

MODEL OF NIGERIAN FINANCIAL SECTOR: AN EMPIRICAL ANALYSIS  
OF THE GROWTH AND ROLE OF NIGERIAN FINANCIAL INSTITUTIONS  
IN THE ECONOMY AND THE NIGERIAN MONETARY POLICIES  
1960 - 1984

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BY

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Submitted for the Degree of Doctor of Philosophy  
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DEDICATION

TO

MY BELOVED WIFE, MRS. BIOLA ADEWUMI

AND MY CHILDREN, MARIA, TOSIN,

AND SAMSON ADEWUMI.

D E C L A R A T I O N

I hereby certify that this thesis, submitted in candidature for the degree of Philosophiac Doctor of the University of Leicester has not already been submitted in substance for any degree and is not currently being submitted for any other degree. This thesis is the result of my academic investigation.

.....  
CANDIDATE

.....  
Director of Studies

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## CHAPTER 1

### INTRODUCTION

#### 1. BACKGROUND

The study of financial institutions in general and commercial banking in particular is as old as history, although many economists believe that the effective beginning of English Banking System started in the year 1750<sup>1</sup>. Mint<sup>2</sup> (1970, p.9) argued that the study of the operation of commercial banks started almost immediately these institutions were established in the second half of seventeenth century in Great Britain and in 1780 in United States. In Nigeria as well as in most developing countries, financial institutions started to operate very much later. In Nigeria, the financial institutions started with commercial banking in 1892 much later than in Senegal where the first commercial bank was established in 1853.

The importance of the role of financial institutions in general and the commercial banks in particular in any economy only came to be fully appreciated with the work of Schumpeter (1934)<sup>3</sup>. In his analysis of the theory of economic development, often generally termed 'the theory of capitalist economic development', he showed clearly that the financial institutions in general are playing positive role in the process of economic development. This view is not shared by many economists and hence has resulted in great debates. The debates have in general been concentrated on the crucial role the financial institutions can play in the development process of any economy.

Some economists hold the view that the development of financial institutions per se is very crucial to the economic development and

capital formation of any nation. The premise under which this view is

1. See H.E. Krooes and F. M. Blyn: "A History of Financial Intermediaries" Random House, New York 2. L.W. Mints, "A History of Banking Theory in Great Britain and U.S." (1970) Chicago University Press. 3 J.A. Schumpeter, (1934) "The Theory of Economic Development: An Inquiry into Profits, Capital, Credit Interest, and the Business Cycle" (Harvard University Press)

held is that for real growth of developing economies, development of financial institutions should be considered as not only necessary but also sufficient conditions. This represents the view expressed by Schumpeter and shared by other economists such as Adelman and Morris (1968), Cameron (1972), Goldsmith (1969 p.390), McKinnon (1973), Minsky (1972) and Shaw (1973) to mention just a few.

The empirical evidence emanating from the work of Adelman and Morris (1968) appears to corroborate the view expressed by Schumpeter. From the analysis of the data from 74 developing countries for the period 1950 to 1963, it was found that out of the 14 purely economic variables there was a clear evidence that the degree to which financial institutions are developed is a very crucial factor in any country's development potentials. In Schumpeterian analysis, two important variables are primed very important for development of a nation, namely the bank or financial institutions in general and the entrepreneurs. Thus both Schumpeter and Adelman and Morris are very similar in their views that financial development has very significant role to play in the development process of any economy. The great need for rapid economic development in less developed countries (LDC) has led most development economists to suggest that the development of financial institutions is one of the most relevant variables in the growth process of these developing economies.

Studies of financial institutions and their role in the development process of the less developed economies have been undertaken by many writers and these have resulted in rich case study materials for students in this field. Because of the views held that financial institutions are intermediaries in the financial system of most of these less developed countries, many studies of these countries often show an implicit assumption

that the financial institutions, and especially the banks have a causative

1. See I. Adelman and C.T. Morris (1968)'s work on "Performance Criteria for Evaluating Econ. Development Potential: An Operational Approach" In J. of Ec. Vol. LXXII; 2. R. Cameron (1967) "Banking and Econ. Devt. Some Lessons of History" Oxford University Press; 3. W.R. Goldsmith (1969) "Financial Structure and Devt." Yale University Press; 4. R.I. McKinnon (1973), "Money and Capital in Econ. Devt." In the Brookings Institution; and 5. H.P. Minsky (1967).

role in the development process of these countries. From this assumption, many studies have come out to appraise the role of the financial institutions in particular and the financial system in general in most of the less developed countries. Some case studies like that of Taylor<sup>1</sup>(1972) on Sierra Leone, that of Islam<sup>2</sup> (1973) on Pakistan, that of Bourne<sup>3</sup> (1969) on Jamaica and that of Abdi<sup>4</sup> (1977) on East African Countries are clear examples.

All of these studies have so many similarities in common and one is that none of them has made attempt at studying the factors which actually facilitate the growth of commercial banks or any other financial institutions. Many of the writers on this subject are so ambitious that they sought to enquire into the whole aspects of financial system from the macro view point. Many of them concentrate on analysing the role of the commercial banks in the process of financial intermediation with basic attention on the uses and sources of funds and often to the utter neglect of their major role in the money supply process, in the control of inflation, and in the capital formation of the economy in which these banks operate. For example, the work on Nigeria by Nwankwo concentrates solely on the descriptive aspects of the Nigerian Financial System without touching on the crucial issues such as money supply or inflation. It is, therefore, not a gainsaying that such studies can hardly go deeper into the analysis of the factors which actually facilitate the growth of commercial banks per se, their role in the money supply process, mobilisation of domestic savings, capital formation and credit creation in the transitional Nigerian economy. One other important similarity in these earlier studies is that most of them only try to answer the 'HOW' question of the operation of financial system and make no attempt to answer the question 'WHY' on several aspects of the institutions.

Commercial banks as well as other financial institutions in any country are generally under the proper supervision of the monetary authorities often fully or partially represented by the Central Bank.

1. See Taylor (1972); 2. Islam's work on Pakistan (1973); 3. Bourne on Jamaica (1969) and 4. Abdi (1977) on East African countries, all on importance of financial institutions on economic development.

Writers on Nigerian banks often merely concern themselves with the relationship between the commercial banks and the Central Bank without actually analysing the impact the Central bank has on the operations of these institutions. In most cases, the role of other financial institutions such as the Federal Savings Bank, Federal Mortgage banks, the Insurance Companies and others are not dealt with in some of these earlier studies. In the developed countries, however, the role of the building societies, the merchant banks and the insurance companies as well as pension funds, has been well recognized in terms of their influence on the monetary policy and the definition of money.<sup>1</sup> In developing countries the importance of the non-bank financial institutions and their effect on the financial system are now in the process of being recognized. This is one of the reasons why this study is very crucial since it attempts to bring into the focus the role of these institutions in the Nigerian economy with respect to the efficacy of monetary policy. Also the model of financial sector is very illuminating.

## 2. THE OBJECTIVES OF THIS STUDY

In view of the foregoing, therefore, this study is conceived as an attempt at both filling the void created by the earlier studies and improving the insight these pioneers have provided in the study of financial institutions including the specialized institutions in general and commercial banks in particular. The basic aim of this study is, therefore, to empirically analyse the growth and expansion of commercial banks in Nigeria, focusing particular attention to the major determinants of their investments and loan operation in the context of credit rationing theory. Because of the growing importance of many non-bank financial institutions, especially the insurance companies, this study also attempts to examine the growth and role of the various non-bank financial institutions as well as those created by the government for specific sectors of the economy. In the light of monetary policy of Nigeria, the study also examines empirically the financial repression hypothesis with respect to its relevance to Nigerian economy, as well as to some selected developing countries.

Since this study concerns all financial institutions in Nigeria, the ultimate

1. See Wilson Committee Report, (1980) on the Review of the Functioning of Financial Institutions, HMSO, London.

goal is to build a short-run model of Nigerian financial sector to test whether a valid test of the monetary approach is also possible for a developing country Nigeria.

With regards to the commercial banking activities in Nigeria, the basic question this enquiry seeks to answer is whether there are certain factors not yet accounted for that facilitate or hinder the growth of this institution in Nigeria. Furthermore, the study attempts to examine the justification or otherwise of the central bank control on the commercial bank credit to the economy.

The orientation of this study is both positive and normative. It is positive in the sense that it uses the aggregative data on commercial banks, central bank and other financial institutions as well as other sectors of the economy to analyse the reasons for the growth and expansion of financial institutions in the economy on the one hand, and the working of the financial sector in general on the other hand. In other words, positive in the sense that it attempts to answer the question WHAT IS? That is, what are the factors responsible for the growth and expansion of financial institutions in Nigeria in general and commercial banks in particular? What are the main determinants of savings deposits, national and household savings, private investments, commercial bank investments, insurance company investments and, finally, what are the intermediate targets of monetary policy in Nigeria? In other words, is the total domestic credit an intermediate target of monetary policy in Nigeria?

The normative orientation is based on the premise that it is policy oriented in the sense that it attempts to find answers to the question

WHAT OUGHT TO BE? To do this, the financial institutions in some developed countries are examined in the light of the operation of such institutions in Nigeria.

There are certain unavoidable constraints associated with the study of any less developed country and the chief among these is the availability of suitable data. All the developing countries share the complex problems of gathering and dissemination of economic statistics which become even more pronounced where there are inadequate infrastructural facilities, institutions and personnel with suitable systems and procedures of gathering data. All these represent a major handicap to any researcher on less developed countries. In the light of the above enumerated constraints, therefore, this study has no other option than to use both macro-analyses to supplement the main micro-analyses. This is to say this study relies heavily on aggregate statistics as a basis for analysing the activities of the institutions and other sectors of the economy in addition to the cross-sectional and other empirical micro data.

### 3 WHAT IS THE RATIONALE OF THIS STUDY?

One good reason why this study concentrates on the financial institutions is due to the fact that they are the main institutions in the financial sector of the economy through which private sector savings are passed on to real sector for investment needed for the development of the country. Since the operation of these institutions affect the efficacy of monetary policy, it is considered important to build up a model (for the first time ever) to explain the working of Nigeria financial sector and how it relates to the real sector using the monetary approach. Also, our analysis of the total domestic credit as an intermediate target of monetary policy in Nigeria represents the first attempt at justifying the use of credit guidelines by the monetary authorities in Nigeria and our study of credit rationing in the commercial loan market is very crucial for the monetary policy implications.

Another important reason why the attention is much more focussed on the commercial banks owes very much to the importance assigned to the banking sector in the Nigerian economy as a channel for mobilizing domestic savings and distribution of credit as well as being one of the major sources of inputs for monetary policy. As will be shown later, the Nigerian commercial banks are the most important instrument of mobilization of domestic savings. According to table 5.1 banking institutions accounted for 90.9 per cent of the aggregate domestic savings in 1960 and 88 per cent in 1983. This shows that the banks will continue to play a dominant role in the realm of domestic mobilisation of savings for many years to come vis a vis other financial institutions. Also as an indication of the importance of this sector of Nigerian economy, the total commercial bank assets as a ratio of the GDP has risen from 3.02 in 1960 to 57.7 by the end of 1981 (See table 4.3). While these ratios compare poorly with those of United States of 33.57 and 81.98 in the corresponding period of 1960 and 1981 respectively, they compare more favourably with those of some oil-exporting countries. Thus in view of the magnitude of their assets and other banking scale variables, it is little wonder that Robert Ruozi (1971) has argued that of all the financial institutions, commercial banks contribute far greater to the economy of any nation. Most of the studies so far on Nigerian commercial banks have been conducted in the context of financial system rather than a deep study of bank as a sector. Moreover, some of the studies have become so outdated and this makes it quite justified to focus deep attention on commercial banks in the light of modern banking technological advancement.

Mobilization of domestic savings is perhaps the most important aspects of banking since they depend largely on the deposits in their lending operations. The total bank deposits have been empirically tested as

1. See R. Ruozi (1971) "Savings Banks and Agricultural Credit," in Conference on the Mobilization of Savings in African Countries, held in Millan, 20-23 September.

the major determinant of the bank supply of loans. In this study, attempt is made at finding the determinants of the demand for time and savings deposits in the economy. It is believed that without savers, there can be no money for the bank to lend to ultimate borrowers. Banks derive most of their profits from their lending operations and other businesses and it is through this that they are able to contribute to the development efforts of any nation.

There have been great debates going on for many years on the issue of interest rates policy in less developed countries. Many authors have suggested that except there is no interference with the interest rates by the monetary authorities of less developed countries, the efficacy of financial development in contributing to the real growth of those economies would be considerably weakened. Amongst the advocates of this idea are Cameron (1972)<sup>2</sup>, Mckinnon (1973) and Shaw(1973), who have argued that the banking system or financial institutions system as Mckninnon and Shaw would call it, is usually growth-inducing and that it is only when it is repressed, which in their view is often the case in LLC, would it fail to make positive contribution or act as obstacle to real growth. This is where 'Financial Repression Hypothesis' developed. In this study, attempt will be made to examine this hypothesis in the light of Nigerian situation where banks are operating under administered interest rate. It is the common practice for the Nigerian monetary authorities to furnish banks with credit guidelines together with the structure of interest rates which tell them which sector of the economy should be more favoured with loan accommodation and what interest rates or range of interest rates to charge for loans or pay on time and savings deposits. In most cases, the directives also give the methods of calculating those rates. For example, according to 1978/79 Credit guidelines, only the reducing

balance method is requested the banks to use in their calculation of interest

1. See T. Adewumi (1982) An Empirical Analysis of the Determinants of Demand for and Supply of Commercial Bank Loans in Nigeria, Unpublished M.A. Dissertation, University of Kent at Canterbury, Kent.
2. On growth and Development see Cameron (1972), McKinnon (1973) and Shaw (1973)
3. Central Bank of Nigeria Report, 1979.

charges on loans payable in agreed instalments. In this study, therefore, the role of interest rates in the mobilization of savings will be examined. In the earlier study on the determinants of demand and supply of bank loans, the interest rate variable was found to be very insignificant. This study provides a further test of the earlier findings.

Since Nigeria is an open economy, it is necessary to consider the financial sector of the economy in relation to outside world. To do this, this study will examine the Nigerian monetary policy and the private capital inflow, through the building of a short-run model of the financial sector. This model is designed to examine whether a valid test of the monetary approach is possible and useful in a developing economy Nigeria where there is a great intervention in the credit market by the monetary authorities.

In general, the commercial banks' function of mobilizing domestic savings in the economy constitutes the focus of this study since the level of deposits largely affects the extent to which banks can provide loans in the economy. That the lending operation of commercial banks is the most important function of banks in the economy is quite true since it is through this that they can contribute to the growth and development of their environment. But mobilization of savings through which banks can provide productive investment funds which can lead to the promotion of the welfare of the people in general is equally very important if not most important. It is, therefore, considered productive to examine the main determinants of the level of total domestic savings in Nigeria in comparison with other selected developing countries in the light of 'financial repression hypothesis.' Mobilization of domestic savings has been considered by many economists as very crucial for economic development of any nation and the more so for developing countries.

In dealing with the mobilization of domestic savings, attempt shall be made to examine the structure of interest rates in the context of banking development in Nigeria.

Because of the importance of credit in Nigeria economy and the fact that interest rate variable has been tested and found insignificant in the loan equation of commercial banks (Adewumi, 1982), it is considered productive to look at the commercial loans in Nigeria in terms of credit rationing. A model will, therefore, be developed to test for credit rationing in the Nigerian loan market. In the context of monetary policy in Nigeria, this study also looks at the total domestic credit as an intermediate variable of policy with a view to testing the justification or otherwise of the credit guideline policy of the monetary authorities.

#### 4. THE OUTLINE OF THE STUDY

This work is divided into 11 chapters. Chapter 2 deals with the discussion on the methods of analysis employed while chapter 3 concentrates on the survey of literature on the monetary economics in general. Chapter 4 deals with the literature on the financial markets, financial institutions and the role of finance in economic development. Chapter 5 is concerned with the traditional or unorganized credit institutions before the advent of commercial banks in Nigeria, while chapter 6 deals with the development of commercial banking. Chapter 7 looks at the structure of commercial banking operation in Nigeria and the specification and estimation of commercial bank equations while chapter 8 deals with the issue of credit in the commercial loan market. Chapter 9 is very crucial since it deals with the empirical aspects of monetary policy in Nigeria. It reviews the Nigerian monetary policies since 1960 in relation to commercial banking operations as well as inflationary trends and examines the determinants of household savings, financial repression hypothesis, and also the total domestic credit model as an intermediate target of policy. It also examines the determinants of private capital inflows in the economy. Chapter 10 is very crucial; it deals with all other financial institutions in Nigeria and examines a model

a short-run model of Nigerian Financial Markets. It looks at the growth of other financial institutions in Nigeria and attempts to estimate the insurance companies investment behaviour designed to test the whether there is an element of substitution in their asset portfolios. Finally, chapter 11, which is the last chapter deals with the conclusions and policy recommendations on the whole aspects of Nigerian financial institutions.

## SECTION II

### AN OVERVIEW OF THE NIGERIAN ECONOMY

The Federal Republic of Nigeria started formally as a nation in 1914 when the Northern and Southern Provinces were amalgamated by the then Colonial Governor, Sir Frederick Lugard. In 1960, it attained its independence from Britain and in 1963, it became a Republican country.

#### 5. GEOGRAPHICAL FACTORS:

Nigeria is situated in West Africa, sharing boundaries with the Republic of Benin to the West, the Cameroon Republic to the East, and the Republics of Niger and Chad to the North. In the South, she is bounded by the Gulf of Guinea. Being situated in the tropics, its vegetation spans from dense forest area in the south through savannah to the semi-desert areas in the far north. It occupies a land area of 913,072.64 square kilometres with a population of over 90 million which makes it easily the most populous country in Africa and 4th in the Commonwealth (after India, Bangladesh and Pakistan). With her huge population, Nigeria has more than half of the sixteen West African countries put together and one in every 4 black Africans is a Nigeria.

#### 6. POLITICAL AND ADMINISTRATIVE STRUCTURE

After the political independence in 1960 and the subsequent republican status attainment within the Commonwealth, Nigerian political system has been

1. See the Nigerian Parliament Acts, 1963.

2. See the Map of Nigeria (Map 2a), showing the important towns of the country

disrupted seven times. firstly, there were three military coups between 1966 and 1975, followed by a civilian administration between 1979 and 1983. After a short spell of civilian administration, the military came to power again in 1983 December and finally a counter-coup in 1985. The 1979 - 1983 civilian rule was under the Nigerian constitution modelled on the lines of United States of America in contrast to the pre-1966 civilian rule which was like the Westminster-type constitution.

Since 1914, the administrative structure of the country has been changing. In 1954, the country was divided into three regions under the Macpherson Constitution, namely Western, Eastern and Northern Regions. In 1963, a fourth region was created, carved out from the then Western Nigeria purely on political grounds rather than economic. In 1967, the military ruler under the forces of circumstances at that time, restructured the country into 12 major political states and these lasted until 1976. In 1976, the country was restructured again into 19 states of the Federation (See Map 2 showing the political division of Nigeria in chapter VII).

In terms of administration, there are three administrative levels of government namely, the Federal or National, the State and the Local Government Councils.

In the realm of foreign policy and relations, Nigeria is non-aligned and hence members of non-aligned nations. However, because of the colonial past, its foreign policy is often largely pro-west rather than pro-east.

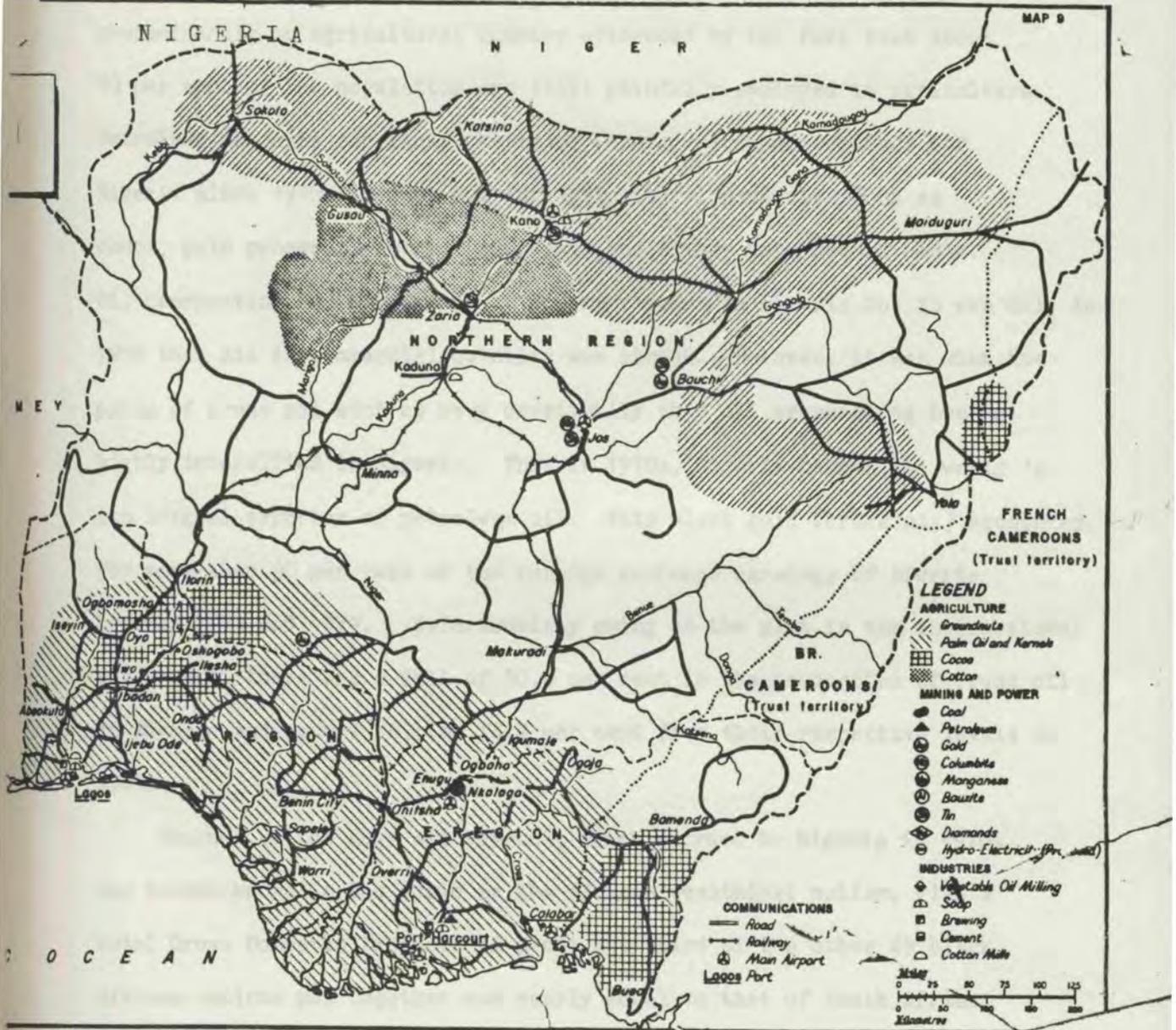
## 7. RESOURCES

The country is well endowed with both human and natural resources. Among the major mineral wealth of Nigeria are petroleum, natural gas,<sup>1</sup> tin ore, coal, columbite, uranium and some quantity of gold. The country is also well endowed with rich soils and vegetations. The important agricultural products of Nigeria include cocoa, groundnuts, tobacco, rubber, cotton,

1. See Map 2B showing the important export commodities of Nigeria.

Map 2B

Boundaries and important export commodities of Nigeria



kola nuts, palm produce, hides and skins, timber, ginger and soya beans. Among the main food crops are yam, rice plantain, bananas, cassava, millet, guinea corn with potatoes and wheat now being grown at increasing rates. Map 2B shows the important resources and communication system of Nigeria.

