is hoped, however, it has pointed research attention to a rich and potentially rewarding area of study in Nigeria. Up to date little is known about the size, the nature and the structure of the demand and supply of loans and advances in Nigeria. Comprehensive and government supported studies will be required to do this. It is only when these demand and supply functions can be well defined that lasting solutions can be designed to solve the problems of bank lending in Nigeria.

Some models have been employed for analysis in this study. These have not performed satisfactorily because of the non-inclusion of sufficient explanatory and performance variables. Research efforts aimed at making these models more comprehensive and powerful in describing lending performance of banks and the lending behaviour of bankers will no doubt be very welcome to academics and policy makers. More incisive studies of the different aspects of loan management in the banks such as planning, management and control will contribute immensely towards improving the efficiency of commercial bank lending in Nigeria.



THE DETERMINANTS OF NIGERIAN COMMERCIAL BANKS' LENDING PERFORMANCE: A STATISTICAL ANALYSIS

Ī

1. INTRODUCTION

Measuring the performance or the efficiency of the operations of any socio-economic system is usually a difficult task. As we have noted in Chapter 2 it is even more so with commercial banks and other financial institutions. The two major problems usually are the heterogeneity of the inputs and the outputs of the commercial banking system and the unquantifiable nature of most (and at times the most important) of these inputs and outputs. The size of these problems has not, however, deterred some scholarly attempts at commercial banks' performance evaluation by researchers such as Kaufman (1966), Fraser and Rose (1972), and Soyode and Oyejide (1975). (See also Edwards, 1979 and Greenbaum, 1967 for reviews). These attempts have been geared, in general, to the evaluation of the "total" bank rather than specific aspects of its operations. Given the scope of this study, we will be restricting this evaluation to the lending function of the commercial banks. By focusing on this identifiable and important aspect of the banks' operations, it is hoped we will be enabled to select, with some measure of confidence, those factors most likely to influence the efficiency of the lending function.

The purpose of the analysis in this chapter is to test the ability of some selected variables to influence the lending performance of commercial banks. The results will, hopefully, help us identify which variables are important determinants of bank lending efficiency, as well as provide some quantitative measure of their importance.

Sections II and III, respectively, examine the determinants and the measures of performance used in this analysis. The data of the analysis are discussed in Section IV. In Section V the results of the analysis are presented. Finally Section VI deals with the concluding remarks.

II

THE DETERMINANTS

Empirically tested economic theories suggest a number of factors that are statistically related to bank performance (Fraser and Rose, 1971 p. 602). These factors, some of which are endogenous and some of which are exogenous to the banking firm, include market structure, demand for bank services, importance of non-bank financial services, bank costs, loan composition and bank size. Data availability and the specific orientation of this analysis dictate that we employ the following particular factors as determinants of bank lending efficiency in this exercise:

Total Assets
Ratio of Time Plus Savings Deposits-toTotal Deposits
Ratio of Capital Funds-to-Total Deposits
Ratio of Interest Paid-to-Total Deposis, and
Number of Branches.

Total assets (size) is undoubtedly an important factor in the operational efficiency of any economic unit (in the particular case of banks, see Haslem, 1968, pp. 172-173). This is because of the theoretically possible and often available economies of scale (see McCall, 1980). A priori, it appears reasonable to suggest that bigger banks are more likely to be able to employ comparatively more capable personnel who will enhance the efficient operation

of their lending function (see Sinkey, 1975) than are smaller banks. With the sophistication of production activities in all sectors of the world economy, lending to these activities has itself become specialised. Efficient lending to the agricultural and manufacturing sectors, in particular, today requires the technical support of specialists in these areas of production activities (see Wilson, 1979). Because of the scarcity of such specialised staff, particularly in a developing country like Nigeria, the personnel are expensive to obtain and retain even for the big, resource-rich banks. If we add this element to that of the ability of bigger institutions to diversify their loan portfolio, one can then state that, all things equal, size is most likely to determine, considerably, not only the volume but also the efficiency of lending.

Ratio of time plus savings-to-total deposits (deposit mix)

In the main, banks lend out the deposits available to them. The longer the term of these deposits, the longer the banks should be confident and willing to part with them by way of loans. Since a large part of time and savings deposits represents the resources that can, in crisis-free business periods, be lent on a long-term basis (Morrison and Selden, 1965) the bigger these deposits are as a proportion of total deposits, the better placed are the banks to make term loans. Because of the long-term nature of agricultural and manufacturing production, and given the paucity of alternative sources of long-term finance in a typical developing economy, the longer-term the commercial banks' lending to these sectors the more efficient. Thus given the right development-conscious and risk-accepting attitude to lending on behalf of these bankers, it can be hypothesized that the bigger

the time and savings deposit resources available to them, the more efficient lending they will make.

Ratio of capital funds-to-total deposits (capital ratio)

After providing for the fixed assets of a bank, little if any, is left of the share capital for the lending activity. Over time the capital fund is increased by the transfer of undistributed profits, which, in any case, are usually unavailable in cash. It can be seen, therefore, that the capital fund does not provide spendable resources to enhance the lending operation. It does, however, provide an intangible but invaluable resource - confidence. This is because generally the size of the capital base of a firm measures the level of owners' commitment and confidence in the business. In the case of a bank this in turn provides confidence to all outsiders including depositors, the monetary authorities and the business community (Gardener, 1980).

It is not only the absolute size of the capital fund that matters to these outsiders. The ratio of capital fund-to-total deposits is also of considerable importance. In general, the higher this ratio, the more stable and financially resilient these 'watchers' have come to think the bank is (1). Much more than any other thing, it is this public confidence that helps maintain a bank as a going-concern. Once this confidence is merely dented, it is only the direct or indirect intervention of the monetary authorities as in the case of the U.K. fringe bank crisis in

⁽¹⁾ In the light of the limitations of this ratio, "it has become common practice to compute the ratio of "free capital" to deposits (CLCB, p. 54). But because "the public at large is not privy to sufficiently detailed information about the degree of risks of the banks' assets to compute sophisticated capital/asset ratios" (CLCB, p. 63), this "crude" measure is still widely monitored by banks as well as the interested outsiders.

1973/74, that can save it from collapsing. Banks in turn, should partly, at least, derive their confidence to lend from the position of this ratio. As this ratio increases, other things being equal, the confidence of banks to lend, and the volume and term of bank lending should increase.

Ratio of interest paid-to-total deposits (interest paid ratio)

Interest rate structures are normally now specified for commercial banks in Nigeria by the Central Bank. Within this broad structure, rates payable on different types of deposits are stipulated. As deposits provide the main resource for lending, the cost of this resource will influence the volume and type of lending activities (see Fraser and Rose, 1974). This is particularly so in the case of Nigeria where the Central Bank specifies the rates to be charged on loans to important sectors of the economy such as agriculture and manufacturing. All these, however, do not mean that banks are entirely strait-jacketed. Given the situation as it is, an efficiently managed bank can positively influence its lending activities in one major way. It can minimize its total resource cost by a clever combination of cost-effective sources of deposits.

Ceteris paribus, the higher this ratio the more reluctant banks are to acquire deposits and the less loans they will make both to the development-inducing sectors and in the aggregate. There are other aspects of lending to be affected also. The higher this ratio, the greater will be the tendency for banks to charge the maximum allowable rate and to increase their profit margin by inflating uncontrolled service charges. These in turn will inevitably lead to high bad debts and high ratios

of interest received plus fees-to-total loans.

Number of branches (branching networks).

The branches of the banks are the outlets for the majority of loans in value and number. Given this fact, a priori thinking will suggest that the more numerous a bank's branches, the more loans it will be able to make (for some empirical evidence see Soyode and Oyejide, 1975). Similarly the more representation a bank has in the rural areas the more agricultural loans it will be able to make. To a large extent this will also be true for urban branching and manufacturing loans. Provided the branching networks are spread over a wide area of the country, the more diversified the loan portfolio will be in terms of the regional elements of risk; and consequently the less the impact of total loss through bad loans. On the whole it seems plausible to suggest that the number of branches will affect the efficiency of bank lending.

III

THE PERFORMANCE MEASURES

The choice of the lending efficiency measures is also dictated largely by the focus of this study. Whilst we include the now popular performance measures such as the ratio of total loans-to-total deposits, and the loan loss ratio, proxied here by the ratio of provision for bad and doubtful debts-to-total loans, (for a review see Edwards, 1979, pp. 449-490), we also include measures not commonly used in this kind of analysis but most relevant for the situation under consideration. These measures are the ratio of agricultural plus manufacturing loans-to-total deposits, and the ratio of interest received on loans-to-total loans. Because these banks operate in a developing

environment, it is appropriate that they should be evaluated in this frame. It is also this consideration that influenced the non-selection of the most commonly used measure of efficiency - profitability (1).

The ratio of total loans-to-total assets measures broadly the ability and the willingness of banks to convert their idle cash deposits into productive resources. It is in this way that they act as effective agents of capital formation (Moulton, 1918, p. 869). For a developing economy there can hardly be rendered a better service by a financial intermediary than that of helping to organise capital resources internally. Because loans are of different types - some desirable others not - one can only say in broad terms that a higher ratio of total loans-to-total assets is welcome.

The best available measure of loan quality is the ratio of net loan losses-to-total loans. However, because of their sensitivity, figures for loan losses are hardly ever published. If the public are ever enabled to keep track of banks' loan losses, so the authorities apparently believe, they may unwittingly decide to withdraw their confidence in banks and cause a flight of deposits when such an action may be neither warranted nor desirable. This measure of loan function efficiency is thus very rarely used. It is, however, appropriate in the circumstance, to proxy it by the ratio of provision for bad and doubtful debts-to-total loans. These provisions are proximates to net

⁽¹⁾ From a joint study (Ojo and Adewunmi, 1980a), conducted by this researcher, it was found that Nigerian commercial banks are favourable contenders for the place of the most profitable banking system in the world (see also table 6.1).

losses because the tax authorities often have explicit rules concerning the total amount of provisions that may count as deduction from current profits (Revell, 1975 p. 84). All things being equal, a well managed bank's loan function should produce a lower ratio of provision for bad and doubtful debts-to-total loans.

It was noted in the last but one paragraph that the ratio of total loans-to-total assets is not an entirely satisfactory measure of the efficiency of resource use in a bank. This is because it reveals nothing of the nature of the loans. To provide further insight into this aspect of bank activity for present purposes, the ratio of agricultural plus manufacturing loans-to-total loans can be examined. This ratio m asures the extent to which banks' lending activities are longer-term in nature and developmental in orientation. It is most probably safe to state that these two sectors hold the key to the growth and development of any developing economy. The contribution of commercial banks to these sectors should thus properly be seen as a measure of the efficiency with which they discharge their obligation to their business environment.

Lending to the agricultural and manufacturing sectors to be growth-and-development-inducing must necessarily be long-term, given the nature of the production activities in these sectors. Long-term resources in the form of time and savings deposits will be needed to support such lending activities. But to what extent are these resources so employed by Nigerian commercial bankers? The answer to this question should provide another measure of the performance of these institutions. It follows logically that, in this study and in general, the higher

the ratio of agricultural plus manufacturing loans-to-time plus savings deposits, the more efficient a bank will be considered.

In a developed economy where the commercial banks are only one of the numerous agents of capital formation, it is understandable why the institutions are often evaluated largely on the basis of profitability. The more profitable a commercial bank is, the better. But this is not entirely true of a developing society where a proper balance must be struck between commercial and developmental efficiency. It is in the light of these that the ratio of interest received on loans-to-total loans (loan rate) is an important measure of lending efficiency and bank performance (see Sinkey, 1975). Ideally, banks in a developing environment must stimulate demand for their loans by deliberate policies on core factors of demand such as the interest rate. The lower the loan rate, the more efficient a bank is likely to be in this developing environment. Indeed, given the Central Bank's ceiling on charges for loans to these "preferred sectors" of the economy, we should expect to observe that returns. to commercial banking are inversely associated with the levels of economic development (see Macesich, 1965).

IV

THE DATA

The data of this analysis, (obtained from the Central Bank of Nigeria), derive from the end of year returns of the commercial banks. As it is normal practice, the data were supplied anonymously, that is without revealing the identity of the relevant institutions. This analysis relates to 18 of the 19 individual commercial banks in operation in 1979. The 19th bank was excluded because complete data on it were unavailable.

This is not, however, a very significant omission as the bank accounts for only 3.5% of the total assets of the commercial banking sector (see table I.1(A))

V

THE RESULTS

In addition to the regressions for the 18 banks, separate regressions were run using data relating to the foreign banks and the indigenous banks. This was done to enable us to examine if there are variations between these two main subsectors of the commercial banking system. The regression results and the mean ratios and the standard deviations for the variables of the analysis are shown in tables I.1 and I.2, respectively.

Ratio of total loans-to-total assets

The coefficient of multiple determination, R^2 , between the five independent variables and this dependent variable is significant at the 10% level. With R^2 equal to 0.64518, the independent variables performed very well in explaining the variations in this ratio.

The coefficients of relationship between this ratio and deposit mix and the interest paid ratios are significant; the one at the 5% level, the other at the 1% level. The relationship between deposit mix and this dependent variable, though positive as expected, is surprisingly weak. More surprising, however, is the negative and, at the same time, very weak relationships between size and capital variables and this ratio. Given the fact that the branches are the main outlets for loans and advances, the relationship between the number of branches and the ratio of total loans-to-total assets is not nearly as strong

Table I.i(A) Cross-sectional data for the analysis of the determinants of Commercial Banks' lending performance

	I	Depende	nt vari	ables		Indep	endent '	variables		
	TA	ISID	CID	IDID	ILTA	PBDIL	AMIL	AMIS	IIIL	No.of branch
1	1,617	49	5 ⁻	2.1	59.0	1.2	45.8	54.8	8.5	108
2	2,269	50	5	1.5	48.2	0.8	41.2	19.9	9.7	111
3	2,621	56	4	1.9	61.9	1.0	36.3	40.0	8.9	54
4	674	57	3	2.5	98.2	4.2	28.0	48.3	6.3	50
5	482	39	4	1.5	81.9	17.3	30.3	63.5	5.4	63
6 7 8 9 10	299 271 159 256 745	59 67 54 38 71	8 5 2 4 7	1.8 2.4 0.5 1.2 1.3	104.3 106.7 55.1 59.3 81.7	1.4 1.4 5.0 0.8 0.1	44.1 43.0 15.0 50.8 38.5	78.0 67.5 15.3 78.9 44.1	9.6 6.3 6.8 9.3	7 · 20 24 23 20
11	54	58	17	2.2	67.0	7.2	31.9	37.0	16.2	5
12	156	45	5	2.6	90.2	3.1	25.6	51.8	10.8	13 . ·
13	129	46	10	3.2	90.2	1.5	32.1	63.0	10.0	13
14	835	52	4	1.5	56.6	1.5	26.2	29.3	10.2	36
15	104	33	15	2.3	57.6	4.5	61.9	107.6	13.4	7
16	32	53	20 .	0.8	62.5	1.0	23.4	27.6	7.8	5
17	37	48	11	1.3	32.6	2.4	23.1	15.7	15.5	3
18	104	56	7	1.4	70.5	4.6	24.6	31.0	7.5	:19

Sources: Tables VI-5 and VI-6.

TA = Total assets (in <math>H m)

TSTD = Ratio of time plus savings deposits/total deposits CTD = Ratio of capital funds/total deposits

IDTD = Ratio of interest paid on deposits/total deposits

ILTA = Ratio of total loans/total assets

PBDTL = Ratio of provision for bad and doubtful debts/total loans

AMTL = Ratio of agriculture plus manufacturing loans/total loans AMTS = Ratio of agriculture plus manufacturing loans/time plus

savings deposits

ILTL = Ratio of interest paid on loans/total loans

Regression results using 1979 cross-sectional data Table I.1

	Total	Tine +	Capital	Int. paid	Number of	c	
Dependent variables	assets	savings deposits	funds	on deposits	branches	2 8	ů,
		ST TO COL	1000				
		deposits	deposits	deposits			
Total loans:							
Total assets . All banks	-0.12464	0.10467**	-0.12804	1.74334#	0.39338	0.64518	4.364**
	(.8008)	(-3984)	(.8134)	(.5245)	(*1998)		
SXUPO UŠTAJOJ •	(-1777)	0.50593	-0.44950	1.33024	-0.22245	0.91374	2.119
. Indigenous banks	-0.40287	0.10048	0.17272	2.02725**	0.89635***	0.82698	4.780***
	(.2643)	(7254)	(.1027)	(.5084)	(.4056)		
٦,							
TOTAL TOTAL OF THE PAINS	(.8207)	.30316 (.1098)	(.2842)	(2.445)	0.65739	0.27113	0.8928
. Foreign banks	0.82976	0.61157	0.60249	2.390134	0.96453	0.99014	20.09
. Indigenous banks	-1.40357**	-0.56738	0.10434	-0.28880	0.35764*	0.85198	5.756***
	(.5148)	(2001)	(8661.)	(.9896.)	(.7895)		
Agric. + manufacturing loans:							
Total loans . All banks	0.50731	-0.31271	0.37966	0.48462	-0.13807	0.23029	0.7181
· Foreign banks	(7360)	(. 3508)	. 6/39)	1.43567	0997.	0.05035	4 306
	(.3935)	(.8545)	(.8503)	(18781)	(.7560)	0.53553	90.
. Indigenous banks	0.26812	-0.23879	-0.31249	0.34928	-0.59665	0,15089	0.1777
Agric. + manufacturing loans:	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	10000	1.00.0	/1100	10000		
Time + savings deposits							
. All banks	-0.15005	-0.93563	-0.48848	1.68801***	-0.15508	0.40222	1.615
. Foreign banks	-0.25038	-0.21601	-0.67332	1.58587	-0.44144	0.98560	13.68
evices access that	(.7141)	(.4618)	(.1543)	(1.586)	(.1372)		1
	(.4462)	(.8735)	(, 1733)	(.8582)	(.6842)	0.49642	0.9858
Interest received on loans:				ì		•	
Total loans . All banks	0 15521	130705			•		
	(.1549)	(.7708)	(.2573)	0.86401	-0.40412	0.47134	2.140
. Foreign banks	0.17397	0.64706	0.80246	3.81185	10000		
Trd sucres	(.3960)	(.1914)	(.6396)	(6.575)	(.5687)	0.00233	1.233
BYING BROWN .	0.71550	-0.17690	-0.58637	0.13979	-0.19648**	0.69336	2.261
	1000# 1	(9769.)	(69/7.)	(.8759)	(.6989)		

Computer print-out Sources

* Significant at the 1 per cent level ** Significant at the 5 per cent level *** Significant at the 10 per cent level *** Standard errors in perentheses

Notes:

as expected, having a coefficient of 0.39338 only.

A breakdown of the commercial banking system into sub-systems of foreign and indigenous banks reveals there are little variations between these two. The R²s of the relationships between this ratio and the independent variables are substantially higher for both the foreign and indigenous banks than it is for the system. Only one of these R²s, that of the indigenous banks is, however, significant at the 10% level.

None of the coefficients of the relationships between the independent variables and this dependent variable is significant for the foreign banks sub-sector. In addition to the negative relationships between the size and capital ratio variables and this dependent variable, the results also reveal a weak and negative relationship between it and the number of branches. On a priori thinking, this is most unexpected. This will be less surprising, however, if it is appreciated that these foreign banks came on the heels of, and mainly serve, the big expatriate businesses, situated in a few urban spots in the country. In this kind of scenario, size rather than number of loans (and therefore branches) is the influencing factor.

The reverse appears to be true of the indigenous banks. The coefficient of relationship between the number of branches and this ratio is positive, very strong and also significant at the 10% level. So also is the relationship of interest paid ratio to this dependent variable, with a coefficient significant at the 5% level. Although the relationship between the size variable and this dependent variable is stronger (-0.40287) than it is for either the "all banks" or foreign banks group, it is, as in the other two cases, surprisingly negative. The

relationshipsof deposit mix and capital ratio variables to this dependent variable are very weak. But unlike the position in the other two groups, the coefficient of relationship between the capital ratio and this dependent variable is positive as will be expected.

Finally, it is noteworthy that it is the foreign banks analysis that reveals anything close to the expected strong relationship between the deposit mix variable and this dependent variable. As evidenced by the sizes of the coefficients for the three analyses, the interest paid ratio is the most important of the five independent variables in explaining the variations in this dependent variable.

Ratio of provision for bad and doubtful debts-to-total loans

The five independent variables explain only a little over one-quarter of the variations in this variable. The coefficient of multiple determination, which is 0.27113, is not significant even at the 10% level.

Of the five independent variables, only the number of branches is positively related to this variable. The coefficient of this relationship (0.65739) is both strong and positive. To the extent that this coefficient is positive, it is "surprising". This is because increased branching networks, ceteris paribus, should provide opportunities for diversification of loan portfolio, which should spread total risk and thus cut provisions for bad debts.

The coefficient of relationship between the interest paid ratio and this variable has a negative sign. This is contrary to what one will expect as noted earlier above. The other

three independent variables are negatively and "correctly" related to this variable.

Contrary to the results obtained for the "all banks" group, the R²s for the foreign and indigenous classes of banks indicate that a substantially high proportion of the variations in the dependent variable is explained by the five independent variables. For the indigenous banks, the R² is additionally significant at the 10% level. Interest paid ratio is the most important of all the independent variables in explaining the variations in this dependent variable. With a value of 2.39013 this coefficient indicates the expected strong positive relationship between these two variables (i.e. interest paid ratio and the provisions ratio). Although the relationships between the other four independent variables and the dependent variable for foreign banks are strong (ranging from 0.60299 to 0.96453), the signs being positive are not "correct".