Even after almost 27 years of independence, Nigeria is still a predominantly an agricultural country evidenced by the fact that about 70 per cent of the population are still gainfully employed in agriculture. Petroleum products represent the major foreign exchange earnings for Nigeria since 1970, thereby putting agricultural products such as cocoa, palm produce, rubber, groundnuts and timber into second place. Oil prospecting had been going on for many years in Nigeria but it was only in 1957 that oil in commercial quantity was struck. However, it was when the price of crude oil went up very drastically that oil prospecting became highly intensified in Nigeria. Thus in 1970s, Nigeria became the world's 6th largest exporter of petroleum oil. This black gold (crude oil) accounted for more than 90 per cent of the foreign exchange earnings of Nigeria between 1973 and 1979<sup>1</sup>. Unfortunately owing to the glut in the international oil market, there was a fall of 30.6 per cent in the production of crude oil in Nigeria and export fell by 34.7 per cent from their respective levels in 1980.

Because of the huge oil revenues which accrued to Nigeria in 1970s, has become known in the world as the African wealthiest nation, with a total Gross Domestic Products of about one-third of the other 49 black African nations put together and nearly equal to that of South Africa.

The apex of financial institutions in Nigeria - the Central Bank - came into existence in 1958 but only became operative on 1st July, 1959 to take over the functions of the defunct West African Currency Boards in addition to the statutory functions assigned to it such as maintenance of external reserves, promotion of monetary stability and a sound financial

1. See The Central Bank Report, 1982.

structure, bankers to bankers and Government alike and chief financial adviser to the Federal Government. The financial institutions operating in the economy are the commercial banks, the merchant banks, Federal Savings Bank, Federal Mortgage banks including the various state housing corporations, finance houses, and Federal Loans Board. Others are various development banks and insurance companies. There are other foreign banks with representative offices in Nigeria operating as commercial banks under Federal Government license.

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1. See G.O. Nwankwo (1980) on Nigerian Financial System, Macmillan Press, London.

## CHAPTER 2

## METHODOLOGY

## INTRODUCTION

This chapter explains the methodology of the analysis employed in study of the growth and role of commercial banks and other financial institutions in the transitional economy of Nigeria. The hypotheses developed are stated in the next section of this chapter.

Section 3 of this chapter examines the concepts of banking institutions the national savings and the commercial banks in particular. The reasons for this lies in the fact that economists, as a matter of tradition, often distinguish between commercial banks, savings banks on account of the differences in the nature of their deposit liabilities as well as the differences in the composition of their assets.<sup>1</sup> Section 4 discusses the data used for this study.

By transition here is meant the emancipation of Nigeria from colonial or dependent status to an independent status in 1960.

## 2. THE HYPOTHESES OF THE STUDY

The basic hypotheses of the study are stated as follows:-

- (a) The money supply in Nigeria before the advent of central bank is determined by the level of exports, the level of economic activities in Britain as measured by the gross domestic products and other dummy variable to take account of the British Treasury monetary policy.
- (b) That the growth of commercial banks in Nigeria is a function of bank spread, literacy level, level of economic activities and the monetary policy variable of the central bank of Nigeria.
- (c) That the real rate of interest has no significant effect on the level of national savings in most of the oil exporting less developed countries.
- (d) That in the commercial loan market of Nigeria, there are elements of credit rationing.
- (e) That a valid test of monetary approach to the study of financial sector of Nigeria is valid and useful.

1. See A. D. Bain (1981) The Economic of Financial System, Macmillan Press, Saxon House, Aldershot.

(f) That total domestic credit, monetary base, and the stock of money defined as  $M_1$  and  $M_2$  are the likely intermediate targets of monetary policy.

Although some of these hypotheses are broad, they can be broken down into manageable sizes for the purpose of empirical investigations as will be seen in the coming chapters.

### 3. THE CONCEPT OF BANK

Going through the legislation and regulations on banks in Britain in search of clear definition of 'bank', it is surprising that we could not find a clear and consistent basis for defining such deposit-taking firms. In 1973, a number of secondary banks started to face liquidity problems which became very acute after 1973 and this highlighted the problem of definition coupled with the lack of tight supervision over the business operations of deposit-taking firms. This was evidenced in the White Paper published in 1976 and legislation, i.e. the Banking Act, which followed in 1979. This Act provides for two categories of banks: registered banks and licensed deposit taking institutions.

Since Nigerian banking institutions originated from Britain, it is not surprising that their operations are similar to those of British banking institutions. In Nigeria, all banks were formerly requested to register during 1950s, but this has changed. All banks are now given licence to operate as deposit-taking institutions. Thus the term "bank" being used in this study refers to all licensed banks in Nigeria. (See also chapter VI).

### 4. BANK AND NON-BANK FINANCIAL INSTITUTIONS

Although all the financial institutions have a common basis for their operations and the same role with respect to the lender/borrower relationship, a lot of controversy have developed over the years on the issue of difference between two groups of financial institution often referred to as "Bank financial institutions" and 'non-bank financial institutions', commonly abbreviated to B.F.I. and N.B.F.I.

For example, some economists suggest that one can divide financial institutions into two kinds based on the alleged distinction between N.F.I. and the N.B.F.I.

One argument for the distinction is that unlike the N.B.F.I.s, the B.F.I.s'

1. See the British Parliament Act, 1979.

liabilities are used as money, i.e. medium of exchange and payment in the economy. However, while this may be true, it is equally true that N.B.F.I.s are capable of adding to the volume of credit in the economy as we shall see later. One can, therefore, argue that if it is true that changes in the amount of credit available has more effect on spending in the economy than changes in the money stock, then the alleged distinction between the B.F.I.s and the N.B.F.I.s is greatly becoming relatively unimportant in the modern day advanced technology in banking. All the financial assets created by modern day financial institutions have special, and possibly unique qualities and it may not be legitimate to consider only the liabilities of B.F.I.s as been unique. (See also chapter III).

The concepts 'Financial Institutions' and 'Financial Intermediaries' are often used interchangeably in the literature since they both refer to the same thing. In this study, however, we shall stick to the use of the concepts 'financial institutions'.

#### 5. THE DATA EMPLOYED

This study covers the period between 1960 and 1985 and in consequence, all the data available on the Nigerian financial institutions in general and commercial banks in particular are employed. The principals of the sources of data are the Central Bank of Nigeria publications such as the Annual Report and Statement of Accounts of various years, the Financial and Economic Review of various years and the Central Bank monthly reports. Other sources are the Federal Office of Statistics publications such as the Nigerian Statistical Review of various years, Nigerian Macro-economic aggregates, the Statistical Digests and Nigerian Year books of various years. In addition, IMF International Financial Statistics of various years provide a valuable source of materials for other less developed and developed countries included in this study.

In most of the analyses, tables are set up to show ratios as well as absolute figures and percentages of the banking variables and in some cases graphs. Where estimates are made, the standard ordinary least squares method and the 2-stage least squares method are used to establish the empirical findings of the study

## CHAPTER III

A REVIEW OF LITERATURE ON MONETARY THEORIES AND THE GENERAL  
NATURE OF FINANCIAL MARKETS, BANK AND NON-BANK  
FINANCIAL INSTITUTIONS

## 1. INTRODUCTION

The objective of this chapter is to survey literature on the monetary theories as they relate to the main topic of this study. It is not intended to be exhaustive, rather it will be an attempt to outline some principal strands in the monetary theories as far as the supply of and demand for money as well as the financial markets, banks and non-bank financial institutions are concerned. In the next chapter, the role of finance in the economic development of any nation will be examined. This chapter is, therefore, divided into two principal sections. Section I deals with the issues of demand and supply of money while section II outlines the general nature of financial markets, bank and non-bank financial institutions.

## SECTION I

## 2. ISSUES ON SUPPLY AND DEMAND FOR MONEY THEORIES

In the past it was very common among the macro economic theorists to concern themselves with the problems relating to the determination of levels of gross domestic products, (GDP), employment, price level and the causes of and the rate of changes in those economic magnitudes over time. The real variables such as private investment, consumption, expenditures and government spending were treated as 'real forces' of productivity and thrift. For a very long time, the growth theorists did not recognize the importance of supply of and demand for money in the economy. This is because these earlier theorists viewed money as neutral without any positive role to play in the economy.

To many economists nowadays, analysis of national income determination without money is incomplete since its exclusion is like excluding the central figure or the moving force of the system. This is why Gwartney (1978) is correct when he wrote that:

"While the majority would assign a somewhat lesser role to money, today almost all economists believe that money, and therefore monetary policy, matters a great deal."

Even for the lay public, that is, the non-economists, the monetary aspect of day-to-day economic life is considered very important. There is little wonder, therefore, that J. S. Mill has observed :

"There cannot .. be intrinsically a more significant thing, in the economy of the society, than money; except in the character of a contrivance for sparing time and labour. It is a machine for doing quickly and commodiously what would be done, though less quickly and commodiously, without it: and like many other kinds of machinery, it only exerts a distinct and independent influence of its own when it gets out of order."

According to Mill, money is a machine, but distinct from all machines because it is all-pervasive. It should not get out of order, lest it throws a monkey wrench into operation of all other machines. Thus the pervasive nature of money coupled with its potentiality of great virtues and vices means that its supply and the demand for it need to be controlled so as not to get out of order with consequent disturbance to peace and prosperity.

Many economic theorists are now showing keen interest in the demand for and supply of money. The classical emphasis is basically on the supply of money determining the price level and the value of commodities. This has resulted in great debate between the two schools of thought which emerged as a consequence.

To the post-Keynesian economists, stock of money is a 'necessary', but not a 'sufficient' condition for determining the equilibrium level of money and income, while the classical believe strongly that it is necessary and sufficient. However, the two schools of thought generally agree that money stock has an important influence on the changes in money national income.

1. See J. D. Gwartney Macroeconomics: - Private and Public Choice. Academic Press. 1975.
2. J. S. Mills (1936) Principles of Political Economy: Book III, London.

Changes in money and national income also affect changes in demand for money. However, there is still no agreement among economists on the price role of money in explaining nominal income. Some economists consider it as the strategic variable while some others regard it as one of the several factors which influence the national income. As a matter of fact, there are still some economists who treat the supply of money as a dependent variable of changes in national income.

The bone of contention among economists lies on the importance of controlling money supply and the importance of the stability of demand for money. The traditional quantity theorists have always emphasised the relative stability of demand for money. The champion of the so-called Chicago School, Professor M. Friedman<sup>1</sup> has once said for example, that:

"the quantity theory is in the first instance, a theory of demand for money. It is not a theory of output, or of money income or of the price level."

In the General Theory, p.166, Keynes<sup>2</sup> believes that the decision on how much to save generates another decisions when he wrote:

"Does he want to hold it in form of immediate market command, (i.e., money or its equivalent)".

Thus, Keynes showed that money is not a mere proxy but an independent variable.

### 3. DEMAND FOR MONEY THEORIES

Most demand for money theories start off with the question "Why do people demand money?". To the classical economists, people demand money for transactions purposes. The neo-classical economists believe that nobody needs funds for its own sake, unless one suffers from 'money illusion'. Demand for money by households or firms may go up sometimes according to the nature of economic or social circumstances. For instance, firms may want to buy new machines which will cost more money while the households may have to spend more during special occasions like festivities such as Christmas time. However, according to neo-classical, the demand for money may also decrease

1. See M. Friedman (1956), The Quantity Theory of Money - A Restatement in Studies in the Quantity Theory of Money, M. Friedman, ed. University of Chicago Press. 2. Also see J.M. Keynes, (1936) The General Theory of Employment, Interest and Money. First Harbinger Edition, 1965.

but more or less usually stable and largely determined by income and price levels.

(i) FISHERIAN MODEL OF DEMAND FOR MONEY THEORY

It is generally agreed by many economists that I. Fisher is one of the first great economists to offer a consistent theory of money. However, because he was much carried away with his concern for the supply of money and its influence on the general level of price, he did not put it in the framework of theory of demand for money. Thus Fisher came up with the identity in which one side represents the value of sale and the other represents the value of purchase. Formally expressed the identity is as follows:

$$M_s V_t = PT \quad (3.1)$$

where  $M_s$  is the quantity of money supplied,  $V_t$  is the transactions velocity  $P$  is the price level and  $T$  stands for the volume of transactions. This simple identity does not tell anything than truism, although it can be used in a theory of demand which is quite capable of explanation and prediction. The famous quantity theory of money which is derived from Fisherian identity can be formalized as follows:-

$$\bar{M}_s \bar{V}_t = \bar{P}\bar{T} \quad (3.2)$$

The only difference between the two equations is the bars above  $V_t$  and  $T$  in the second equation and these bars are designed to show that the two variables are constant in character in equation (3.2) commonly termed the equation of exchange. The equation of exchange as stated above implies that changes in money supply can bring about a proportional change in the price level given that  $T$  and  $V$  are constant.

Fisher's model tells us about the definition of money; it is a medium of exchange and its demand is determined by the value of transactions generated in the economy during a period of time. This means that the demand for money in Fisherian model is equal to a constant ratio of the value of transactions as expressed formally below:

$$M_d = K_t \bar{P}\bar{T} \quad (3.3)$$

1. See I. Fisher, (1911), The Purchasing Power of Money (New York, Macmillan).

The equilibrium condition or steady state for demand for money will be as follows:

$$M_d = M_s \quad (3.4)$$

The combination of (3.3) and (3.4) yields the following equation:

$$M_d = K_t P\bar{T} = M_s \quad (3.5)$$

Hence 
$$M_s \frac{1}{K_t} = P\bar{T} = M_s \bar{V}_t \quad (3.6)$$

where 
$$\bar{V}_t = \frac{1}{K_t} \quad (3.7)$$

What the equation (3.7) is saying is that the transaction velocity of money or demand for money balance set as a ratio of the volume of transaction in the economy are reciprocal to each other. This Fisherian transaction approach to the theory of demand clearly hypothesises that "demand for money is a constant proportion of the level of transactions. The major weakness of this approach is the underlying assumption of full employment income. However, most economists now agree that the removal of this assumption will not affect the explanatory power of the theory as such.<sup>1</sup> What is of great interest in this approach is the fact that the Cash balance Approach of the Cambridge school is more or less a new brand of the quantity theory. This Cambridge approach clearly confirms the conclusion from Fisher's model through the use of a very sound framework of the theory of demand for money.

#### (ii) CAMBRIDGE MODEL OF DEMAND FOR MONEY

The Cambridge approach, like Fisherian approach, emphasises the transaction purpose of holding money. However, there is a great difference between the two approaches. For while Fisher's theory relates to the determination of amount of money that is needed for transaction business, the Cambridge version focuses on what determines the amount of money that an individual would want to hold, given the desired volume of transactions. Put another way, the Cambridge economists emphasise on 'what to hold' as different from 'have to hold' emphasised by Fisher.

In Cambridge version, the demand for money is seen to be a function of volume of desired transactions and the opportunity cost of holding cash

1. See A.H.Hansen, (1953) A Guide to Keynes (New York, McGraw-Hill).

balance. Implicit in the Cambridge version is the recognition of such factors as total wealth, interest rates and future expectations as being very important in the demand for money balance. However, <sup>1</sup>Pigou, (1949) and others have suggested that all those factors could be assumed to hold in stable proportion with one another in the short-run. Put formally, the Cambridge approach takes the following form:

$$M^d = KPY \quad (3.8)$$

$$M^d = M^s \quad (3.9)$$

Combining the two equations yields the following:

$$M^s = KPY = M^d \quad (3.10)$$

Hence 
$$M^s \frac{1}{K} = PY = M^s V \quad (3.11)$$

where 'V' is the income velocity as different from  $V_t$  in the earlier model which implies the number of times a unit of money turnover or the ratio of circulation relative to the rate of production. Another difference between Cambridge version and the earlier theory is the recognition of interest rate variable by the later in the determination of demand for money.

Although one major weakness of the Cambridge version lies in the fact that the model fails to provide any clear answer on why money is held, however, it is important to recognize that the Cambridge economists have laid a solid foundation on which other economists after them later developed.

### (iii) KEYNES' THREE MOTIVES FOR HOLDING MONEY AND KEYNESIANS DEMAND FOR MONEY

Keynes' work was largely an improvement of Cambridge theoretical framework. Although after 1936, he broke away from Cambridge tradition and established his own idea, yet it is quite difficult to draw a line of distinction between his work and that of Cambridge tradition. Many economists still believe that the treatise on money completely belongs to Cambridge tradition.

While Fisher and Cambridge economists considered the medium of exchange aspect of money implicitly or explicitly linking the demand for money

1. See the book by A.C. Pigou (1949), Employment and Equilibrium 2nd ed., Macmillan, London.

balance to the volume of transactions in a given period of time, Keynes's analysis considers transactions as one of the three motives for holding money. Keynes also recognized the influence of interest rate on demand for cash balance for transaction purpose. He argued that there is a tradeoff between the demand for transaction purpose and the prospect of holding other income yielding assets leading to the earning of interest income. However, to Keynes, this interest rate variable has a strong association with the second motive of holding money which is the 'speculative'. The other motive is what Keynes termed 'precautionary'. Thus in Keynes' paradigm, the demand for money depends on three motives as follows:

- (a) Transaction demand
- (b) Precautionary demand
- and (c) Speculative or Asset demand.

Since the introduction of the General Theory, two major developments within the Keynesian tradition have occurred. These developments were actually designed to base demand for money on microeconomic behaviour at the individual level. The first can be viewed as a challenge to the separation of the two demand for money into income-related and interest-related components, as can be seen in the work of Baumol (1952)<sup>1</sup>, and that of Tobin (1956)<sup>2</sup>. The introduction of risk element into the individual decision-making process represents the second major development on the Keynesian theory of demand for money. Markowitz (1952, 1959)<sup>3</sup>, as a matter of fact initiated the idea of risk into the demand for money, however, the work of Tobin (1958) puts this in good theoretical perspective in accordance with the foundations already outlined by Hicks<sup>3</sup> as long ago as 1935.

Many Keynesian economists now believe that the precautionary demand for money in Keynes' paradigm actually originated from the work of Edgeworth (1885)<sup>4</sup>. The Keynesian economists like Patinkin (1965)<sup>5</sup>, Whalen (1966) and Orr (1970) have done a great job to improve upon Keynes' work on precautionary demand for money.

1. For brilliant discussion on demand for money in terms of microeconomic behaviour, see W. Baumol, (1952) "The transactions demand for cash - an inventory theoretic approach", in Quarterly Journal of Econ. Vol. 66 pp. 545-566.
2. See two articles by J. Tobin (1956 and 1959) (3) Also see J.R. Hicks (1935).
4. See F.Y. Edgeworth (1885) "The Mathematical Theory of Banking", Journal of the Royal Statistical Society, Vol 51, 1888. 5. See the work of other Keynesians like D. Patinkin (1965), F.L. Whalen (1966), and D. Orr (1970)

It is quite obvious that both precautionary and transaction demand for money imply a choice decision between capital-safe assets and money on one hand and between narrowly defined money and a variety of deposits accounts with financial institutions on the other hand. Thus the two motives can largely explain the demand for money narrowly defined. The portfolio analysis of demand for money developed by Tobin (1958)<sup>1</sup> brings into focus the choice between the capital-safe assets and capital-uncertain assets such as bonds. This portfolio analysis of demand for money is very interesting and needs a deeper examination since it relates very much to the financial institutions which is the focus of this study.

#### (iv) THE THEORY OF PORTFOLIO SELECTION

The theory of portfolio selection developed by Tobin (1958) is designed to correct some of the weaknesses inherent in Keynes' analysis of demand for money. For instance, Keynes was of the view that the speculative demand increases as the proportion of investors in the money-holding category rises and also as the bond holder group falls. In essence, therefore, Tobin's model is intended to predict that the proportion of each individual assets held as money may vary with the rate of interest. Keynes' liquidity preference is rooted on expectations with respect to future interest rate as opposed to Tobin's analysis which emphasises element of uncertainty associated with future interest rates, which might lead to wealth holders sustaining loss instead of capital gain.

In general, Tobin seems to have adopted this theory to analyse the asset demand for money. Tobin seems to address himself to one question: "Given a fixed amount of wealth and a group of different assets with associated different yields and risks, which choice of assets from these will maximize expected yields from a given basket of asset wealth?"

Thus in Tobin's paradigm, money is just one in the whole spectrum of asset wealth and hence asset demand for money is treated as a problem of choice. It is

1. See J. Tobin (1958) "Liquidity Preference as Behaviour towards Risk", in the Review of Economic Studies, vol. 25, February.

a problem of how an economic unit or wealth holder can make a choice from the portfolio of assets which maximizes the rate of return on the entire portfolio. Risk is an unavoidable element in the portfolio selection since without it, the tendency is for a wealth-holder to hold all his wealth only in the highest-yielding assets. In theory, an individual economic unit who likes or is indifferent to risk may hold all his wealth in a single highest-yielding assets. In practice, however, this is not always the case. Many an individual tends to diversify his asset portfolios because he is a risk averter. Because of the unavoidable risk associated with choice of assets to hold, a **wealth-holder** needs to make his decision in accordance with rational calculation.

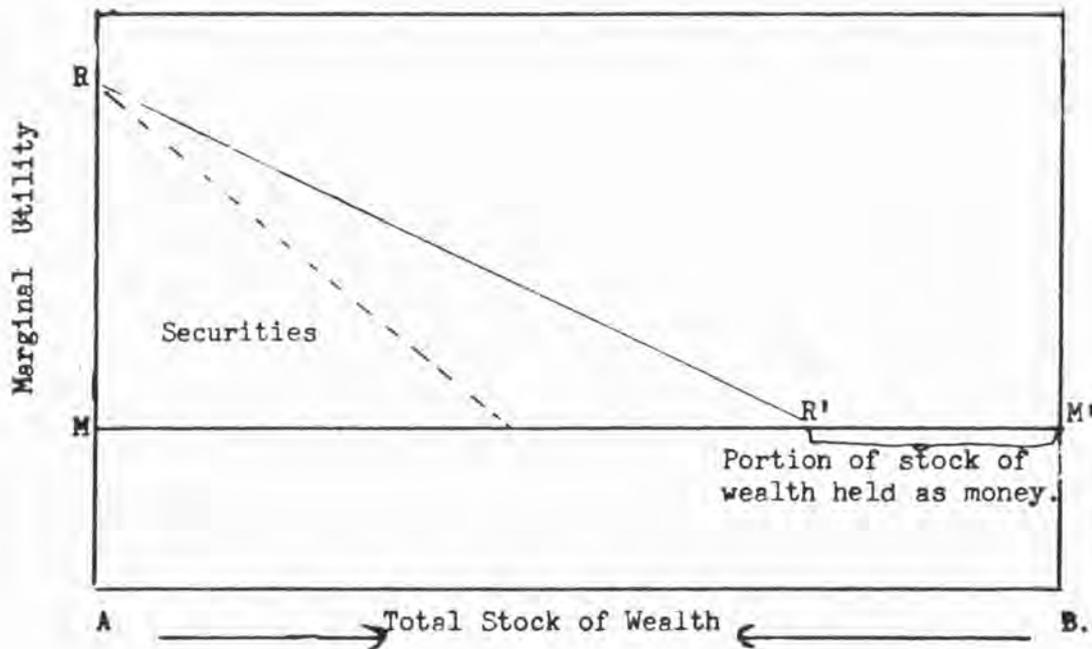
The decision to select from different types of securities is largely affected by interest rates associated with individual securities. The interest rates make it possible for a wealth-holder to estimate what Tobin terms 'certainty equivalent' of each of the securities. Thus a wealthholder considers what amount he is prepared to exchange his claim of uncertain value for a claim of certain values which may be cash. A question about what an investor or a wealth-holder is prepared to pay for certain value, will indicate how much an investor is willing to invest in any particular type of security. With the application of marginal utility theory, it is easy to know how much an additional Naira (Nigerian currency) invested in say government treasury will yield an additional marginal utility with respect to the entire wealth portfolio. An optimum or efficient diversification is one in which the marginal utility derived from each last Naira of security is equal. The proportion in which income-yielding wealth assets and money are held will determine the total rate of return, with the return being highest if all wealth is in income-yielding assets and the loss greatest if all is in money, although much less will be the risk. Between the two extremes, there are always infinite combinations of yield and risk according to the proportional division of portfolio among assets and money.

An optimum portfolio is manifested through diversification among several securities when the marginal advantage from each security is equal.

Tobin made use of marginality theory in his analysis of portfolio choice selection but with great modifications. For example, in place of the law of diminishing marginal return, he imposed the assumption of risk aversion. This idea of risk aversion can be easily understood with the aid of a diagram below:

Fig. (3.1)

PORTFOLIO SELECTION WITH MONEY AND OTHER ASSET



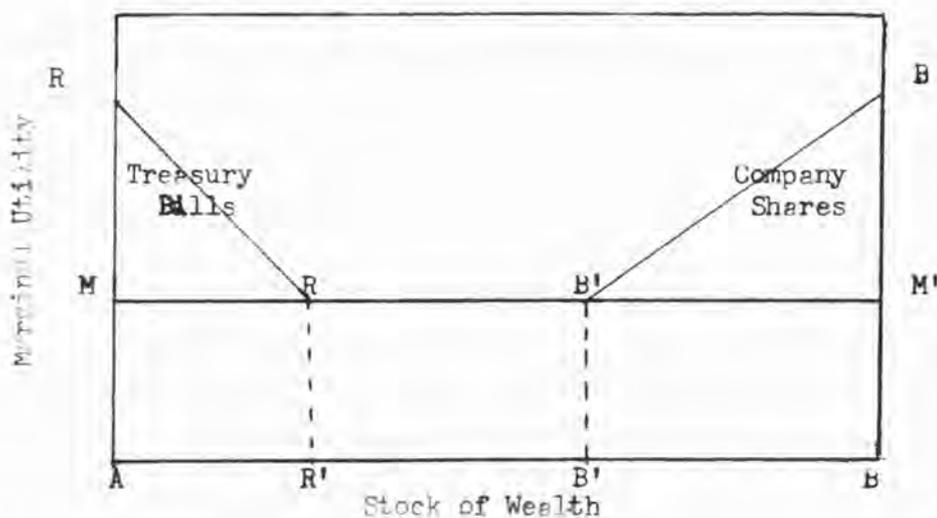
The line  $RR'$  in the above represents investor's risk aversion. For each Naira worth of security, therefore, there is less utility since it increases the total amount of a possible capital gain or loss associated with a given portfolio. An investor will increase his purchases of the securities until the marginal utility derived from the security just equals that derived from money at point  $R'$ . Thus his optimum portfolio which will maximize his expected utility will consist of  $MR'$  in securities and  $M'R'$  in money. Should an investor continue to increase his subjective

evaluation of the risk associated with security, the slope  $RR'$  in the diagram below will become steeper and increasingly less utility is derived from one Naira worth of security. Point R will remain unchanged since it is associated only with the rate of return on security for there is no risk associated with holding zero amount of securities.

In the diagram 3.1 the horizontal line AB measures the amount of capital to be invested while the vertical axis AR measures the amount of marginal utility brought about by the last Naira of investment on a particular asset. The marginal utility of money is assumed to be constant since it is not subject to risk as depicted by  $MM'$  in fig. (3.1). Money is shown to have positive utility because money is the most liquid of all assets.

In Fig.(3.2) below is shown the proportional shares of three types of asset categories in the portfolio of assets. From right to left is measured the new security holding while the amount of old security is measured from left to right. The implicit assumption underlying this diagram is that the yield on each of the two types of securities are independent of one another.

Figure (3.2)  
 PORTFOLIO SELECTION WITH MONEY AND TWO OTHER TYPES OF SECURITY



Again an investor will increase his holdings of both types of securities until the marginal utility of money is equal to each other. Thus from the

above, the hypothetical investor holds  $MR'$  in Treasury bills and  $B'M'$  in form of shares while holding  $RE'$  in form of money. If  $RR'$  and  $B'B$  have intersected above  $MM'$ , no money could have been held as part of wealth portfolio.

If an economy is experiencing inflation, an investor may select his asset portfolio by either holding less money in favour of more security holdings to take advantage of upward shift in the yield of securities associated with inflation or by treating money like any other securities if the price situation is uncertain. This would involve a downward sloping curve for money indicating not only a negative return but also an uncertain rate of return. Should price uncertainty persist, the investor might be forced to seek for a new asset to perform the functions of money asset, for example, foreign currency as in many of the less developed countries where rate of inflation is still high.

In general, an investor with a desire to maximize his rate of return on his wealth portfolio will hold some amount of money in his portfolio as well as other assets in accordance with the rate of interest on each type of asset and the amount of risk associated with their holdings.

Tobin's approach, as can be seen from the foregoing, is a clear generalisation of the treatment of money as one among a wide range of assets that represent alternative forms of holding wealth. Thus the demand for money is considered as one decision in the formation of an optimal portfolio selection, the choice of which is being determined by a trade-off between the rate of return and liquidity service or convenience. This kind of approach also manifests itself in Friedman's "RESTATEMENT" in 1956. Omitting human capital, Brainard and Tobin<sup>2</sup>(1968) also adopted this approach in their analysis of demand for other assets.

Like Keynes' demand for speculative balances, portfolio approach has not escaped criticism. Some economists have argued that portfolio approach

1. See M. Friedman (1956)

2. See J. Tobin and W.C. Brainard (1968), "Pitfalls in Financial Model Building," American Economic Review, Papers and Proceedings, Vol. LIII, No. 2 (May).

merely attempts to explain how an investor makes a choice between assets whose yields are certain and those whose yields are not without necessarily offering explanation on the choice between money and bonds. This type of criticism can only be justified under the narrow definition of money and can be very misleading under the broad definition of money which includes bank deposits bearing a competitive rate of interest. Moreover, in so far as depositors can transfer money from deposit accounts to current accounts without incurring any cost, it is reasonable to expect depositors to hold money in their current accounts only at the level which satisfies their transaction's and precautionary needs. In this case, one might expect portfolio demand to apply only to the choice between deposits on which interest is paid (and in fact all bank deposits are now attracting interest) and bonds or treasury bills. The definition of money gets broader and broader as the financial system of a country becomes more and more complex owing to sophistication in new technology.

While the portfolio approach introduced by Tobin might be considered as representing a narrow approach to demand for money, Friedman's formulation of the quantity theory can be interpreted as a simple generalization of a portfolio approach to include the total demand for money with broad definition.

#### (V) THE WEALTH THEORY OF DEMAND FOR MONEY

The Keynesian approach to the theory of demand for money is an outgrowth of development of the earlier theory developed by the Cambridge economists. Keynes extended the Cambridge analysis by examining the other motives behind the holding of cash balances by people.

Like Keynesian approach, the modern quantity theory also took off from where the Cambridge economists stopped. To these economists, the demand for money is the same as the demand for any other commodities rendering services. To Milton Friedman, the chief exponent of this approach, money is 'durable' consumer goods held for the services it renders and yielding a flow of services proportional to the stock. Some economists have also argued

that the wealth theory of demand for money developed by Friedman is largely an extension of Keynes' theory.<sup>1</sup> For in Friedman's analysis, people demand for money in the same way as they demand for any other assets, financial or physical. Thus assets are given very broad definition in this theory just as the definition of expenditures.

Friedman(1956) enumerated five broad ways of holding wealth, namely money, bonds, equities, physical goods and human wealth each with its own distinctive characteristics and each yielding some returns either in money or in kind. The convenience offered by money to its holder is a service yield since it makes the holder to avoid trouble and even costs of not having money for immediate use.

being regarded as one of the durable goods, the general principle of 'Diminishing Rate of Substitution' is applicable to money. Thus the more money one holds the less valuable the money becomes to one relative to other assets rendered. An economic constraint is imposed on any individual by the limitation of his wealth. Thus an individual can hold wealth assets only to the extent of his financial resources.

The concept of wealth in modern economics generally includes all assets such as bonds, stocks, shares, equities, land, buildings, etc. which can be traded and yield income. For the sake of analysis income from labour is also amenable to trade in future income from labour. This is the rationale for including human wealth in the concept of economic wealth by Friedman. Thus income from human wealth is regarded as a return on a particular type of wealth just like interest on bonds or dividend on equity or rent on building. However, inspite of the analytical similarity between human and non-human wealth there are empirical differences between the two. For example, while there is a great scope for trading among assets included in non-human wealth such scope is limited in human wealth. Of course, an individual may sell some of his non-human wealth and invest on education or skill formation and equally too, it is

1. See A. Leijohlfvud, (1968) On Keynesian Economics and the Economics of Keynes New York: Oxford University Press.

possible that an individual may avoid spending on his education and invest it on accumulation of non-human wealth. Thus there is a possibility of substitution between non-human and human wealth. Although the inclusion of human wealth in the concept of wealth by Friedman might be justified in the light of the substantial portion of increase in GNP to human investment in any country, but the limited marketability of human wealth poses a problem of substitutability among assets within the portfolio of asset wealth. If the human component in the total wealth is higher, its limited marketability can be compensated for by greater demand for holding money.

In Friedman's analysis, wealth implies the present value of the discounted flow of permanent income on the ground that it is a maintainable income. Put formally, this can be stated as follows:

$$W = \frac{YP}{V} \quad (3.4)$$

where W = wealth

YP = permanent income

and V = velocity.

However, while Friedman prefers the use of permanent income - which is the weighted average of current and past values of income- as an indicator, some other investigators have concentrated on non-human wealth, w.

Like Cambridge tradition, Friedman also considers the cost involved in holding money. The opportunity cost of holding money is the income foregone by not holding other assets such as bonds, equity, durable goods and also human wealth. Following the principle of Diminishing Marginal Rate of Substitution, he asserts that if the return on other assets increases, the demand for money would decline. Hence the rate of return on various assets are relevant for determining the demand for money.

The price level stability or otherwise determines the rate of return on money. If price level changes, the real value of money holding would fall in proportion to a change in price level. Thus a rise in price level causes

a negative return on money balance and a fall makes it positive. Friedman, therefore, includes in his analysis the expected rate of price change which may also be taken as the expected change in return for money. The higher the rate of expected return on money, the greater is the demand for holding money or cash balance and the lesser the return, the lower the demand for it. The services that money renders create a demand for it and these services are measured in terms of constant purchasing power. Price changes determine the amount of nominal money balance. The demand for money can be expressed as follows to incorporate all the variables discussed so far:

$$M_d = f(w, r - \frac{1}{r} \frac{dr}{dt}, \frac{1}{P} \frac{dP}{dt}, h)P \quad (3.5)$$

$\frac{1}{r} \frac{dr}{dt}$  is the percentage change in interest rate used to measure the expected percentage change in capital gain or loss as a consequence of holding other assets.

where:

$M_d$  = demand for money balance

$w$  = wealth

$h$  = ratio of human wealth

$r$  = rate of interest

$p$  = price level.

In this model, the appropriate construct on money holdings has become expected rate of returns on wealth. Friedman's model shows that the demand for money and hence velocity of money in contrast to other forms of wealth is in equilibrium in the long run.

#### (VI) KEYNESIANS AND QUANTITY THEORIES COMPARED

Friedman's model was presented as an alternative to the Keynesians' approach to the demand for money. However, Patinkin amongst others has argued convincingly that: "What Friedman has actually presented is an elegant exposition of the modern portfolio approach to the demand for money which ... can only be seen as a continuation of the Keynesian

1. See Patinkin, D. (1969) "The Chicago Tradition, the Quantity Theory, and Friedman", in the Journal of Money, Credit and Banking, Vol. 1.

theory of liquidity preference" (Patinkin 1969 p.47). Friedman himself once declared that the reformulation of his theory was "much influenced by the Keynesian liquidity analysis."

In spite of the similarity between the two approaches, there are some fundamental differences between them. For example, the quantity theory lays emphasis on wealth as opposed to current income and omits any unstable element such as implied in the speculative demand for money. Another fundamental difference is that the quantity theory gives much weight to the price level variable as well as the expected inflation which is regarded as the cost of holding money. Moreover, to the Keynesian, a great weight is attached to interest rate variable since it has been shown that this variable highly affects demand for money. In contrast, the quantity theorists do not consider interest rate to be special in the demand for money theory since they do not expect to find that the interest elasticity of demand for money is high.

The issue of the proper definition of money is still largely debatable. On the question whether the money is directly substitutable, the quantity theorists hold that money is possessing a property of a direct substitute over a wide range of assets and hence has great implications for monetary policy. It is now generally recognized that each particular theory carries with it the implication for interest-elasticity of demand for money and interest-elasticity of investment.

The quantity theory deals with the long run analysis of price level while the Keynesians deal with a short-run model which emphasises the importance of interest rates as being very important variable in the demand for money theory. The quantity theorists have advanced six basic propositions and the first and most basic of these is their strong belief in quantity theory. The second relates to an hypothesis on the way in which changes in the quantity of money stock affect the national income, generally

1. See D. Patinkin, (1969), "The Chicago Tradition, the Quantity Theory, and Friedman", Journal of Money, Credit and Banking, Vol. 1 No. 1

referred to as transmission mechanism. Prominent among the monetarists on this issue are Friedman (1969)<sup>1</sup> and Brunner and Meltzer<sup>2</sup> (1963) who have tried to explain this transmission process in their models. Also interesting is the work of Laidler (1978)<sup>3</sup> who provided an excellent survey on the issue of transmission mechanism on the part of the quantity theorists. The third proposition involves their belief in the stability of the private sector of the economy. It is argued that ill-considered policies of government tend to destabilize the economy. Thus in the absence of government's bad policies, there would still be some fluctuations in income but with tolerable levels of unemployment and of course little inflation. In contrast, Keynesians, by and large, hold the belief in inherent instability of the private economy and hence emphasize the need for fiscal policies rather than monetary policies to stabilize it. The fourth proposition is rather subtle and it relates to research technique. The quantity theorists assert that in determining nominal income, one should concentrate only on the factors changing aggregate demand like quantity of money, while ignoring the allocation of this demand among the component sectors of the economy. To the Keynesians, however, the incentives to spend in these component sectors of the economy determine the aggregate demand. Hence they determine aggregate demand by combining the demands of various sectors of the economy. To be sure, both the monetarists and the Keynesians agree that when the stock of money increases, nominal income does rise. However, there is still no agreement on how this increase is brought about. For example, the quantity theorists believe that this occurs because the public increases its expenditures in order to bring its real money holdings back to equilibrium level. They, therefore, argue that in determining what will happen to nominal income, one should concentrate on the aggregate expenditure rather than asking the types of expenditures since if some types of expenditures, for instance the purchase of capital goods, do not increase, others will increase even more to compensate for this. The Keynesians, however, believe that since a rise in the money stock has a negative impact on interest rates, it is necessary to examine how expenditures

1. See M. Friedman, (1969), *Optimum Quantity of Money*, Chicago: Aldine.

2. See Brunner and Meltzer, (1963) 3. See also Laidler (1978).

a negative impact on interest rates, it is necessary to examine how expenditures in various sectors such as in residential construction, react to this fall in interest rates.

This issue clearly brings out another point of difference between the two schools of thought. Thus while the Keynesians prefer large-scale econometric models that describe various sectors of the economy in detail, the monetarists favour the use of smaller but highly aggregated models like St. Louis model developed by Andersen and Jordan<sup>1</sup>(1968).

Another bone of contention between the Keynesians and the monetarists relates to the behaviour of price level. Contrary to the Keynesians, the monetarists believe in the flexibility of prices both upward and downward.

An hypothetical example will drive this point home. Suppose there is a rise in price of oil by say 20 per cent, the Keynesians would say that if oil is considered directly or indirectly as a raw material representing about say, 10 per cent of GNP, it follows that the 20 per cent rise in oil prices would result in two per cent overall rise in price level. To the monetarists, there is a general belief that if the stock of money is held constant, much of the rise in the price of oil and oil products will be removed through the declines in other prices assuming there is no inflation. If there is inflation, however, this rise in oil price will be removed by a decline in the rate that other prices are rising. A 2 per cent rise in price level, according to monetarists, will lead to an increase in the demand for nominal money in excess of money supply and this will result in the fall in aggregate demand and hence a further decline in prices.

Perhaps of great importance is the stability issue on which there is still no agreement between Keynesians and monetarists. This relates to the stability of private sector without the help of government stabilization policies in a situation of high unemployment level and high inflations.<sup>2</sup>

The strong belief in instability of the private sector has led the Keynesians to develop an approach as a response. The capitalist economies witnessed

1. See L.C. Anderson and J.L. Jordan, (1968); on "The Monetary and Fiscal Actions: A Test of their Relative Importance in Economic Stabilization" in the Federal Reserve Bank of St. Louis Monthly Review, Vol. 50, No. 11 November.
2. Also see C.R. Parrett and A.A. Walters (1966)

a great deal of disruptions caused by panics, recessions and depressions for nearly two hundred years before the World War II. The Great Depression of 1930s represents the last straw and this stimulated economists to examine the cause or causes. To the monetarists, the sharp declines in the growth rate of the money stock coupled with the innerent fault in the capitalist system represent the main cause of the depression rather than poor monetary arrangements. The governments in all the economically advanced market economies became engulfed with formulation of policies aimed at preventing or limiting the uneven movements of production and employment which had resulted in great waste and suffering in the past. To rationalize the government interventionist policies in the economy, the Keynesian developed the income-expenditure model as a paradigm for the analysis of any alternative stabilization policies. Thus to the Keynesians, the instability in the private sector economy is attributable to the variations in the investment opportunities as a result of new techniques and new products. This variations became aggravated by the speculation in the security markets.

All economists now agree that the basic issue underlying the debate between the monetarists and the Keynesians revolves around the length of the horizon of one's analysis as well as the speed with which the economy adapts. For example, the Keynesians accept many of the arguments advanced by monetarists as correct in the long run, but certainly not in the shorter run necessary for the effectiveness of economic policy. Keynes<sup>1</sup>' famous statement, "in the long run we are all dead," is a direct response to the quantity theory.

#### (VII) SOME CRITICISMS OF QUANTITY THEORY

Some Keynesian economists have levied some criticisms against the quantity theory. Although many studies have shown that the demand for money bears a stable relationship to its determinants, but only few of them are in agreement with Friedman that interest rates are unimportant. Laidler<sup>2</sup>(1966) argues that there are convincing body of evidence to support the claim that the demand for money is stable and negatively related to the interest rate. Also many studies

1. See M. Keynes, (1924), A Tract on Monetary Reform, (London: Macmillan p.80).

2. Also see D. Laidler (1966), "The Rate of Interest and the Demand for Money - Some Empirical Evidence", Journal of Political Economy (December).

have shown that the money supply is partly endogenously determined. For example, Teigen<sup>1</sup>(1964) finds that money supply is affected positively by interest rate changes. It is argued that in a situation of bright investment prospects when the demand for finance increases, the bank may expand the money supply. However, in such a situation of high demand for finance, the monetary authorities may intervene perhaps for debt-management reasons to make sure that the rise in demand do not lead to a sharp rise in interest rates. Thus, the demand for, and supply of, money may not be strictly independent. It is, therefore, argued that Friedman's claim that a discrepancy occurs between demand and supply of money because of changes in nominal income is erroneous.

Some critics have argued that Friedman's introduction of the permanent income hypothesis into monetary analysis is an attempt to explain that the apparent large money multiplier may be superfluous. The superfluity of the multiplier may be due to spurious correlation between money and nominal income. It is further argued that the claim that in the long run the velocity is stable and in the short-run exhibits pro-cyclical movement can be explained in terms of endogenous money supply determinants only and not by permanent income. For example, in the long run, a stable velocity ratio between money income and money stock will manifest itself if the monetary authorities continually adjust the money stock in response to prior changes in money income. Since money income rises first during an expansion, in the short run, the interest rates are increased resulting in an increase in velocity ratio as demand for money falls, while the money supply increases only after some lag.

It has also been argued that the monetarists show their evidence on timing so as to avoid the endogenous interpretation of monetary time-series data. This is clearly evidenced in the work of Tobin<sup>2</sup>(1961) where he claimed that in addition to being inconclusive, the timing evidence only points to some inconsistencies in the Monetarist approach. Tobin examined the timing implications of an economic model in which the money supply was treated as endogenous and found that it implied cyclical timing patterns

1. See R. Teigen, (1964) on "Demand and Supply Functions for Money in the U.S.", *Econometrica*, Vol 32 (October)

2. Also See J. Tobin, (1961) "Money, Capital and Other Stores of Value", *American Economic Review* (May)

between income money and money like those found by Friedman and Schwartz (1963).<sup>1</sup> Tobin, therefore, concluded that timing evidence alone cannot support the monetarist theory.

So far for the criticisms. One can only conclude that as empirical evidence is emerging from empirical investigations of demand for and supply of money, the apparent gap between the monetarists and the Keynesians will soon be closed.

#### A. THE FINANCIAL INSTITUTIONS: THEIR NATURE, TYPES AND GROWTH

The operations of the financial institutions, which are often referred to as financial intermediaries by some economists, take place in the financial markets. A financial institution is often defined as an enterprise which operates like business enterprise, but whose products are in the form of financial assets and liabilities. Put in another way, a financial institution can be defined as an enterprise whose assets and liabilities consist almost exclusively of financial instruments. According to Pierce and Shaw,<sup>2</sup> the primary function of the financial institution is to purchase primary securities from the ultimate borrowers, while at the same time, collect deposits from the ultimate lenders.

The financial institutions, in general, owes their existence to the borrowers and lenders whose various requirements are often incompatible.

##### (i) BORROWERS AND LENDERS

The borrowers are the deficit units who wish to borrow principally to finance their various planned expenditures, investment or otherwise. They are interested to borrow a relatively large amount of money for a reasonably long period at a very low rate of interest.

1. See M. Friedman and A.J. Schwartz (1963), A Monetary History of the United States Princeton University Press, New Jersey.
2. D.G. Pierce and D.M. Shaw (1979), Monetary Economics: Theories, Evidence and Policy. Butterworths London-Boston

The lenders are the surplus units who might have got their money through past savings. People and institutions often save in order to provide for their future needs. They may wish to ensure a regular flow of income for themselves as well as their dependants in the future. This desire, therefore, motivates them to accumulate savings in the present and take up insurance policy. These savers are the lenders who often lend in order to take advantage of profitable opportunities. Since a borrower may also turn to be a lender, the distinction between the two economic units should not be taken to suggest that they are separate groups in real life. An economic unit who might be an individual may borrow large sum of money, insure his life and property and also lend money to bank or other financial institutions. Thus all these various activities will put him in contact with many financial institutions to satisfy his various needs and requirements.