In the indigenous banks class, the coefficients of the relationship between the size and the number of branches on the one hand and the dependent variable on the other are significant, respectively, at the 10 and 5% levels. The other three coefficients are not significant. The capital ratio is positively, though very weakly, related to this dependent variable.

Ratio of agricultural plus manufacturing loans-to-total loans

The independent variables explain only a small proportion

of the variations in this variable. The R² of 0.23029 means

that less than a quarter of the explanations is provided.

Two of the independent variables (deposit mix ratio and number of branches) are negatively related to this dependent

variable. Contrary to expectation this result means that these most important factors do not account for variations in the volume of agricultural plus manufacturing loans relative to total loans. Apparently, interpreting these results technically, higher deposit costs do not adversely affect the allocation of resources to agriculture and manufacturing as the coefficient of the relationship of these variables (0.48462) carries a positive sign. The size variable, rather than deposit mix or capital ratio, is the most important explanatory variable of the five. As will be expected, both the size and the capital ratio variables are positively related to this dependent variable.

Ninety-five per cent of the variations in the dependent variable are explained by the independent variables considering the foreign banks group analysis. Although the R² is very large it is nevertheless not significant. Individually, all the independent variables of the foreign banks analysis are negatively related to the dependent variable. Except in the case of interest paid ratio, all these signs are "incorrect", that is to say, contrary to a priori thinking.

The sign of the coefficient of the relationship between the capital ratio and this dependent variable for the indigenous banks analysis is negative and "incorrect". As in the "all banks" analysis reported above, the signs of the coefficient of the relationship of the other four independent variables and this dependent variable carry similar signs and the comments made in those cases are equally valid here. Overall the most surprising result here is that of the relationship between deposit mix ratio and this dependent variable. For the three separate analyses this relationship is both weak and negative. The inference here is that more stable deposit resources exact negative rather than positive influence on the levels of agricultural and

manufacturing loans. This is surprising considering the fact that lending to these sectors is more likely to be long-term in nature. The inference of course, might well be that the banks in spite of the long-term nature of the resources available to them and of the activities in these sectors, only offer short-term advances to the entrepreneurs.

Ratio of agricultural plus manufacturing loans-to-time plus savings deposits

Forty per cent of the explanation for the variations in this variable is provided by the five independent variables.

The coefficient of the relationship of the independent variables and this dependent variable is not, however, significant.

Interest paid ratio is the most important of the five explanatory variables. The coefficient of the relationship of this ratio and the dependent variable carries a positive sign and is significant—at the 10% level. The positive direction of this relationship suggests that resource cost does not adversely influence the use of deposits for medium—to—long—term lending. This also seems to lend support to the widely—held view that commercial banks, after all, pool all deposits and allocate funds to different uses without immediate concern for costs and sources; provided, of course, that the statutory and prudent levels—of liquidity are maintained.

All the other independent variables are negatively related to this variable. These results are contrary to expectation. For instance, more branches and increased size (total assets) should, ceteris paribus, lead to increases in this ratio. As expected, however, the relationship between this ratio and the number of branches is positive in the indigenous banks group's analysis. The nature of the other four coefficients for this class of bank and those of the coefficients for the

foreign banks analysis are very akin to what was observed in the "all banks" analysis. The comments made in those respects above apply with equal validity here as well.

Ratio of interest received on loans-to-total loans

The five independent variables were able to provide explanations for 47% of the variations in this ratio. As may be expected, interest paid ratio is strongly and positively related to this dependent variable, having a coefficient of 0.86401. It is also the most important of the five independent variables in explaining variations in the loan rate. Two other independent variables - deposit mix and capital ratio - though w akly related to the loan rate have coefficients of relationship that are significant at the lo% level.

It appears reasonable, from the point of view of the oftendiscussed theoretical economies of scale, to expect that the bigger the size of a bank, the lower, we should expect to observe, the loan rate. The result of this analysis does not appear to support this proposition as the relationship between total assets and loan rate is positive as well as weak.

The coefficient of relationship between deposit mix and loan rate is negative as well as significant at the 10% level. This result is welcome if the inference is that banks do not pass all increases in costs of their resources to their clients in the form of higher loan rates. Economies of scale and benefits of increased diversification may be the explanations for the observed negative relationship between number of branches and loan rate.

Although the coefficient of the relationship between the loan rate and capital ratio is significant at the 10% level and

positive too, knowledge about the link between these variables is poor. We, therefore, do not draw any conclusions from this result.

The five independent variables in the foreign banks analysis are positively related to the loan rate. Together the independent variables explain 86% of the variations in loan rate for this group of banks.

On the other hand, size and interest paid ratios are the only two independent variables positively related to the loan rate in the case of indigenous banks. As in the foreign banks analysis, however, the independent variables perform very well (69%) in explaining variations in the loan rate. There is also a significant and negative relationship between number of branches and loan rate as was found for the 'all banks' analysis.

VI

SUMMARY AND CONCLUDING REMARKS

Overall the independent variables performed reasonably well in explaining the variations in the dependent variables. They provide between 40 and 65% of the explanations for the variations in three of the five dependent variables. In the remaining two they offer in one case 23% and in the other 27% of the explanations. The result is not unexpected as it ought to be appreciated that there are important explanatory variables, such as management, inevitably left out of the model, as noted at the outset. Unlike hitherto, however, we now have an appreciably good idea of the determinants of bank lending performance in a developing environment like Nigeria. The analyses have helped to identify some of the relevant factors to consider in evaluating and/or attempting to improve the efficiency of the lending function in this environment.

A division of the banking system into the foreign and indigenous banks' sub-sectors for separate analyses has not been a "wild goose chase". For from these analyses we know there exist some variations, wide at times, between these two main classes of Nigerian banks. This fact is reinforced by the evidence revealed by the Means and the Standard deviations of the variables in table I.2. In 1979, the indigenous banks invested a greater proportion of their resources in loans (73.07%) than the foreign banks (68.50%).

The contrary, however, would have been expected in view of the availability to foreign banks of long experience (both in Nigeria and abroad) and imported expertise in the form of personnel, procedures and practices. That this result might be due to attitude more than expertise is, however, evidenced by the groups' relative provisions for bad and doubtful debts - a measure of loan quality. Whilst the foreign banks provided 2.31% on the average with a standard deviation of 2.57%, the indigenous banks made average provisions of 3.89% with a standard deviation of 4.69%. As Olieh (1979 p. 45) frankly admits:

".... while the expatriate banks have advantage of age and experience and a reservoir of qualified personnel and are consequently able to set up systems and procedures that make for great operating efficiency, most indigenous banks rely on local manpower, who because of insufficient exposure cannot match the level of expertise of their expatriate competitors."

The foreign banks had on the average higher ratios of agricultural plus manufacturing loans-to-total loans, and-to-time plus savings deposits. In another analysis (Appendix II), permitting anticipation, it will be found that whilst, relatively, foreign banks invested more in manufacturing, the indigenous banks more than matched their performance in agriculture.

Table I.2 The means and standard deviations of independent and dependent variables

	Variables		Mean	Standard Deviation
1	Total assets:	All banks Foreign banks Indigenous banks	6.02 11.01 2.85	7.80 10.65 2.66
2	Time plus savings deposits: Total deposits	All banks Foreign banks Indigenous banks	51.72 53.71 50.45	9.61 11.66 8.43
3	Capital funds: Total deposits	All banks Foreign banks Indigenous banks	7.55 8.71 6.82	5.12 5.19 5.19
4	Interest paid on deposits: Total deposits	All banks Foreign banks Indigenous banks	1.78 1.87 1.72	0.68 0.37 0.84
5	Number of branches:	All banks Foreign banks Indigenous banks	32.27 44.57 24.45	33.14 47.46 17.64
6	Total loans: Total assets	All banks Foreign banks Indigenous banks	7.16 6.85 7.31	2.05 1.88 2.23
7	Provision for B.D. & D: Total loans	All banks Foreign banks Indigenous banks	3.28 2.31 3.89	3.99 2.57 4.69
8	Agric. plus manufacturing loans: Total loans	All banks Foreign banks Indigenous banks	3.45 4.28 2.93	1.17 0.96 0.99
9	Agric. plus manufacturing loans: Time plus savings deposits	All banks Foreign banks Indigenous banks	4.85 5.45 4.47	2.48 2.94 2.21
0	Interest received on loans: Total loans	All banks Foreign banks Indigenous banks	9.22 10.00 8.72	3.29 3.94 2.88

Source: Computer print-out

For all loans, the foreign banks charged more on the average (10%) than the indigenous banks (8.72%). There are two main factors that could account for this. One, the indigenous banks, as we have found, lend relatively more to the agricultural sector. Since the rate for lending to this sector is pegged at 6%, their loan rate will, overall, be lower than that of the foreign banks with comparatively more lending to the manufacturing sector attracting higher interest charge. Two, the indigenous banks were established to serve specific states or group customers. A good example is the Co-operative Bank Limited for co-operators in Western Nigeria. One way in which these institutions fulfil the objective of serving these customers is by charging concessionary interest rates on loans and advances (Ojo and Adewunmi, 1980b).

It is noteworthy that none of the independent variables emerged as consistently the most important factor in explaining variations in the dependent variables. Interest paid ratio was found more important than others in explaining variations in three out of the five independent variables. Deposit mix and size variables shared the pride of place, one each, in the other two cases. With one exception each, total assets and number of branches were rather surprisingly weak in their ability to explain variations in the dependent variables. A plausible deduction from this result is that banks do not efficiently employ increased resources (assets) and facilities (branches).

Admittedly, in practice the relationships between the specified performance measures and their determinants as in this model are more unlikely to be linear. Therefore, for operational purposes a doubling of total assets, say, may not guarantee a 25% increase in loans and advances. The functional importance

and usefulness of the results of these analyses will appear to lie in their implications for commercial banks' broad policy formulation and performance monitoring. The above analyses provide information for management on some quantifiable factors determining bank performance. More importantly, however, the analyses indicate the basic nature of the relationship between these performance variables and their determinants. Like the product of all quantitative analyses, a knowledge of these relationships can only serve as an input to the decision-making process.

Furthermore, the analyses offer a caution. Because only part of the total explanations for the variations in the performance variables is provided by these selected independent variables, management is made, subtly, aware of the fact that more factors than those employed in the analysis (probably more important in their explanatory power) must still be identified and accounted for before any definitive conclusions can be drawn.

The usefulness of these results to the whole study is that they will aid a better appreciation of an analysis of the lending activities of the banks; particularly in Chapter 6. With this information about the determinants of the lending performance of the banks, one is better placed to appraise their operational results.

Finally the weakness of the above analysis may be noted. For lack of relevant data i.e. cross-section data for one or more other years, the stability of these results has not been tested.

APPENDIX II

A STATISTICAL ANALYSIS OF THE DETERMINANTS OF NIGERIAN COMMERCIAL BANKS' ATTITUDE TO RISK

Ī

INTRODUCTION

Commercial banks in all parts of the world operate under differing degrees of control exercised by the monetary authorities in their community. Because of the commercial-business nature of these banks, these controls necessarily provide room for initiative and considerable flexibility of actions. The Nigerian commercial banks, as can be gauged from the analysis in Chapter 5, are not an exception to the rule in this regard. Thus they operate with sufficient latitude for the employment of initiative in resource management. In determining whether these institutions are effective and efficient in their lending and other operations, it will be useful to examine how they function in their regulated environment. In the ultimate, however, it is the individual manager's attitude or willingness to take risk that will determine the level of efficiency attained. This disposition will also, broadly, determine to what extent those risk assets, such as loans, are acquired and the way the asset portfolios are structured (see Carleton, 1962).

Undoubtedly, the determinants of a bank's attitude to risk are many and vary in number and influence from bank to bank. Many, and unfortunately the potentially more influential, of these variables are still largely unquantifiable given the present state of management science (see Carson and Scott Jr 1963, pp. 420-33). The cultural, the sociological and the psychological make-up of a manager will, for instance, contribute immensely to his attitude to risk taking (Phelan, 1962). Yet this is still

difficult to express numerically for incorporation into quantitative models. Given this state of affairs and the statistical nature of this analysis, we shall inevitably be confined to those factors that are quantifiable and for which data are also available. In the following analyses, we shall try to find out the measure of the contribution of the selected factors in the determination of the bankers' willingness to assume risk.

As Revell (1975, p. 80) asserts:

"....there is a special relationship between risk and the operations of financial institutions, because a large part of the functions of these institutions is to reduce the risk of financial transactions for both savers who place funds with them and the borrowers who are enabled to have the use of these funds."

It is the fact of this relationship that makes the present analysis relevant to this study. There are, of course, different types of risks arising from different sources (Revell, 1975, p. 80). We are in this analysis using risk in a general sense to refer to that all-important factor that permeates the whole operation of commercial banking. Although confined, in the main, in these analyses to the lending function, one is wary of restricting the definition of risk to, say, credit risk. This is because of the belief that the classification of risk is easier in theory than in practice. Even though bankers recognise and identify types of risk, the final portfolio structure decision is the result of trade-offs between, and a proper balancing of, all risks.

The next section presents the data for the analyses in this chapter. Section III discusses the variables of the model. The results of the statistical tests are presented in Section IV.

In the final section some of the implications of the results of these analyses for Nigeria's economic development are examined.

II

THE DATA

Two sets of data are used in these analyses. The first consists of cross-sectional data for all the individual institutions of the Nigerian commercial banking system. Because of the well-known Central Bank's practice of not supplying individual data with institutional identification, these data, obtained from the First and Second Schedule of returns of the banks for December 1979, were given anonymously. The second set consists of a time-series of quarterly data for the period starting from the first quarter of 1965 and ending with the fourth quarter of 1978. The source of this second set of data is the CBN's Economic and Financial Review for various years.

For further, and hopefully more insightful, analysis, the commercial banking system is divided into two groups of eleven indigenous and eight foreign banks. As only the 1979 data provide scope for this breakdown, it is the only set so used. The hope is that the time-series and cross-sectional analyses will reveal (if any) the time and intra-industry dimension of the phenomenon being examined (i.e. banker's attitude to risk).

III

THE VARIABLES OF THE MODEL

Two broadly similar models were developed for fitting these data. The more comprehensive of the two is that for which the cross-sectional data are fitted. Three independent variables and five dependent variables are used in a multiple regression model for analysing the cross-sectional data. The model using the time series data is the same in all respects except for the

(1) See Tables II-1(A) and II-2(A)

Table II-1(A) Cross-sectional data for the analysis of the determinants of Commercial Bankers' attitude to risk

	Depende	nt variab	les		Indep	endent va	riables	
	Size	TSTD	CID	CATA	TLTA	ALTL	ULTL	MLTL
1 2 3	1617 2269	49 50	5 5	33 31	44 34	10 5	24 17	36 37
3 4 5	2621 674 482	56 57 39	5 4 3 4	18 21 27	31 7 0 50	5 5 9 8	8 8 10	31 19 22
6 7 8 9 10	299 271 159 256 745	59 67 54 38 71	8 5 2 4 7	16 17 37 32 9	48 70 37 43 35	4 12 5 11 7	7 6 8 4 4	40 31 10 41 . 31
11 12 13 14 15	54 156 129 835 104	58 45 46 52 ·	17 5 10 4 15	26 19 26 29 33	32 67 47 39 21	2 9 6 4 3	6 4 10 8 4	30 17 26 22 59
16 17 18 19	32 37 104 378	53 48 56 75	20 · 11 7 3	49 13 35 24	47 26 50 41	14 8 3 3	3 17 0.02 8	9 15 22 26

Sources: Tables VI-6 and VI-7

Key: Size = Total assets (in \mathbb{M} million)

TSID = Ratio of time plus savings deposits/total deposits

CID = Ratio of capital funds/total deposits CATA = Ratio of current assets/total assets TLTA = Ratio of total loans/total assets

ALTL = Ratio of agriculture loans/total loans

ULTL = Ratio of unsecured loans/total loans

MLTL = Ratio of manufacturing loans/total loans

Table II-2(A) Time-series data for the analysis of the determinants of Commercial Bankers' attitude to risk

Dependent variables Independent	4	
	r variables	
TSTD CTD CATA TLTA	ALIL MIT	<u>.</u>
398,566 50.7 12.4 9.6 68.6	34.0 10.5	;
	25.8 13.7	
·	18.7 14.8	
	39.6 10.7	
429,074 54.6 10.8 7.7 60.7	1.9 12.3	,
442,092 56.4 11.0 10.0 55.7	1.9 -14.0)
447,512 60.0 11.1 14.1 52.5	2.0 16.2	,
482,558 55.3 11.2 11.0 62.5	1.6 12.8	
497,692 54.3 10.3 11.9 58.2	1.5 13.5	
412,492 54.8 9.3 12.9 53.1	1.5 14.3	
412,432 54.0 9.3 12.9 55.1	1.5 14.5	<i>.</i>
419,722 56.5 9.5 15.6 54.5	1.5 16.8	i
449,012 54.3 8.9 11.0 61.2	1.3 14.4	
490,016 52.3 9.9 26.7 48.9	1.4 15.8	
490,490 56.9 10.0 34.0 42.0	1.6 19.2	
	1.7 20.2	
. 37.0	1.7 20.2	
560,070 55.5 8.1 40.2 40.3	1.7 16.4	
614,478 57.5 7.4 50.2 30.6	1.6 19.1	
	1.7 20.5	
·	1.8 22.1	
761,814 53.7 13.5 48.5 31.8	1.8 17.3	
844,664 50.8 11.8 51.2 27.0	2.1 19.4	
897,670 55.6 11.1 52.6 27.1	2.2 19.2	
	2.1 21.9	
	2.0 21.7	
	2.9 23.8	
2/20///31	2.5	
	2.4 28.1	
1,259,726 58.9 11.1 28.9 36.5	2.2 27.2	
1,275,884 56.5 10.7 28.0 39.3	1.8 23.8	
	2.1 26.8	
	2.3 26.6	
	26 266	
	2.6 26.6	
	3.1 23.2	
	2.8 23.8	
	3.0 24.4	
1,765,571 60.8 9.2 32.8 36.3	3.2 2.0	
1,771,969 57.5 8.5 26.8 42.5	2.9 0.8	
- · · · · · · · · · · · · · · · · · · ·		
	3.3 25.7	
	3.1 28.9	
	3.1 28.7	
2,811,156 57.5 5.9 30.1 34.4	2.9 27.6	

Depende	nt variable	es		Independer	nt variabl	es.
	TSTD	CTD	CATA	TLTA	ALTL	MLTL
3,222,332 3,618,758 3,879,395 4,307,986 4,917,402 5,222,476 5,891,963 6,371,366 7,168,780	52.1 53.4 54.4 55.4 46.4 51.4 50.0 47.5 41.7 43.8	5.2 5.0 4.5 3.8 4.0 4.0 3.8 3.4 3.9	26.5 25.5 24.1 22.2 18.4 17.1 15.1 24.2 31.4 25.7	30.3 31.0 34.0 35.7 31.8 32.5 31.9 33.3 31.1	2.7 2.8 2.2 2.6 3.3 4.0 3.7 3.8 3.9	27.7 28.0 26.7 28.6 27.7 30.0 29.1 28.7 28.1 28.4
7,335,455 8,125,853 8,530,947 8,920,706 8,669,461 8,918,915 9,105,681	41.7 43.1 41.3 46.2 48.1 49.1	3.8 3.9 3.9 4.7 4.9 5.0	23.2 22.6 22.0 18.9 18.7 16.7	33.6 36.0 36.1 41.9 42.8 45.1	3.7 4.5 4.6 4.7 5.0 5.6	27.6 27.2 30.5 27.7 27.7

Sources: CBN Economic and Financial Reviews (various issues - 1960-1978)

Key: See Table II-1(A)

fact that it has four dependent variables rather than five.

III.1 The explanatory variables

These are: (a) Total assets

- (b) Ratio of time plus savings-to-total deposits, and
- (c) Ratio of capital funds-to-total deposits.

dimension in which the size of banks is measured (see Kaufman, 1966, and Tulasne, 1981). More importantly the size of total assets should, to some extent, indicate the ability or capacity of a bank to assume risk. Thus it can be hypothesised that ceteris paribus the bigger a bank is, the greater should be its propensity for risk-taking. A big bank, because of the sheer size of its assets, is better cushioned for, and can better absorb, 'shocks' resulting from the risks inherent in portfolio management. This confidence-giving attribute should thus make the big bank more risk-accepting and less-risk averting than a smaller bank.

An important advantage of economies of scale can also be mentioned here. Because of its large size, a big bank will invariably be more able to employ and maintain well-informed and experienced management staff. So in addition to being willing to take risks, the bigger bank will also be able to do so because it has the know-how, the expertise and other relevant resources (Benston, 1968).

Finally it is more rewarding to spread risk by diversification if the portfolio is large than when it is small. This indeed is the principle on which Unit Trusts operate. It can be hypothesised, therefore, that, ceteris paribus, the bigger a bank

is, the bigger should be its propensity for risk-taking.

The second explanatory variable of the analyses is the ratio of time plus savings deposits-to-total deposits. This ratio, to some extent and in 'normal' times, measures the volatility of a bank's deposit base. Morrison and Selden (1965 p. 13) have found that "there is support for the view that savings deposits are less volatile than demand deposits." However, "in the great depression, savings depositors proved to be as vulnerable to panic as demand depositors." Banks grant loans and invest on the strength of their deposits. The more volatile or unstable, the less confidence the bank will have in employing them on a long-term basis. Besen's (1965, p. 97) conclusion that "the degree of stability of sources of funds of a bank had an important bearing on the portfolio selection" will appear to lend credence to this line of thinking. In a branch-banking system as in Nigeria, deposit volatility may not be a strong alibi for not lending long. This is because the statement that "the clearing banks with their large branch networks can be confident that a substantial proportion of the deposits will remain with them " (Wilson Report, p.43) is also true for Nigerian banks. In essence, time and savings deposits represent the more stable and reliable portion of bank deposits (1). Properly viewed, a large share of the time and savings deposits should thus be seen as constituting the core deposits in the This being so it will appear logical to expect that the higher the ratio of time plus savings deposits to total deposits,

⁽¹⁾ This is particularly so in the case of Nigeria where a large proportion of these are retail rather than wholesale deposits and CDs account for less than 2% of total deposits.

the greater the ability and willingness of banks to take risks should be. One point must be noted here, however. It is that whilst it is less controversial to assume that deposit stability enhances the ability of banks to make risky investments, it is debatable whether they will thus be more risk-accepting.