(ii) WHY DO FINANCIAL INSTITUTIONS EXIST IN THE ECONOMY?

It is obvious that no single transaction is likely to achieve all the objectives of borrowers and lenders without the existence of financial institutions. Thus financial institutions exist in order to reconcile the conflicting desires of borrowers and lenders and make them compatible. Therefore, the existence of financial institutions is justified by the type of functions they perform in the economy.

The most fundamental of these functions is the collection of small savings of the surplus units and the lending of these in larger packages to the borrowers. In some cases, large loans are obtained by financial institutions such as commercial bank, only to be broken down into smaller parcels to make them more acceptable to the savers who want to borrow.

In general, every financial institution makes at least two markets, one for the suppliers of its funds and the other for its borrowers. With each economic contract in both markets is associated a peculiar characteristic

which only implies that no two institutions can have the same form of financial instruments. The financial institutions issue short-term liquid financial claims to lenders while they themselves collect less liquid claims from borrowers which might be in form of bond, share, mortgage or any type of collateral securities. Put succinctly, the financial institutions in the process of their operation, make possible the substitution of indirect form of securities for direct primary securities in the asset portfolios of savers.<sup>1</sup> For example, commercial banks issue liabilities to lenders such as demand deposits and time and saving deposits, payable on demand, while acquiring financial assets that have long maturities.

#### (iii) HOW ARE THE FINANCIAL INSTITUTIONS CLASSIFIED?

The predominance among the sources of funds of liabilities compared with the networth which appear in the balance sheet is, as a matter of fact, one of the basic characteristics of most of the financial institutions. Most of the financial institutions, therefore, can be regarded as institutions that depend on borrowing for their funds, which they use for lending. The primary classification of the financial institutions, according to Goldsmith (1969)<sup>2</sup> can be based in terms of the form and sources as well as uses of the funds in which they deal.

Fourfold classification is adopted by Goldsmith to distinguish between various types of financial institutions. These are, (i) money (currency and current accounts)(ii) other short-term claims such as bond or treasury bills, (iii) long-term claims and (iv) corporate stock. The distinction between long and short terms rests on the time interval between deposits and withdrawal or between loan and repayment or between issuance or retirement of a bond or note. The terms of claims and liabilities, arising under life insurance and pension contracts, are regarded as long-term and so also are mortgages, corporate bonds and government securities with an original maturity of over five years. Bank loans to business and consumer credit fall within the

1. See P. F. Smith, (1975) Money and Financial Intermediation The Theory and Structure of Financial Systems, Precentice-Hall, New Jersey.
2. Also see W.R. Goldsmith, (1969) "Financial Structure and Development" (New Haven), Yale University Press.

category of short-term claims, since they scarcely remain outstanding for more than two or three years. Savings deposits are not easy to classify since as statistical data indicate such deposits on the average remain with the receiving financial institutions for a period of about four years, inspite of the fact that depositors have the right to withdraw them at short notice. Demand deposits by comparison stay on the average for only ten week days in depositor's bank account in developed countries and much lower in developing countries.

The financial institutions also exhibit a lot of differences in aspect of organization. For example, organization in form of business corporation is very standard among the commercial banks, property insurance companies, finance and investment companies. In most developed capitalist countries, this form of organization is not common among savings and loan associations, and life insurance companies. The other common form of organization is called mutual organization which is associated with the savings banks, savings and loans associations, credit unions and life insurance companies. The two forms of organization reflect the fact that they are run as business enterprises with the primary purpose of making profits. While both forms are similar in terms of motives, there is one fundamental difference in form of ownership type. Thus while the corporations are controlled by their shareholders, who often appoint the management and are entitled to all profits, the mutual organizations have no shareholders. The suppliers of funds are the depositors or policy-holders who in law elect the management. In practice, however, this management is self-perpetuating. The profits arising out of the mutual organization's business are often returned to the depositors and policy makers or accumulated for an indefinite time in the enterprise to constitute networth.

The other form of organization is the one being controlled by either government or private, and in most developing countries like Nigeria, by both government and foreign private nationals. For example, the Nigerian Pension fund is essentially a government institution, but some commercial

1. See P. F. Smith, (1970), Economics of Financial Institutions and Markets, Homewood, Illinois: Richard D. Irwin

banks are both owned by government and some foreign interests. With respect to Nigerian Pension Fund, the funds in this institution is managed usually in accordance with the regulations under which it was established. In general, all the funds accumulated are held for the benefit of contributors.

In most countries of the world, the main financial institutions fall into the four different forms of classification as already analysed above. However, the number of financial institutions in any economy depends very largely on the level of economic and financial development which is responsible for creating the need for any type of financial institution. For example, in most developing countries, many financial institutions are State-owned unlike in the developed countries where they are largely private concerns. In United States of America alone, there are more than 60,000 financial institutions, the first of which started operation as a fire insurance company in 1752, while the first bank started in 1781.

In most of the less developed countries like Nigeria, the first taste of financial institutions was usually a banking type. This brings us to the other classifications which relate to whether an institution is a banking type or non-banking type. More will be discussed about this in the later chapters.

#### (iv) THE MAIN FINANCIAL INSTITUTIONS IN THE ECONOMY

It must be mentioned that the Central Bank in any economy stands as the apex of all financial institutions, but since its role is principally the regulation of price level in the economy to ensure financial stability, discussion on it is in chapter 9 which deals with the review of Nigerian monetary policies.

The most important of all the bank-type financial institutions are easily the commercial banks and they represent the largest financial institution in any economy, performing a number of inter-related functions.

On the liability side of the balance sheet, commercial banks represent the primary source of money supply. For example, the Money Supply,  $M_3$  rose up sharply in Britain in the first quarter of 1986 owing to increasing lending

1. See R.W. Goldsmith (1958), Financial Intermediaries in the American Economy since 1900, Princeton University Press, New Jersey.
2. See J. Ahrensdorf (1959), "Central Bank Policies and Inflation A Case Study of four less developed Economies, 1949 - 57", Staff Papers, October.

activities of the commercial banks (Channel 4 7 o'clock news, 6/5/86).

The banks open demand deposits for customers and through the creation of credit in the form of loans and investments they are able to provide liquidity for the economy. In the short-term loanable funds market, banks are the chief suppliers to business and consumers. Furthermore they are also large purchasers of securities issued by the government in any country. They keep custody of their communities' money as well as managing most of their monetary transfers. Commercial banks will be fully dealt with in chapters 6, 7 and 8.

Other forms of banking institutions are the merchant banks and accepting houses. There are also savings and loans association, Post Office Savings Institutions, etc. The merchant banks and accepting houses facilitate trade by accepting bills of exchange and marketing securities. In most developed countries, these merchant banks and accepting houses have developed further by their operations in the international financial markets such as euro-dollar market, as well as operating offices in foreign countries. These institutions are often referred to as wholesale banks as opposed to the retail banking since they take deposits of large amounts which are for relatively short periods like three months or more, and lend these out to other financial institutions like commercial banks as well as non-banking institutions in large sum.

To many financial economists,<sup>2</sup> the original function of financial institution concerns the financial process of transmutation, coming from ultimate borrowers to ultimate lenders. They do this so as to match as closely as possible the needs and desires of the separate surplus and deficit units. Thus through the provision of more liquid assets for the surplus units to hold, financial institutions like banks or building societies are able to attract very small, temporary savings which would otherwise not be available for investment. They pooled together all forms of

1. This was mentioned in the 7 o'clock news at Channel 4 on 6/5/86.

2. See N.J. Gibson, "The Significance of Financial Intermediaries for Economic Policy 1932 - 1965, 1967 -70, Institute of Economic Affairs, 1970, Hobart paper No. 30

deposits collected from a large number of largely independent sources, and lend same out to borrowers on interest. The process of taking deposits has given all the deposit taking institutions much more enviable position among all the financial institutions in general.

(v) WHY THE COMMERCIAL BANKS ARE UNIQUE AMONG OTHER FINANCIAL INSTITUTIONS

The commercial banks are the most unique of all the deposit-taking financial institutions. It has, therefore, been recognized by most writers that commercial banks differ from other financial institutions because of certain exclusive right and advantage which they enjoy. For example, Pierce and Shaw see the distinction in the indirect securities the banks issue, i.e. their deposits, which are a means of payment and are, therefore, money, as opposed to the indirect securities of all other financial institutions which are not generally acceptable as a means of payment and hence, not money.

It has been strongly argued that most depositors of banks regard their deposits as the basic reservoir of money. Consequently, when these customers receive payments, the money will be deposited in their bank accounts. Long years of banking business has made bank to accept it as a custom that any payment made out of one bank is very likely to be deposited in other banks. Thus the loss of cash by one bank is the gain to another.

The old debates on the "uniqueness" of banks were revived by the conclusions drawn on Shaw and Pierce's study of Non-bank financial institutions. The common argument has always bordered on the unique ability to create credit on the part of commercial banks. While a banker can create a bank deposit 'with a stroke of the pen' as writers commonly say, other institutions are only able to lend on "funds" kept with them by their depositors. The bankers, on their part, had protested against this notion and argued that they too, merely pass on savings. The modern version of this counter-argument is embodied in the 'New View' of the supply of money and (first expressed by Gurley and Shaw (1955) and later by Tobin and Brainard (1963)).

1. See D.G. Pierce & D.M. Shaw (1979).

2. J.G. Gurley and E.S. Shaw, (1955) "Financial Aspects of Econ. Development", in American Economic Review, September.

3. See the work of Tobin and Brainard (1963), "Financial Intermediaries and the Effectiveness of Monetary Control", American Economic Review, May.

It is argued that both banks and other financial institutions are finance-constrained in their credit-expanding activity by the willingness of their customers to hold their liabilities. In other words, the banks are limited by the amount of saving entrusted to them. However, the argument has now shifted from the ability to create credit with a stroke of the pen to the ability to expand credit in a multiple of any increase in reserves. Even then, the uniqueness of banks in terms of the use of their indirect securities as a means of payment is still largely uncontested, as we shall see in chapter 10.

A typical commercial bank in its simplest form consists of a privately owned institution with authority to accept demand deposits, which shape its profits opportunities and its operating problems. As an institution, it derives its funds largely from equity supplied by stockholder and the fixed value claims of depositors. Out of these funds it lends as well as invests at profit.

(vi) THE GENERAL ECONOMIC AND FINANCIAL CONSTRAINTS CONFRONTING BANKS AND OTHER FINANCIAL INSTITUTIONS.

The commercial banks as well as any other financial institution are confronted with certain constraints in their business operations. These constraints pose as a threat to the success of any institutions. The banks in particular are faced with the potential liquidity problems which can accompany too much and unexpected deposits withdrawals that can lead to potential losses on the loans and investments which they made with depositors' funds. Fortunately however, many of these problems are rather statistical in nature and therefore, must be treated in terms of probabilities and frequency distributions.

However, the fact that no bank has a direct control over its demand deposits, makes the problem quite real and hence a need for bank to design its asset portfolio in a way that gives it the liquidity it needs to meet potential deposit withdrawals. The problem facing the bank, therefore, is one which involves reconciliation of the potential need for liquidity with the profitability of the asset portfolio. This is because depositors largely hold transactions balances with the banks since they expect cheques drawn on their accounts

to be promptly settled.

The major constraints confronting the financial institutions in general and the bank in particular are liquidity and sustenance of public confidence. Many writers have now recognized that bank's liquidity provision which is a function of act of faith is the foundation upon which public confidence in the bank is built. In order to ensure liquidity at all times, most banks distribute their funds among individuals and institutions in the economy in the form of short-term loans and other marketable securities. Consequently, at any sign of a threat to its liquidity through large withdrawals, bank's first line of defence is usually the portfolio of short-term marketable securities, or its secondary reserves. These securities provide liquidity in two ways. (a) The regular turnover of funds provides a stream of cash flows which can easily be used to cover deposit withdrawals, and (b) the securities can be sold and the proceeds used to cover deposit losses where necessary.

To maintain the trust in the banking system, commercial banks in most countries do keep cash reserves as a matter of prudence. In some countries, it is a matter of formal legal requirements. For example, in Nigeria, Ghana and Sierra Leone, banks are required by law to keep a certain amount of cash reserve requirement with the central bank in addition to the stipulated 25 per cent liquidity ratio.<sup>1</sup> It has been suggested that since maintenance of trust in the banking system is the responsibility of all the economic units, prudential control over all institutions in the market is necessary in order to ensure the stability which is required at all points in the financial system.<sup>2</sup> This is in recognition of the interdependent nature of decisions every economic unit which implies that the success of each individual institution depends very largely upon the stability and continuity of the whole system which should be associated with the stability of each separate institution in the system.

#### OTHER FINANCIAL INSTITUTIONS

1. See G.O. Nwankow (1980), The Nigerian Financial System, Macmillan Press.
2. See R.T. Coghlan and C. Sykes (1980), "Managing the Money Supply", Lloyds Bank Review, No. 135, January.

Other financial institutions operating in any economy include life insurance companies, stock markets, hire purchase companies, building societies as well as public financial institutions which in less developed countries are referred to as specialized institutions. For example, in Nigeria there are three of these institutions, namely the agricultural bank, the bank for commerce and industry and the Federal mortgage bank, (See Chapter 10).

In general, stock market is usually one of the institutions which developed in response to the needs of modern industrial economy. In Britain for instance, it developed in the early process of industrialization. However, stock markets are relatively more important in United Kingdom and in Nigeria than countries like Japan, and Germany. This is because the British Commercial banks are traditionally in favour of short-term loans, and so also are their extensions overseas. Stock Exchange markets are the main avenue for long-term credit in place of banks. In Japan and Germany, on the other hand, stock exchange markets are playing secondary role in the provision of long-term finance for industry, since banks in these two countries have been active provider of long-term finance to industry almost at the start of their operation. In general, however, in every market economy, the stock exchange market serves as an indispensable provider of market for the sale of secondary securities. The Nigerian Stock Exchange will be discussed in chapter 10.

Life insurance companies and pension funds are very active in the stock exchange market as any investing institution with preference for long-term securities. They obtain their funds from contracts entered into with them by the insured person. The life company guarantees some minimum return on the money and payment in full to the beneficiary of the insured in the event of certain eventualities, such as death or to the insured himself in the event of his disablement or retirement. Thus it is understandable why the insurance's liabilities are usually largely illiquid. In some cases a policy is often

1. See E.A.O. Phillips, The Capital Market of a Developing Country: Nigeria a Case Study, unpublished Ph.D. thesis, Pennsylvania State University, 1978

accepted as collateral for a loan from another institution or intermediary. The common argument among most modern economists is that the general insurance as distinct from life insurance, provides a service rather than financial intermediation and hence general insurance policies do not constitute a financial claim in the same way that life policies do. However, it must be countered by the fact that the funds derived from these general insurance companies often result in a pool of funds which is available for investment in financial assets as will be discussed in chapter 10.

It is usual to find only a few items of liquid assets in the balance sheet of any insurance company since large proportion of their funds are held in the form of highly illiquid assets which have very variable potential capital assets but with stable income flows.

In most advanced countries there are private unit trusts and investment trusts whose major objective is to provide investors with the benefits of expert portfolio management as well as a diversified portfolio at a much cheaper cost than if the investors were to deal directly with investments markets. The balance sheet of these trusts usually show long-term financial claims and liabilities.

The establishment of building societies in most developed countries was a response to the urgent desire of people to be owner occupiers as a result of economic affluence associated with high level of economic development. In some countries where the bank's role in the area of building finance is very small, these building societies developed as a form of specialized institution created by the state for that purpose.

In United Kingdom, building societies provide loans to people to build their own houses while in U.S.A., the savings and loans associations as well as Mutual savings fulfill this role.<sup>2</sup> However, in most developing countries like Nigeria, it is a state-owned institution. For example, The Federal Mortgage bank in Nigeria and the other various state-owned housing corporations serve the housing needs of people. In all cases generally, funds are predominantly supplied to the institutions in the form of short-term deposits or

1. K.W. Wilson, (1983), British Financial Institutions, Pitman Book Ltd., London  
 2. See D. Ghosh (1974), The Economics of Building Societies, Saxon House.

predominantly supplied to the institutions in the form of short-term deposits or shares which are often more liable to immediate withdrawals. In most countries, these institutions are often allowed to enjoy certain tax advantage over other financial or industrial organisations since the service they provide is rather social in nature. For example, in Britain, interest rate on building society shares and deposits are paid net of the standard rate of tax, whereas the societies are only required to pay tax on these payments at a composite rate which is sometimes less than the standard rate of tax.

Many governments regard building societies as non-profit-making organizations and hence, are not required to pay dividends over and above the interest paid on their shares and deposits. By so doing, the authorities have given the building societies competitive advantage over all other institutions. Furthermore, in Great Britain, borrowers from building societies are entitled to tax relief on their mortgage interest payments up to a certain limit, thereby reducing the cost of such borrowing.<sup>1</sup>

One distinguishing characteristic of building society is that their balance sheet consists of mortgages which are largely illiquid form of lending and shares as well as deposits that are highly liquid form of borrowing. In addition they usually have large proportion of their other investments in illiquid forms which is a reflection of their traditional stability as well as the excellent security for loans provided by the property, during the inflationary period.

The Hire Purchase Company is one of the most recently developed institutions in most industrial countries. In U.S.A. this is often called Credit Union.<sup>2</sup> Industrialization in most developed countries has resulted in the growth of durable goods which are often costly to be paid for at once from average individual earning. The products of industrialization resulted in availability of a wide range of durable goods like cars, televisions, washing machines, radiograms, bicycles and motor-cycles which called for high demand for finance by the majority of the population who are employed. Many people

1. See D. Ghosh (1974) The Economics of Building Societies. Saxon House.

2. See. A.D. Bain, The Economics of the Financial System, Oxford, 1981.

do not want to have to save the total cost of the commodity before enjoying the benefits of its services, rather they prefer to pay for the commodity while at the same time enjoying the flow of services resulting from its possession. The hire purchase in principle, is similar to house ownership. In this case, however, the credit is given by finance companies.

Another type of specialist lending institution very common in developed countries are the finance houses which derive most of their funds from deposits which are not withdrawable on demand. As already mentioned there are also state-created institutions designed to meet certain needs of the economy in terms of finance. Invariably, this is often seen by the government as an area in which the private sector does not perform adequately. In Nigeria for instance, the Agricultural Credit Bank, and the Bank for Commerce and Industry are two typical examples to meet the finance needs of agriculture and industry respectively. In Great Britain, such state created institutions include National Enterprise Board, Finance for Industry Ltd., and since 1976, Equity Capital for Industry Ltd.<sup>1</sup>

(vii) GENERAL COMMENTS ON THE LIQUIDITY NEEDS OF FINANCIAL INSTITUTIONS

Uncertainty is very pervasive in all the economies of the world as to the future prospects of businesses. Thus individual economic unit is not sure whether his present income will continue in the future to enable him undertake all his planned purchases. The firms are not sure of the political problems of most countries of the world which can affect their profit profile. The prices of oil have been going up and down causing problems for many oil-exporting countries by making it impossible for them to fulfill their budgetary objectives. Many nations of the world are in great debt that they still find it very difficult to service.<sup>2</sup> Thus many financial institutions are not always sure, specifically the likely future trend in the

1. See T. Mayer, J.S. Duesenberry and R. Aliber, Money, Banking and the Economy, W.W. Norton & Company, Inc. New York. 1981.

2. See K.W. Wilson (1983), British Financial Institutions, Pitman Book Ltd

deposit withdrawals because of the uncertainty. The main requirement for liquidity of any financial institutions is a function of uncertainty with respect to the possibility of withdrawals from the financial institutions in relation to the expected flow of new deposits and the predetermined income flow from the repayments of capital and interest.

For the commercial banks, it is essential that the means to meet the likely sudden withdrawals are available so as to maintain the public's confidence in the banking system.<sup>1</sup> Commercial banks remain the most unique and at the same time the most vulnerable institutions owing to the nature of deposits which they accept but used largely by their depositors as a means of payment.

Other variables which can affect the liquidity position of financial institutions are market conditions and the state of the economy. The cost of borrowing at short notice and the credibility of financial institution per se can influence its liquidity requirement. The credibility of financial institution gives it the ability to borrow. In general all the financial institutions always strive to maintain adequate liquidity. Many hold a spectrum of assets ranked by liquidity and yield in accordance with the type of business they undertake, and this dictates the proportion of the individual asset security holdings.

(viii) THE EMERGENCE OF FINANCIAL INSTITUTIONS IN THE ECONOMY

According to Gurley and Shaw,<sup>2</sup> there must be certain necessary and sufficient conditions which must be present in any economy to give birth to financial institutions. These conditions are the presence of deficit spenders and the surplus units in the economy. Furthermore the two different kinds of economic units must each have relatively conflicting interests which make it impossible for them to deal directly with each other. Thus financial institutions developed to cater for the conflicting needs of the two types of economic units in the financial sector of the economy. In so far as these institutions

1. For a full discussion, see Goldfield/Chandler (1982) The Economics of Money and Banking. 8th Edtn. Harper and Row New York.

2. See Pierce and Shaw (1979) Monetary Economics: Theories, Evidence and Policy. Butterworths, London, Boston.

are able to reconcile the conflicting portfolio requirements of these economic units in perpetuity, their continued existence is assured.

The economic development of a nation is tied up with the development of financial structure, which is in itself an on-going process, and hence changes as new financial needs and requirements arise. Most economists now believe that a thorough understanding of economic development process of a nation should take account of the development of the financial institutions. Thus the type of financial institutions existing in any one country is a clean reflection of the history of that country and its tradition within which they operate. This is why financial institutions may not be identical in terms of standard of service or nature from one country to another. However, it has been argued that in spite of this unidentical institutional arrangements throughout the world, the underlying principle still remains the same. It is further argued that the development of financial institutions anywhere in the world is a direct response to pressures made apparent through markets. It follows, therefore, that development of financial institutions and markets will continue to play a more important role in facilitating economic growth than any other financial variables. In chapter 4 will be discussed the financial institutions and the economic development.

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1. For a brilliant discussion on this, see R.W. Goldsmith (1969) Financial Structure and Development, Yale University Press New Haven.

## CHAPTER IV

## FINANCIAL INSTITUTIONS AND ECONOMIC DEVELOPMENT

## INTRODUCTION:

In the last chapter attempt was made at looking at some of the theories of demand for real balances. The importance of financial markets has been analysed with the aid of some diagrams and mentions have been made of the financial institutions with respect to types, nature, and what conditions necessitate their existence in any economy. In this chapter, the aim is to examine the literature on financial institutions and economic development very briefly.

## 4.2 FINANCE AND ECONOMIC DEVELOPMENT:

There have been considerable literature on the importance of financial institutions in helping to provide the finance need for economic development. As early as 1934, Schumpeter<sup>1</sup>, in his writing on economic development, viewed the existence of financial institutions as a necessary condition for the capitalist economic development. To him, if an economy is to develop, there must be two conditions which are both necessary and sufficient, namely the existence of financial institutions and the availability of entrepreneur. Many other writers also share the view of Schumpeter at least with respect to the basic principles. Some of these are Goldsmith (1969), Patrick (1966)<sup>2</sup> and Cameron (1970)<sup>3</sup>. Goldsmith examined the data on 35 developed and developing countries in his attempt at finding the difference between financial development and real development. To do this, he calculated the financial interrelations ratio or the ratio of financial instruments to the real wealth. In his findings, he

1. See J.A. Schumpeter (1934), The Theory of Economic Development: An Inquiry Into Profits, Capital, Credit, Interest, and the Business Cycle Harvard.
2. For further explanation see Patrick (1966), "Financial development and Economic Growth in Underdeveloped Countries", in Economic development and Cultural Change Vol. XIV (January).
3. See R. Cameron (1967), ed., Banking in the Early Stages of Industrialization: A Study in Comparative Economic History, Oxford University Press.

concluded that financial development is a prerequisite or simultaneously goes with real development. In his study, an economy is said to have a high financial structure development if there is a high financial inter-relations ratio. The weakness of Goldfield's findings is the fact that he played down all other factors which can facilitate the development of financial structure per se. For example, political and cultural factors have great influence on the levels of financial structure development. However, inspite of this, the high empirical correlation shown between financial structure development and real development can be regarded as suggestive.

Examining the historical economic development of some developed and less developed countries, Cameron and others came out with their postulation with respect to the functions of financial institutions in general or in particular, the banking system. These functions are (a) intermediation (b) furnishing part or all of the means of payments or money supply, and (c) the provision of entrepreneurial talent and guidance for the economy as a whole. The writers also argued that the success of development effort depends largely on the way the banks execute their functions and suggested that banks should strive to attract more deposits which should be allocated in form of loans to those entrepreneurs whose investment projects have high rate of social return.

The work of Gurley (1967)<sup>1</sup> was more or less a challenge to the Schupetarian view on financial institutions. From his study of the development process of socialist and developing countries, Gurley concluded that financial system is not a necessary condition for development since there are alternatives or substitutes for the role being played by financial intermediaries in the development process. He, however, recognized that financial institutions might be great contributors to economic development,

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See J.G. Gurley (1967), Financial Structures in Developing Economies, in Fiscal and Monetary Problems in Developing States, David Krivine ed. (New York)

on the conditions that there is a decentralization of decision-making, specialization of savings and heavy emphasis on external rather than internal financing of investments' (p.104) especially in the economy with features of capitalist economic system. Gurley's conclusion can be applicable to a particular case rather than general. While it can be true for pure capitalist economy, one wonders whether it can be true for developing countries which are operating hybrid economic system i.e. quasi-capitalist and quasi-socialist. The only conclusion to be drawn from Gurley's exposition, however, is that except the developing countries are operating capitalist economic development system, Gurley's conclusion is not applicable to them. The view that financial institutions are necessary for development will continue to hold strong for the foreseeable future in developing countries.

#### 4.3 EMPIRICAL EVIDENCE

The works of those pioneers on the financial institutions and development have given impetus to many writers and students to address themselves to the study of the relationship between financial system and institutions as well as economic development in both developed and developing countries. In particular many of these empirical efforts were directed at investigating the role of financial institutions in the development process of a particular economy. As one would expect, most of these studies have been done in pursuit of doctorate degree by students from developing countries. Some of these are Taylor (Sierra Leone - 1973)<sup>1</sup>, Islam (Pakistan - 1973)<sup>2</sup>, Bourne (Jamaica - 1969)<sup>3</sup> and Abdi (Eastern Africa - 1977). All these students came out with the same conclusion that financial system and institutions can make a great contribution to economic development on conditions that appropriate measures are taken such as mobilization of domestic resources, removal of obstacles in the accommodation of loans to agricultural sectors, and improving the quality of investment in order to increase the productive capacity of the economy.

1. See A.B. Taylor (1973) on The role of Financial Institutions in the Economic Development of Sierra Leone Unpublished Ph.d Thesis, Glasgow University.
2. R. Islam (1973), Monetary Management, Commercial Credit expansion and Economic Development in Pakistan, Unpublished M.Sc. Thesis, Lancaster University.
3. C.E. Bourne (1963), Commercial Banks and Econ. Development in Jamaica, M.Sc. Dissertation (Unpublished), Birmingham University.

There is no doubt that these conclusions are realistic since in most of these countries, financial institutions have been assigned a greater role to play in the area of provision of development finance. This is because, the other options or alternatives to financial institutions such as taxation as suggested by Gurley are either costly to experiment or the government for political reasons is not willing to make use of them.

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For the developed countries, the work of Griggs (1971 and that of Greenberg (1975) are very crucial. In their work, they have tried to examine the roles being played by financial institutions in selected American communities. Greenberg<sup>2</sup> (1975) concentrated on the extent to which commercial banks in Philadelphia execute their traditional and developmental functions. Griggs' work was directed at the personnel of those banks selected for his study. He studied how the lending officers are aggressive in lending to small scale and new businesses in Texas. The conclusions of both studies seem to suggest that financial system in general and commercial bank in particular have an important role to play in development process. Thus in both developed and developing countries, financial institutions have been accorded a pre-eminent role. Greenberg (1975), however, argued that there are many factors that can influence economic activity and one of these is a banking system. He held that optimal banking system (which can be defined as one that allocates resources towards their most efficient uses) is not a sufficient condition for attracting new resources, promoting technological change and full utilization of a region's resources.

One general feature of the recent studies of the role of financial institutions in the development process of the economy is that researchers on both developed and developing countries have been very critical about the view held on the role of financial institutions, as a result of their empirical evidence. Thus it can be said that the debate on the role of financial institutions in the development process of a nation will continue for some foreseeable future, since the

1. H. Griggs (1971) Small Business Loans Ph.d thesis (Unpublished), Texas.
2. C.A.C. Greenberg (1975), The Role of Commercial Banking in Regional Economic Development - Philadelphia 1945 - 1970 Unpublished Ph.d Thesis, University of Pennsylvania.

basic question at the core of the arguments is yet to be answered. The question relates to causality, i.e. whether it is the financial development that causes economic development or otherwise. The problem is that the two processes in real life start almost simultaneously in a very complex, interwoven and inter-dependent manner. Thus the problem of identification of the direction of causality, if at all possible to find, becomes even more difficult to solve. However, the fundamental issue in the debate which is the relationship between the real and monetary variables still remains generally accepted that both real and monetary variables are related. This view is shared by Porter (1966)

#### 4.4 THEORETICAL UNDERPINNING OF THE RELATIONSHIP

Most of the growth theorists have shown in their work their long recognition of the relationship between real and monetary variables. The most common and one of the earliest growth models is that of Harrod-Domar model of growth. Some economists have argued that the work of both Harrod (1939, 1948) and Domar (1946, 1947) were more or less an extension of Keynes's analysis of the long period economy. Keynes, in his analysis, was basically concerned with the effects of the level of investment and saving on the stock of capital. Keynes's silence on the productive potential of the stock of capital is caused by his concern for the significance of investment and its overriding influence on effective demand. However, since in the long run investment expenditure adds to the capital stock, any analysis of such long run must include this fact. This is why Domar showed the recognition of this by showing the relationship between the actual output and effective demand on the one hand, and the potential output and the capital stock on the other. Harrod, in his part, considered the relationship between growth and output growth in the other way round through the adoption of acceleration principle in which producers' demand for capital goods is considered to be proportional to output. The work of the two writers have been very interesting since they arrived at results which showed striking similarities in some important respects in spite of the fact that they followed different

1. See R. Porter (1966), "The Promotion of Banking Habit and Economic Development" in Journal of Development Studies, Vol. 2 No. 4
2. See R.F. Harrod (1939), "An Essay in Dynamic Theory", Economic Journal, Vol. 49, pp. 14-33. Also Harrod's Work on Towards a Dynamic Economics, London.
3. J.M. Keynes, 1937, "The General Theory of Employment", Journal of Economics.

way. This study is not concerned with the full details of growth theory but only to show the relationship between the real and monetary variables. It is therefore, imperative to look into Harrod model to consider the relationship.

Harrod's model commences with identity thus:

$$I_t = S_t \quad (4.1)$$

where  $I_t$  = investment in time  $t$

and  $S_t$  = savings in time  $t$ .

Harrod's proportionate rate of growth is  $G$  and can be decomposed as follows:

$$G_t = \frac{I_t}{Y_t} \rightarrow \frac{I_t}{Y_t} = \frac{S_t}{Y_t} \rightarrow \frac{K_t^*}{Y_t^*} \quad (4.2)$$

where  $K$  = volume of capital and a star on the variable indicates its derivative with respect to time:

$$Y^* = \frac{dY}{dt}; \quad K^* = \frac{dK}{dt} \quad (4.3)$$

$Y^*$  = change in national income.

Equation 4.2 gives the definition of the rate of growth of output or national income as depicted by the first identity while the third identity defines ex post saving and investment. If the two  $I_t$ s are cancelled out, it will still show that the second identity is correct. Thus the famous Harrodian identity which forms the corner-stone of modern growth theory can be written as follows:

$$G_t = \frac{S_t}{Y_t} \rightarrow \frac{K_t^*}{Y_t^*} \quad (4.4)$$

Since saving is equal to investment, then investment function in Harrod model can be stated as follows to show the relationship between national income and capital or investment:

$$S_t = sY; \quad 0 < s < 1 \quad (4.5)$$

$$I_t = rY^*; \quad r > 0 \quad (4.6)$$

The Harrodian identity (equation 4.4) expresses the growth rate of output as the ratio of the proportion of income saved to the incremental capital-output ratio, while equations (4.5) and (4.6) are saving function and investment function respectively. The Keynesian condition for equilibrium condition in good market is stated as:

$$I_t = S_t \quad (4.7)$$

$$\text{Hence } n = \frac{Y_t^*}{Y_t} = \frac{s}{r} \quad (4.8)$$

where  $s$  represents the average or marginal propensity to save out of income and  $r$ , the desired ratio of the proportion of income saved to the incremental capital-output ratio. What this implies is that assuming an economy is in equilibrium (of course a closed economy), given a constant and positive rate of  $s$  and  $r$ , there will be a unique growth path in which all the three variables of the system grow constantly at the same rate  $\frac{s}{r}$  or  $n$ .

Many economists have expressed their criticism against Harrod model on many grounds. For example, the model has been criticized for its simplistic assumption of fixed co-efficient of production, and the disregard for the role of entrepreneur. In other words, the model has been criticized for assuming away the influence of all factors affecting the level of national income other than capital. However, this study is interested only in the central role of capital in the production of the national income and the dependent relationship between national income and capital through investment mechanism.

#### 4.5 THE MONETARIST AND THE DIRECTION OF CAUSALITY

Goldsmith (1969)<sup>1</sup> is one of the first earlier researchers to conclude that there is a positive relationship between the monetary and financial sector. As already noted, the champion of Chicago school, M. Friedman, examined the direction of causation between monetary sector and real sector of the economy and concluded based on his study with Schwartz (1963), that causation runs from monetary to the real sector. His examination of the relationship between money

1. See Goldsmith (1969), Financial Structure and Development - Yale University Press.

2. See Friedman and Schwartz (1963), A Monetary History of the U.S., 1867-1960, Princeton University Press.

and the industrial production index for United States data, Friedman (1969) concluded that there is a high positive relationship between these variables and this lent credence to his earlier assertion on direction of causation. Sims<sup>1</sup>(1972) tried to find statistical evidence in support of exogeneity of money in the money-income relationship(p.540) by using the US time series data and sophisticated regression analysis. Based on his findings, he concluded that the hypothesis that causality is unidirectional from money to income is in conformity with the post-war US data, while the hypothesis that causality is unidirectional from income to money has no support. There are many opponents of the view that there is a causal link between monetary and real sectors. For example, Lombra and Torto<sup>2</sup>(1973) have argued that it is quite possible for a situation of 'reverse causation' in which cyclical and other variations in money income can affect the money stock. However, Hamburger<sup>3</sup>(1970), had earlier indicated along the line of Sims that the evidence of a direct causation from monetary aggregates to money incomes was based on the time pattern of the relationship and that changes in money stock had resulted in movements in money incomes whereas the reverse was not the case.

On this causality debate, two pairs of writers have tried to reach a conclusion on the direction of causation based on Canadian data working separately. Barth and Bennett<sup>4</sup>, the first pair, concluded that their finding on Canadian economy did not find support for Sims' result and conclusion.(1974, p.310). However, based on the same Canadian data, the second pair, Sharpe and Miller(1974) gave support to Sims' quite contrary to the conclusion of the former.

1. See C.A. Sims (1972), "Money, Income and Causality," in American Economic Review, Vol. IV, No. 3 (February).
2. R.E. Lombra and R.C. Torto (1973), "Defensive" Behaviour and the Reverse Causation Argument,' Southern Economic Journal, vol. 40, No. 1 (July)
3. M.J. Hamburger,- (1970), "Indicators of Monetary Policy: The Arguments and the Evidence," The American Economic Review, Vol. 60 (May), papers and proceedings.
4. J.R. Barth and J. Bennet (1974), "The Role of Money in the Canadian Economy - An Empirical Test". Canadian Journal of Economics, May.

#### 4.6 PATRICK'S VIEW ON THE RELATIONSHIP BETWEEN REAL AND FINANCIAL SECTORS:

The two concepts - demand-following and supply-leading - introduced by Patrick(1966) clearly illustrate his view on the relationship between financial and real sectors of the economy. In his analysis, he conceived of financial institutions in the wake of economic development as being either responding to the demands for financial services of the real sector in a passive manner (demand-following) or responding positively through the provision of financial services for the real sector in anticipation of demand for them implying (supply-leading). The demand-following type of financial institutions is generally associated with Great Britain's economic development history while Japan and German's epitomize the supply-leading financial institutions. In these economies, financial institutions are involved in industries serving the role of a banker as well as an entrepreneur. Realizing the fact that the process of economic development is an on-going phenomenon through different stages, Patrick suggests that supply-leading can cause innovation-type investment even 'before sustained industrial growth gets under way.'<sup>1</sup> According to him, the supply-leading which gives rise to real growth is soon submerged by demand-following financial response.

The work of Stammer (1968)<sup>2</sup> on the role of financial institutions in the process of economic development based on Hong Kong economy gave support to the Patrick's demand-following and supply-leading notion of financial development. However, he was of the view that the role of the existing institutions and their willingness to take initiatives and respond positively to the demands for new financial services is far more important than the development of new financial institutions in response to new economic activities in the economy. This is to say that he did not share the view of Patrick that as economic activities increase with great sophistication, there would be the emergence of new financial intermediaries in response. Even then, Stammer's

1. See the work of Patrick (1966) "Financial Development and Economic Growth in Underdeveloped Countries" p. 177. in Economic Development and Cultural Change, Vol. XIV (January).
2. N. Stammer (1968), Money and Finance in Hong Kong, unpublished Ph.D Thesis, Australian National University.

analysis was based on Hong Kong economy and hence might be right for that economy. For developing countries like Nigeria, however, the view of Patrick is still very evidenced, at least in Nigeria's case for which this study is based. Thus as far as developing countries are concerned, the central theme of Patrick's analysis i.e. that there is an important role for the financial sector at a certain state of the development process which is growth-inducing is still applicable. What is really of importance to the developing countries is the allocative efficiency and the encouragement of entrepreneurial abilities which the supply-leading financial development involved and this aspect is essential for economic growth. It is this aspect which is of interest in this study. The financial institutions in general and commercial banks in particular are very crucial in the development aspiration of Nigeria.

#### 4.7 The Exponents of Financial Repression and the Structuralist Hypotheses

The analysis of the role of financial institutions in the economic development will not be complete without examining two of the widely discussed hypotheses of the role of finance in the economic development, namely the Financial Repression Hypothesis and the Structuralist Hypothesis.

The chief proponents of financial repression hypothesis concentrated basically on the role the financial system and institutions play in the development aspiration of any nation. In their view, the role is fundamentally growth-inducing, if of course, they are not repressed. The champions of this school of thought such as Cameron<sup>1</sup> (1972), Mckinnon<sup>2</sup> (1973) and Shaw<sup>3</sup> (1973) lay great emphasis on government legislation and policies on interest rate as well as legal restrictions on economic activities as the chief sources of repression. These government legislative policies on interest rate, according to them, only help to distort the full operation of the market mechanism in the allocation of prices for financial resources. The consequences

1. R. Cameron, ed. (1972), Banking and Economic Development: Some Lessons of History, Oxford University Press New York.

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

3. See also E.D. Shaw (1973), Financial Deepening in Economic Development, Oxford University Press.

of these repressions are manifest in the limited savings and the existence of financial dualism. The interest rate ceilings resulted in limited savings, loan rate ceilings and the sectoral allocation guide rules resulted in limited loan resources. They, therefore, advocate free interplay of market forces in developing countries for the efficient mobilization of domestic savings and efficient allocation of loan resources.

There is no doubt, that in theory, these advocates of free interplay or market forces, sound convincing, but in practice, because of the peculiar economic circumstances of different nations, their conclusions cannot be generalized, at least to some extent. For one thing, their studies are based on advanced economies. Thus interpretation of the result may be applicable to the developed economies but unless with sufficient qualifications, may not be applicable to developing countries with their environmental peculiarities. A lot of differences exists from one economy to the other in terms of volume of financial assets and institutions, in terms of technological advancement in financial sector, and in terms of interrelations of the different subsectors and level of economic activities and operators. It is a gross misconception on the part of these advocates to think that every financial environment is perfectly competitive, but this is not so as far as less developed countries are concerned. Their suggestion that re-aligning interest rates alone can wipe out financial dualism only shows their ignorance of the background of lending business in developing countries.

The traditional moneylenders in developing countries are still very important since their operation is very simple in that the ultimate borrower does not need book knowledge necessary for filling of forms in bank lending, and neither does there any need for him to provide collateral security for the loan. This is because, the moneylenders are more flexible in their approach since they have excellent knowledge of their customers as well as the socio-economic factors

they possess. The recipe for the removal of financial dualism suggested i.e. re-alignment of interest rate might not automatically induce savers in developing countries to shift to modern financial institutions for saving and hence not remove the 'financial dualism'. Even if they want to do so, they might not because of the innumerable (so to say) inconveniences and costs associated with such a change, especially in a vast country like Nigeria where an ultimate saver may have to travel more than five miles in some areas before he can reach a bank office. On the issue of government legislative policies on financial institutions, there is no responsible government in the world which will not exercise some element of control on financial institutions in general and commercial banks in particular if only to ensure the stability of financial system. One can therefore, argue that there is some element of control, although in varying degrees from one economy to the other on the use of commercial banks' as well as other financial institutions loan resources, since credit is so central to economic activities in any economy and is also potentially and politically sensitive. Hence no government will like to abandon the allocation of credit and its use to purely price mechanism without some intervention as economic situation dictates.

This is highly inevitable in most developing countries where markets are largely imperfect, information grossly inadequate and financial resources highly insufficient. The only option open to government in most of these countries is to administer and allocate financial resources through interest rate policies and issuance of credit guidelines (See Chapters 9 and 10 of this study on this issue

The Structuralist hypothesis is associated with the work of Gerschenkron<sup>1</sup>(1962). In his thesis, he argued that the role as well as the ability of the financial institutions in the economic development of a country depends on the structure of its economy at any particular time. Using level of industrialization as a measuring rod, he tried to classify all countries with advanced countries at the top while the most backward countries were at the bottom. Topping

1. A. Gerschenkron (1962), Economic Backwardness in Historical Perspective: A Book of Essay, Harvard University Press.

the list of advanced countries is Britain, while Germany and Russia occupied the midway and the bottom respectively in descending order of degree of backwardness. In the light of his historical analysis of the role of financial institutions during the period of industrialization in Europe, he expressed the view that in highly industrial countries, where great reliance is placed on internal finance by the entrepreneurs, the role of financial institutions can be expected to be minimal. While he cites Britain as an example of highly industrialized economy, he argues that Germany which is a moderately backward economy, had to rely very heavily on the financial institutions since there was limited financial resources available to all kinds of business enterprises. For the Russia, Gerschenkron gives the following description of the country's economic and financial environment at the initial stage of industrialization:

"The scarcity of capital in Russia was such that no banking system could conceivably succeed in attracting sufficient funds to finance a large-scale industrialization; 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." (p.19-20).

What this implies is that Gerschenkron does not see the possibility of a financial system playing a prominent role in industrialization process of such country with such unprofitable and unhealthy financial environment of the description above. There is no doubt that such description can be applicable to many developing countries of today, and in fact is applicable to Nigerian economy of 1950s and most part of 1960s.

However, while such description might be applicable to many developing countries of today, his implied solution can be regarded as irrelevant for two reasons. First and foremost, in most developing countries, the financial institutions in general and commercial banks in particular occupy the commanding

height of the economy, and hence have a substantial stranglehold on the financial resources. The second reason is that most of these developing countries were formerly ruled by their colonial masters to which they still have strong ties in terms of the political system they operate in their respective countries. Thus, many of these countries have adopted capitalist mode of development either in pure form or in mixed form (often referred to as Mixed Economy). The governments of these developing economies, therefore, have no political will to change overnight to centrally planned economy which involves the centralising of economic decision making. Furthermore, the generally low levels of income in most of these countries means that it would be quite impossible to impose heavy taxation to generate savings instead of financial institutions.

In spite of all the issues raised above so far, Gerschenkron's analysis has served the useful purpose of putting the role of financial institutions in the process of development in clear perspective. He has succeeded in identifying the role for financial system at some stage of industrial or economic development. While many economists will agree with Gerschenkron on the problems entailed in financial intermediation in developing countries such as fraudulent bankruptcy, business honesty and general distrust of the public, to mention a few, many economists in developing countries find it hard to accept the solution he offers, which is the adoption of centralization of financial resources mechanism. Instead of adopting Gerschenkron's alternative, in many developing countries, it has become a deliberate policy of governments to establish and foster financial institutions and markets by increasing financial instruments and developing capital market. Through this act, they are able to encourage financial institutions to mobilize savings and to allocate investment funds efficiently.

## CHAPTER V

THE GROWTH AND DEVELOPMENT OF CREDIT SYSTEM IN NIGERIA:  
THE TRADITIONAL CREDIT INSTITUTIONS & COMMERCIAL  
BANKS

## INTRODUCTION:

In the last chapter attempt was made at examining the literature on the role of finance in economic development process of an economy. In this chapter, the development of credit system from the time when the country was an agrarian economy before the colonization to the present time when the country is in the process of industrialization will be examined. Most writers on Nigerian monetary system often concentrate on the organized financial system while neglecting the unorganized credit system in spite of the important role it had played in the economy before the advent of organized credit system. In fact some of these unorganized credit institutions formed the bedrock of some organized indigenous credit institutions as will be shown later. It is a pity that most books on Nigerian monetary system did not recognize the fact that part of the sources of finance for indigenous commercial banking business in Nigeria was from the traditional money lenders and that most of the cooperative Unions in Nigeria were the outgrowth of the traditional Esusu Credit system, the relics of which can still be found in the remote parts of the country.

This chapter as well as the next chapter is very important, since unlike other writers on Nigerian Monetary System, attempts are made at examining the reasons for the failure of most early indigenous banks in Nigeria and also to show that the failure rates were largely due to competition being perpetuated by the foreign banks with their head offices overseas. That only indigenous banks without state backing failed adds weight to this argument and suggests that the foreign banks too would have failed as a result of competition but for the financial support they got from their head offices overseas.

The chapter is divided into four major sections. Section I examines the

effects that the existence of any type of credit system will have in a closed economy. It also discusses financial institution as any business firm with profit maximizing motives. In section II, the unorganized credit institutions are discussed while section III concentrates on the organized credit institutions, and in section IV the possibility of interactions between the unorganized and organized money markets is discussed with the aid of graphic model.