The ratio of capital funds-to-total deposits is the last explanatory variable being employed in these analyses. The reason for selecting this variable is perhaps apparent. "The ultimate strength of a bank lies in its capital funds." (Crosse and Hempel, 1973, p. 69). This is not, however, so much because of the usefulness of capital funds in meeting the liabilities of the bank in a financial crisis but "rather as a factor, perhaps the most important factor, in maintaining the confidence a bank must enjoy to continue business and prosper" (Crosse and Hempel, 1973, p. 70).

Thus depositors and the supervisory authorities are likely to favour "the maximum amount of capital as protection against risks inherent in banking business" (Crosse and Hempel, 1973, p. 67). From this point of view it seems a reasonable hypothesis to state that the more capital a bank has in relation to its total deposits, the higher should be the proportion of risk assets in its portfolio. This will be so because the more capital it has the more "protection" it is likely to be able to provide for the risks inherent in the investment of depositors' funds. Ceteris paribus, the more of this "protection" the greater the degree of confidence reposed in the bank by its depositors and the financial community and, therefore, the more willing such a bank should be in increasing the share of risk assets in its portfolio. This statement must be particularly true in the Nigerian case where capital adequacy is still assessed

by the monetary authorities in terms of capital-to-deposit and capital-to-loans and advances ratios. For example;

"A commercial bank may not apply its funds for payment of dividends to its shareholders unless such a bank maintains a ratio of not less than one to ten (1:10) between its adjusted capital funds and its total loans and advances." (CBN, Monetary Policy Circular No. 12 for 1980 Fiscal Year).

Given this restriction, the more capital funds a bank has, absolutely and in relation to its total deposits, the more loans and advances it is able to make. In Nigeria this ratio does not only provide the necessary incentive in the form of confidence to lend but also the legal capacity to do so. The v riables total assets, ratio of time plus savings deposits—to-total deposits and ratio of capital funds—to-total deposits will, respectively, be referred to in the rest of these analyses as size, deposit mix and capital variables for convenience of reference.

III.2 The dependent variables

These are the variables chosen to serve as indicators of the risk-averting propensities of Nigerian commercial bankers. In a developing environment like Nigeria's where the majority (in number, at least) of borrowers are new, growing and struggling borrowers, no banker can be efficient if excessively risk-averse. Lending to this group of borrowers is inherently risky and a banker must be risk-accepting to be able to perform efficiently.

Although there are five variables in all here, the first two are the most important. The last three are included with the hope that the results will provide further knowledge about the second variable. The variables, which are in ratios, are: Current Assets-to-Total Assets
Total Loans-to-Total Assets
Agricultural Loans-to-Total Loans
Unsecured Loans-to-Total Loans
Manufacturing Loans-to-Total Loans

In the case of Nigeria, much more than in advanced countries' financial environments, current assets held by banks consist mainly of virtually risk-free government securities. This is so, because, as is noted in Chapter 5, the money market in Nigeria is still very narrow in terms of variety and volume of financial assets available for investment of funds. The ratio of current a sets-to-total assets, if high reflects the reluctance of banks to take on riskier assets. The higher this ratio is, the more risk-averse a bank is and the lower, the more risk-accepting.

The obverse of this variable is the ratio of total loanst -total assets. This is the second dependent variable of the
model. Federal Government Development Loan Stocks issued by the
CBN on their behalf are the other major investment assets, apart
from loans and advances, competing for the long-term funds of
commercial banks in Nigeria. Since these stocks are relatively
riskless, at least, in terms of "default or delay in fulfilment
of obligations" and "changes in interest rates" (Revell, 1975,
p. 80), this ratio (total loans-to-total assets) will appear to
measure appropriately the banks' propensity to assume risk.

In essence, the ratio of total loans-to-total assets will not reveal satisfactorily the risk attitude of banks. A loan portfolio will ordinarily consist of short-term commercial advances as well as longer-term lending to agriculture and industry. The ratio of agricultural loans-to-total loans; of manufacturing loans-to-total loans; and of unsecured loans-to-total loans will help reveal the true dimension of the risks

associated with the loans. These ratios have thus been chosen for their potential ability to provide supporting evidence for the second dependent variable (i.e. ratio of total loans-to-total assets).

It is noted in Chapter 5 that the indigenisation of the Nigerian commercial banks has made the dichotomy between indigenous and foreign banks less meaningful. This is true and valid for the analysis of the structure of the Nigerian commercial banking system. In an evaluation of banking practices and behaviour, this may not be wholly true. Individual bank's culture, policies, and, therefore, behaviour are much too deepr oted to be blurred by the mere wave of an "indigenisation wand." T e indigenous and foreign banks are more likely to continue to b have true to traditions and well-internalized practices. attributes more than any change in the bank's name and shareholders are what dominate the attitudes, the motives and the policies of these institutions. In the light of these, in addition to analysing the behaviour of the banks as a system, indigenous and foreign banks have been isolated for analysis as It is hoped that these further analyses will enrich the understanding of the different sub-groups of the commercial banking sector.

IV

THE RESULTS

In this section the results of the analyses are presented. As table II.1 shows, the multiple correlation coefficients, Rs, indicate some strong measures of correlation between the selected independent and dependent variables. For the 'all banks' class, the correlation is not so strong generally and particularly between the ratio of agricultural loans-to-total loans and the

Table I.1 Analysis using 1979 cross-sectional data

	Simple	e correlation	ıtion	Multiple	correlation	ton	Beta	coefficients	cients
Dependent variables	Total	Time + savings	Capital	æ	28	64	Total	Time +	Capital
	assets	Total deposits	Total				assets	Total deposits	Total deposits
Current assets: Total assets . All banks	1060	-,3798	.3024	.44959	.20214	1.267	.14776	34678	.25641
. Poretgn banks	.0673	6879	.2249	(9.45575)	.49922	1.329	(.3182)	(.2103)	(.4817) 26433
. Indigenous banks	1764	0524	.4052	(8.81847) .41413 (71.24396)	.17150	0.4830	. 4838)	(.3234) 67154 (.4232)	.44505 . (.8188)
Total loans: Total assets . All banks	2022	.1824	3318	.50578	.25581	1.719	40165	.13275	47436**
. Foreign banks	.0045	.5246	5270	.68461	.46869	1.176	46601	1.28606	76533
. Indigenous banks	.2187	.3820	2435	46389	.21519	0.6398	.08615	. 38264 (. 5665)	20602 20602 (1. 096)
Agricultural loans: Total loans . All banks	0779	1268	.0337	.14546	.02116	0.1081	78314	-1.28081	18082
. Foreign banks	.4966	0236	5086	.58564	. 34298	0969.0		-2.51261	54276
. Indigenous banks	2204	.0331	.4291	.42992	-18483	0.5290		(:1383)	(.2687)
Total loans . All banks	.4925	1317	-, 2089	.52169	.27216	1.870	(36213**	1.178594	51532
. Foreign banks	.5626	2247	4540	.66585	.44336	1.062	(:4537)	(.2744)	56004 (.8904)
. Indigenous banks	.1013	1897	0290	.22433	.05032	0.1236	(:2492)	7.19895	.52658
Manufacturing loans: Total loans . All banks	.2300	2339	.0738	36728	.13489	0.7796	.31367	23449	.15741 (.6261)
. Foreign banks	2347	8505	.4801	. 94372 .	09068	10.85*	62364	-1.10588	<u> </u>
. Indigenous banks	.1923	2014	3753	42156 (9.98175)	17771.	0.5043	.03506	1.170U) 19218 (.3757)	(.7269)

Source: Computer print-out

* Significant at the 5 per cent level ** Significant at the 10 per cent level *** Standard errors in parentheses

Notes

independent variables.

The foreign banks analysis exhibits a much stronger relationship, with the Rs ranging between 58.56 and 94.37%. On the other hand the indigenous banks indicate a much less strong relationship with four of the Rs having values ranging between 41 and 46% and the fifth as low as 22%. All the coefficients of multiple determination (R²s) are, with only one exception, not significant. Although the values of the R²s are generally low. it is noteworthy that in the foreign banks analysis, the independent variables provide better explanations for the variations in the dependent variables. This is particularly n ticeable in the relationship between the ratio of current assetsto-total assets and the ratio of manufacturing loans-to-total 1 ans with 49.92 and 89.06%, respectively. The independent variables are very poor, however, in explaining variations in the dependent variables in the case of the indigenous banks analysis. Less than one-quarter of the explanations is provided by these variables.

Ratio of current assets to total assets

For all the three groups and all the independent variables, the beta coefficients were not significant. More importantly, however, the signs of the beta coefficients were largely unexpected. Only in the case of foreign banks class (for all variables) and the ratio of time and savings deposits—to—total deposit (for all groups) were the signs "correct"; that is negative. Given the fact that an increase in size as measured by total assets creates opportunities for diversification and other scale economies advantages, it is to be expected that more assets should increase risk-acceptance propensities of

banks as noted earlier. The results of these analyses indicate the contrary for the banking system and the indigenous banks group. The exception to the rule here is the foreign banks group.

Ceteris paribus, higher capital funds-to-total deposits should give banks needed confidence to assume more risks. That this is true is confirmed only by the foreign banks analysis. The signs of the beta coefficients for the other two groups of banks are "incorrect".

The sign of the beta coefficients of the ratio of time plus savings deposits-to-total deposits, for all groups of banks, are negative and "correct". The sizes of these betas are also worthy of note. As can be observed, the beta coefficients for this ratio are larger than the corresponding betas for the other two independent variables in all the three groups of banks. This result reinforces the belief that time and savings deposits considerably influence portfolio decisions.

Ratio of total loans-to-total assets

Ideally, the relationship between the independent variables and this dependent variable should be the opposite of what it was for the ratio of current assets to total assets. For, whereas the ratio of total loans to total assets reflects the bankers' propensity to assume risk, the ratio of current assets to total assets measures their degree of risk-aversion.

The beta coefficient of the capital-to-total deposits ratio is the only one that is significant, and only at the 10% level. Of the nine beta coefficients for the three groups of banks' analyses, five have the unexpected negative signs. In the 'all banks' class, the beta coefficient of the time plus

savings deposits-to-total deposits indicate a positive relationship with this dependent variable. The other two independent variables have beta coefficients with the negative signs indicating inverse relationships. All the beta coefficients for the foreign banks class are similar in signs to the "all banks'". The above comments thus apply. On the other hand, the beta coefficients for the total assets and time plus savings deposits-to-total deposits variables have positive signs in the indigenous banks analysis. The sign for the beta coefficient of the third independent variable is, however, negative.

Time and savings deposits constitute the core resource for loans and advances. This being so, it appears reasonable to expect that the ratio of time plus savings deposits-to-total deposits should mostly explain variations in loans and advances. This was confirmed to be logical by the sizes of the beta coefficients for this ratio in the case of foreign banks and indigenous banks but not 'all banks'.

Ratio of agricultural loans to total loans.

None of the beta coefficients of the relationships between this dependent variable and all the independent variables is significant. Once again, however, the deposit mix variable is more important than others in its explanatory power as measured by the size of its beta coefficients for all groups.

Contrary to expectation the signs of all the beta coefficients in the 'all banks' class are negative. Except for the size variable, the same is true for the foreign banks class. The indigenous banks differ here. The signs of the beta coefficients of the independent variables are all positive. To

the extent that the results here follow largely the pattern witnessed in the relationship between the ratio of total loans to total assets and the independent variables, the addition of the present variable is providing the hoped-for corroborative evidence. The fact that Nigerian commercial banks, in general, shy away from agricultural loans comes out clearly in this result. Total assets, the ratio of time plus savings deposits to-total deposits and the ratio of capital-to-total deposits are all inversely related to the ratio of agricultural loans-to-total loans.

Ratio of unsecured loans-to-total loans

The beta coefficient of the relationship between this variable and the size variable is significant at the 10% level. None of the other beta coefficients is significant at any of the chosen levels. For all the three groups, the beta coefficient of the relationship between size and this dependent variable is positive as will be expected. The bigger in size the more confident a bank should be in making unsecured advances. Surprisingly, the reverse is the case with the deposit mix variable, which for all the groups has beta coefficients with the negative sign. Except for the indigenous banks class, this picture is also repeated for the relationship between the capital-to-total deposit variable and this dependent variable. In the 'all banks' analysis, deposit mix seems to explain, more than any other independent variable, the variations in the ratio of unsecured loans-to-total loans. Considering the indigenous and the foreign banks separately, the capital-to-total deposit ratio emerges as the most important explanatory variable.

Ratio of manufacturing loans-to-total loans

None of the beta coefficients of the relationships between this variable and the independent variables is significant. It is less clear here than in the preceding cases, which of the three independent variables can most explain variations in this dependent variable. The separate analyses of the three groups of banks, by size of the beta coefficients, indicate different variables for each group.

Surprising but consistent with the last two dependent ariables' analyses, the deposit mix variable for all the groups carry negative signs. With one exception - the deposit mix - the beta coefficients of the 'all banks' class are positive and "correct". All the beta coefficients of the foreign banks class are negative. This is, however, very surprising in view of the well-known relationship between the largely foreign manufacturing sector and these banks. Because indigenous banks do not relate so much to the manufacturing sector, the results of the analysis here is not unexpected.

time-series data. Three of the four coefficients of multiple determination (R²s) are significant, two at the 5% level and the third at the 10% level. In both analyses the R²s of the relationship between the independent variables and the dependent variable - ratio of manufacturing loans-to-total loans - are significant. More important corroborative evidence is, however, provided by the size of the R²s. As in the previous analyses, the R²s here are relatively small, indicating that the independent variables do not explain, in most cases, a large part of the variations in the dependent variables. The Rs, with values between 0.31151 and 0.59769, however, confirm that there are strong

regression Results of multiple/analysis using 1965(1) - 1978(4) quarterly time series data Table II.2

Total assets Tota			Simple	e correlat	lation	Multiple	correlation	ation	Beta	coefficients	ients
Current assets: Total deposits Total deposits Total deposits Total deposits Total deposits Total loans:			Total	Time +	Capital	ĸ	, A	ſ± ₄	Total assets	Time + Savings	Capital
Current assets:2765 .2184 .1962 .31151 _{4*4} .09704 1.86322600 .07091 Total assets Total loans:0498 .1503 .3519 .38173 .14572 2.957** .1260006921 Agricultural loans: Total loans Manufacturing loans Total loans 162139035972 .59769 .35723 9.633* .14647189641004	1			Total deposits	Total deposits					Total deposits	Total deposits
Total loans: .0498 .1503 .3519 .38173 .14572 2.957** .12600 06921 Agricultural loans .3162 1202 .2162 .49094 .24102 5.504* .31692* 30269** Total loans .1621 3903 5972 .59769 .35723 9.633* .14647 18964 18964 Total loans .1621 3903 5972 .594407) .16533 (.1543) (.2220) (.2220)	-	Current assets: Total assets	2765	.2184		.31151 *** (12.54539)	.09704	1.863	22600	.07091 (.4765)	.09714
Agricultural loans: Total loans Agricultural loans Total loans .16211202 .2162 .49094 .24102 5.504* .31692*30269** Total loans .162139035972 .59769 .35723 9.633* .146471896418964 .2020) (.2220)	7	Total loans:	.0498	.1503	.3519	.38173	.14572	2.957**		06921	.42580* (. <i>5</i> 422)
Manufacturing loans .162139035972 .59769 .35723 9.633* .1464718964 Total loans	m	Agricultural loans: Total loans	.3162	1202	.2162	.49094	.24102	5.504*	.31692* (.1743)	~	•
	4	Manufacturing loans Total loans	.1621	- 3903	5972	.59769 (5.84407)	.35723	9.633	.14647	4,	58176* (.3279)

* Significant at the 5 per cent level ** Significant at the 10 per cent level *** Standard errors in parentheses Notes:

Computer print-out Source:

relationships between these sets of variables.

The beta coefficients of the relationship between current assets—to-total assets as dependent variable and the three independent variables are all significant. Of the three independent variables, the highest explanatory power belongs to the size variable. This differs from the result of the previous analyses of cross-sectional data. The signs of these beta coefficients are negative and 'correct' for the size variable but positive and rather unexpected, on a priori grounds, for the other two dependent variables.

The beta coefficients of the relationship between the capital variable and total loans-to-total assets ratio is significant as it was in the previous analyses. The other two betas are not. Only the deposit mix variable deviates from expectation in its relationship with the total loans-to-total assets ratio. The sign of the beta coefficient of this relationship is negative. The capital variable explains most the variations in this dependent variable. In all aspects, these results are similar for the 'all banks' class in the previous analyses.

All the beta coefficients of the relationship between the independent variables and the ratio of agricultural loans-to-total loans are significant. Two of these betas (for the size and capital variables) are significant at the 5% level; the third at the 10% level. Whilst the deposit mix variable was the most of important explanatory variable in the previous analysis, the capital variable is in the present. The signs of the beta coefficients here are positive and 'correct' except in the most unexpected case of the deposit mix variable.

One only of the beta coefficients of the relationships

of the independent variables to the dependent variable - the ratio of manufacturing loans-to-total loans - is significant. It is that for the capital variable. The sign of the beta coefficient of the relationship of size variable to this dependent variable is positive as will be expected on a priori grounds. In the other cases, the signs are unexpectedly negative. The capital variable, as in two of the other three dependent variable cases considered already, is the most important explanatory variable of all the independent variables. In the previous analysis it was the size variable.

V

SUMMARY AND CONCLUDING REMARKS

The above analyses represent an attempt to examine the relationship between some selected commercial bank characteristics and their risk-accepting or risk-averting propensities. The explanatory variables are those quantifiable factors which on a priori grounds are thought most likely to influence the portfolio structuring decisions of banks. The dependent variables are those factors that are indicative of the attitudes of the bankers to risk.

It was found from these analyses that the selected explanatory variables are largely correlated to the dependent variables. The independent variables, however, did not explain a "sufficiently" large proportion of the variations in the dependent variables.

The beta coefficients of the relationship between the size variable and the ratio of current assets-to-total assets are positive for the 'all banks' and the indigenous banks groups. These indicate that the banks are risk shy even when their ability to be risk-accepting is increased. On the other

hand the foreign banks will tend to reduce their liquidity when their resource base widens. The coefficient of relationship of the deposit mix variable with the dependent variables supports the a priori reasoning that the less volatile the deposit base of banks, the less liquid or more risk-accepting they are likely to be. In general one can expect that a higher deposit mix will encourage Nigerian commercial banks to be less risk-averse. This expectation is proved right by the observed relationship in these analyses between the deposit mix and the ratio of total loans-to-total assets. But these results also question some a priori reasoning. The beta coefficients of the relationships between the size and capital variables and the ratio of total loans-to-total assets, for the 'all banks' These indicate that inand foreign banks groups are negative. creases in resources (size) and confidence (capital) do not make these banks more risk-accepting.

One of the most important inferences to be drawn from these analyses is that the greater the ability of banks in terms of increased resource base, less volatile deposit mix, and higher capital-to-deposit ratio, the less is the proportion of total loans going to agriculture. This can be gauged from the signs (negative) of the beta coefficients of the relationships between the independent variables and the ratio of agricultural loans-to-total loans. Though this is generally true for the entire banking system, the indigenous banks deviate from this general behaviour significantly. The foreign banks on the other hand, conform to the attitude observed for the system.

Total assets (or size) positively influence the banks' attitude to unsecured lending. On the other hand, the deposit mix 'exerts' negative influence on the ratio of unsecured loans-

to-total loans. The negative sign of the beta coefficient of the relationship between these variables can be interpreted to mean that the tendency for banks to make unsecured loans is negatively influenced by deposit volatility.

Deposit mix variable is inversely related to the ratio of manufacturing loans-to-total loans for all the three groups of banks. This again underlines the near irrelevance of the stability of deposits in the banks' decision to allocate loan resources to the manufacturing sector. The 'all banks' analysis reveals that the banking system is influenced in this decision by variations in the resource and capital bases of the institutions. The foreign banks as a group are not positively influenced, however, by any of the independent variables in he aggregate manufacturing lending decision. The size factor is the only one of the three explanatory variables that positively influences the indigenous banks in the aggregate manufacturing lending decision.

The mean ratios of the dependent variables are relatively close for the indigenous and foreign banks in all cases but one (see table II.3). Foreign banks with a mean current assets—to—total assets ratio of 23.75% put proportionately less of their assets in low—risk, low—yielding assets than the indigenous banks with 27.73%. This position is reversed, however, when we consider the ratio of total loans—to—total assets. The indigenous banks have a mean ratio of 49.64% whilst the foreign banks have 35.75%. These indicate that proportionately more of the resources of the indigenous banks are in high risk assets than are those of the foreign banks. Put differently, the indigenous banks are more risk—accepting. Although the foreign banks prudently avoid excess liquidity by keeping as low

Table Ii.3 The means and standard deviations of the independent and dependent variables for the cross-section analysis

_	Variables		Mean	Standard deviation
1	Total assets:	All banks Foreign banks Indigenous banks	590.6315 1,010.875 285.000	760.4068 1,018.317 253.842
2	Time plus savings deposits: Total deposits	All banks Foreign banks Indigenous banks	52.947 56.375 50.454	10.7624 13.1577 8.0381
3	Capital funds: Total deposits	All banks Foreign banks Indigenous banks	7.3157 8.0 6.8181	5.0886 5.20988 4.9509
4	Current assets: Total assets	All banks Foreign banks Indigenous banks	26.05 23.75 27.73	9.406 8.779 9.854
5	Total loans:	All banks Foreign banks Indigenous banks	43.79 35.75 49.64	13.411 8.481 13.553
6	Agricultural loans: Total loans	All banks Foreign banks Indigenous banks	6.740 4.875 8.09	3.338 2.5877 3.260
7	Unsecured loans Total loans	All banks Foreign banks Indigenous banks	8.22 9.75 7.10	5.551 7.066 4.301
8	Manufacturing loans Total loans	All banks Foreign banks Indigenous banks	27.58 36.25 21.27	11.740 9.562 8.781

Source: Computer print-out

current assets-to-total assets ratios as practicable, they shy away from risk by keeping a low loans-to-total assets ratio as well.

much as the foreign banks to the agricultural sector; the mean ratios being 8.09 and 4.88%, respectively. This may be a reflection of the level of the groups' commitments to the development of this important sector. It may also be the result of the 'nearness' of the indigenous banks to the farming community. Whilst their nearness to and knowledge of, the farming ommunity provides confidence for this risky investment, the commitment to aid this sector enhances the propensity to do so.

Overall only 8.22% of the lending by Nigerian commercial banks is unsecured. The foreign banks with a 9.75% ratio do more unsecured lending than the 'average' bank and the indigenous bank with 7.1%. This result may reflect the kinds of customers the two groups of banks deal with mainly. The customers of the foreign banks are invariably the big foreign multinational subsidiaries. With an eye on the total resources of the borrower, it is easier to make unsecured lending. Additionally these big foreign firms' links with household names abroad provide further intangible but invaluable security. This is because it is expected that support will 'normally' come from these mother firms in times of need.

Even with indigenisation, the manufacturing sector is still largely foreign. This may well explain the lending operations of the two banking groups to this sector. As can be observed from their mean ratios, the foreign banks lend proportionately more to this sector than do the indigenous banks.

The analysis of the time series data supports substantially

the results of the cross-sectional data. Three of the four R²s are significant at the 5 or 10% levels. However, the smallness of the R²s indicates, as in the previous analysis, that not a large proportion of the variations in the dependent variables are explained by the selected independent variables.

Undoubtedly, the above analyses have not provided all the explanations for the risk attitude of Nigerian bankers. They have, however, been able to indicate pointedly some of the factors influencing these attitudes. Some measures of the influences exerted on these bankers' attitudes to risk by the selected explanatory variables have also been revealed. For the purposes of lending performance evaluation, policy and decision-making some valuable parameters have been identified. All these, more importantly, should provide a viable plank for further research in this important aspect of Nigerian banking and finance.

The results of these analyses are laden with potential policy implications. The clear indication is that Nigerian commercial bankers are risk-shy. Given the place of commercial banks in the Nigerian financial system, the fact that the country cannot accommodate an unaggressive and risk-averse banking system can not be overemphasised. Whilst co-operation is needed from the borrowers and infrastructural support and a 'conducive' operating environment from the authorities, there is need for significant re-orientation towards development-consciousness from the banks. The business environment in a developing economy is a growing, and risky one and the banker must be willing to accept risk and deviate from orthodoxy in order to operate efficiently therein.

APPENDIX III A STATISTICAL ANALYSIS OF THE "LIQUIDITY PREFERENCE" OF NIGERIAN COMMERCIAL BANKERS

1. INTRODUCTION

The size of a bank's loan portfolio depends on the aggregate resource allocation to the lending function as one of the activities competing for the total bank resource. More importantly, the overall composition of the assets portfolio reflects the 'attitude' of bank management. One important aspect of this attitude, that has significant implications for the profitability, safety and the efficiency of the bank, is what might be called their "liquidity preference".

It has been suggested that "the whole rationale of allocative and efficiency features of the financial intermediation process hinges critically on the asset management policies of the financial intermediaries in less developed countries." (Bhatia and Khatkhate, 1975, p. 135). Thus banks at all times have the unenviable task of striving to strike a balance between profitability on the one hand and liquidity and safety on the other in the course of portfolio management. A banker with very high preference for liquidity, however, forgoes profits through this attitude. In a developing economy, even more is lost by this attitude - the economic process is slowed down if not On the other hand, "when a bank makes a loan outrightly impeded. to an individual or business in its community, it is helping the community to prosper and grow and this prosperity and growth cannot but help the bank prosper too." (Nadler, 1979, p. 75). In default, the banker "would be derelict in carrying out the principal function of commercial banking - namely, the

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'production of loans" (Macesich, 1965, pp. 96-97).

In this chapter both the time series and cross sectional data of the asset portfolios of Nigerian commercial banks are analysed for the purpose of examining the hypothesis that Nigerian bankers have a high preference for liquidity with consequent effect on their contribution to economic development.

The next section presents the theoretical framework of this analysis, the methodology and the data. Section 3 discusses the results of the analyses. Section 4 summarizes the foregoing and notes the implications of the results for the Nigerian economy.

2. THEORETICAL FRAMEWORK, METHODOLOGY AND DATA

"Liquidity in a bank and elsewhere may be defined as the possession of those assets, which can be converted into cash easily, quickly and without significant loss." (Macesich, 1965, p. 97). As noted above, the issue of liquidity is of central importance to bank management. The banker needs to be sufficiently liquid in order to meet the anticipated and sometimes unanticipated deposit withdrawals and loan demands of his customers and the community in general. In practice the secondary reserve element of the investment account is usually employed for this task. This is so because, ideally the resources put into cash, and balances held with the central bank and other banks are those optimum for the day-to-day operations (including the requirements of the monetary authority). On the other hand, the resources allocated to loans cannot be relied upon in emergency as their conversion will be considered too costly, particularly, in terms of customer relations. As Nadler (1979, p. . 75) states:

"....the investments of an aggressive bank other than the investment part of secondary reserves are truly considered a residual account, receiving funds only when loan demands are not strong enough to use up all the money not tied up in reserves."

From experience and aided by meticulous forecasting, a banker should be able to predict the levels of liquidity appropriate for the needs of depositors and loan customers. Excess liquidity will, therefore, reflect misallocation of resources and inefficient management, with unpleasant consequences for both the profitability of the bank and the development and growth of its community.

"The relative mixture of assets in a bank's portfolio goes far in indicating the bank's liquidity preference and degree of risk aversion." (Hooker, Jr, 1970, p. 12). Thus in this analysis, the 'liquidity preference' of the commercial bankers was measured in terms of the allocation of resources to "cash", "cash items", "balances with other banks", and "treasury securities". The appropriateness of this was considered to derive from the fact that these assets represent the list of "eligible" assets for the purpose of calculating the liquidity ratio of the Central Bank of Nigeria (CBN).

Given the "narrowness" of the Nigerian capital market, loans and advances are the main long-term investment assets available to the commercial bankers. The higher, therefore, the ratio of loans-to-total assets, certeris paribus, the less conservative and the more efficient and aggressive these bankers. For the above-stated hypothesis to stand it should be observable that the Nigerian bankers in structuring their assets portfolios give undeserved attention to liquidity. In other words, one should expect to see from these analyses that the bankers hold

a significantly high proportion of their resources in the form of the above listed liquid assets. Alternatively for it to be rejected one should expect the obverse of the 'liquidity preference' attitude to be profound, that is to find a comparatively high proportion of the assets of the banks in loans and advances.

In testing the hypothesis an attempt was made to examine whether there are differences in the allocation of resources to the available assets by bankers of various categories and by the banking system as an entity over time. More explicitly stated the null hypotheses are that

- "there are no significant differences in the liquidity preference of banks as defined by the structure of their assets with reference to
 - (a) the banking system over-time,
 - (b) all individual banks in the system,(c) all foreign banks,

 - (d) all indigenous banks, and
 - (e) banks of varying deposit sizes."

The statistical method of analysis used in this exercise was the analysis of variance. The choice of the method of analysis has been dictated largely by the 'poorness' of the data, in particular, the lack of sufficient replicates.

The data used for these analyses were basically of two The first consists of cross-sectional data for the entire banking system (19 individual banks) for the year end 1979; while the second consists of aggregate time series data for the period 1960-1978 (a total of 19 years).

Again, the 'quality' of the data defined the criterion of classification used in the analysis, namely:

all banks (cross-section); all banks (time-series); type of bank (foreign); type of bank (indigenous); and deposit size.

(See table III-1). The categorization of assets used here is similar to CBN's except that an item "other advances" (which are mainly investments in long-term government loan stocks) has been merged with the "other assets". (see table III-4). These are, namely,

Cash and cash items
Balance with other banks
Treasury securities
Loans and advances
Other assets

3. THE RESULTS

variance. With P = 0.05 and for n_1 = 4 and n_2 = 90, 50, 35 or 20, the critical F-values are, respectively, 2.47, 2.56, 2.64 and 2.87; thus all the obtained F-values of this analysis are significant. Generally, therefore, it can be stated that there are differences among banks in their allocation of resources to different categories of assets. Similarly for the banking system there are temporal differences in its resource allocation.

The F-value for the 'all banks' (time series) is 51.5
This indicates that there have occurred significant changes in the way all bankers distributed their assets between 1960 and 1978. It is observable that when banks are classified by deposit size, there also exist significant differences among them in the way they allocate their resources over available assets. That is to say that banks of varying sizes allocate resources to different categories of assets in different ways. The F-value for the 'all banks' (cross-section) classification

Table III-l Nigerian bankers' "liquidity preference": analysis of variance

C	riterion of classification	Degrees of freedom	Sum of squares	Mean square	F
ı	All banks (cross-section)	94 4 90	29,698.2 19,766.2 9,931.9	4,942.0 110.4	44.8
II	All banks (time series)	94 · 4 90	25,114.1	4,370.0	51.5
II	Type of bank (indigenous	54 4 50	20,120.3 14,306.7 5,813.6	3,5770.0 116.3	30.8
IV	Type of bank (foreign)	39 4 35	9,577.9 7,597.8 1,980.1	1,899.0 56.6	33.6
V	Deposit size	24 4 20	5,578.3 5,026.8 551.4	1,257.0 27.6	45.6

Table III-2 Individual commercial banks' portfolio of assets:1979 (in percentages)

_		Cash &	Balance		Loans 8		Total
Banks		cash	with other		advan-	assets	assets
		items	banks	ies	ces		
1		7.5	10.2	0.1	FO 2		100
<u> </u>		4.0	13.0	9.1	50.3	22.9	100
2 3 4		9.0		0.0	70.0	13.0	100
3			8.5	14.8	43.2	24.5	100
4		5.2	12.2	1.6	67.2	. 13.8	100
5	•	4.0	10.1	11.8	46.6	27.5	100
6		6.6	19.8	11.0	37.1	25.5	100
7		2.7	14.2	12.4	38.7	32.0	100
8		2.4	10.9	0.0	26.4	60.3	100
9		2.7	44.5	1.3	47.4	4.1	100
10		16.7	17.1	1.2	50.2	14.8	100
10	•	10.7	1/0 1	1.2	50.2	14.0	100
11		7.2	13.2	0.0	69.6	10.0	100
12		18.7	7.0	13.0	43.6	17.7	100
13		3.0	8.6	4.8	48.3	35.3	100
14		5.0	4.0	21.8	33.8	35.4	100
15		1.0	18.9	6.5	35.4	38.2	100
16		2.0	17.9	12.9	20.0	46.3	
17		1.5	4.0	12.5	20.9	46.3	100
18		4.0	19.5		31.0	51.0	100
19		5.4		2.7	32.3	41.5	100
13		3.4	9.3	9.3	41.1	34.9	100
					•		
1 banks	Mean (%)	5.71	13.84	7.72	43.85	28.88	
(1-19)	S.D. (%)	(4.62)	(8.64)		(13.37)	(14.50)	
reign		, - - ,	, ,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,,	,,	
banks	Mean (%)	5.08	11.15	10.44	35.80	37.54	
(12-19)	S.D. (%)	(5.73)	(6.60)	(6.03)	(8.51)	(9.89)	•
•	, ,,,	,,	,000,	(300)	, 3, 52,	(300)	
digenous banks	Mean (%)	6.18	15.79	5 .7 5	49 . 70	22.58	
1-11)	S.D. (%)	(4.13)	(10.06)		(14.12)	(15.09)	
	ひ。ひ。 しもり	(キ・エン)	(10.00)	、フ・フフ)	14.14/	(TD.O2)	

Source: Computed from Appendix table VII-1

Table III-3 Average percentage distribution of assets on bank size for the Nigerian banking system: 1979

Bank size category*	and	Relative frequen- cy	Cash & cash items	Balance with other banks	Treasury secur- ities	Loans and advances	Other assets
1		.16	8.40	5.00	15.77	36.13	34.70
2		.06	2.70	14.20	12.40	38.70	32.00
3		.16	5.23	-14.10	5.20	51 . 77	25.30
4		.31	5.53	11.90	6.92	51.15	24.45
5		.31	5.30	20.00	5.00	37.30	32.42
Total		1.00					

^{*} Bank size category:

- 1 = \mathbb{H}1,000 million and above in deposits
- 2 = %500-1,000 million in deposits
- 3 = 300-500 million in deposits
- 4 = N100-300 million in deposits
- 5 = %100 million and less in deposits

Table III-4 Nigerian commercial banking system portfolio of assets: 1960-1978 (in percentages)

Year (December)	Cash & cash items	Balance . with other banks	Treasury secur- ities	Loans and advances	Other assets	Total assets	
1960.	8.0	20.5	1.5	47.8	22.2	1∞	
1961	7.5	25.6	2.0	40.7	24.2	100	
1962	8.6	17.1	2.3	54.0	18.0	100	
1963	7.2	19.3	0.7	55.0	17.8	100	
1964	7.3	10.5	2.7	61.8	17.7	100	
1065	5.9	11.7	3.0	62.2	17.2	100	•
1965	5.9	11.5	3.0	62 . 2	17.2	100	
1966	5.6		4.6	60.5	17.5	100	
1967		8.3	6.3	61.2	18.6	100	
1968	4.8	2.0	35.0	40.3	17.9	100	
1969	4.9	1.9	44.0	31.8	17.4	100	
· 1970	6.5	1.8	43.4	30.5	17.8	100	
1971	4.9	3.0	22.8	39.3	30.0	100	
1972	5.3	2.2	26.2	43.1	23.2	100	
1973	5.7	3.4	21.5	42.5	26.9	100	
1974	11.8	3.9	26.9	33.4	24.0	100	
1975	19.2	4.3	18.4	35.7	22.4	100	
1976	17.2	4.6	16.5	33.3	28.4	100	
1977	10.0	5.2	13.5	36.0	35.3	100	
1978	8.1	4.3	10.5	45.1	32.0	100	

Source: Adapted from Twenty Years of Central Banking in Nigeria (Lagos Nigeria, Research Department, Central Bank of Nigeria, 1979) p.12

is 44.8. The size of this F-value evidences the fact that when banks are considered individually rather than in groups by deposit size or as an entity, they differ significantly in the way they invest their resources. Considering either the indigenous or foreign banks as a group, we find there are differences in their use of resources for financial assets. This is evidenced by the large values of the F-ratios resulting from this analysis: 30.8 and 33.6, respectively, for the indigenous and foreign banks. In this respect there is evidence here that neither the indigenous banks nor the foreign banks are homogenous in their behaviour.

The above results are useful to the extent that one can infer from them some evidence, of variations in bankers' rortfolios structuring approaches. One, however, should be interested in other relevant issues such as the direction of these changes over time. Have the banks become more conservative or aggressive, for instance? Tables III-2, III-3 and III-4 have been presented to provide some answers to this kind of question. A comparison of the means in table III-2 shows that indigenous banks on the average allocated a higher proportion of their total resources (49.70%) to loans and advances than their foreign counterparts with an average of 35.80% during 1979. Foreign banks invested a total of 26.67% of their resources in liquid assets whilst their indigenous opposites allocated 27.72% to these assets. Although there appears to be little difference in these percentage allocations, a breakdown reveals more variations between these groups of banks. The indigenous banks carry relatively higher proportions of cash and balances than the foreign banks. These might be explained by the size of the indigenous banks and the limited distribution of their

branches and nearness to money centres, which leads to inevitable holding of liquidity that makes individual branches self-sufficient and independent of the system, in a way.

The difference in the 'liquidity preference' attitudes of these groups of banks is probably more clearly manifest in their holdings of treasury securities. As noted above, any excess liquidity not immediately required to meet the liquidity ratio prescription of the CBN, can either be put in treasury securities or in loans. The risk-shy banker will, therefore, hold excesses of these securities rather than venture aggressively into the lo ns market. During 1979, the foreign banks invested nearly twice as large a percentage of their total assets in treasury securities, as did their indigenous counterparts (see table III-2).

The rest of the differences in the percentage allocations to loans and advances by foreign and indigenous banks not accounted for by their allocations to liquid assets is made up in the category of 'other assets'. Indigenous banks had 22.58% of their assets under this heading in 1979 and the foreign banks had 37.54%. Apparently what is not invested by foreign banks in loans and advances is put in loan stocks of the Federal Government which are considerably more liquid than loans. This is because of the rediscounting facility for these assets available at the CBN. It can be argued, therefore, that the foreign banks prefer, much more than the indigenous banks, the low-yielding liquid assets to the highly remunerative but less liquid loans and advances.

In tableIII-3 banks are grouped according to the size of their deposits in a descending order of magnitude. Although it was shown in the analysis of variance that these groups differ in resource allocation, not much more was learnt. Are the big banks more liquidity-conscious than the small ones? The first two big

classes of banks, can be seen to invest an average of 37% of their resources in loans and advances. This compares poorly with the next two groups which allocate to the same category of assets 51% of their resources. Up till this point, it could be considered, albeit prematurely, that the smaller the size of banks the less the bankers' preference for liquidity. This would have been erroneous, for the smallest sized group of banks with 37.30% of their resources in loans and advances are more akin to the biggest bank-size groups in their investment behaviour. However, if the investment of resources in loans and advances is a measure of the efficiency of banking operations, as indeed it is generally acknowledged to be, neither the very big nor the very small banks are efficient going by the evidence here revealed. Firally it is noteworthy that the biggest sized banks allocate comparatively more resources to 'cash' and 'cash items' and 'treasury securities' than the other classes of banks. is contrary to a priori expectation in the light of the experienced management at their disposal.

It is observable from the results of the analysis of variance that, over time, the 'liquidity preference' attitude of Nigerian bankers has changed. An examination of table III-4 sheds some light on the direction of the changes. At the beginning of the review period, 47.8% of the banking system's assets were in loans and advances. Except for the drop in 1961, there was a general upward trend in this percentage allocation up till 1967 when 61.2% was recorded. Thereafter, a decline commenced reaching a low of 30.5% in 1970. Between 1971 and 1978, resource allocation to this asset averaged between 33.3% in 1976 and 45.1% in 1978. The banks may undoubtedly be excused for their poor performance on this score during the 1967-70 civil war. At this time, the 'war

sector' was the priority sector and the economy's resources were allocated first thereto via the instruments of treasury securities. But the banks have failed in their function of 'producing' loans for economic development generally during the 1960-1978 period as evidenced here. To that extent they have been inefficient in their operations. It is to be expected that bankers become 'wiser', gain more expertise and experience in loan granting in an environment with the passage of time. These acquired qualities should enable banks to become more 'efficient' in their use of resources. The available evidence in table III-4 ho ever, does not appear to support this assumption. Corroborative evidence is also available in table III-5 where it can be observed that the commercial banks have had excess liquidity during most of the last two decades. In other words, these banks have not performed up to realistic expectations. (See also table IV-1).

There have been fluctuations in resource allocation to treasury securities between 1960 and 1978. From 1.5% in 1960 it reached a peak of 44% in 1969. By 1978 year end it had fallen as low as 10.5%. In view of the fact that this asset is the 'fountain' and 'reservoir' of liquidity for banks, some remarks are in order here. The size of allocations to this asset in the early 1960s was dictated by the size of the issues available for sale. As can be gauged from tableIII.4 there were noticeable increases in total resource allocation to this asset during the war years, when treasury securities were employed to mobilize funds for war financing. However, the end of the civil war in 1970 coincided with the opening up of new oil wells (as well as old ones) and a huge inflow of 'petro-naira' into the government purse. This soon turned the government from a net debtor to a net creditor to the banking system. It also inevitably led to the

Table III-5 Aggregate liquidity ratios of commercial banks (1) (in per cent)

Year	Ratio	Excess (2)
1966	38.4	13.4
1967	30.8	5.8
1968	72.8	47.8
1969	91.7	66.7
. 1970	89.5	64.5
1370		
1971	55.9	30.9
1972	58.0	33.0
1973	47.3	22.3
1974	65.4	40.4
1975	56.4	31.4
1919	30.4	
1976	47.7	22.7
1977	38.2	13.2
1978	38.4	13.4
1979	45.5	20.5
T2 / 2	43.3	20.3
		•

Source: Central Bank of Nigeria "Economic and Financial Review" (various issues)

- (1) Computed according to statutory requirements
- (2) Excess over the statutory requirement of 25%

"thinning" down of the treasury securities market. The observed decline in the percentage allocations of resources to this asset since 1971 can thus be seen in their true perspective - as not the result of the bankers' willingness to 'eschew' liquidity but that of unavailability of these assets. This general attitude was noted by the CBN in its 1979 Annual Report (p. 35) thus:

[&]quot;.... the upsurge in commercial bank liquidity in 1979 reflected a reduced pace of expansion in loans and advances, the suspension of new issues of stabilization securities since 1st April and the subsequent redemption of the banks' holdings of these securities."