## SECTION I

### 5.2 EFFECTS OF THE EXISTENCE OF ANY FINANCIAL INSTITUTION IN A CLOSED ECONOMY

The economic development of a nation is tied up with the development of financial structure. The financial structure per se is an on-going process which continues to change as the new financial needs and requirements arrive. It is now generally recognized by economists that a thorough understanding of economic development process of a nation should take account of the development of the financial institutions as already discussed in the last chapter. The type of financial institutions existing in any one country is always a reflection of the history of that country and its tradition within which they operate.<sup>1</sup> Thus financial institutions may not be identical from one country to another, but the fundamental principles for their existence remain the same. In order to illustrate the importance of the existence of any financial institution in a closed economy, it is instructive to take the perspective of its effect on cost and availability of finance. With the aid of a diagram, the effects of the existence of financial institutions in the economy may be illustrated.

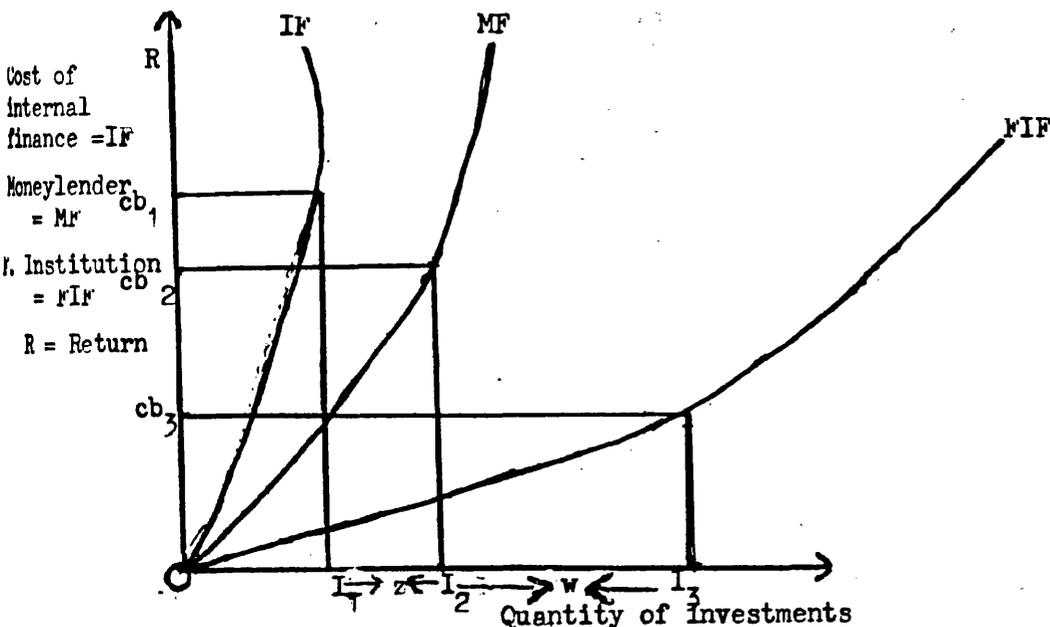
As can be seen from the diagram 5.1 below, it is assumed that the cost of borrowing represents the one incurred in the search for potential lenders in the absence of a financial institution and hence will rise in direct proportion to the quantity. There are other elements of cost, such as the incentive needed to get the ultimate lenders to agree to lend which, of course,

<sup>1</sup> See H. Ben-Shahav (1972), "The Structure of Capital Markets, and Economic Growth - The Case of Israel" in Financial Development and Economic Growth, ed. Arnold Sametz, New York University Press.

should include the return they would normally require to offset the risk and loss of liquidity involved. The magnitude of cost of finance depends largely on the kind of financial structure in existence. The diagram 5.1 shows that as more and more financial institutions are being established, the cost of borrowing will continue to fall and investment will continue to increase. Thus in Nigeria before the advent of organized or unorganized credit institutions, farmers depended on internal finance to carry out their investment projects on their farms<sup>1</sup>. Of course, during that time, farmers did not need the heavy and costly modern farming equipments, but the simple implement of farming such as cutlass and hoe. Thus the quantity of investment in the economy was very small and this is depicted in the diagram at point  $OI_1$ . The cost of borrowing to the farmers is at point  $cb_1$ , which is very high, since the farmers had to go to friends and relatives who might be living so many miles away in order to obtain loans. However, with the advent of credit institutions, firstly the unorganized, the cost of borrowing fell to  $cb_2$  while the quantity of investment increased by  $OI_2 - OI_1 = z$ . The advent of modern banking or organized credit institutions is depicted by a fall in the cost of borrowing from  $cb_2$  to  $cb_3$  with the associated investment level which increased from  $OI_2$  to  $OI_3$ , an increase of  $OI_3 - OI_2 = w$ .

Diagram 5.1.

Effects of different Financial Institutions on Cost and Investment.



1. See G.I Jones (1951), Dual Organization in Ibo Social Structure in African Journal.

In the diagram above, curve IF, which is almost vertical stands for the internal finance, curve MF, for external finance in form of traditional moneylender and curve FIF for the finance from the financial institutions with its associated low cost and higher investment level. While the traditional moneylender improves the quantity of investments through their lending operations, the cost of borrowing is still very high. However, the advent of financial institutions not only lower the cost of borrowing but also improve substantially the investment level in the economy. Thus it can be seen that existence of financial institutions not only makes finance more available but also at lower cost than could possibly be if only internal finance or traditional moneylender finance were the only possibility in the economy.

It can be argued that the improvement in the level of finance for investment purposes generated by the existence of financial institutions should be related to the fact that they have efficient organization and management far more superior to that of traditional credit institutions. The financial institutions are normally headed by professional managers who are capable of handling large scale operations quite more efficiently, thereby enhancing the importance of their securities to the public.<sup>1</sup> With the financial institutions in the economy, the surplus units are sure of getting their money back on demand while the deficit units are able to get a fairly long term maturing loans. Those with large amount of money to save are able to lend more and more as long as returns on their money is attractive. The small-scale savings are attracted into productive use by the financial institutions, made possible by their ability to match the portfolio requirements of the various borrowers and lenders.

<sup>2</sup>  
Caghan(1981) has argued that in an economy where there are already various financial institutions in operation, introduction of new ones may generally be interpreted as the provision of a more efficient service than had been done before or the provision of an entirely new service. Thus

1. P.F. Smith, Money and Financial Intermediation, The Theory and Structure of Financial System, Prentice-Hall- 1977.

2. See R. Coghlan, 1981 The Theory of Money and Finance, Macmillan Press. London

in Nigeria, the commercial banks were the first financial institutions to operate in the economy only to be followed later after many years by all other various financial institutions which provide new services to meet the growing needs of the economy. The development of all the various institutions will be discussed fully in the later chapters.

## SECTION II

### 5.3 THE GENERAL NATURE OF UNORGANIZED CREDIT INSTITUTIONS IN DEVELOPING COUNTRIES WITH PARTICULAR REFERENCE TO NIGERIA BEFORE 1890s

Organized credit institutions did not appear in the developing countries until later part of seventeenth century and in Nigeria, until after 1890.

In Senegal, the first bank ever started to operate as early as 1853<sup>1</sup> and was established by the French. The late arrival of banking institutions in most developing countries can be explained in terms of the agrarian nature of their economies coupled with the associated traditional beliefs which did not favour any form of interest system on money borrowed. It can also be explained in terms of the undeveloped nature of their monetary systems which did not constitute a conducive profitable environment for any type of organized credit institutions like those operating in the developed economies. Thus there were unorganized institutions in Nigeria before 1890s.

For the purpose of clear analysis, it is productive to distinguish between the organized financial or credit institutions and unorganized ones, and this can be easily done by explaining the general characteristics of unorganized credit institutions.

### 5.4 Characteristics of Unorganized Credit Institutions and Money Market

In general, the unorganized credit institutions consist of local unorganized money markets which are very indigenous in characters. In Nigeria, for example, and in many developing countries in general, the money markets were unorganized for many years, and were generally more imperfect and less homogenous than any organized credit market in operation in developed countries before 1890s. Unorganized market was generally noted for lack of impersonality in the granting of loans to people in need and this remained an important feature of the credit markets of many developing countries for many years. In this kind of market,

1. R. Fry (1976) Bankers in West Africa, London.

the granting of loans is usually based on personal knowledge of the borrower, and prompt repayment is not often pressed. In Nigeria, before the advent of banking institution, the traditional credit institutions often granted loans to people without provision of collateral securities. The lenders, usually the moneylenders, were much more interested in explanation of terms and condition of credit in specific details without actually putting it on record. This is to say in the Nigerian unorganized money markets as well as in any developing country with such kind of markets, oral arrangements were regarded as being sufficient for the accommodation of loans. In some countries where the unorganized credit institutions were well developed like India,<sup>1</sup> for instance, money lenders often preferred to keep their money instead of lending it on bad or unacceptable collateral securities.<sup>2</sup> Unfortunately, lack of proper records to quantify the activities of these unorganized credit institutions in Nigeria had precluded deeper analysis of their importance in the provision of finance in the economy before the advent of banking institutions. Attempts made by some scholars at interviewing people involved met with disappointment since people were rather unwilling to disclose their trade methods or secrets. Neither were they prepared to produce their account books. Moreover, the known borrowers, because of social prestige, were not ready to admit that they borrowed. However, since most of the cooperative societies in Nigeria in most part of 1950s shared many characteristics of an unorganized credit institutions and the fact that most local moneylenders were members of these cooperative societies,<sup>3</sup> it will not be out of place if these cooperative societies per se were regarded as unorganized. The table below shows to what extent the unorganized credit institutions were complementary to the organized institutions with respect to the total credit allocation in the economy.

According to table 5.1 below, in 1944 when there was no record of unorganized

1. See G.L. Karkel (1967), Unorganized Money Markets in India, Lalvarm Publishing, India.
2. See also S. Ghatak (1981) Monetary Economics in Developing Countries, Macmillan.
3. W.R. Bascon (1949), "The Esusu: "A Credit Institutions of the Yoruba" in Journal of the Royal Anthropological Institute Vol. LXXXII, p. 63.

THE RELATIVE SHARE OF ORGANIZED AND UNORGANIZED CREDIT  
INSTITUTIONS IN THE TOTAL INSTITUTIONAL  
CREDIT IN THE NIGERIAN ECONOMY  
1944 - 1959

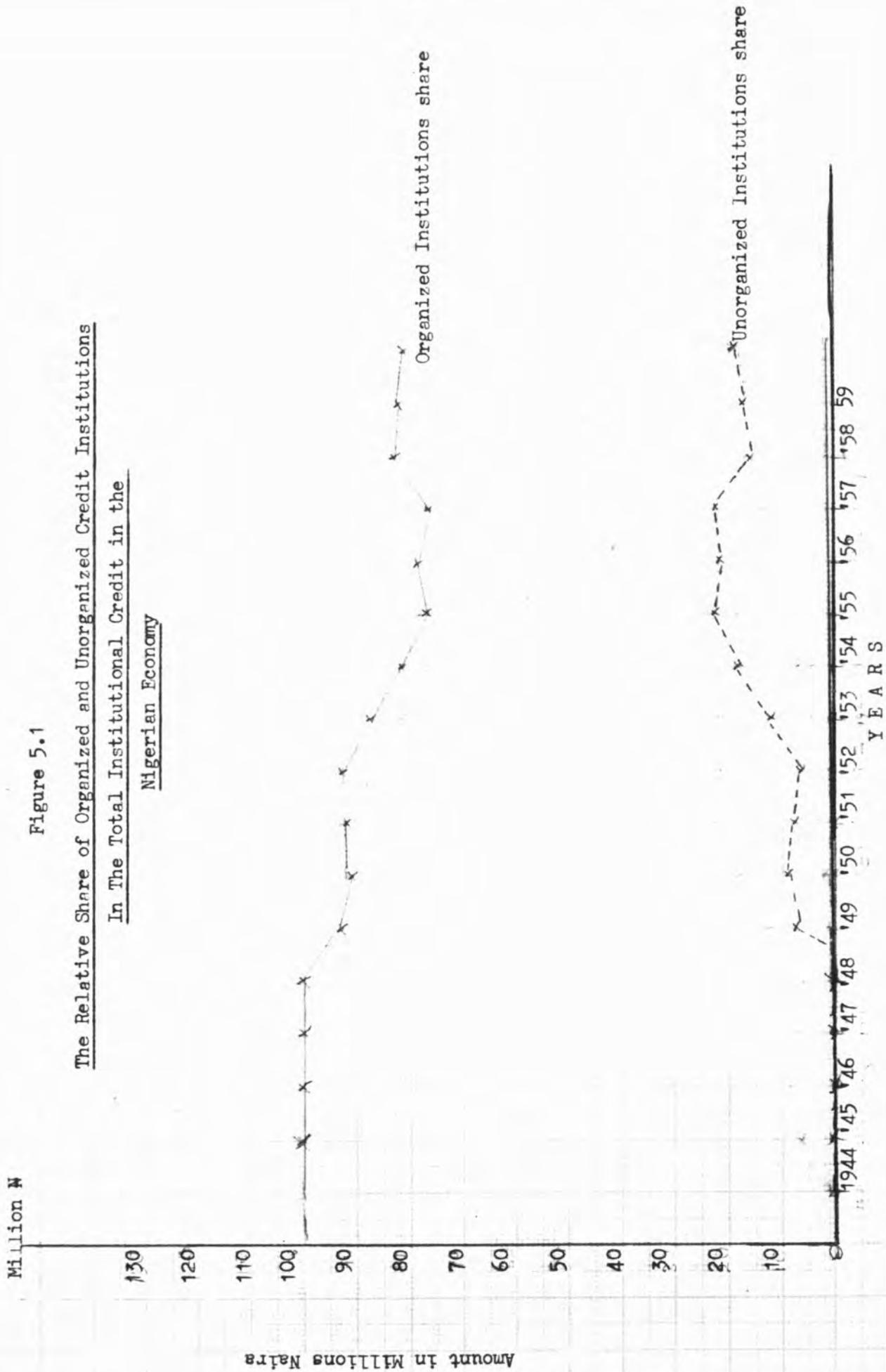
( In million ₦ )

YEAR	Total Credit	Organized		Unorganized	
		Absolute Share	Percentage Share	Absolute Share	Percentage Share
	₦	₦	%	₦	₦
1944	0.7	0.7	100	--	--
1945	1.0	1.0	100	--	--
1946	1.9	1.9	100	--	--
1947	3.4	3.4	100	--	--
1948	7.7	7.1	92.2	0.6	7.8
1949	8.6	7.8	90.7	0.8	9.3
1950	9.56	8.7	91.0	0.86	9.0
1951	11.9	11.0	92.4	0.9	7.6
1952	20.8	18.3	88	1.5	12.0
1953	25.0	20.4	81.6	4.6	18.4
1954	30.7	23.8	77.5	6.9	22.5
1955	47.9	38.1	79.5	9.8	20.5
1956	64.2	51	79.4	13.2	20.6
1957	82.1	68.9	83.9	13.2	16.1
1958	96.6	79.9	82.7	16.7	17.3
1959	100.2	81.8	81.6	18.4	18.4

(Table 5.1)

Source: The Federal Ministry of Finance, Lagos.

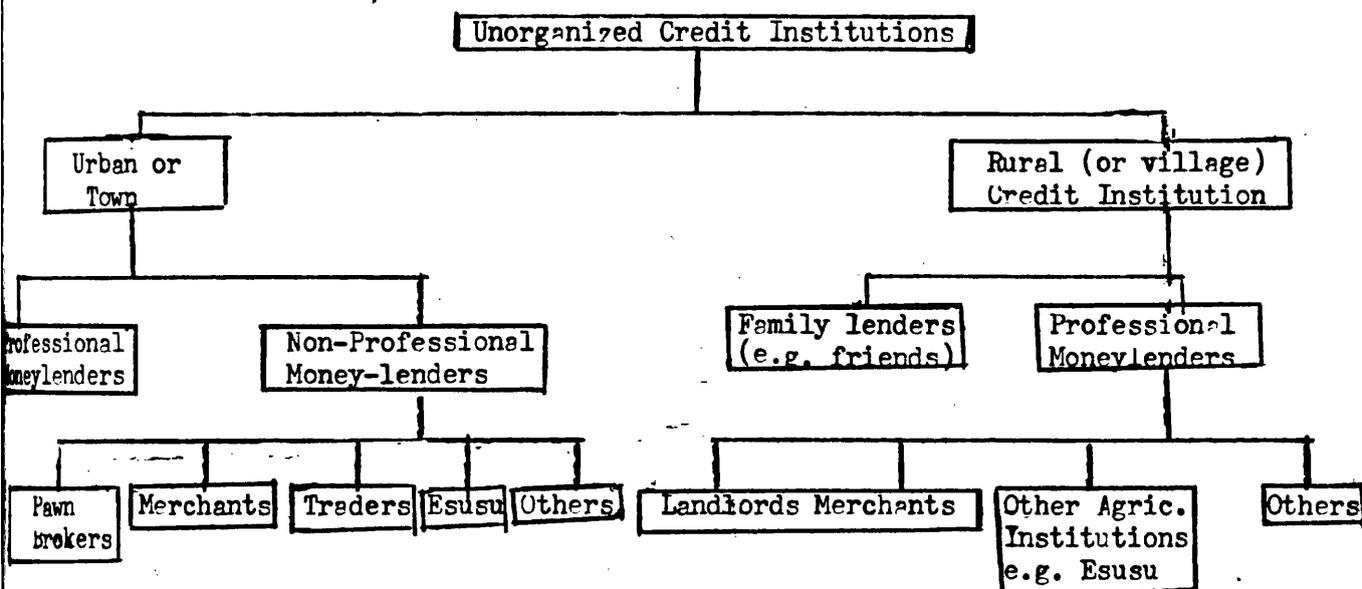
credit institutions, all credit in the economy was from the organized credit institutions. However, since 1948, the share of the unorganized institutions became noticeable, contributing a total of ₦0.6 million to the credit needs of the economy. It continued to increase throughout the period under review except for 1957 when there was no increase at all. However, in percentage term, the highest share was recorded in 1954 with



a share of 22.5 per cent as against 77.5 per cent for the organized institutions. The lowest percentage record for the unorganized was in 1951 with 7.6 per cent while the lowest for organized was in 1954 with 77.5 per cent. There is no doubt that unorganized institutions had made considerable contributions towards the credit needs of the economy in the past even though there are no adequate and reliable data to quantify them.

The organized credit institutions operate in the organized market under the conditions of perfect competition. Between the two extremes, i.e. organized and unorganized, are the semi-organized credit institutions which often contained some characteristics of both, but whose operation was very limited in scope. Because of the importance of these unorganized credit institutions in most developing countries in the past to a large extent and in the present to a limited extent, it is instructive to give a diagrammatic analysis of their general structure:

THE GENERAL NATURE OF THE STRUCTURE OF UNORGANIZED CREDIT INSTITUTIONS IN DEVELOPING COUNTRIES



In any society, it is possible to discover relics of unorganized credit institutions, (UCI). In fact many modern banking institutions developed from such UCIs. Thus developing countries' case is not an isolated one. For example,

<sup>1</sup>  
Cyril James (1972) in his book entitled "The Economics of Money, Credit and Banking" tried to trace the history of modern banking to the Ancient world and discovered that the early forms of banking consisted primarily of money-changing, which gradually developed into moneylenders. However, these money changers/lenders were brought under regulation since they became recognized as important profession in Roman Empire and hence became organized credit institutions. Thus the history of unorganized credit institutions was very long and is associated with the undeveloped nature of a nation's economy. Nigeria and other developing countries, therefore shared this experience with the contemporary developed countries of the world like Italy, Britain, and France at the time of their monetary development process. The above diagram shows the general structure of unorganized credit institutions in any developing country.

Since these UCIs operate in the unorganized money markets, the nature and forms of their operations are much in line with the characteristics associated with the unorganized money market. Thus in his article entitled "Interest Rates Outside the Organized Money Markets of Underdeveloped Countries", U. Tun Wai <sup>2</sup> (1957), gave a vivid picture of unorganized money markets. He saw unorganized money markets (UMMs) in developing countries as being generally imperfect and much less homogenous than organized markets. They are scattered about in rural areas, since there is little or no contact between the lenders and borrowers in different localities owing largely to poor communication system. He went further to say that the wider socioeconomic pattern of the rural life often reflects the type of relationship which develops between the ultimate borrowers and lenders. In Nigerian unorganized money markets, the lending and repayments were done in kind rather than in money before the advent of monetized economy. This was so since the borrowers were largely agriculturalists and hence the average size of loan was usually very small. This is in sharp contrast to the characteristics associated with the organized money markets where the ultimate lenders are almost

1. See C. James (1972), The Economics of Money, Credit and Banking, Ronald Press New York.
2. U. Tun Wai (1957), "Interest Rates Outside the Unorganized Money Markets in Underdeveloped Countries", IMR, Staff Papers, Vol. VI, No. 1 (November).

monopolistically the commercial banks and borrowers are usually big firms and government functionaries. In the UMMs, the lenders include a few financial institutions such as cooperatives, private and government sponsored agricultural banks, indigenous bankers, professional lenders, large traders, landlords, shopkeepers, relatives and friends as already shown in the diagram above.

On the basis of the characteristics of the suppliers and demanders of loans, it is possible to divide the UMMs into three major components. The first component consists of markets in which the indigenous bankers, cooperative societies and other institutions are dominant and in which the demanders are largely rural traders as well as medium-sized landlords and farmers. The second consists of markets in which the credit needs of small agriculturalists with good credit ratings are catered for by usually fairly respectable moneylenders, traders and landlords in return for a relatively high rate of interest.<sup>1</sup> Finally, the third component is associated with markets in which exorbitant rates of interest are charged simply because the demanders of credit are generally poor credit risks for their lack of suitable collateral.<sup>2</sup> This type of market is usually served by the shady moneylenders. For the sake of simplicity, however, the UMMs may be divided into two broad groups instead of three by merging together the last two components on the grounds that the same borrowers and lenders are often found in both markets. For example, a professional moneylender may give credit to a creditworthy farmer at reasonable rate of interest and at the same time to another borrower at an exorbitant rate of interest, thereby operating as a loan shark. Similarly, the ultimate borrower who is credit-worthy may like to augment the loans obtained from the second market by further loans from a loan shark.