4. SUMMARY AND CONCLUDING REMARKS

It appears clear from the results of the above analyses that Nigerian commercial bankers differ in their preference for liquidity as manifested in their resource allocation to different categories of assets over time. By itself, this is not very important. What seems more important is that they have become more and more liquidity-oriented. That is to say that they prefer the orthodox, self-liquidating type of assets to medium-and-long-term loans and advances even though the latter have higher margins of profit, and are more beneficial to the community. The institutions have not, therefore, made the most efficient use of their resources.

Although Nigeria has had her own share of the traumatic experience of bank failures in the past (Ejiofor, 1977), a claim that the present unaggressive, and 'liquidity preference' attitude of the bankers might be due to either the 'shock' and/or 'inertia' effects of these experiences cannot be easily sustained. After all, few, if any, of today's bankers were a part of these experiences of the 1940s and 50s.

The bankers' attitude cannot be explained by a lack of loan demand either. The Nigerian economy has been truly "booming" particularly since the end of the civil war in 1970. The tremendous growth in the assets of banks bears clear testimony to this (see table III-4). In this kind of situation, when the economy is on the upswing it is unlikely that there can be a shortage of loan demand. Besides, however, the findings of Friedman and Schwatz (1963) appear to refute the hypothesis "that shifts in relative credit demands of various classes of borrowers can explain the changes in the relative composition of bank earning asset portfolios (Morrison, 1967, p. 115).

With the commercial banks constituting the main financial intermediaries in Nigeria, the implications of these revealed "liquidity preference" attitudes of the bankers must be obvious. These institutions hold the key to the economy's development and growth. And given the onerous responsibility their position imposes on them, the bankers cannot fail in their functions (most importantly-lending) without inviting unpalatable intervention from the authorities. For these bankers to be efficient in their lending operations in particular, and resource use in general, they must improve on their 'liquidity preference' attitude. They must become more forward looking, aggressive and risk-accepting.

APPENDIX IVA

QUESTIONNAIRES

(20)	loans and advances from the bank? e.g. rate of interest, guarantee, compensating balance, etc.
	Which of these do you find most difficult to meet or even repugnant?
(21)	Have you ever failed to get a loan because of a lack of the right quality and/or quantity of collateral? What kinds of securities do you have to offer for a loan but which are unacceptable to the bank?
	What amount of loan and for what purpose?
(22)	765
(23)	Have you ever tried to obtain a loan under the scheme?
	Did you succeed?
	If not, what was the cause of the failure?
(24)	to farmers of all grades? EVALUATION OF THEIR FARMS
	AND PREBUCTS.
	Enterprise statistics Name: J.O.S. & Sons
	Total Assets/Liabilities (as per 1978 Balance sheet)
	Type of business: FARMING & CIVIL ENGINEERING.

PART I: LOAN PROPOSAL I

THE PEASANT FARMER

Mr Sanni Fasasi is a farmer at Ikorodu. He is the son of a farmer and has been farming with his father all his life until the father died ten years ago. Sanni, who is now 45 has no education at all. He is, however, a successful farmer by local standards having built himself a house and acquired a fleet of 5 taxi cabs out of the proceeds of his fresh tomato and vegetable farming. Up till now he has been doing his farm work single-handedly as he has turned his children to UPE schools.

In view of the growing demand for his produce and urged on by the cheering news and prospects of the Agricultural Credit Guarantee Scheme, he has approached your bank for an advance of %5,000. This loan is to be used for the purposes of acquiring more land (%3,000); acquiring farm tools and inputs such as fertilizers (%1,500) and hiring labour (%500).

Mr Fasasi has never held a bank account. In addition to the house and taxi cabs, the land on which he farms belongs to him by inheritance although this right is unregistered as there is no conveyance.

QUESTIONS

(1)	Would you make the type of loan requested by this applicant?
(2)	Would you make any other type of loan to the applicant? If yes, what type?
	If you answer \cdot NO to questions 1 and 2, please go directly to question 7, omitting questions 3 - 6.
(3)	What is the maximum amount you would lend?
(4)	What is the maximum maturity you would require?
(5)	What terms would you require on the loans
•	(a) Interest Rate

	(b)	Repayment Schedule		
	(c)	Unsecured or Secured		
		If secured, type of collateral		
	(d)	Compensating Balance		
	(e)	Special charges		
	(f)	Personal guarantee		
	(g)	Others		
(6)	requi	additional condition not mention re for ensuring the security and a position on the board of dire	l safety of th	
(7)	of fa	ate the relative extent to which ctors influenced your decision trant a loan to the applicant. Procentages totalling 100% for all le:	o say you wou lease estimat	ld or would e in terms
	(b) T (c) T (d) T	he applicant's financial position he applicant's management he potential growth of the industry he potential place of the applicant's usiness in the community	10% 5% 5% 10%	
	(e) E	stablished bank loan policies he bank's financial position ecurity offered	20% 10% 40%	
		Total	100%	100%

LOAN PROPOSAL II

THE SMALL-SCALE MANUFACTURER

Mr Christopher Adebiyi is the sole proprietor of Alowonle Trading Company, a wholesaler of candles. He has been a customer of your branch for over 20 years. His business, as far as the account can reflect, has been growing steadily over the recent past recording an average annual turnover of M25,000 in the last 3 years. Like most Nigerian traders of his class he has not ever asked his bank for a loan all these years of his business life, for whatever reason.

In the last year or so he has been finding it increasingly difficult to meet the demands of his cusomers for supplies. He approaches your bank with a proposal involving an investment of N50,000 for the establishment of a small-scale plant for the production of candles and having prospect for future expansion that could quadruple this initial size. From his personal savings and loans from relatives, half of this sum could be raised. He will want your bank to finance the remaining half of N25,000.00.

The production process requires no skills and can be undertaken by operators after only a few days induction.

CUESTIONS

(1)	Would	d you make the type of loan requested by this applicant?
(2)		d you make any other type of loan to the applicant? If what type?
		ou answer NO to questions 1 and 2, please go directly to tion 7, omitting questions 3 - 6.
(3)	What	is the maximum amount you would lend?
(4)	What	is the maximum maturity you would require?
(5)	What	terms would you require on the loans
	(a)	Interest Rate
	(b)	Repayment Schedule

	(c)	Unsecured or Secured		
		If secured, type of collateral		
	(đ)	Compensating Balance	•	% of loan
	(e)	Special charges		
	(f)	Personal guarantee		•
	(g)	Others		
(6)	for	additional condition not mention ensuring the security and safety tion on the board of directors).	ned above wo	n (e.g. a
(7)	of f	mate the relative extent to which actors influenced your decision to grant a loan to the applicant. For ercentages totalling 100% for alluple:	o say you v lease estin	would or would mate in terms
	(a) (b) (c) (d) (e) (f) (g)	The applicant's financial position The applicant's management The potential growth of the industry The potential place of the applicant's business in the community Established bank loan policies The bank's financial position Security offered	10% 5% 5% 10% 20% 10% 40%	
		Total	100%	100%

LOAN PROPOSAL III

THE INDUSTRIAL FARMER

Nigerian Agricola Limited is a mixed farming private company. It was established by Mr Solomon Johnson, an alien, ten years ago, but to meet the requirements of the 1977 Indigenisation Decree, the company has recently gone public. The founder of the farming business, Mr Johnson, is an agriculture graduate. He has in the

last few years, through prudent ploughing back of profit, expanded the business. To cope with the increased business he employed Dr Doyin Aileme, a veterinary surgeon, two years ago; Miss Funlola Sokunbi, an agricultural economist and Mr Robinson Nwankwo, an agriculturist, a year ago.

Below is the company's latest five year Financial Summary. The company is applying for a loan of \$100,000 for the purchase of fixed assets including machinery, and land and building. Mr Johnson reckons the company will, from its resources, be able to meet the cost of increased need for working capital.

FIVE	YEAR	FINANCIAL	SUMMARY	1975	-	1979
------	------	-----------	---------	------	---	------

Year ended 31st MARCH	1979	1978	1977	1976	1975
	≌'000	⊭'000	№'000	≌'000	₩'000
Balance Sheet					
Cash Debtors Stock Office furniture Plant and Machinery Land and Buildings	2,800	3,000	1,400	1,300	500
	3,900	4,000	3,500	2,900	2,000
	4,000	4,000	4,200	3,400	3,100
	2,250	2,500	1,000	1,100	1,200
	7,000	8,000	4,000	4,500	5,000
	5,300	4,200	4,200	4,200	4,200
Total Assets	25,250	25,700	18,300	17,400	15,000
Shareholders funds	19,900	17,600	13,500	12,000	10,000
Current Liabilities	5,350	8,100	4,800	5,400	
	25,250	25,700	18,300	17,400	15,000
Profit and Loss Account	_				
Gross Earnings	19,000	20,000	16,000	12,000	10,000
Net Earnings (After tax)	4,300	4,700	4,000	4,000	3,000
Dividends Paid	2,000	2,600	2,500	2,000	1,000
Transfer to Reserve	2,300	2,100	1,500	2,000	2,000

QUESTIONS

- (1) Would you make the type of loan requested by this applicant?
- (2) Would you make any other type of loan to the applicant? If yes, what type?

If you answer NO to questions 1 and 2, please go directly to question 7, omitting questions 3 - ϵ .

What	is the maximum amount you would lend?
	is the maximum maturity you would require?
What	terms would you require on the loans Interest Rate
(b)	Repayment Schedule
(c)	Unsecured or Secured .
	If secured, type of collateral
(b)	Compensating Balance % of loan
(e)	Special charges
(f)	Personal guarantee
(g)	Others
for e	additional condition not mentioned above would you require ensuring the security and safety of the loan (e.g. a tion on the board of directors)
of fa	nate the relative extent to which the following categories actors influenced your decision to say you would or would grant a loan to the applicant. Please estimate in terms ercentages totalling 100% for all categories. For an ole:

(a)	The applicant's financial position	10%	
(b)	The applicant's management	5%	
(c)	The potential growth of the industry	5%	
(d)	The potential place of the applicant's	}	
	business in the community	10%	
(e)	Established bank loan policies	20%	
(f)	The bank's financial position	10%	
(g)	Security offered	40%	
	Total	100%	100%
		===	

LOAN PROPOSAL IV

NUTS AND BOLTS (NIGERIA) LIMITED

Nuts and Bolts (Nigeria) Ltd was incorporated as a limited liability company in January, 1978. It is engaged in the manufacture of nuts and bolts for use in the car assembly industry. Presently its small factory employs a labour force of 60 semiskilled workers. The directors of the company are a group of 3 friends, former colleagues and graduates of the Yaba College of Technology. Mr Josiah Iyamu, a professional engineer, is the chief executive with responsibility for overall management and administration; Mr Christian Onwufuju, also an engineer is the Technical Works Director; and Malam Sule Mohammed, a Cost and Management accountant, is the financial and sales Director.

The company's first two years of operations can be described as successful. The directors are of the view that their present scale of operation can be expanded to great advantage. They are, therefore, proposing a rather ambitious investment of \$250,000. They are looking forward to raising this sum from three sources - \$100,000 from the issue of new share capital; \$100,000 from the Nigerian Industrial Development Bank (NIDB); and \$50,000 from your bank. The sum of \$200,000 is what is estimated to be the cost of fixed assets that will include extension to their existing factory and the cost of plant and machinery and office furniture. The advance from your bank is required in the form of an overdraft and will be employed to meet the needs of increased working capital.

The financial statements of the company for the first two full years of operation is presented below:

	FINANCIAL STATEMENTS SUM	MARY FOR 1978 &	1979
Year Ende	ed 31st DECEMBER	1978 .₩'000	1979 ₩'000
Balance S	Sheet		
Cash Debtors Stock Office Furn Plant and B	Machinery	10,000 9,000 4,000 5,000 66,000 22,000	14,000 12,000 6,000 4,500 60,000 22,000
		116,000	118,500
Shareholder Other Liabi		60,000 56,000	68,500 50,000
		116,000	118,500
Profit and	Loss Account		
Gross Earning Net Earning Dividends P Transfer to	rs (After Tax) Paid	130,000 20,000 14,000 6,000	155,000 23,500 15,000 8,500
	QUESTIC	ons	
(1) Would	d you make the type of loan		his applicant?
	d you make any other type o what type?	of loan to the a	pplicant? If
If yo	ou answer NO to questions laion 7, omitting questions	and 2, please	
•	is the maximum amount you		
(4) What	is the maximum maturity you	u would require?	?
(5) What	terms would you require on Interest Rate		
(a)	Interest Rate		
(b)	Repayment Schedule		

(c) Unsecured or Secured

	If secured, type of c	collateral		
(d) Compensating Balance			
(e) Special charges			· % of loan
(:	f) Personal guarantee			
(4	g) Others			
(7) E:	hat additional condition equire for ensuring the se.g. a position on the bostimate the relative extef factors influenced your of grant a loan to the apf percentages totalling leample:	ecurity and ard of direction of direction to which plicant. Pl	safety of the tors) the following say you woul ease estimate	categories d or would in terms
(a (1) (c) (d) (d)	a) The applicant's financial of the applicant's management of the potential growth of the business in the community e) Established bank loan policity of the bank's financial position.	e industry applicant's	10% 5% 5% 10% 20% 10% 40%	
		Total	100%	100%

PART 2: INVESTMENT PREFERENCE TEST

Assume that you have, over the years, been able to accumulate cash savings of your own totalling \$100,000 and that you consider investing all of it now.

Please indicate how you would allocate this sum amongst the investments in each of the following sets of options, assuming that you do not intend to change your investment decisions for, at least, one year.

Show your apportionment by placing percentages in the space provided such that each set of 5 types of assets (A + B + C + D + E) add up to 100%

	Assets .	Distribution of N100,000 (in percentages)
SFT I	A. 4% Treasury Bills B. 4% Commercial Bank Deposit C. 7% Federal Government Development Loan Stock 1996 D. 9% Guiness Nigeria Ltd. Debentures 1990 E. BATA (Nigeria) Ltd. Ordinary Shares	•
•		100%
SET II	A. 4% Treasury Bills B. 4½% Treasury Certificates C. 7% Federal Government Development Loan Stock 1996 D. 9% Bentworth Finance (Nigeria) Ltd Debentures 1983 E. BEREC (Nigeria) Ltd Ordinary Shares	
	2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2	100%
SET III	A. 4% Treasury Bills B. 5% Federal Mortgage Bank Deposit C. 7% Federal Government Development Loan Stock 1996 D. 9% Thomas Wyatt Debentures 1981/92 E. ROAD (Nigeria) Ltd Ordinary Shares	
		100%
SET IV	A. 4% Treasury Bills B. 4½% Treasury Certificates C. 7% Federal Government Development Loan Stock 1996 D. 9% W.A. Portland Cement Debentures 1985/89 E. Taylor Woodrow Ordinary Shares	
		100%

PARI	3: STRUCTURED QUESTIONNAIRE INTERVIEW
(1)	•
(2)	How long have you been in your present branch?
(3)	How long, on the average, do you stay in a branch?
(4)	
(5)	What do you feel are the advantages and disadvantages of written loan policies?
(6)	In what ways does your bank market its loan services?
()	_
(8)	What in your view are the benefits to the bank and the clients of the marketing of lending services?
(9)	How often do your customers call for your expert advice?
	If not at all, why, do you think?
(16)	What kind of information do you give to your loan customer e.g
	 (a) knowledge of general economic conditions (b) knowledge of specific industry or business (c) advice on expansion, reconstruction etc. (d) advice on investment of surplus funds (e) credit information (f) others
(11)	In providing advisory services to clients, what support is provided by the Area, Regional and Head Office?

(12) Do you make business calls on new and potential customers?

(13)	What, do you think, is the usefulness of business calls by banks on their clients (new, old and potential)?
(14)	In what various ways do you get to know intimately your customers? e.g. contacts at social clubs, visits to work sites, etc.
(15)	Do you generally answer yes or no to loan applications for the agricultural or manufacturing sector? How do you help improve the credit-worthiness of loan proposals from these sub-sectors?
(16)	What kinds of collateral are routinely acceptable to the bank? Do customers offer other types not acceptable to you? (Please list).
(17)	Where securities are called for by the bank on a loan, what percentages of the loan do such securities usually represent?
(18)	What do you think are the main reasons for the bank's demand for securities on making a loan?
(19)	Should banks act as advisers to business?
(20)	are they supervised?
(21)	What, in your view, are the factors responsible for loan default by agricultural and manufacturing sector borrowers?
(22)	What are the special problems of lending to agriculture and manufacturing? How can these problems be solved and what should be the role of the bank in this exercise?
BRANC	CH STATISTICS
	Bank
(b) (c)	Branch Size (No. of staff)
e) f)	Percentage of agricultural sector accounts Percentage of agricultural sector accounts
g) ·	Types of services provided .
h) '	Method of business promotion

PRANCII	MANAGER	SIATISTICS	2		
			al Experience		
Financi	al Inst	itution	Location	Position	No. of Years
2					
(c) <u>Ot</u>	her Wor	king Experi	lences		·
Company	•	Location	Type of Business	Position	No. of Years
2 _:					
(d) <u>Ed</u>	ucation	(Post-seco	ondary)		
Institu	tion		Field of Study	Qualification	n From: To
2					

LOAN MANAGEMENT IN NIGERIAN COMMERCIAL BANKS

QUESTIONNAIRE I

- (1) Do you operate a planning department in your bank?
 When was it established and what is its existing strength?
- (2) How do you plan for your loans and advances given the central bank directives in this regard?

 And for how long ahead?
- (3) To what extent do bank officers outside the planning department participate in the planning exercise?
- (4) Does your bank operate its loan function with a written loan policy? Any loan policies specifically for agricultural and manufacturing lending?
- (5) To what extent do these policy guidelines aid or constrain lending at the operational levels of management?
- (6) What are the objectives of your bank's lending function?
- (7) What are the main kinds of information required for your lending function and activities of planning, control and operations?
- (8) How do you presently obtain this information?
- (9) Does lack of information ever constrain your lending activities?
- (10) To what extent, do you think, a central credit bureau would help improve the information resource of the banking system, and in particular your bank?
- (11) To what extent do commercial banks presently co-operate in the exchange of credit information?
- (12) Does your bank maintain customer credit files?
 What kinds of information are available therein?
- (13) How does management in your bank control the quality and the quantity of advances?

 And how successfully do you think?
- (14) How often do you review the credit limits of your credit officers, mainly the branch managers?
- (15) How long, on the average, do your branch managers stay working in a branch? Do they stay long enough, do you think, to get to know their customers?
- (16) What in your view, are the causes of loan losses particularly in the agricultural and manufacturing lending sectors?

- (17) Does your bank routinely review the loans and advances granted by its loan officers?

 What form does this review take?
- (18) What is your bank's defaulted loan collection procedure?

 How effective is this procedure in recovering defaulted loans as well as discouraging loan default by customers?
- (19) Does the bank request its lending officers to submit periodical age analysis of loans?

 Any other periodic reports on loan portfolio?
- (20) What kinds of lending related services do you offer your customers?
- (21) Do you have a Business Advisory Service Unit?
 When was it established and what is the staff strength?
- (22) What services does this unit offer especially to your agricultural and manufacturing sector customers?
- (23) Do your bank's business promotion officers (if any) make
 business calls on new and old customers?
 Of what benefit do you think, are these calls to the bank
 as well as to the customers?
- (24) Do customers call on your bank for advice? If yes, what types of advice?
- (25) What kinds of support services are provided by the bank's advisory services unit to the branch managers?
- (26) In what positive and concrete ways do you feel your bank helps to increase the volume of credit worthy projects in the economy?
- (27) In what ways does your bank help to improve the credit worthiness of your clients?
- (28) How does your bank positively market its loans and advances services especially to the important agricultural and manufacturing sectors?
- (29) What are the special problems of lending to the agricultural and manufacturing sectors?

 How could these problems be alleviated or completely eliminated and what, do you think, should be the role of the commercial banks in the exercise?

 How much more could you have lent, say, last year without these problems?
- (30) What do you think, should be the role of commercial banks in development financing?
- (31) Would more incentives from the government induce your bank to lend more to the strategic sectors of agriculture and manufacturing

 If yes, what kinds of incentives do you have in mind?