In most developed countries, unorganized money markets are largely prevalent in rural areas where they meet the small-sized credit needs of agricultural community. In large urban centres, however, it is possible

1. See G.L. Karkel (1967), Unorganized Money Markets in India, Lalvarm Publishing House, India.
2. S.F. NADEL, A Black Byzantium, OUP., London 1951.
3. See also an interesting articles on the unorganized Credit Market in developing Countries by S. Ghatak in the Journal of the Developing Economies, 1975.

to find professional moneylenders satisfying the credit needs of small business enterprises as well as consumer credits to wage earners. In some countries pawn shops operate also in the commercial centres. In Britain, for instance, there are many pawnbrokers in the big city centres satisfying the needs of their clients desperately in need of urgent cash but who find it difficult or are not qualified to obtain loans from the banks. However, one cannot totally regard this type of institution as unorganized since many of them operate within the confines of British law, and many often advertise their business in some local as well as national papers.<sup>1</sup>

In many developing countries, agriculture still remains the mainstay of the economy, accounting for between 60 and 80 per cent of their national income. The table below shows the contribution of agriculture to the gross domestic product of Nigeria in 1950s and early part of 1963. According to this table, agriculture contributed 49.5 per cent of the gross domestic product of Nigeria in 1950 as against 0.566 in respect of manufacturing sector. The highest contribution from agriculture was recorded in 1958, with a share of 68.8 per cent, as against 2.8 per cent for manufacturing. Thus it is certainly necessary that any discussion of credit institutions should take cognizance of the unorganized credit institutions in any developing country since these institutions had helped greatly in giving loans to farming community where the banks could not either because of non-existence or because the farmers were credit risks and hence not in conformity with traditional principles of banking. In most developed countries, however, the existence and hence the importance of unorganized money markets is not so pronounced since industrial enterprises rather than agriculture contribute at least 90 per cent of their gross domestic products. For example, in Britain and United States, the share of agriculture in national income is between 5 and 10 per cent.<sup>2</sup> Also, very small proportion of the labour force in developed countries is engaged in agriculture unlike developing countries where

1. See the Islington or Hackney Gazette, London of any issue for the advertisement.
2. UNO Food and Agricultural Organization, 1975; also see Vienna Institute for Comparative Economic Studies, 1976.

Table 5.2 79

COMPOSITION OF NIGERIAN GROSS DOMESTIC PRODUCTS BY MAJOR ECONOMIC ACTIVITIES  
1950 - 1963 (In Million ₦)

ACTIVITY	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963
Agricultural Sector	681.8	778.2	1002.2	1059.2	1115.6	1144.6	1106.3	1130.4	1239.8	1226	1280	1331.2	1388.2	1437
Mining	15.6	15.2	15.8	15.8	16.2	18.0	19.2	18.8	14.0	13.2	16.8	27.6	36.4	42.6
Manufacturing	7.8	8.0	11.6	12.6	15.8	17.4	24.0	26.2	50.8	61.2	72.2	78.8	84.4	98.2
Communications	5.4	5.4	6.0	5.8	4.8	5.3	6.2	5.8	6.2	6.4	7.0	7.4	7.8	5.8
Building & Civil Engineering	40.6	50.8	38.8	51.8	75.6	76.6	73.0	86.0	45.8	64.2	66.6	55.0	58.4	66.4
Ownership of Buildings	17.8	18.2	18.4	18.8	18.8	19.4	19.2	20.6	15.8	17.2	18.6	20.0	21.4	22.0
Transport	57.2	68.0	70.6	90.8	101.8	120.4	130.2	149.2	58.2	64.6	74.6	86.0	85.6	47.4
Crafts	31.6	31.8	32.0	32.2	32.4	32.8	33.0	33.4	40.8	40.8	40.8	40.8	40.8	40.8
Missions	12.9	14.0	15.2	15.6	17.4	22.8	25.4	30.9	36.2	43.2	46.6	49.2	53.7	55.4
Government	30.0	32.8	39.8	33.0	35.2	46.8	57.4	61.0	58.2	72.6	70.0	76.0	80.0	76.4
Marketing Boards	82.0	21.0	56.0	57.6	85.4	50.0	89.8	23.4	1.4	23.2	11.6	10.2	6.4	16.4
Banking, Insurance and Professions	3.0	2.4	2.6	3.4	3.4	4.2	4.4	5.0	6.2	7.4	7.4	8.0	8.4	8.6
Domestic Services	8.8	8.8	8.8	9.4	9.6	10.0	10.9	11.0	7.4	7.8	8.0	8.0	8.4	9.0
Miscellaneous Services	1.8	2.0	2.2	2.2	2.4	3.0	3.8	4.0	3.6	4.2	7.4	7.2	8.0	7.8
Distribution..														
residual error, etc.	132.4	199.0	246.8	215.0	209.4	219.6	147.4	213.0	216.0	225.2	235.6	243.4	257.4	269.2
GROSS DOMESTIC PRODUCT AT FACTOR COST	1377.4	1482.8	1587.0	1623.2	1744.2	1790.4	1747.4	1820.0	1800.0	1877.0	1962.6	2028.0	2144.6	2243.0

Source: For 1950-57: "Nigerian National Accounts, by P.N.O. Okigbo  
For 1958-63: Federal Office of Statistics, Lagos.

See Figure 5.2 showing the trend in the share of agricultural sector in GDP overleaf.

the proportion is much large and often of between 66 and 75 per cent, and also in most developing countries agricultural indebtedness represented in the past the major portion of rural indebtedness. For example, a survey conducted by the Board of Economic Enquiry in Punjab in 1951 indicated that in Pakistan, 80 per cent of all the rural credits represented agricultural credits.<sup>1</sup>

In some developing countries where data on UMMs exist, it is possible to estimate the relative size of these markets via the estimation of the value of agricultural indebtedness relative to its value in organized markets. For example, it has been argued that such a comparison is possible only in a few Asian countries where evidence of the performance of the UMMs has been fully documented. It is claimed, for instance, that if agricultural indebtedness is higher than the claims of the banking system on the private sector of the economy, it means that unorganized money markets are more important than the organized ones.<sup>2</sup> In Nigeria, this comparison is not possible to make since there are no adequate and reliable data. However, the only comparison possible which has been depicted by table 5.1 can only be regarded as an approximation in so far as only one type of unorganized credit institutions was compared with the organized. Even then, since agricultural loans are rather long term in nature and the fact that banks in Nigeria were largely disposed to giving short-term loans rather than long term, the amount of contribution given by the unorganized credit institutions to farming community was more significant than that of the organized ones in 1940s and 1950s.

#### 5. How to Measure the Extent of Development of UMMs in Any Economy:

There has been growing concern among economists on how to measure the extent of UMMs impact on any economy.

One possible way of measuring the extent of the development of UMMs in a developing economy is to find association between currency in circulation and the level of growth. It can be hypothesized that, other things remaining equal,

1. See for instance, M.K. Lowermilk (1973)

2. See the work of U. T. Wai (1977) on interest rates Outside the organized money markets of underdeveloped countries.

the higher the currency in circulation, the higher the growth level of the economy and the less subsistent is the economy, hence the more developed the UMMS.

In general, it is believed that as the currency in circulation within an economy increases with the level of economic development, the greater will be the extent to which the economy is monetized.<sup>1</sup> But a monetized agricultural sector does not necessarily mean that credit systems are developed. Another way to measure the extent of UMMS, is to compare the relative magnitude of the agricultural loans and the amount of currency in circulation. Also, by comparing the agricultural loans with agricultural income and national income, one may be able to indicate whether such loans are too small or too large. For example, it has been observed that in a number of developing countries like India, Burma and Mexico, the agricultural loans before the 1929 great depression was quite voluminous and that it had been expanding rapidly owing to rising prices of agricultural products.<sup>2</sup> Tun Wai (1977) estimated the noninstitutional sources of credit in Africa and Asia at 72 per cent of total rural credit in each region and that of Middle East at 63 per cent as against the low figure for the five Latin American countries which was estimated at 15 per cent. For Nigeria and Sierra Leone, Wai suggested that traders, middlemen, produce buyers, and moneylenders supply between 40 and 50 per cent of total rural credit, and if loans from other sources are added,<sup>3</sup> will amount to 72 per cent.

#### 5.6 Sources of Credit in Unorganized Money Markets of LDC

As can be seen from figure 5.1, the principal sources of credit in the UMMS are largely noninstitutional. These are the professional moneylenders, landlords, traders and relatives or friends. The reports<sup>4</sup> on the rural surveys conducted in India, Pakistan and Thailand clearly confirms the structure shown on figure 5.1 and in fact, the report shows that there are usually many persons besides professional moneylenders, who lend at very high rate of interest. As already pointed out, the unorganized credit institutions had been very important sources of credit in developing

1. See for instance A.G. Chandavarkar (1977).

2. E.W. Simpson (1937) on Mexico

3. Other sources include friends, relatives, neighbours and landlords.

4. M. Long (1968) on Interest rates and the structure of agricultural credit markets.

countries before the advent of organized credit institutions and even after the advent for the following reasons:

- (a) In most developing countries, the existing organized credit institutions largely restrict their lending activities to commercial centres rather than rural areas which they often regard as poor risk section of the economy.
- (b) The rural ultimate borrowers too have preference for unorganized credit institutions as sources of their credit needs even at a higher rate of interest than obtains in organized credit institutions since the procedures of obtaining credit are much more simple than in organized institutions.

The preference for unorganized credit institutions by rural ultimate borrowers inspite of higher price of loans than organized may be due to many factors. Firstly, the organized institutions are usually prevalent in urban and commercial centres, and hence are at considerable distance from the rural borrowers. The unorganized credit institutions, on the other hand, are usually available in every village. Secondly, ultimate borrowers obtain their loans almost immediately from the unorganized credit institutions either for economic or uneconomic purposes like marriage and litigation, which is largely impossible with the organized institutions. Thirdly, because of the very <sup>1</sup> nature of the cost of such loan, there is usually no publicity on the amount of money borrowed from unorganized institutions. Moreover, there are virtual absence of intricate and complicated conditions to be fulfilled before the accommodation of loans by the moneylenders. This is because, the borrower does not need to provide collateral security as a condition for the loans; a mere verbal promise to repay is considered sufficient. <sup>2</sup> Thus the non-requirement for collateral security may partly explain the continued existence of unorganized institutions in most developing countries up till today since most people in the rural areas are generally poor and hence have very little in the form of financial or physical assets.

### 5.5 Source of Organized Credit

The importance of commercial banks as a source of credit to the rural agricultural sector varies from one developing country to the other

1. See for instance the Consortium for the study of Nigerian Rural Development 1966.
2. This view is supported by the work of Chandavarkar (1965).

depending on the nature of banking development and the central bank's policy of selective credit controls. For example in some Latin American countries, commercial banks have been important sources of agricultural credit for a long time, whereas in some developing African countries, the cooperative banks as well as cooperative societies have been more dominant as important source of credit in rural areas. This was very evidenced in Nigeria in 1940s and 1950s when the cooperative societies were very active in the rural areas of the country. Using the amount of credit from the cooperative societies to the agricultural sector of Nigeria as representing the share of unorganized institutions, (and in fact these societies were not well organized in 1940s and 1950s), in 1948, all the credit from unorganized institutions - NO.6 million - was for agriculture as against N7.1 million from the organized which was totally for business enterprises and government functionaries (See Table 5.1). However, owing to the active intervention of the Nigerian Central Bank, with its selective credit policy instrument, organized institutional loan to agriculture has been increasing since 1976. Also in some Latin American and Middle Eastern countries, governments have actually taken up the supply of credit to agriculture either directly, through the specialized institutions or in partnership with other institutions. In Nigeria, for instance, the Federal Government established a specialized institution specifically for agriculture in 1973 known as the Nigeria Agriculture and Cooperative Bank, charged with the responsibility of providing soft loans to farmers. (See Chapter 10).

#### 5.8 Cooperative Credit Societies:

Cooperative credit societies exist in Nigeria as already mentioned, and also in most developing countries, especially in rural areas where they have been very helpful as source of loanable funds to rural communities. For this reason, some writers often find it more convenient and reasonable in the past to classify them with the unorganized money markets. Today, however, in some countries, many co-operative credit societies have become more organized and many are performing commercial banking functions. In Ghana and Nigeria, for instance, there are cooperative banks which operate fully as commercial banks and which developed basically from the various old cooperative societies operating in those countries.

1. See A.G. Chandavarkar (1965)

2. See T. Adewumi (1982)

3. The Central Bank of Nigeria Annual Report and Statement of Accounts, 1977

4. See. Tun, Wai (1977)

In general, in most countries, cooperative societies may be a limited or unlimited form of organization. In some cases small cooperative societies may combine together to form central cooperative banks which in turn combine to form an apex cooperative bank. This apex cooperative banks offer banking services to the cooperative movement as a whole.<sup>1</sup> Examples of this are the three cooperative banks in Nigeria, i.e. the Northern Nigeria Cooperative Bank, the Cooperative Bank of Eastern Nigeria and the Cooperative bank of Western Nigeria. The bulk of the finance of these cooperative banks normally comes from the government and also from the cooperative movements per se.

#### 5.8a Some Shortcomings of Cooperative Banks

A lot of shortcomings have been identified in the operation of cooperatives which are of varying degrees in accordance with the level of development of cooperative banks per se in any particular country. One of these shortcomings relates to the shortage of fund which makes their lending operations very inadequate with respect to medium and long-term credit. This is one of the great problems facing the cooperative banks in Nigeria because of excess demand for their loans. Another example is the study by Wai (1957)<sup>2</sup> which revealed that the Cooperative Department Administration Report on the working of cooperative societies, 1954 showed that the cooperative credit societies made a substantial amount of short-term loans to people, but could not adequately meet the needs of those looking for long-term loans because of shortage of funds. One other important short-coming of the cooperative societies is that while they represent a very good channel through which government fund can pass into the hands of farmers, they are generally less important in the domestic capital mobilization. The cooperative movement at any one time depends on the nature of agricultural prices and terms of trade. Thus whenever agricultural incomes fall, the movements too will feel its impact.

1. See the work of R. Ruozi (1971) on "Savings Banks and Agricultural Credit".

2. See Wai (1957)

In some countries, the role of government often inhibits the effectiveness of the cooperative movements as in Indonesia.<sup>1</sup> In many other places, land tenure system remains a major obstacle in the establishment of effective cooperative society and this hinders the channelling of funds to the agricultural sector. Yet some countries have had a long history of successful cooperative movements. For example, in India, Pakistan and Burma, cooperative movements had been well established since 1904, while Ceylon and Thailand had a taste of it in 1912 and 1916 respectively. In Nigeria, it was much later with first cooperative society established in 1938.

#### 5.9 THE DEVELOPMENT OF UNORGANIZED CREDIT INSTITUTIONS IN NIGERIA

The development of credit institutions and money markets may be associated with the development of agriculture from subsistence to modern agriculture. The rationale behind this is the fact that for many years, agriculture was the mainstay of Nigerian economy (See table 5.2), contributing more than two-thirds of the country's gross domestic products. Before the arrival of the colonial master, Nigerian economy was largely subsistence; agriculture was based on self-sufficient type since there were no markets in which any surplus could be disposed off. And even if markets had existed, the disposition would be based on double coincidence of wants, since the economy was largely moneyless. Although some commodity monies had been in use for some time, but these were highly localized.<sup>2</sup> Even within each locality many types of commodity money existed without uniform standard of measurement. No generally accepted standard of payments could emerge in a country where tribal wars and loyalty were very rife. Therefore, in such kind of economy, there was little or no need for credit since hope for the future could not be built as people lived in constant fear of tribal attack.<sup>3</sup> As time went on, however, some farmers were emerging prosperous in the

sense that they could afford to hire labour. As a reward for service rendered,

1. See R. Ruzi (1971)

2. L. Eric (1975), Money and Credit in Developing Africa, Heinemann, London.

3. See J.K. Onoh (1982).

farmers fed his workers and satisfied their basic needs as well as that of his household.

#### A Emergence of Rudimentary Market Agriculture

As time went on, people started to settle down, since the tribal war was rescinding. Hence it was possible to produce more than each household could consume. Market, therefore developed locally through which the surpluses were disposed off by way of barter. In line with this development was the emergence of rudimentary needs for credits as a result of vagaries of weather which could often result in droughts and consequent crop failures. Also during this period, people were often at the mercy of animal and human epidemics, and in each occasion of such mishaps, people sought for credit accomodation which was often given in kinds such as seeds, timber for house-building or food. Where credits were given in kind, such as foodstuff or seed like maize, rice or cassava, such loans were often used either as seeds for planting or as wages to the labourers. In other words, such credits were often used for current farming expenditure or for immediate consumption either by farmer or by his labourers. Some writers have argued that such form of credit which developed in the traditional or unorganized institutions were largely for consumption and therefore not productive. However, this is not correct. It is quite arguable that since such form of loan is in kind and to the extent that it is used for consumption, it is productive in so far as such consumption would make the borrowing farmer fit for work, (in a situation where manual labour is in vogue) and hence a great possibility of increased productivity exists. Had the farmer no opportunity to borrow, production would suffer, no matter how small.

In general, one can say that the significance of the unorganized institutions however rudimentary, might be well illuminated by asserting that if farmers failed to consume what was borrowed or to pay the labourers to do the work, the productivity of the economy would be badly affected. Therefore, one can conclude on this issue that all agricultural loans are always

1. See G.L. Karkel (1967)

productive whether used by the farmer for his family consumption or for current farming expenditures.

Unlike the impersonality culture associated with the operation of organized credit institutions, mutual personal understanding and confidence on the part of lender and borrower is one of the fundamental principles governing the lending and borrowing in the unorganized credit markets and institutions. The lender has the confidence that the borrower would repay back later the same amount or quantity borrowed, no more, no less especially when the credit transaction is between friends and relatives other than borrower and moneylender.

### β The Structure of Unorganized Credit Institutions and Market in Nigeria before the 1960s.

The structure of unorganized credit institution and markets follows closely the stages of development of the financial system. However, the financial system per se depends on the development of agriculture since, as already pointed out, agriculture remained the mainstay of Nigerian economy for a considerable number of years before and after independence. For example the share of agriculture in the total national income of Nigeria in 1960 was 62.9 per cent and in absolute term it was ₦1414.6 million, out of a total GDP of 2,247.4. (See table 5.2). It was only in 1970s that the share of agriculture started to be falling markedly. For example in 1974 it fell to 23.9 per cent and this fall was steady and finally reached the rock bottom share of 18 per cent in 1979. For convenience as well as for analytical purposes, the unorganized credit markets and institutions can be divided into five, from the most rudimentary form to the semi-modern form of markets in terms of the characteristics of borrowers and lenders in each market:

1. Relations, family and friend Unorganized Credit Institutions
2. Iwofa Credit Institutions and Markets
3. The Esusu Credit Institutions and Market

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1. Also see Figure 5.2. There was a slight fall in the share of agriculture in 1956 which might be due to fluctuations in the price of cocoa in that year.

2. Central Bank of Nigeria Annual Report and Statement of Accounts, 1979.

4. Traders' Credit Institutions and Market
5. The Professional Moneylenders and Market.

It should be pointed out, however, that each type of market and institutions developed as the nature of economy at each particular period warranted it. Although the markets and institutions have been divided into five types, but in practice it is difficult to draw a clear demarcation among these five types, and hence this classification should not be taken to imply lack of coordination or interdependence among them. As a matter of fact, they were linked to each other in some respects. Thus it is not unlikely to see ultimate borrowers from one market in another market if their demand for loan in one market is not satisfied. The classification adopted here, therefore is simply designed to bring into focus the structural characteristics of the unorganized institutions in Nigeria and how they developed.

(i) Relative, Family and Friends Unorganized Credit Institution & Market

The virtual absence of any visible professional intermediaries is one of the chief characteristics of this institution and market. Credit transaction, in general, is based on face-to-face arrangements between the ultimate borrowers and lenders. Since loans are usually granted on personal basis, they are largely unsecured beyond a verbal pledge. Today, in the relatively unbanked areas of Nigeria, majority of the borrowers are the householders in need of consumption loans and small business enterprises, such as small traders and small-scale producers. The borrowers also include farmers who find it difficult to obtain sufficient funds from the organized credit institutions.

The suppliers of credit in this market in the past were largely relatives and friends and such credits were always in kind. Today, the suppliers are largely heterogenous. They consist of non-commercial moneylenders who are largely relatives, friends and acquaintances and neighbours as well as local commercial moneylenders. As should be expected, non-commercial unorganized

1. For example, R.B. Morrow (1973) reported that in S. Korea 60 per cent of rural credit came from other farmers, 28 per cent from relatives and 12 percent from traders and moneylenders. (Reserve Bank of India, 1961-62).

institutions like this extend credit because of kinship and friendship loyalty.<sup>1</sup> The local moneylenders usually combine moneylending with other business activities and as such do not have either the facilities for credit mobilization or any formalized procedures of lending. They operate mostly with their own friends and since they don't usually have broad knowledge of a broad market, their lending activities are usually within a small geographical region in which they live. Hence they are limited in number when compared with non-commercial credit suppliers.

In the past, the unorganized credit institution of this kind did not charge interest rate on loans. For example, the relation credit did not attract any interest because it was against the tradition of the society to demand more than was given. In fact this zero rate of interest on loans has its roots in religious belief among the muslim, in particular that it was highly unorthodox and, therefore, very anti-social to demand interest rate on loan. It was viewed as adding to the burdens of the borrowers.

This kind of unorganized credit institution developed in early part of 18th century, perhaps, when production were mainly based on subsistence in a moneyless economy.

The extensive road development projects which followed the amalgamation of hitherto Northern and Southern Nigeria into one unified country opened up extensive trade links with various commercial centres and cities of the country. These cities and commercial centres of the country relied on the rural agricultural communities for the supply of food while they concentrated on their trade and industry. As the demand for food was growing in these urban centres, the rural communities became drawn into the market economy of these commercial centres and cities. Already, the British silver coin had been introduced as a legal tender on 21st May, 1880 in most of the important towns and cities in the country.<sup>2</sup>

1. See C.R. Wharton, (1962) on "Marketing, Merchandising and Moneylending, in Malayan Economic Review, Vol. VII, No. 2 October.

2. See R. Fry (1976) Bankers in West Africa, The Story of the Bank of British West Africa Ltd., London.

The resultant production for markets following the use of silver coins as medium of exchange coupled with the increasing demand for agricultural products heralded an intense need for credit on the part of the farmers. It should be pointed out that the cultivation of such food crops like yam, cassava and rice are very tiresome and needs a lot of labour input. Since these crops were the staple food of town dwellers as well as the rural dwellers by that time and still are, the need for finance among farmers to increase their production can never be overemphasized.<sup>1</sup> The fact was that contacts farmers and traders with their merchandise generated an added desire on the part of the farmers to increase production so as to get enough money to buy such things as bicycle, clothes and other things of their desire. The traders too demanded more credit to be able to satisfy the needs of their customers.

At the early stage of development, the credit needs which arose were quite small and yet very important. These needs were usually met in either of these three ways; (a) part of the future harvest could be pledged to workers or be paid with the money borrowed either from the family, friend or relatives and in some cases, from the local moneylenders who lent on commercial basis with the proceeds of the harvest as collateral. In a majority of cases, the contribution from the Esusu Credit Institutions could ease the credit needs of the farmers. In some parts of the country like northern Nigeria, the high demand for foodstuff was often met by the local government authorities through the system of "land-lease" of machines which allowed the farmers to pay a fixed rental charge for the machine after the sales of<sup>2</sup> their produce. However, the economic use of machine demands very vast area of land and hence the credit needs were less satisfied by the local government. In fact the rigorous procedures involved often put off many potential users of that form of credit. Thus Many farmers satisfied their credit needs by direct personal contacts with family or friends who were in a position

1. See also A.G. Chandavarkar (1977).

2. See the Consortium for the Study of Nigerian Rural Development (1966a) pp. 8-9

to satisfy their credit needs. Where the needs for credit still remained unsatisfied, farmers could make use of the opportunities offered by Iwofa-Credit institutions. The family credit will be taken up later with empirical evidence.

(ii) Iwofa Credit Institution & Market

This kind of credit institution involves the need for ultimate borrower or one of his children, in particular female, to work on the farm or household of the moneylender till the debt is paid. The service of the person pledged as collateral, represents a form of interest on loan. Since it offers very cheap labour, this system of credit is still very prevalent among the rich and poor alike in the remote parts of Nigeria, especially the southern part.