LOAN MANAGEMENT IN NIGERIAN COMMERCIAL BANKS

QUESTIONNAIRE 2

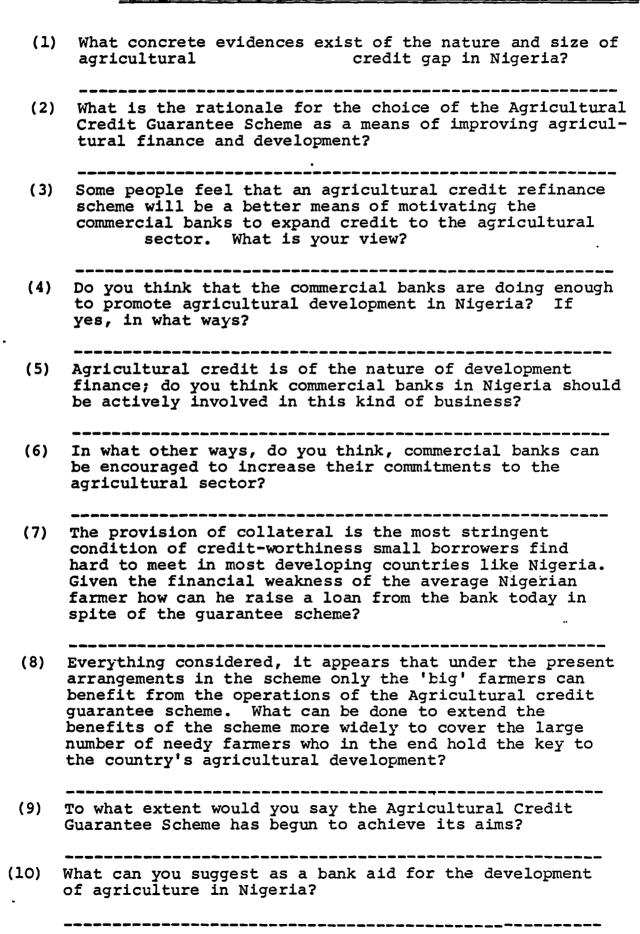
How many banks							
How long is you	ur avera	ge rela	ations	hip wi	th eac	h bank	:?
How do you eva want to do bus	luate, o iness?						
What considera change to a ba	tions in nk? (i)	fluence Do o	e your perati	choice	e of, vices	or dec play a	cision to
	(ii)	How a	about	credit	exten	ded to	_
	(1:11)	How	about	advice	recei	.ved?	
		How					
that it does n	ot reall	y matte	er whi	ch one	deals		
that it does n there are grea	ot reall t differ	y matte ences	er whi among	ch one banks?	deals	with	
Would you say that it does n there are grea What do you ha Would you say operate, satis can expect fro are not fully	ot reall t differ ve in mi that the factoril m them?	y matterences and? Niger y prov	er whi among ian Co ide al	ch one banks?	deals	with	or that
that it does n there are grea What do you ha Would you say operate, satis can expect fro are not fully	ot reall t differ ve in mi that the factoril m them? satisfac	nd? Niger Or cartery?	er whi among ian Co ide al n you	ch one banks?	deals	ks as ousines	they nows firms
that it does n there are grea What do you ha Would you say operate, satis can expect fro are not fully	ot reall t differ ve in mi that the factoril m them? satisfac	nd? Niger Or calletory?	er whi among ian Co ide al n you u seek	ch one banks?	deals	ks as busines areas	they nows firms
that it does n there are grea What do you ha Would you say operate, satis can expect fro are not fully	ot reall t differ ve in mi that the factoril m them? satisfac services (i)	nd? Niger Or calletory?	er whi among ian Co ide al n you u seek ation	ch one banks? mmerci l serv sugges from on gen	al barrices h	ks as ousines areas	they not stated that
that it does n there are grea What do you ha Would you say operate, satis can expect fro are not fully	ot reall t differ ve in mi that the factoril m them? satisfac services (i) (ii)	y matterences and? Niger y prov Or car tory? do yo Inform	er whi among ian Co ide al n you u seek ation ation ss?	ch one banks? mmercil serv sugges from on gen on spe	al barrices het some	aks as ousines areas	they not stated that
that it does n there are grea What do you ha Would you say operate, satis can expect fro	ot reall t differ ve in mi that the factoril m them? satisfac services (i) (ii)	nd? Niger y prov Or cal tory? do yo Inform busine	er whi among ian Co ide al n you u seek ation ation ss?	ch one banks? mmercil serv sugges from on gen on spe	deals al bar ices h t some your h eral e cific	aks as ousines areas	they not stated that

	(vi) Others (please list)
	u get all the services and advances you would like to from your bank(s)?
	t, what do you have in mind?
comme:	your business regularly or usually borrow money from trial banks?
	t, why not?
If ye	s, for what purpose and maturity?
Would	you say there is much difference in the lending ities of the various banks with particular regard to
	(i) access to credit .
	(ii) duration of credit
	(iii) charges for loans
	(iv) security required
	(v) time to negotiate
	(vi) compensatory balance
How do	oes your bank rate in your view, on the following factors in lending? (Please underline your assessment)
(i)	Access to credit - Liberal, or restrictive
(11)	Duration of credit - Too short or long enough
(111)	Charges for loan - Comparatively inexpensive or expensive
(iv)	Security required - Excessive or inexcessive
. (v)	Time to negotiate - Long or short

	(vi) Compensating balance - Liberal or restrictive
(12)	Before deciding on important financial matters, do you turn to your bankers for advice?
	If yes, do you get satisfactory response on such a request?
	If no, why?
(13)	In your opinion, is giving information and advice to business firms and individual customers an important function of commercial banks?
(14)	Some bank users feel that Nigerian banks are too conservative and safety minded, whilst others feel that the banks try to encourage expansion and innovation in enterprises. What do you think?
(15)	Would you say there is much competition or rivalry among banks in trying to get new business?
(16)	Have you ever had business promotion visits from your bankers and/or other bankers soliciting business?
(17)	Have you ever obtained funds from sources other than commercial banks such as through issues of additional share capital or Insurance Company?
	Why were these other sources chosen?
(18)	How beneficial to your firm are business calls by commercial banks?
(19)	development and growth?
	If not, what is?
(20)	What are the usual conditions under which your enterprise obtains loans and advances from the bank? e.g. rate of interest, guarantee, compensating balance, etc.
	Which of these do you find most difficult to meet or even repugnant?

21)	Have you ever failed to get a loan because of a lack of the right quality and/or quantity of collateral? What kinds of securities do you have to offer for a loan but which are unacceptable to the bank?
	What amount of loan and for what purpose?
	For agricultural businesses only
22)	Have you ever heard of the Agricultural Credit Guarantee Scheme?
23)	Have you ever tried to obtain a loan under the scheme?
	Did you succeed?
	If not, what was the cause of the failure?
24)	In what ways can the banks best make money more readily available to farmers of all grades?
	Enterprise statistics
	Name:
	Total Assets/Liabilities (as per 1978 Balance Sheet)
	Type of business:
	Bankers:

QUESTIONNAIRE RE AGRICULTURAL CREDIT GUARANTEE SCHEME



INVESTMENT PREFERENCE TEST

Department of Economics, University College of North Wale LL57 2DS Bangor North Wales, United Kingdom.

Dear Sir,

INVESTMENT PREFERENCE GAME

I will be grateful if you can help my study by participating in an Investment Preference Test I am conducting among Nigerian Commercial Bank Executives. If you will, kindly complete the attached. To enable me to group participants in the Test, I shall be glad if you can complete the short questionnaire below as much as you are willing to disclose.

(a)	Age:				
(b)	Banking & Financial Experience:				
	Financial Institution		Location	Position	No. of Years
1.				*****	
2.					
3.					
(c)	Other Working Experience:				
	Company	Location	Type of Busin	ess Position	No. of Years
1.					
2.			4-4		
3.					
(d)	Income: (Please	tick the	relevant range	<u> </u>	

- - 1. Up to ¥15,000
 - 2. ¥15,000 20,000
 - 3. \$20,000 25,000
 - 4. Above \25,000

APPENDIX IV-B

LETTERS OF REQUEST FOR INTERVIEW

DEPARTMENT OF ECONOMICS UNIVERSITY COLLEGE OF NORTH WALES BANGOR LL57 2DG

PROFESSOR J. R. S. REVELL

BANGOR (0248) 51151

Your reference

Our reference

Extension 372/373

EPMG/JEB

12th May, 1980

Dear

One of our Ph.D. students, Mr. O. Adewurmi, is currently conducting research into the lending practices of the U.K. clearing banks, with special reference to the industrial and agricultural sectors. He wishes to use this information in a comparative study of the respective practices in the Nigerian banking system. Any information and data obtained from your bank would, of course, be treated with the utmost confidentiality.

We wondered if you would be good enough to put Mr. Adewumni in contact with the appropriate manager? A questionnaire is enclosed to provide details on the kind of ground Mr. Adewummi would like to cover in an interview.

Our apologies for any inconvenience and we look forward to your reply.

Yours sincerely,

Dr. E.P.M. Gardener

Postgraduate Director of Studies

DEPARTMENT OF ECONOMICS UNIVERSITY COLLEGE OF NORTH WALES BANGOR LL57 2DG

PROFESSOR J. R. S. REVELL

BANGOR (0248) 511'51

Your reference

Our reference

Extension

Dear Manager,

A STUDY OF LOAN MANAGEMENT IN NIGERIAN COMMERCIAL BANKS

I am currently undertaking a study of Loan Management in Nigerian Commercial banks as the main part of my Ph.D. programme. In this connection I am requesting the assistance of a randomly selected number of commercial bank managers in responding to a number of questions, and hypothetical lending and investment situations.

Specifically your help is required in the evaluation of the four loan proposals presented in part I of this document. You are, of course, free to make all the assumptions you need to enable you to reach a decision on the loan proposals as well as to answer the accompanying questions.

In part II of this document you are kindly requested to indicate your investment preferences against the sets of assets presented to you therei.

Finally I would very much like to discuss the questionnaire which constitutes the part III of this document with you when I return to collect it. It is enclosed here to enable you to get informed ahead of the issues to be discussed.

As one of the few managers randomly selected for this exercise, your assistance is VERY IMPORTANT and, if kindly given, will be highly appreciated.

Thanks in advance for your co-operation,

Yours sincerely,

O. Adewunmi

DEPARTMENT OF ECONOMICS UNIVERSITY COLLEGE OF NORTH WALES BANGOR LL57 2DG

PROFESSOR J. R. S. REVELL -

BANGOR (0248) 51151

Your reference

Our reference

Extension

Dear Sir,

LOAN MANAGEMENT IN NIGERIAN COMMERCIAL BANKS

As the attached letter from my Supervisor states, I am conducting the above titled study in connection with my Ph.D. Programme. In this regard, I should be grateful if you would help urge on a few of your Branch Managers to respond to the enclosed Questionnaires. All I am seeking is their reactions to these theoretical but typical loan decision-making situations.

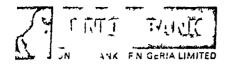
The participation of the nominated Managers is considered crucial to the succe s of my study and for this reason, I should be glad to have an early response from them.

A stamped addressed envelope is sent along with each Questionnaire for the respo dents' replies.

I thank you very much in advance for your cooperation.

Yours faithfully,

0. ADEWUNMI



UNION BANK OF NIGERIA LIMITED Staff Training Centre, P.M Bag 2027, Lagos Telephone 44918

13th October, 1980

Mr. Ogunsulire, Union Bank of Nig. Ltd., IKLJA.

Dear Mr. Ogunsulire,

Bearer of this note is Mr. O. Adewunmi, currently pursuing a full-time research for his PHD at the University College of Morth Vales.

apart from being an old staff of our Bank, the area into which he is researching is of interest to us at this Training Centre. Hopefully, when he is back in Lagos, we expect to benefit from his work.

Leanwhile, he requires your co-operation in completing some of his questionnaires to the very best of your ability and strictly on the basis of what you will do if faced with those hypothetical situations.

Mr Adewunmi realises how busy you are and will appreciate any help you render. Flease assist him as best as you can.

Yours sincerely,

0. A. AKIHBAHI

LulaGER

DEPARTMENT OF ECONOMICS UNIVERSITY COLLEGE OF NORTH WALES BANGOR LL57 2DG

PROFESSOR J. R. S. REVELL

BANGOR (0248) 51151

Your reference

Our reference

Extension

Dear Sir,

LOAN MANAGEMENT IN NIGERIAN COMMERICAL BANKS - QUESTIONNAIRE

I am conducting a study on the above subject as the main part of my Ph.D. programme. As this study focuses on Manufacturing (amongst other issues) I am requesting your kind assistance in the completion of the attached questionnaire.

Your response will be very important to this exercise and, if given, will be highly appreciated. Of course, your reply and comments will be treated with the strictest confidentiality.

Yours sincerely,

O. Adewunmi

DEPARTMENT OF ECONOMICS UNIVERSITY COLLEGE OF NORTH WALES BANGOR LL57 2DG

PROFESSOR J. R. S. REVELL

BANGOR (0248) 51151

Your reference

Our reference

Extension

Dear Sir,

LOAN MANAGEMENT IN NIGERIAN COMMERCIAL BANKS - QUESTIONNAIRE

I am conducting a study on the above subject as a core of my Ph.D. programme. As this study focuses on Agriculture (among other issues), I am requesting your kind assistance in the completion of the attached questionnaire. In view of the uniqueness of the Fund and its expected role in agricultural finance and development, your response will be very important to this exercise and, if given, will be highly appreciated. Of course, your reply and comments will be treated with the strictest confidentiality.

Yours sincerely,

O. Adewunmi

DEPARTMENT OF ECONOMICS UNIVERSITY COLLEGE OF NORTH WALES BANGOR LL57 2DG

PROFESSOR J. R. S. REVELL

BANGOR (0248) 51151

Your reference

Our reference OA/SAP

Extension 381

Dear Sir,

Loan Management in Nigerian Commercial Banks - Questionnaire

I am conducting a study on the above subject as the main part of my Ph.D programme.

The purpose of this part of the study is to collect comparative statistics and information for British banks. I am requesting your kind assistance in the completion of the attached questionnaire. I note that your response will be very important and useful to this exercise and, if given, will be highly appreciated.

Yours sincerely,

0. Adewunmi

DEPARTMENT OF ECONOMICS UNIVERSITY COLLEGE OF NORTH WALES BANGOR LL57 2DG

PROFESSOR J. R. S. REVELL

BANGOR (0248) 51151

Your reference

Our reference OA/JA

Extension 381

LOAN MANAGEMENT IN COMMERCIAL BANKS

I write to say a big thank you for the interview you gave me on the above subject recently. Your time, patience and willingness to inform me on this subject of my study and related banking issues are greatly appreciated and will be remembered for a long time. Without any doubt your assistance shall make good contribution to the success of my research and I hope I can always count on your support in the future.

With my best regards,

Yours sincerely,

O. ADEWUNMI

APPENDIX

TABLES AND FIGURES

Commerical Bank's sources and application of funds, 1973-1978 (monthly average) Table IV.1

					E M	million
ASSETS (application)	1973	1974	1975	1976	1977	1978
Cash and cash items Balance held with other hanke	+ 25.0	23	+428.0	+791.3	-331.3	-354.8
Loans and advances	B (+ 49.9	+118.3	+ 63.9	+176.8	
Investments	+133.9	+184.6	+377.9	+580,8	+801	+1,052.1
Other assets	7	+388.9	5	+ 50.0	+1,019.4	- 41.9
B 0 + 1 1	+143.0	+185.3	+339.5	+306.9	+536.6	+591.9
local	334.4	1,039.2	1,422.5	1,792.9	2,203.4	1,196.7
LIABILITIES (sources)						
Capital and reserves	+ 9,3	+ 13 0	4 25 4	96 +		(
Balances held for other banks	- 3.0) 4	3 6	4 53.6	; ;
	9.0		' ~	+ 2.2	7.7	1.85.4
banks	+ 0.1		4	4	- 24.0	, ,
Other liabilities	+219.2	+680.9	7	+1,349.2	+1,184.7	+458.8
	+109.4	+302.5	+401.7	ان	+901.2	88.
Total	334.6	1,039.2	1,422.5	1,792.9	2,203.4	1,196.7
ASSETS (application)						Fercentage
Cash and cash items	+	נינר ד	6		,	
Balance held with other banks	9 8 +		7° 6	4.44.4		29
Loans and advances			26.	, 5		4. [
Investments Other accets		+ 37.4	+ 11.2	+ 2,8		
	+ 43.0	+ 17.8	+ 23.9	+ 17.1	24.	49
Total	100.0	100.0	100.0	100.0	100.0	100.0
LIABILITIES (sources)						
Capital and reserves	+ 2.8	_	α +	4	•	1
Balances held for other banks	6.0	8.0			⊣ ₹	יית
	ં	o.	o	+	Ċ	י ר
auvances irom other banks	o		+ 1.04	1	- 2	ካ (
Other Liabilities Centricates of Deposit)	65	65.		+ 75.	53	ک « ۳
10101110111	32.	• •	+ 28.2	+ 21.	40.	+ 57.5
Incal	100.0	100,0	100.0	100.0	100.0	100.0

Sources: CBN: Annual Report and Statement of Accounts (various years 1973-1978)

	Table V-l	interest rates structure	1980/81	
			•	Rate (%)
(iii)	Minimum Rediscount Treasury Bill issue Treasury Certificat Treasury Certificat Federal Government	e rate de (1 year) ° de (2 years)		6 5 5 ¹ 2 6
(•)				6 - 8
	4-8 " 9-14 " 15-20 "	urity " " " "		6 6 6 7 7 7 7 7 7 4 8 8
vi)	Deposit Rates (Comm			
	Savings Deposit	s	•	6
	" " fo " " fo " " fo	ith 7 days' notice or one month or 1-3 months or 3-6 months or 6-12 months or over 12 months		5 5 5 6 6 6 6 7
ii)	Lending Rates: Minimal Maxim			6½ 11½
		sectors maximum edit Guarantee Scheme sing Costing not more tha	i n	9½ 11½ 5-6 6
(v ii)	Specialised Institut	ions:		
	(b) Nigerian Industr	Bank - Savings Deposit R rial Development Bank or Commerce and Industry es)	ate	6 8½-11 8½-11
	(d) Nigerian Agricul For Agricultu For Agricultu	tural Bank (Lending Rate ral Production ral Commodities Marketin Bank - Savings Rate Housing		6 8 -11 6 - 7 6 -11 6 7 -11

Source: CBN Monetary Policy Circular No. 12: Central Bank Credit Guidelines for 1980 Fiscal Year (Lagos, April 1980).

Comparative ratios or prorit before tax to volume of business (PBT/VB) for Commercial Banks in selected countries and Nigeria: 1970 - 1977 (in percentages) Table VI-1

44000			1	1					
Comicty	series	1970	1971	1972	1973	1974	1975	1976	1977
Australia	Trading	-	.7	.7	6	8	,	,	0
Austria Polei	4 commercial	1.10	1.06	0.92	0.76			• • •	• <
Sergium	Commercial	5	Ŋ,	4.	4.	0	. ~	• "	ዞ ሮ
Canada	Chartered	•	0	۲.	-	6	. –	•	ე a
Denmark	Banks	9•	ω.	٥.	•	1.40	3.70	0.28	1.58
Finland	Banks	5	9	9	4	4	Ц	L	•
France	Banks	۳,		ט נ	ם כ	•		ů,	4.
Germany	Commercial	'	•) (•	٠,	ດໍ່	٠,	4
Greece	4 Jarge	, c	•	۰	4.			9	9
Italv	a raige	0.73	0.94	0.83	0.88	0.78	5	9	ω.
7	ALL Daliks	φ.	Φ.	ω.	9	<u>.</u>	0.47	0.41	0.46
Netherlands	Commercial	ω.	9	0	7	9	7	α	٥
Norway	Commercial	6	ω,	9		. ת	•	•	•
Spain	Commercial	1.63	1.57	1.66	1,76			500	99.7
sweden	Commercial	5	9	الر		• ^	•	•	4.
Switzerland	Large	7	9	•	•	• ı	ו ה	C.	4.
	n	•	•	•	•	•	. 7		.7
U.K.	Commercial	٦.	2	(,	ιι	(Ċ	C	•
USA	FDIC insured	0.89	0.81	0.77		1.00 2.00		1.20	k (
Yugoslavia	Banks	٠	4	٠		• ~	•	٥	0.90
Nigeria	All commercial		•	•	•	•	.		
	banks .	1.30	1.50	1.90	2.00	1.50	1.60	1,20	٦
							•	•	•

Revell, Jack "Costs and Margins in Banking: An International Survey". Organisation for Economic Co-operation and Development, 1980, p.39. (1) Sources:

The London Clearing Banks. Evidence by the Committee of London Clearing Bankers to the Committee to Review the Functioning of Financial Institutions (New York; Longman Inc. 1978) p. 172. (5)

Ojo, Ade T. and Adewunmi, 'Wole "Banking and Finance in Nigeria". University of Lagos (June 1980) Mimeograph. (3)

Table VI-2 A comparative analysis of the profitability of commercial banks from selected countries: 1973 - 1977 (in percentages)

Sources:	1973 1974 1975 1976 1977		Year
s: (1) (2)			
a	.76 .72 .69 .70	USA.	
"Insured Commercial Bank Income in 1978". 1979) p. 697. The London Clearing Banks. Evidence by Bankers to the Committee to Review the F	1.5 1.0 0.8 1.2	UK	Return on as:
Banks Evidend	2.0 1.5 1.6 1.2	Nigeria	assets
ਦੱਜ ∣	12.9 12.6 11.8 11.5 11.5	USA	
	24.1 17.2 14.9 21.3	UX	Return on equity
in (September Clearing Institutions.	41.4 43.5 52.6 50.6 74.9	Nigeria	uity

titutions.

(ω) Ojo, Ade T. and Adewunmi, 'Wole "Banking and Finance in Nigeria". University of Lagos (June 1980) Mimeograph.

Table VI-3 An analysis of Commercial Banks' deposits, 1960-1978

Year (End of		Amo (¥ mi)	unt llion)		I	Percenta	age	
December)	Demand	Savings	Time	Total Deposits	Demand	Savings	Time	Savings & Time as %
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	of Total (6 + 7)
1000								_
1960	82.2	36.8	18.0	137.0	60.0		13.1	40.0
1961	83.4	42.4	28.2	153.8	54.2		18.3	45.8
1962	90.6	48.4	34.8	173.8	52.2		20.0	47.8
1963	97.6	56.4	37.8	191.8	50.9		19.7	49.1
1964	115.6	70.2	46.2	232.0	49.8	30.3	19.9	51.2
965	124.0	80.4	60.6	265.0	46.8	30.3	22.9	53.2
1966	134.6	89.4	73.2	297.0	45.3	30.1	24.6	54.7
967	110.4	51.8	79.4	241.6	45.7	21.4	32.9	54.3
968	147.0	74.8	108.8	330.4	44.5	22.6	32.9	55.5
1969	185.6	94.6	120.8	401.0	46.3	23.6	30.1	53.7
970	289.0	129.8	207.0	625.8	46.2	20.7	33.1	53.8
1971	285.4	160.4	211.4	657.2	43.4	24.4	32.2	56.6
972	315.0	205.2	256.0	776.2	40.6	26.4	33.0	59.4
973	430.7	224.5	357.8	1,013.0	43.0		35.0	57.0
974	720.7	286.7	686.5	1,693.9	42.5		40.5	57.4
19 7 5	1,266.8	521.3	1,051.0	.2,839,1	44.6	18.4	37.0	55.4
1976	2,185.1	709.1	1,270.0	4,164.3	52.5	17.0	30.5	47.5
1977	2,980.1	930.1	1,325.0	5,235.2	56.9	17.8	25.3	43.1
1978	2,700.9	1,075.7	1,526,0	5,302.6	50.9		28.8	49.1

Source: CBN, Economic and Financial Review (various issues 1960-1978).

5.9 1.1 0.5 36.7 59.1 1978 8 0.2 34.9 1:1 1977 8 30.3 0.7 2.5 1976 200 29.0 3.0 6.0 1.2 62.9 1975 30 33.3 5.0 60.3 3.6 9.0 1974 8 Nigerian Commercial Banking System : Portfolio of Liabilities 1960 - 1978 (percentages) 35.8 0.7 1.4 57.2 4.9 1973 100 1.8 36.5 5.3 1.2 55.2 1972 90 39.8 1.6 51,5 5.5 1.6 1971 8 38.9 5.0 54.2 1.2 0.5 1970 8 1.0 38.4 0.5 52.6 1969 7.1 8 33.5 59.0 4.8 1.7 1.0 1968 28 2.1 26.7 4.8 12.6 53.8 1961 8 12.5 2.0, 18.3 60.3 6.9 1966 8 18.2 9.6 61.0 8.9 1965 28 15.6 12.8 5.9 7.6 58.1 1964 8 9.5 15.4 59.0 7.8 9.6 1963 8 Table VI-4 6.09 10.0 6.4 9.3 13.4 1962 8 19.2 7.2 15.7 52.2 5.6 1961 8 17.5 4.6 16.6 2.7 57.4 1960 100 Total deposits Balances held for other banks Liabilities Other liabilities Capital & Reserves Loans and advances TOTAL

Sources: Same as Table 5.3

Table VI-5 Number of operating Commercial Banks and their branches in Nigeria, 1960 - 1978

Year End	No.of Banks	No. of Branches	Growth Rate of Branching	Average Branch per Bank	Popul- ation	No. of Persons per Branch
1960	12	190		15.8	51.598	271,568
1961	13	195	2.6	15.0	52.921	271,390
1962	17	210	7.7	12.3	54.278	258,467
1963	17	218	3.8	12.8	55.670	255,367
1964	17	226	3.7	13.3	57.062	252.487
1965	15	240	6.2	16.0	58.489	247.704
1966	15	253	5.4	16.9	59.951	236.960
1967	14	281	11.1	20.1	61.450	218,683
1968	14	298	6.0	21.3	62.986	211,362
.1969	13	302	1.3	23.2	64.561	213,778
1970	13	273	-9.6	21.0	66.175	242.399
1971	16	318	16.5	19.9	63.160	214,340
1972	16	367	15.4	22.9	70.205	191,294
1973	16	385	4.9	24.1	72.311	187,821
1974	. 17	403	4.7	23.7	74.480	184,814
1975	17	436	8.2	25.6	76.714	175,950
1976	18	464	6.4	25.8	76.800	165,517
1977	19	508	9.5	26.7	78 .7 00	154,921
1978	19	618	21.6	32.5	80.700	120,089

Sources:

- (1) CBN, Annual Report and Statement of Accounts (various years 1960-1978).
- (2) Olayide, S.O. ed. "Economic Survey of Nigeria, 1960-1975" Ibadan, Nigeria; Aromolaram Publishing Co. Ltd, 1976.
- (3) CBN, Research Department. Nigeria's Principal Economic & Financial Indicators: 1970-1978.

Table VI-6 Individual commercial bank's portfolio of assets:1979 (% million)

Banks	Cash & Cash Items	Balance with other banks	Treasury securities	Loans & advances	Other assets	Total assets
A	36.4	49.0	44.0	242.18	110.07	481.65
В	10.92	35.35	0.13	189.65	35.33	271.38
С	23.02	21.80	37.90	110.91	62.87	256.50
D	8.14	19.04	2.46	104.96	21.55	156.15
E	5.11	13.08	15.25	60.30	35.58	129.32
F	10.45	31.53	17.45	58.98	40.45	158.86
G	23.03	117.70	103.84	323.13	266.99	834.69
H	0.76	3.45	-	8.39	19.2	31.81
I	1.01	16.64	0.50	17.72	1.51	37.38
J	17.40	17.76	1.26	52.20	15.42	104.04
K	48.54	89.02	0.49	468.2	67.25	673.50
L	302.18	112.75	210.11	706.11	286.22	1,617.37
M	. 8.92	25.58	14.41	144.34	105.29	298.54
N	114.53	83.93	494.97	769.38	805.95	2,268.76
P	7 . 63	140.95	48.21	263.68	284.80	745.27
Q	2.14	18.62	13.39	21.71	48.11	103.97
R	38.47	106.38	327.47	813.82	1,335.28	2,621.42
S	2.12	10.44	1.43	17.28	22.24	53.51
T	20.46	35.27	35.25	155.38	132.01	378.37
Total	681.23	948.3	1,368.52	4,528.32	3,696.12	11,222.49

Source: CBN, Research Department.

26.3 55.2 15.5 98.5 7.5 13 50.2 2.5 22.2 99.98 61.0 70.5 3.0 15.0 125.8 34.6 1.8 œ 69.5 15.4 32.2 15.7 9.2 1.2 13.3 27.0 4.2 28.0 62.5 52.9 9.99 27.6 118.1 1.2 28.2 16 82.0 116.0 æ 9. 57.6 1.9 1.0 43.0 2.7 59.3 95.5 107.6 2.3 173.8 2.3 32.7 20.9 44.1 13.4 15 29.3 22.0 92.0 71.5 32.2 12.5 2.8 79.8 5.0 38.7 56.6 0.7 11.6 77.4 10.2 45.8 26.0 46.0 46.6 58.3 90.2 63.0 197.0 10.0 6.4 26.4 90.2 16.2 16.2 5.2 10.6 72.4 9.4 11.2 . . ı 0.3 19.0 201.9 96.0 10.8 67.3 8.7 16.9 95.8 79.7 27.7 8 1.4 25.6 18.6 3.5 3.4 14.2 28.7 67.0 126.2 3.6 26.2 32.3 2.3 29.6 93.8 12.3 37.0 8.0 8.3 34.8 116.0 49.7 3.1 50.2 16.2 31.9 10.4 I 87.0 115.3 9.0 31.1 77.6 23.9 8.5 2.8 0.3 53.9 81.7 74.4 44.1 29.1 0.7 6.2 2 38.0 4.3 175.0 30.1 10.8 40.5 96.4 156.3 0.8 82.9 59.3 78.9 1.9 17.3 10.5 10.3 480.9 179.7 4.9 10.0 91.7 80.0 55.1 15.3 1.5 37.3 103.2 58.9 0.5 70.1 11.6 31.0 93.7 67.5 12.1 106.7 8.5 3.3 2.6 46.7 33.3 158.3 19.4 104.3 78.0 80.6 10.5 48.3 40.3 6.09 16.7 247.3 59.5 10.2 2.9 51.9 85.2 47.8 30.3 20.4 63.5 53.3 210.4 (-1.7) 56.5 2.6 68.0 9.0 19.0 92.2 20.5 26.3 98.2 48.3 18.3 173.9 20.4 40.0 110.0 8.5 56.3 3.8 21**4.**5 163.8 18.0 3.0 5.2 31.1 91.5 76.4 18.0 20.0 72.2 27.4 61.9 68.2 m 150.0 54.9 23.9 8.1 50.3 74.2 48.2 19.9 36.5 95.9 8.9 67.0 30.5 82.6 16.8 36.5 1.2 4.5 0.8 2 6.3 4.8 32.5 43.7 9.8 36.0 75.8 73.0 19.4 59.0 54.8 3.5 8.5 58.8 10.7 5.2 164.5 2.6 75.4 Ag. Loans/Demand Deceits 11.3 ~ Agric.Loans/Notal Loans Agric+Wanuf.Loans/Time Gross Exp/Total Assets Gross Earnings /Gross Farmings Total Loans/T.+ S. Deposits Capital/Total Assets Total Loans
Ratio of Int.Paid/
Total Decosits
Agric, + Wanfg/Total Ratio of Int.Earned, Net Earn(B/4 Taxes), Assets/Ibtal Assets Earnings/Cay-(or Liquid) Capital/T/Deposits Loans to Preferred + Savings Deposits Across Earnings Prov. for Rad Debts, Total Loans Real Estate Loans/ Real Estate Loans/ Savings, Deposits Total Loans/Total ttal Potal Loans/Total Salaries + Wages/ Agric.Guar.Loans, Sectors/ T/Loans Assets Gross Incone Interest Earned/ Farnings/ Total Assets . Total Assets " /Gross Exp. Ratios Total Assets I/Deposits Total Loans Secured * Current Gross Manuf.

Table VI-7 Nigerian Commercial Banks : Cross-sectional Data for 1979

Table VI-8 Nigerian commercial banking system: portfolio of assets 1960-1979 (percentages)

Assets	1960	1961	1960 1961 1962 1963	1963	1964	1965	1966 1967		1968 1969 1970 1971 1972 1973 1974 1975 1976	1969	1970	1971	1972	1973	1974	भ		1571 1578	15.78	1979
Sash and cash items	8.0	7.5	8.0 7.5 8.6 7.2	7.2	7.3	7.3 5.9 5.9	5.9	5.6	4.8 4.9	4.9	6.5	4.9 5.3 5.7 11.8 19.2	5.3	5.7	11.8	19.2	17.2	10.0	8.1	6.1
Balances with other banks 20.5 25.6 17.1 19.3	nks 20.5	25.6	17.1	19.3	10.5	11.7	11.5	8.3	2.0	1.9	1.8	3.0 2.2	2.2	3.4	3.9 4.3		4.6	5.2	4.3	8.4
Treasury securities	1.5	2.0	1.5 2.0 2.3	0.7	2.7	3.0	4.6	6.3	35.0	44.0 43.4	43.4	22.8	22.8 26.2 21.5		26.9 18.4		16.5	13.5	10.5	12.2
Loans and Advances	47.8	40.7	47.8 40.7 54.0 55.0	55.0	61.8	62.2	60.5 61.2	61.2	40.3	31.8	30.5	39.3	43.1 42.5		33.4	35.7	33.3	36.0	45.1	40.4
Other assets	22.2	24.2	22.2 24.2 18.0 17.8	17.8	17.7	17.2	17.5	17.2 17.5 18.6 17.9 17.4	17.9	17.4	17.8	17.8 30.0 23.2 26.9 24.0 22.4 28.4	23.2	26.9	24.0	22.4	28.4	35.3 32.0		32.9
						İ														
Total	100	00 00 00	8	8	. 8	100	8	8	100	100	100	100	18	8	00T	100	100	100	81	g

(1) Adapted from CBN Twenty Years of Central Banking in Nigeria: 1959-1979 (Lagos, CBN, Research Cept., 1975).
Table 0-1
(2) Table VI-6 Source:

(W million)
1979
for
data
cross-sectional
banks:
commercial
Nigerian

	٦	7		4	5	9	U	co	6	10	11	12	13	14	15	16	11	18	1.9	- July
l Agric. loans	20.45	5	;			:														1000
2 Manufacturing loans		25.50	5 5	22.17	11.70	35.49	19.12	0.58	9.16	3.44			14.16	_					42 2	عد مرد
3 Unsecured loans		233.0	99.75	7.6	44.04	61.187	82.27	12.86					70.62						1 0	136.20
-	242.18			11.39	3.80	134.59	11.68	0.98					25.72					11 87		520,020
5 Savings deposits	•			189.65	110.91	769.38	263.68	17.12					323.13						7 9	8TO-675
6 Time deposits		327.66	12.12	60.59	% %	321.9	14.21	4.98					33.45						2.00	4528.32
7 Demand deposits		261.12	69.81	59.5	34.75	480.56	215.26	7.51					255 63						co.Ta	1283.81
8 Total demaits		608.3	56.75	58.28	116.18	791.18	93.79	25.16					201.00						08.22	2417.7
Cash + short-to		1197.08	138.67	178.07	187.21	1593.64	323.25	37. 66					201.00						.07.3	3265.17
	123.34	525.04	48.91	_		693.43	66.79	34.15		•			0.75	_			74.06 2	211.35 4	476.58	6941.42
	10.98	61.59	11.07	0.0		90 50	30.00						744.57						38.04	2767.98
	144.37			141		02:00	20.30	70.0					23.50						12.50	77.475
	27.15			141.30	67.26	5/0.53	202.32	17.81					230.91						101 A6	3301 23
	13.99	102.37	66.22	15.30	13.96	111.20	18,23	9.9					42.62							3201.73
.4 Interest earned on loans	12.97	79.46	12.28	10.17	11.54	70.59	5.31	2.39					11.43							
	4.45	60.32	13.92	12.0	10,36	74.52	9.82	2.91					33.05	_						y .
16 Profit before tax		25.18	2.53	4.36	2.25	23.84	4.31	0.86					9 20				.03		67.67	4 *
.7 Profit after tax		22.91	6.26	5.12	2.45	40.61	8.25	2.84									3	•	11.84	! 2 *
Province Care Car	: :	13.55	3, 39	5.12	1 25	20.61	14	7					17.13				.39	0.01	(-11.36)	. 4
	7.46	B 49	101			10.0	1	1.43					9.40		_		.39	0.01	(-11.36)	•
	7.38	,	10.0		9 .	0.32	5.00	76.0					4.82				.39		98 91	•
O Total assets	481.65	_		0.		26.84		1.8					6.30				8	*	6.4	• •
		1617.4	298.54	271.38	256.48 2	2268.76	745.27	103.97	156.15 1		158.86 2	2621.42	834.69	53.51	31.81	37.38 104	5 6	2 75 875	. כיי	# (
l Loan maturity:												ı		J	-1		,			11222.5
Up to 1 year	194, 38		,																	
1-3 years	48.8	663.42 106.0	0.901		103.34		187.99	16.01	100.00	55.14	47.99	642.32	255.83	16.52	_	·	•	Ī	į	
3-5 years		1	23.12	13.89	5.69	49.23	42.63	5.70	2,82	1.93	5.05	101.94		12.0	•	•	•		17.9	3673.7
After 5 years	۱ ا	5,3.80	9.42	11.23	0.78	29.52	17.96		1.19	1.25	30.5	(64.94	41.15					_	45.7	*
	l	48.89	2.80	2.98	1.10	51.45	15.10		0.88	1.98	2.69	20.13	26.15			79.0	. 83 6 6	10.13	20.3	*
2 Method of repayment:	})	1						30.3	209.9
Overdraft	143.42		ì	1																
Specific instalments	, 84.18	410.75	6.4.	91.85	101.99	471.49	202.09	17.00	85.81	51.19	50.65	555,12		14.5						
One single payment	14.58	70.097	91.26	98.00	8.93	292.57	60.47	1.15	19.14	7.40	7.41	217.98	103.98	2.0	3.41	7.20	42.23 6 52	20 70 70	411.8	3068.41
		13.20		76.07	ı	5.52	1.12	3.56	1	1.71	0.92	40.72		0.78					1.00	1296.35
3 Types of Security:																			n .	162.81
Cash & deposits	7.59	29 59	90 6	60			;													
Financial assets	33.19	71.30	27.87	26.36	2 2	60.09	23.69	4.1/	11.50	7.58	0.83	25.21	24.33	0.73	1				17.3	i w
Flants & equipments	ı -	247.13	27.56	28.84	3 29	140	10.23	9.70	8.32	3.36	3.9	52.74	43.96	0.57	0.60				6 77	422.72
Real estate	90.41		53.80	42.83	63.79	107.79	57.95	67.0	67.8	8 6	. ;	94.95	175.25	1.48	1				36.2	C/ **
Ocherwise	110.99	358.09	27.83	60.04	31.04	366.53	103.95	13.96	28.22	32,76	34.40	235,55		1.20	۱ ,	1 11.6	17.17	38.74	153.8	*
								:		?		707.27	60.67	13.3	67.79			•	216.0	1985.36
	•																			

Source: CBN, Research and Bank Examination Departments

Table VII-2 Investment preference test: operations - level Lending officers' responses

Respond- ent		Financia (percentage)	
	Α	В	С	D	E
1	20.0	22.5	5.0	20.0	32.5
2	2.5	10.0	12.5	42.5	32.5
3	15.0	15.0	10.0	10.0	50.0
4	27.5	23.75	18.75	18.75	11.25
5	55.0	22.5	6.25	7.5	8.75
6	23.75	30.0	8.75	11.25	26.25
7	22.5	36.25	18.75	8.75	13.75
8	0.0	0.0	0.0	25.0	75.0
9	26.25	34.0	10.5	1.75	25.0
10	38.75	20.0	20.0	13.75	7.5
11	8.75	13.75	12.50	35.0	30.0
12	10.0	70.0	5.0	10.0	5.0
13	20.0	30.0	10.0	20.0	20.0
14	20.0	20.0	6.25	22.5	31.25
15	16.25	18.75	25.0	22.5	17.5
16	37.5	32.5	7.5	15.0	7.5
17	25.0	27.5	20.0	16.25	11.25
18	45.0	30.0	10.0	7.5	7.5
19	1.25	1.25	7.5	62.5	27.5
20	31.25	31.25	10.0	21.25	6.25
21	20.0	25.0	16.25	21.25	17.5
22	27.5	21.25	20.0	23.75	7.5
23	33.75	26.25	1.25	17.5	21.25
24	37.5	35.0	7.5	10.0	12.5
25	30.0	47.5	6.25	6.25	10.0
26	7.5	18.75	32.5	21.25	20.0

Source: Computed from collected questionnaires

Table VII-3 Simulated loan request questionnaire: factors in lending decisions (summary of responses)

	_						
Respond- ent	A	В	С	D	E	F	G
1 2 3 4 5	27.5 12.5 22.5 23.75 23.75	30.0 10.0 16.25 7.5 6.25	15.0 10.0 12.50 16.25 3.75	- 5.0 - - 1.25	17.5 27.5 13.75 11.25	12.5 16.25 15.0	10.0 22.5 18.75 26.25 65.0
6 7 8 9 10	27.5 22.5 8.75 21.25 20.0	23.75 22.5 10.0 10.0 20.0	12.50 8.75 8.75 8.75 25.0	11.25 5.0 3.75 7.0 10.0	5.0 15.0 18.75 17.5 10.0	10.0 11.25 23.75 4.5 2.5	10.0 15.0 25.0 31.0
11 12 13 14 15	17.5 15.0 24.0 40.0	7.5 7.5 25.0 26.25	15.0 - 7.5 27.5 6.25	- - - 9.0 1.25	20.0 - 43.75 14.5 3.75	12.5 - - - 11.25	27.5
16 17 18 19 20	10.0 16.25 8.75 11.25 12.5	12.5 7.5 38.75 27.5 20.0	18.75 8.75 10.0 8.75 18.75	- 6.25 16.25 2.5	10.0 22.5 10.0 15.0 18.75	16.25 10.0 11.25 20.0 15.0	32.5 28.75 5.0 15.0
21 22 23 24 25	17.5 17.5 27.5 5.25	21.25 7.5 26.25 10.0	21.25 6.25 11.25 5.5	11.25 8.75 1.25 5.0	11.25 30.0 6.875 5.0	6.25 12.5 5.625 40.0	11.25 17.5 21.25 30.0
26 27 28 29 30	31.25 17.5	27.5 28.75	10.0 8.75	1.7 7.5 12.5 1.5	7 . 5 7 . 0	6.25 3.75	10.0
31 32 33 34 35	11.25 8.75	15.0 25.0 11.25 17.5	18.75 13.75	3.75 12.5 11.25 13.75	26.25 20.0	12.5 1.25 22.5 2.5	5.0 12.5
36 37 38	20.0 20.0 31.25	10.0 15.0 17.5		5.0 25.0 6.25	46.25 30.0 8.75	- 2.5	13.75
N 35 Mean S.D.	35	35 18.8%	12.7%	35 5.8% 5.8	35 16.3% 11.0	35 9.3% 8.6	35 17.6% 12.4

Source: Computed from collected questionnaires

Key: a,b,c,d,e,f,q (see Appendix IVA-1).2 Question ity preference Measure of liquid. variable Dependent 60.0 72.5 53.75 58.75 0.0 52.5 75.0 2.5 62.5 45.0 60.25 58.75 30.0 51.25 77.5 44.5 12.5 22.5 50.0 40.0 35.0 70.0 positive Propensity to responses lend (No. of NNN ω N N N3 1 2 1 2 1.2 2.7 1.0 2.4 2.3 maturity Average 0.75 2 0 1.0 1.7 2.0 5.0 4.0 1.7 1.5 2.0 1.2 1.0 2.0 2.0 (years) 1.7 1.0 17.5 27.5 5.25 31.25 17.5 15.0 24.0 40.0 10.0 27.5 12.5 22.5 23.75 23.75 16.25 8.75 11.25 12.5 17.5 27.5 22.5 8.75 21.25 20.0 **∞** ₽ Independent Sources: 7.5 7.5 25.0 26.25 23.75 22.5 10.0 10.0 20.0 7.5 38.75 27.5 20.0 21.25 30.0 10.0 16.25 7.5 6.25 **⊛** ₽ Collected Owstionnaires Lending Practices 15.0 10.0 12.5 16.25 3.75 8.75 10.0 8.75 18.75 21.25 15.0 7.5 27.5 6.25 18.75 12.5 8.75 8.75 8.75 25.0 æ a variables 6.25 16.25 2.5 0.0 11.25 11.25 5.0 3.75 7.0 10.0 0.0 5.0 0.0 1.25 0.0 9.0 1.25 8.75 1.25 5.0 7.5 (%) Q 20.0 43.75 14.5 3.75 30.0 6.815 5.0 7.5 5.0 15.0 18.75 17.5 17.5 27.5 13.75 11.25 22.5 10.0 15.0 18.75 11.25 **⊛** 0 0.0 12.5 16.25 0.0 12.5 5.625 10.0 11.25 20.0 15.0 6.25 10.0 11.25 23.75 4.5 2.5 12.5 0.0 0.0 11.25 16.25 ✐₩ 15.0 25.0 31.0 12.5 18.75 26.25 65.0 17.5 21.25 30.0 10.0 27.5 26.25 0.0 11.25 32.5 28.75 5.0 15.0 15.0 11.25 10.0 22.5 æ \

Table VII-4 Liquidity preference, propensity to lend and lending practices of Nigerian commercial bankers

Table VII-5. Investment preference test: top level management staff responses

Financial Assets (Percentage distribution) В Е Respondent Α 1 16.25 55.0 28.75 2 40.0 17.5 30.0 12.5 3 36.25 9.75 13.0 20.0 21.0 4 3.75 10.0 10.0 22.5 53.75 5 9.5 14.25 42.5 5.0 28.75 6 100.0 7 25.0 75.0 8 23.75 16.25 30.0 18.75 11.25 9 100.0 25.0 25.0 12.5 10 37.5 11 40.0 20.0 25.0 5.0 10.0 12 90.0 2.5 2.5 5.0 13 37.5 15.0 35.0 12.5 14 40.0 .45.0 15.0 15 33.0 27.0 8.5 15.0 16.5 21.25 16 21.25 16.25 25.0 16.25 15.0 17 17.5 22.5 32.5 12.5 18 10.0 15.0 27.5 25.0 22.5 19 8.75 11.25 30.0 25.0 25.0 20 62.5 21.25 5.0 6.25 5.0 21 46.25 13.75 23.75 7.5 8.75 6.25 22 57.5 31.25 5.0 23 37.5 10.0 17.5 27.5 7.5 24 50.0 50.0 58.75 12.5 25 1.25 27.5 26 16.25 23.75 13.75 26.25 20.0 27 21.25 13.75 13.75 21.25 30.0 28 16.25 25.0 20.0 22.5 16.25

Source: Computed from collected Questionnaires

Table X-1: Balance sheet categories

Assets

Mnemonic	Transfer category	Portfolio category	Description
CASH CALL TBIL OBIL ASCD IGOV IMKT INMK LAMT	YES YES	YES YES YES YES YES YES YES YES	Cash Money at call Treasury bills Other bills CDs purchased - fixed rate Government securities Marketable securities Non-marketable securities Amortized loans
LIFX LCFX LIVR LCVR OVER COLL DBTR SDEP OTAS TRAD AFIX CONA LONO-	YES YES YES YES YES YES		Loans - ind fixed rate Loans - corp fixed rate Loans - ind var. rate Loans - corp var. rate Overdrafts Items in course of collection Debtors Special deposits Other assets Trade investments Fixed assets Contingent assets (1)
LON9			Individual large loans

⁽¹⁾ footnote to balance sheet only

Liabilities

Mnemonic	Transfer category	Portfolio category	Description
SHAR CRES RRES PROV DEPN CDBT TAXN DIVI DOIN DOCP TDVR	YES YES YES YES YES YES	YES	Paid up share capital Capital Reserves Revenue reserves Provisions Depreciation of fixed assets Debt capital Taxation payable Dividends payable Demand deposits - individuals Demand deposits - corporate Time deposits - variable rate
IDFX CDFX CDIR OTLI LIFE GENL CONL	YES YES	YES	Time deposits - fixed rate CDs issued - fixed rate Creditors Other liabilities Life fund net liability General insurance liability Contingent liabilities

(1) footnote to balance sheet only

Table X-2: Modes available in SOFI

AMODE	Assumption files: initialization, listing, modifications and copying
DMODE	Decision files: initialization, listing, modifications and copying
FMODE	Faults: collection of faults reports and user comments
GMODE.	Graphics mode: display of data as pictures
IMODE	Balance sheet files: initialization, listing, modifications and copying
LMODE	Listing of data files or library catalogues on the line printer, the computer's fast printing device
QMODE	Queries mode: retrieval and presentation in tabular format of any information stored in data files
SMODE	Simulation mode
TMODE	Transfers of files between a user's library and the SOFI library
UMODE	Update mode: produces an Update Report to bring a user up to date with new developments to SOFI

Table XI-1 Sample of detailed loans portfolio array

Maturity (years)	Outstanding Balance (\mathbf{H} million)	Interest Rate (%)
2 4 1 3 4 5	9.625045 2.048953 93.90000 17.10000 23.55000 25.60000	7.5 9.0 6.0 8.0 9.0 10.0
Total	171.824	

Table XI-2 Sample of detailed investments portfolio array

Maturity (years)	Par (N million)	Original yield (%)	Issue rate (%)	Book value (∺ million)
2 9 1 1 2 3 10	75.60 28.20 70.50 2.75 2.00 44.00 16.20	4.625 5.25 3.0 3.0 4.625 3.125 4.0	4.625 5.25 3.0 3.0 4.625 3.125 4.0	75.60 28.20 70.50 2.75 2.00 44.00 16.20
Totals	239.25			239,25

Table XI-3 Profile of ratios to be tracked in the analysis

Ratio No.	Description	Definition
1	Liquidity ratio	Cash + primary reserve assets Total assets
2	Loan/deposit ratio	Total loans and advances Total deposits
3	Loan/asset ratio	Total loans and advances Total assets
4	Term loans/deposits ratio	<u>Term loans</u> Total deposits
5	Term loans/assets ratio	Term loans Total assets
6	Term loans/term deposits ratio	Term loans Time + savings deposits
7	Deposit composition ratio	Time + savings deposits Total deposits
8	Capital fund ratio	Capital funds Total deposits

Table XI-4 Bank 1: Ratios report (in percentages)

	1975	1976	1978	1980
	25.0	25.0	35.0	25.0
Ratio 1 Ratio 2	25.0 37.7	25.0 35.3	25.0 50.5	25.0 50.8
Ratio 3 Ratio 4	36.1 9.3	33.4 7.8	45.2 10.6	44.9 13.9
Ratio 5	8.9	7.4	9.5	12.3
Ratio 6	24.8	16.9	29.3	32.1
Ratio 7	37.7	46.2	36.1	43.4
Ratio 8	3.8	3.7	6.6	6.6

Table XI-5 Bank 1(A): Summarised balance sheet positions (1)

Liabilities	1975	1976	1978	1980
Issued share capital	15.0	20.3	35.2	45.3
Capital reserves	10.0	14.3	32.0	52.0
Revenue reserves	8.4	19.5	38.5	62.5
Provisions	0.0	12.4	32.3	69.7
Taxation	6.9	22.3	59.0	103.0
Demand deposits	548.3	690.3	881.1	1196.7
Time deposits	110.6	228.0	167.4	484.2
Savings deposits	220.6	365.6	331.2	432.0
Totals	919.8	1,372.6	1,576.8	2,445.5
Assets				
Cash	20.0	113.2	161.5	199.4
Primary reserve assets	211.0	230.0	230.0	410.0
Other investments	340.0	239.2	331.8	537.2
Term loans	82.0	170.8	174.4	348.8
Overdrafts	249.8	599.4	653.9	919.8
Fixed assets	17.0	20.0	25.1	30.2
Totals	919.8	1,372.6	1,576.8	2,445.5

Note; (1) Differences in balance sheet footings are a result of increased profitability of bank 1(A) after the increase in loan deposit ratio to 60%.

Table XI-6	Bank 1(A):	Ratios	report		
		1975	1976	1978	1980
Ratio 1		25.0	25.0	25.0	25.0
Ratio 2		37.7	60.0	60.0	60.0
Ratio 3		36.1	56.1	52.5	51.9
Ratio 4		9.3	13.3	12.6	16.5
Ratio 5		8.9	12.4	11.1	14.3
Ratio 6		24.8	28.8	35.0	38.1
Ratio 7		37.7	46.2	36.1	43.4
Ratio 8		3.8	4.2	7.7	7.6

Table XI-7 Bank 1(A): Performance indices

Index (1)	1976	1978	1980
Net income/equity (%)	46.1	34.0	20.8
Net income/assets (%)	1.1	1.2	0.9
Equity/deposits (%)	4.2	7.7	7.6
Earnings per share (EPS)	1.02	90K	62K
Loans/deposits (%)	60.0	· 60 . 0	60.0
Assets/equity	25.4	14.9	15.3
Loans/assets (%)	56.1	52.5	51.9
Term loans/deposits (%)	13.3	12.6	16.5
Term loans/term deposits (%)	28.8	35.0	38.1

Note: (1) All ratios are annualized

Table XI-8 Bank 1(A)-1: Performance indices

Index	1976	1978	1980
Wet income/equity (%)	46.1	35.8	21.8
Wet income/assets (%)	1.1	1.2	1.0
Equity/deposits (%)	4.2	7.8	7.8
arnings per share (EPS)	1.02	95K	66K
oans/deposits (%)	60.1	60.2	60.0
ssets/equity	25.4	14.7	14.9
oans/assets (%)	56.2	52.4	51.5

Table XI-9 Bank $1(A)-2$:	Performance indices			
Index	1976	1978	1980	
Net income/equity (%)	37.0	34.4	18.5	
Net income/assets (%)	0.9	1.1	0.8	
Equity/deposits (%)	4.0	7.3	7.0	
Earnings per share (EPS)	82K	86K	52K	
Loans/deposits (%)	60.1	60.2	60.0	
Assets/equity	26.9	15.7	16.6	
Loans/assets (%)	56.2	52.4	51.5	

Table XII-1 Bank 1: Contingency test (1) - Performance indices

1976	1978	1980
15.6	23.4	13.5
3.4	5.8	5.3
34K 35.3	50k 50.5	30K 50.8
30.9 33.4	19.4 45.2	21.5 44.9
	15.6 O.4 3.4 34K 35.3	15.6 23.4 0.4 0.7 3.4 5.8 34K 50K 35.3 50.5 30.9 19.4

Table XII-2 Bank 1(A)-1: Contingency test (1) - Performance indices

Index	1976	1978	1980
Net income/equity (%) Not income/assets (%) Equity/deposits (%) Earnings per share (EPS) L ans/deposits (%) A sets/equity L ans/assets (%)	27.5	28.0	14.1
	0.7	0.9	0.5
	3.7	6.5	5.9
	61K	66K	35K
	60.0	60.0	60.0
	28.67	17.6	19.58
	56.1	52.5	51.9

T ble XII-3 Bank 1: Contingency test (2) - Summarised balance sheet positions

Liabilities	1975	1976	1978	1980
Issued share capital Capital reserves Revenue reserves	15.0	20.3	35.2	45.3
	10.0	14.3	32.0	52.0
	8.4	12.2	35.1	67.9
Provisions	0.0	10.6	32.8	75.2
Taxation		14.9	55.6	108.4
Demand deposits Time deposits Savings deposits	548.3	836.2	1,077.8	1,467.4
	110.6	276.1	204.8	593.7
	220.6	442.7	405.1	529.0
Totals	919.8	1,627.3	1,878.4	2,938.9
Assets				
Cash Primary reserve assets Other investments Term loans Overdrafts Fixed assets	20.0	132.2	193.9	243.2
	211.0	275.8	275.8	491.5
	340.0	543.2	456.1	742.5
	82.0	145.5	194.9	392.8
	249.8	510.6	732.6	1,038.7
	17.0	20.0	25.1	30.2
Totals	919.8	1,627.3	1,878.4	2,938.9

Table XII-4 Bank l(A)-1: Contingency test (2) - Summarised balance sheet positions

Liabilities	1976	1976	1978	1980
Issued share capital	15.0	20.3	35.2	45.3
Capital reserves	10.0	14.3	32.0	52.0
Revenue reserves	8.4	17.7	52.9	98.1
Provisions	0.0	15.6	43.6	94.6
Taxation	6.9	20.5	73.5	138.6
Demand deposits	548.3	837.9	1,083.2	1,475.2
Time deposits	110.6		205.8	596.9
Savings deposits	220.6	443.8	407.2	532.5
Totals	919.8	1,646.8	1,933.4	3,033.2
Assets				
Cash	20.0	134.7	206.5	301.5
Primary reserve assets	211.0	276.7	276.7	456.7
Other investments	340.0	239.2	357.8	599.2
Term loans	82.0	217.5	226.4	450.8
Overdrafts	249.8	758.7	840.9	1,194.8
Fixed assets	17.0	20.0	25.1	30.2
Totals	919.8	1,646.8	1,933.4	3,033.2

rable xII-5 Contingency test. (2): Income/expenses levels

	1976	1978	1980
Operating expenses	29.5	50.3	81.5
Miscellaneous expenses	2.9	12.2	16.1
Miscellaneous income	21.6	28.2	62.4

Table XII-6 Bank 1: Contingency test (2) - performance indices

Index	1976	1978	1980
Net income/equity (%)	24.1	43.5 =	25.8
Net income/assets (%)	0.5	1.1	0.9
Equity/deposits (%)	3.0	6.1	6.4
Earnings per share (EPS)	5 3K	100K	75K
Loans/deposits (%)	42.2	55.0	55.3
Assets/equity	34.8	18.4	17.8
Loans/assets (%)	40.3	49.4	48.7

Table XII-7 Bank 1(A)-1: Contingency test(2) - performance indices

Index	1976	1978	1980
Net income/equity (%) Net income/assets (%) Equity/deposits (%) Earnings per share (EPS) Loans/deposits (%) Assets/equity Loans/assets (%)	40.8	50.6	27.1
	0.8	1.4	1.1
	3.4	7.1	7.5
	90K	1.30	92K
	62.6	62.9	63.2
	31.48	16.09	15.52
	59.3	55.2	54.3

Table XII-8 Bank 1: Contingency test (3) - summarised balance sheet positions

Liabilities	1975	1976	1978	1980
Issued share capital	15.0	20.3	35.2	45.3
Capital reserves	10.0	14.3	32.0	52.0
Revenue reserves	8.4	13.0	25.4	39.4
Provisions	0.0	7.5	24.1	55.8
Taxation	6.9	15.8	46.0	79.9
Demand deposits	548.3	690.3	793.0	1,196.7
Time deposits	110.6	228.0	150.7	484.2
Savings deposits	220.6	365.6	298.1	432.0
Totals	919.8	1,354.8	1,404.5	2,385.3
Assets				
Cash	20.0	109.0	121.2	186.6
Primary Reserve Assets	211.0	230.0	230.0	410.0
Other investments	340.0	543.2	331.8	686.0
Term loans	82.0	100.4	146.3	294.3
Overdrafts	249.8	352.2	550.1	778.2
Fixed assets	17.0	20.0	25.1	30.2
Totals	919.8	1,354.8	1,404.5	2,385.3

Table XII-9 Bank l(A)-1: Contingency test (3) - summarised balance sheet positions

Liabilities	1975	1976	1978	1980
Issued share capital Capital reserves Revenue reserves Provisions Taxation Demand deposits Time deposits Savings deposits	15.0 10.0 8.4 0.0 6.9 548.3 110.6 220.6	20.3 14.3 19.5 12.4 22.3 690.3 228.0 365.6	793.0	
Totals	919.8	1,372.7	1,447.2	2,454.6
Assets				
Cash Primary reserve assets Other investments Term loans Overdrafts Fixed assets	20.0 211.0 340.0 82.0 249.8 17.0	112.2 230.0 239.3 171.8 599.4 20.0	230.0 229.8	204.4 410.0 543.2 347.0 919.8 30.2
Totals	919.8	1,372.7	1,447.2	2,454.6

Table XII-10 Bank 1: Contingency test (3) - ratios report

	1975	1976	1978	1980
Ratio 1	25.0	25.0	25.0	25.0
Ratio 2	37.7	35.3	56.1	50.8
Ratio 3	36.1	33.4	49.6	45.0
Ratio 4	9.3	7.8	11.8	13.9
Ratio 5	8.9	7.4	10.4	12.3
Ratio 6	24.8	16.9	32.6	32.1
Ratio 7	37.7	46.2	36.1	43.4
Ratio 8	3.8	3.7	7.5	6.5

Table XII-11 Bank 1(A)-1: Contingency test (3) - ratios report

	1975	1976	1978	1980
Ratio 1	25.0	25.0	25.0	25.0
Ratio 2	37.7	60.1	66.8	60.0
Ratio 3	36.1	56.2	57.4	51.6
Ratio 4	9.3	13.4	14.2	16.4
Ratio 5	8.9	12.5	12.2	14.1
Ratio 6	24.8	28.9	39.2	37.9
Ratio 7	37.7	46.2	36.1	43.4
Ratio 8	3.8	4.2	8.8	7.7

Table XII-12 Bank 1: Contingency test (3) - performance indices

Index	1976	1978	1980
Net income/equity (%)	26.7	31.6	18.3
Net income/assets (%)	0.7	1.1	0.7
Equity/deposits (%)	3.7	7.5	6.5
Earnings per share (EPS)	59K	74K	48K
Loans/deposits (%)	35.3	56.1	50.8
Assets/equity	28.45	15.16	17.45
Loans/assets (%)	33.4	49.6	45.0

Table XII-13 Bank 1(A)-1: Contingency test (3) - performance indices

Index	1976	1978	1980
Net income/equity (%)	46.1	37.0	19.9
Net income/assets (%)	1.1	1.4	0.9
Equity/deposits (%)	4.2	8.8	7.7
Earnings per share (EPS)	1.02K	98K	61K
Loans/deposits (%)	60.1	66.8	60.0
Assets/equity	25.4	13.3	15.1
Loans/assets	56.2	57.4	51.6

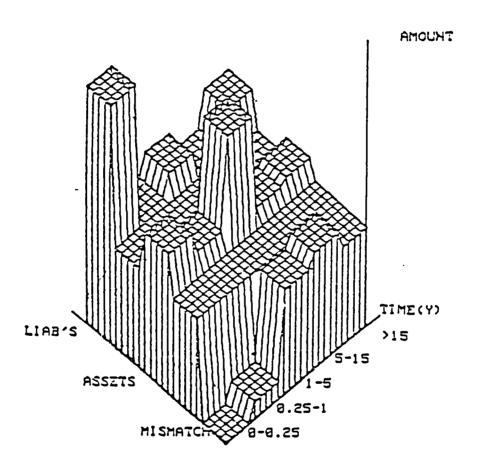
Table XIII-1 Reasons for loans becoming uncollectable

- (1) Whereabouts of customer unknown
- (2) Speculative investment
- (3) Security was not perfected
- (4) Company hampered by importation of obsolete machinery
- (5) Dormant. Now dealing with another bank
- (6) Drawing against post-dated cheques
- (7) Judgement debt. Proprietor has left the country
- (8) Balance in dispute
- (9) Customer denied liability. Balance in dispute
- (10) Obtained credit on false information
- (11) Diverting funds to other sources
- (12) Unwilling to pay

Figure X-1 SOFI Data Presentation

Exhibit 70.1

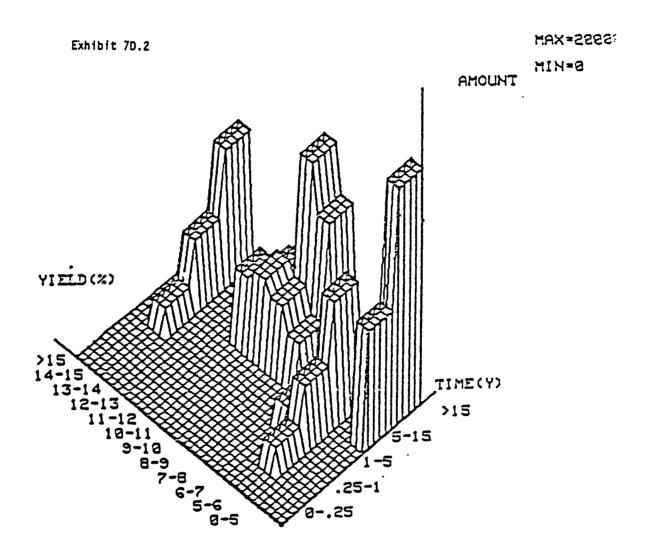
MAX*552268 MIN=-476530



This three-dimensional picture portrays the entire balance sheet of a financial institution broken down according to the maturity of the assets and liabilities. The three rows of columns which run from left to right show the liabilities, assets, and cumulative mismatch. The heights of the columns give the amounts of each asset, liability, or cumulative mismatch, in each maturity band. An idea of the scale is obtained from the min/max figures at the top right hand side of the picture, and the zero level is defined by the height of the "floor" separating the three rows (i.e. between liabilities and assets, and between assets and mismatch).

Source: Gardener, E.P.M. 'A Study on Capital Adequacy Criteria for Commercial Banks'. Ph.D. Thesis (unpublished) University of Wales, 1979.

Figure X-2 SOFI Data Presentation



In this three-dimensional picture, the assets side of the portfolio array is broken down by maturity and yield, with the heights of the columns showing the amount in each maturity/yield call. Again, an idea of the scale is given by the min/max figures in the too right-hand corner of the picture.

Source: Gardener, E.P.M. 'A Study on Capital Adequacy Criteria for Commercial Banks'. Ph.D. Thesis (unpublished) University of Wales, 1979.

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