(iii) The Esusu Credit Institutions

The Esusu Credit Institution is essentially a native of Nigeria although it also appears in other developing countries under several names and guises. For example in Korea, it is called the "Rotating Credit Club" or "Kye Market". In essence, Esusu is a form of rotating credit association commonly found in African, Asian, East and South-East Asian countries, but under different names like 'Ko', 'hai', 'Dashi' etc. with their different local meanings.

The Esusu Credit Institution is more or less a device through which traditional forms of social relationships are mobilized in order to meet non-traditional economic needs. This institution has grown largely within the peasant social structure to harmonize agrarian economic patterns with the commercial ones. Today, it acts as a bridge between peasant and trader attitudes towards money and its uses.

In general, the operation of this kind of institution had its fundamental root in the social club formation in Korea. However, as the pace of economic development quickened, this kind of institution lost its traditional element of mutual help, community solidarity and harmony. The continued presence of this kind of institutions has been noticed in other developing countries. For

example, <sup>2</sup> Bascón<sup>2</sup> an anthropologist, has tried to explain the presence of

1. See D.C. Cole, (1983), Studies in the Modernization of the Republic of Korea, 1945 - 1975 Harvard University Press.

2. See also W. R. Bascón, (1947).

this institution among the Indians in West Indies in terms of cultural transmission. It is held that the spread of the institution was due largely to the Yoruba-speaking elements who settled in those parts of the world.

Although this kind of institution did not impose any interest rate charges on its operation, yet it has been widely recognized as a channel for mobilising small savings to make large sum of money. Esusu credit institutions gave contribution to member farmers which in the past had enabled them to purchase cattle, fruits and land for agricultural extensions as well as for housebuilding. Bascom has clearly emphasized the advantages of this institution when he argued that the "Esusu gave members enough money to enable them to make expensive purchases or to meet debts of a considerable size."

Today, the Esusu institution has been transformed from its former role of mutual help and maintenance of community solidarity and harmony into informal but economically rational financial institutions in many countries. To be sure, the Esusu institutions are a kind of instalment system for deposits and loans. The scheme covertly or overtly was originally designed to pool small savings to make a large sum of money. The principle on which the scheme is based results in a lump-sum fund contributed in variable amount by all the members according to their individual economic ability. Nowadays, the institution is based on an interest payment calculation from each members to whom the money is loaned out. Each member, therefore, is a saver-depositor and the longer the duration of a member's deposit or the later his position in the sequence of rotations, the higher will be the rate of return on his instalment deposit. As a borrower, the longer the duration of his loan repayment, the higher will be the rate of interest to be paid. Usually the interest rate calculation in most Esusu are not so rational. This largely depends upon one member's position in the sequence of rotation for loan as will be explained later in this chapter based on the personal experience of the writer.

See W.R. Bascom (1949) on "The Esusu: A Credit Institutions of the Yoruba" in the Journal of the Royal Anthropological Institute, Vol. LXXXII, 1949 p. 63 cf.

One very important regulation in the Esusu institution is the fact that it precludes its members from debts which would have resulted had the members gone all out to borrow money from the moneylender at a very high rate of interest. It is one of the conditions of membership that anybody who breaks this important rule would no longer receive any financial help from the club and that might result in expulsion of such persons.

The Esusu Credit Institution should be seen as an improvement on the family, friend and acquaintances unregulated credit institutions. The transition of agriculture from subsistence to market agriculture is associated with the development of credit institutions from unorganized to semi-organized and finally to organized institutions. Esusu institution, therefore, could be regarded as standing in the mid-way between the two extreme forms of institutions. When the farmers started to take a broader view away from the purview of their territorial boundaries, export economy emerged and they started to produce for export markets. In addition new articles like radio, bicycles and many other fanciful hardwares were being imported into the country. These imports created strong demand from the farmers especially for the bicycle, which was later translated into increased export production. Where it was not possible to increase production to the desired level because of shortage of credit, other forms of credit soon developed.

#### Export Production and Credit Needs

Transport constraints considerably inhibited export production in 1930s and 40s. However, with the commencement of operation of railways, export production started to grow in importance. Groundnuts was one of the chief cash crops of the country and the production of this was formerly limited to local consumption. It was hardly possible to move groundnuts from the producing areas in the north to Lagos, the only export port by that time situated in the south at a distance of about 850 miles without good transport system. Thus in 1900 only 600 tons of groundnuts were exported as compared with 320,000 tons in 1937 when the railway started operation.

1. See IBRD (1954), Economic Development of Nigeria, Baltimore.

This figure later rose to a record level of 715,000 in 1957. Palm oil export stood at 6000 tons in 1900 and by 1937 rose to 46,000 tons. By 1958 the figure stood at 190,167<sup>1</sup>. It is interesting to note that over 90 per cent of the export production came from the rural peasant farmers using their crude method of agriculture.

As economy was moving away from subsistence to export production, credit needs of farmers became highly intensified. The farming population in Nigeria at that time was more than eighty per cent of the workforce and this puts the farming population in great need for credit either for the extension of their farms or for the purchase of imported commodities and modern techniques of production. The groundnut farmers, for example had genuine desire to buy ploughs and tractors but no credit. Similarly, the cocoa farmers in the Southern Nigeria needed credit to build storage facilities for their products but no credit. Because of the poor road-network, the palm oil producers in the south needed bicycles to carry their produce to market from where they would be loaded for exports, but no credit also. The small amount of credit which trickled to the large majority of farmers came from the unregulated or unorganized credit institutions and this varied in size and costs. The organized financial institutions might also have assisted indirectly, probably through provision of credit to well-known merchants with adequate collateral and who in turn lent this to farmers. Unfortunately no record of this is available for this study.

#### (iv) Traders or Merchant Credit Institution

The merchant's credit represents a link between the unorganized and organized credit institutions. One can regard merchant's credit institution as informal credit brokers which clustered around the business or commercial centres. In most cases, these informal credit brokers often disguised as legitimate business concerns in order to avoid taxes and encounters with legal authorities. As a group, these merchant moneylenders

1. See the Economic Survey of Nigeria, 1959, Government Printers, Lagos.

exerted considerable influence on their borrowers and set terms and interest rates on loans. They often exchanged information about borrowers and ultimate lenders, often made loans to each other and had market-sharing arrangements. Unfortunately, some people interviewed about this only gave account of the operations of these moneylenders but there was no record of their activities.

These merchant moneylenders made loans to large export farmers who sold their produce through the middlemen. These middlemen were merchants of agricultural products in disguise but largely moneylenders in themselves. These middleman moneylenders always tried to secure long term customer relationship with their producers by granting them credit at high rates of interest which could even be more than the rate obtained in organized credit institutions by 20 per cent according to one of the produce buyers interviewed in connection with this study. These merchant-cum-lenders (so to say) were often very intimate with the farmers' credit needs and so were able to borrow money from banks which they lent out to farmers. The role of merchant credit institutions was aptly described by Gallett et al as follows:-

"In 1952, the cooperatives had not the supply of loanable funds nor the experience in credit to replace him. The state was offering a limited supply of funds for development purposes. The banks were not in touch with the farmer and had not the organization to handle a vast number of petty loans in thousands of villages."<sup>1</sup>

Thus the banks preferred to lend to these merchant-cum-moneylenders rather than the poor risk farmers. The merchant-moneylenders in turn lent to farmers on a very small-scale. In a few cases, they often borrowed customers in the form of credit-purchase system to enable them to buy tractors and other farming implements needed in their farms pending the harvest time.

The merchant-cum-moneylenders often acted as commission agents to town merchant-cum-moneylenders. The village merchant would collect the raw

1. See R.B. Gallett and I.O. Dina (1956), on "The Nigerian Cocoa Marketing Board", Nigerian Cocoa Farmers, London.

materials or agricultural products from his clients and supply same to town merchant. More often than not, in an attempt to ensure the smooth and uninterrupted flow of supply of products from the farmers, the merchant often put it down as one of the conditions for loan that the farmers should either sell to him or through him at the agreed price. Although credit from the merchant-cum-moneylenders carried high rate of interest, there is no doubt that they had greatly helped, regardless of the size of credit, farmers with loan to improve their productivities, even where banks could not for security reasons.

(v) Professional Moneylenders and Some Empirical Evidence on their Activities

Most of these moneylenders specialized in small-loan business in towns and commercial centres of the country. They often extended small loans for consumption and working capital to small retailers, wholesale traders, and owners of various small service enterprises in urban areas.

The Nigerian moneylenders were not very many and had limited resources which dictated the scope of their lending activities. The smaller moneylenders granted petty loans to workers and labourers at very high rate of interest which varied from one lender to another. However, those moneylenders with large resources mostly advanced loan for trade and commerce. While big moneylenders existed in towns, the small moneylenders were found in villages serving the credit needs of farming communities. Although there were some banks in some city centres such as Lagos, Ibadan, Port Harcourt and Kano, the chief source of credit to the indigenous businessmen still remained largely the merchant moneylenders. This is not to say that the organized institutions did not contribute to credit needs of the economy by that time, but the scope of such contribution was relatively small owing largely to the banks' conformity to the traditional principles of banking. Even then, most of the merchant moneylenders relied heavily on organized institutions for the bulk of their working capital since they were able to provide suitable

1. See United Nations (1963), pp. 30-1 for examples in Gambia, Sudan and Sierra Leone, Moneylenders charge between 50 and 300 per cent on loans.

collateral securities, especially landed properties. The rate of interest charged on loans by moneylender was invariably high, and at times up to 50 to 70 per cent but some time between 20 to 50 per cent. The high rate of return or interest charged by a moneylender is very common in most LDC countries.<sup>1</sup> The reason for charging high rate of interest might be due to the fact that the moneylender borrowed from the organized institutions at a high rate of interest, composed of pure rate of interest (i.e. the rate that equates the supply of and demand for loanable funds in this context) plus administration and risk charges. The moneylender in turn lent money to the farmer, probably for six months from sowing to harvest time only, while for the rest of the year, his money was not put into any use and hence no interest income. In order to compensate for the period when his was lying idle, then he would have to charge perhaps twice the normal rate in order to cover the opportunity cost of his money.<sup>2</sup> Many studies have shown that this tendency of high rate of interest charged by moneylender is common with the developing countries as indicated before. For example, Nisbet's study of rural credit survey in Chile ( Nisbet 1966 P.13)<sup>3</sup> showed that moneylender commonly lent until harvest time, from six to nine months and hence one should expect higher interest charge on loan to farmer.

Various reasons have been adduced for the continued dominance of the unorganized credit institutions, especially moneylender, as a source of credit to the indigenous businessmen in Nigeria or any other developing country for that matter. The most important of these reasons was recognized to be the credit policies and the urban-oriented operations of most organized credit institutions. In 1940s and 50s loans were restricted to only those indigenous businessmen which the banks considered not to be poor risk and virtually nothing to the agricultural sector directly. Thus the only source of credit opened to agricultural sector was the unorganized institutions, some of which borrowed from the banks and relent to farmers.

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1. For example, it is claimed that in Gambia, Sudan and Sierra Leone, moneylenders get between 50 and 300 per cent on loan as interest (United Nations (1963), pp.30-1
  2. See A. Bottomley (1975) on Interest Rates Determination in underdeveloped areas
  3. See also C. Nisbet (1966) p. 13 on "Interest rate and Imperfect Competition".

The high interest rate associated with the loans from unorganized institutions is often referred to as "Userer Credit". Unfortunately, since the interest rates were often paid in kind, and also because the borrowers and lenders preferred to keep their activities secret, the quantitative analysis of these rates of interest cannot be made. A lot of researches have been conducted on the calculation of concealed interest rates in the unorganized capital markets of some developing countries such as India, but no research<sup>1</sup> in Nigeria has been done on this score owing to lack of data. It is largely because of lack of data in most developing countries with regard to the interest rates charge by the unorganized financial institutions that prompted Bottomley (1975) to conduct a study on how interest rate was determined in underdeveloped rural areas. Going through a lot of literature on the unorganized money markets of many developing countries, he came out with an hypothetical lending cost structure on loans to a borrower with a constant return to scale. Perhaps the most interesting point in his analysis was the fact that he was able to show the urban bank cost of loans in comparison with the moneylender's cost.

According to his analysis, the lower the amount of loan, the greater will be the cost. Thus for a moneylender loan, the average cost for a loan of ₹100 will be 50 per cent while that of bank attracted a cost of 100 per cent, thereby putting moneylender a cheaper source of credit to ultimate borrower. This is because small loans are often very costly and difficult to administer for the banks. With the loan of ₹500, both moneylender and bank charge the same amount of interest which is 25 per cent, on the average. However, as the magnitude of loans is increasing, it becomes more obvious that the moneylender credit is more costly than bank credit. Thus for a loan of ₹1000, the cost of 10 per cent for the banks while for moneylender credit, it is 20 per cent. Thus in so far as the majority of small farmers are in existence in any developing country with their associated small loan demand, unorganized financial institutions like moneylenders will continue to be major sources of

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1. See Also the Report of the Committee of Direction - All India Credit Survey, in the Reserve Bank of India, (Bombay).

credit to rural dwellers.

One can also explain the high interest rates phenomenon in terms of supply and demand for loanable funds in unorganized capital market of any developing country like Nigeria. Any analysis of high interest rates in unorganized money market should include all the factors that can affect the supply of and demand for loanable funds. A lot of literature exists on the supply of and demand for loanable funds in the unorganized capital markets of developing countries. For example, Bhaduri (1973)<sup>1</sup> attempts to find explanations for the high interest rate on short-term consumption loans in some West Bengal villages during 1970 to 1971. The same author, in his article entitled "On the formation of Usurious Interest Rates in Backward Agriculture", tried to analyse how the high interest rate was attached to credit in unorganized capital markets. Bottomley (1963)<sup>2</sup> attributed the high interest rate to the increase in supply price of credit as a result of greater administrative cost to lenders. However, in another paper, the same author (as already pointed out) found another reason in terms of lender's risk element.

Perhaps the most interesting article on this supply-demand explanation of high rate of interest is that of Wai (1957). In his article, he considered many relevant factors which affect the demand for and supply of credit in rural areas of less developed countries and exposed the exploitative way of formation of usurious interest rates. Bhaduri (1973), utilizing the factors highlighted by Wai (1957) developed an argument in form of a formal model to show how the several essential factors responsible for the formation of usurious interest rates are connected with each other. In this paper, it is instructive to look at the high interest rate in terms of scarcity of loanable funds since this is rather more reasonable and rooted in microeconomic price theory.<sup>3</sup>

Moreover, since there are inadequate or no data on how the interest rate is being determined in the rural areas of most developing countries, including Nigeria, it is considered more rational to look at the rate of interest

1. See the interesting work of Bhaduri (1973 and 1977)

2. See A. Bottomley (1963a and 1963b) on "the Determinants of interest rates."

3. See M. Friedman (1962) for excellent discussion of price theory.

in terms of supply and demand theory. Clearly this is in contrast to the so-called theory of the customary rate of interest following one of the authors in his explanation for the high rate of interest in an unorganized money market. For example, W. T. Newlyn and D.C. Rowan<sup>1</sup> did not think that supply of and demand for loanable funds are responsive enough to changes in supply and demand conditions. Hence they concluded that interest rates were likely to be determined mainly by law or convention. The two writers believed that this happens in all economies in which lending and borrowings are contracted by private bargains rather than two markets. However while this might be true in the short-run, it might not be true in the long run as economic and social conditions may change.

Even then, the theory of customary rates failed to explain how or why the custom of high rates developed. This represents the rationale for taking a different view in this paper on the whole issue of why the interest rates were so high in Nigeria in 1940s and 50s in the unorganized money markets. Moreover, while some writers have tried to explain high rate of interest phenomenon from the demand side only, others from the supply side,<sup>2</sup> this study is combining the supply and demand factors together to explain how the interest rate level in unorganized capital market in the past was determined.

In the diagram below, the vertical axis represents the rate of interest or cost of credit in the unorganized markets while the horizontal axis shows the amount of credit granted at any point in time. The supply curve of loanable funds is a bit steep indicating that moneylenders or the unorganized financial institutions in general are assumed to be financially constrained since the provision of credits depends largely on their own limited financial resources. Moreover, the state of Nigerian economy by then was such that many people were poor and only very few people could afford to lend their money out to people. And among those unorganized financial institutions, only few could seek more funds to augment their own for their lending business. As this is general for all developing countries, an example from India Rural Credit Survey will

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1. See Newlyn and Rowan (1954)

2. See Bottomley, (1975).

drive this point home.

According to the survey, only 28 per cent of the moneylenders interviewed showed the willingness to try and obtain funds in addition to their own resources.<sup>1</sup>(p.178) This cannot be a surprise since majority of the farmers, in general, prefer to borrow money from relatives and friends with little or no string attached rather than from moneylenders with high interest rates. For example, four studies conducted on Thailand cited by Donner<sup>2</sup> (1971) revealed that 46 per cent of credit to farmers were from relatives and friends, out of which 35 to 40 per cent came from the former while between 39 and 57 per cent from the later. In another study on South Korea, Morrow<sup>3</sup> (1973) showed that 60 per cent of the private rural credit funds were from other farmers, 28 per cent from relatives and friends and the remaining 12 per cent from traders and moneylenders.

The study conducted on Pakistan by Lawdermilk (1973)<sup>4</sup> showed a considerably low share of rural credit originating from moneylenders. According to the study, 63 per cent of the credit came from friends and relatives, 17 per cent from the well-to-do rural people, 13 per cent from the cooperatives and only 4 per cent from shopkeepers and moneylenders. However, in Sri Lanka, moneylenders provided 29 per cent of the rural credit as against 26 per cent from the relatives and friends.

All the above studies seem to justify the nature of the supply curve for loanable funds in the rural areas of Nigeria in the past. Credit supply from the family and friends would be very small indeed since it is unlikely they could augment their supply with the borrowed fund from banks largely because of lack of suitable collateral and the more so because there was no interest payment on loans from them. However, the few moneylenders who were in serious business in various parts of the country might have the opportunity to obtain funds from the banks at interest and relent same in addition to their own resources at very high rate of interest.

Since most the credit supply from the family, friends or relatives was largely in kind and invariably without interest rate payment as already pointed out, it is necessary to consider the relatively small number of moneylenders as the true source of supply of credit for investment or productive purposes in the

1. See Reserve Bank of India (1954) on India Credit Survey;

2. See Donner (1971), 3. the work of Morrow (1973) on Korea and 4. G. Guntilleke (1973a) on Sri Lanka.

rural areas of Nigeria, and to which our supply of and demand for credit analysis is applicable. The moneylenders per se might have limited resources, hence they would have to consider their personal expenditures before they could lend money. Thus the volume of loans any moneylender can grant largely depends on the sources of his incomes such as repayment of both interest and capital. It also depends on the credit terms of lending; if the term of credit is very short, one would expect an increase in the turnover of loanable funds, since as the borrowers are returning the principal and interest, (assuming there is no default risk), the more loans will be available for others.

For the demand side, one should expect the demand for loan to be elastic since savings by farmers are likely to be very low owing to their low incomes. Most of the borrowers were largely small farmers who borrowed not only for investment in land, cattle or for working capital for the purchases of seeds and fertilizers, but also for their minimum basic needs like food, shelter, and clothing. Thus the demand for loans would be very high in a country in which large majority of the population depended on agriculture with associated low income and hence low savings, which implies that capital would be scarce.

It is generally believed that in developing countries, scarcity of capital in the past could actually affect the rate of interest. For example, an empirical study on the structure of interest rates in agricultural credit markets by Long (1968)<sup>1</sup> and that of Bottomley and Nudds (1969)<sup>2</sup> have both argued that scarcity of loanable funds must necessarily raise interest rates regardless of the benevolent or non-benevolent attitude of moneylenders. As already pointed out, apart from scarcity of capital, the rate of interest charged by the moneylenders also usually includes returns for the risks they take by lending on promises or doubtful securities. (U. T. Wai (1956)).

The example above and many others seem to support the explanation of high rate of interest in the unorganized money markets in Nigeria in the past. Since the majority of small farmers could not borrow from organized money markets for lack of collateral, they had no options after seeking from relatives or friends than to borrow from the moneylenders who offered them loans at very high cost.

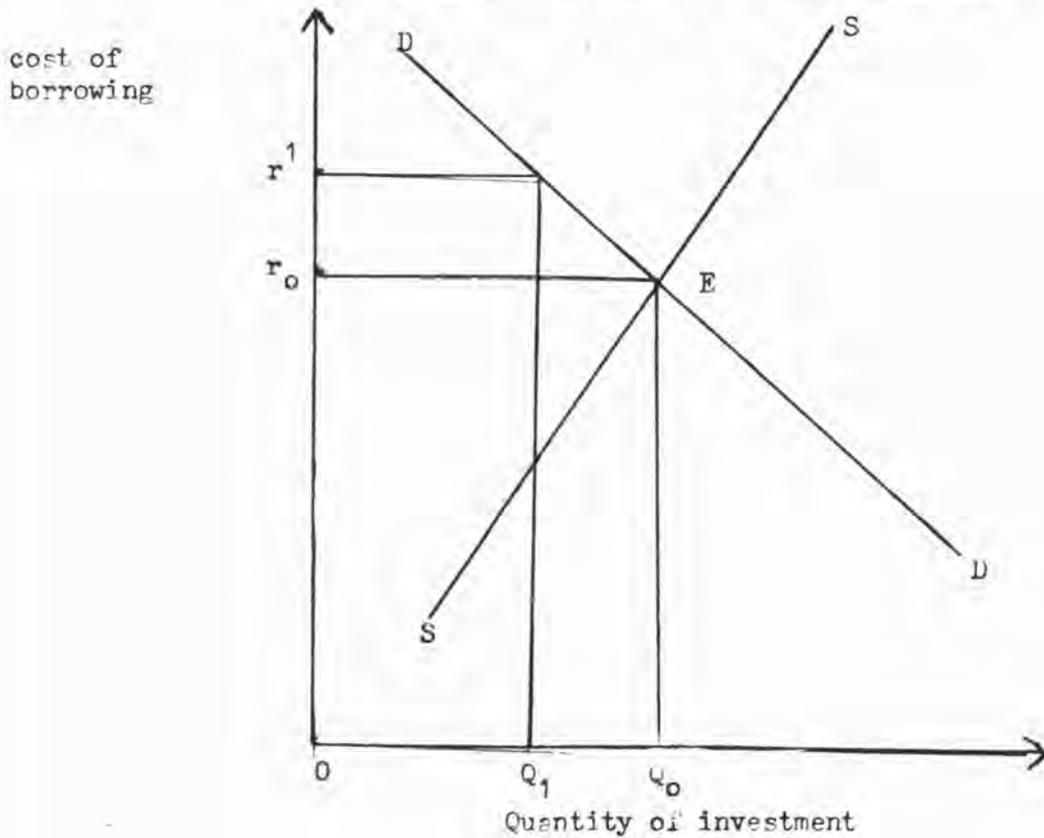
1. See Long (1968); 2. Bottomley and Nudds (1969).

Also see Tun Wai (1956) on the brilliant discussion of risks entailed in lending in unorganized credit markets.

### 5.10 Analysis of High Interest Rate with the aid of a diagram:

It can be seen from the diagram 5.3 below that owing to scarcity of loanable funds because of very limited number of domestic savers who turned to moneylending business, the rate of interest was set at  $r^1$ . Since

#### Investment Demand and Supply of Loans



(Diagram 5.3)

it is assumed here that the ultimate borrowers would not pay more than they themselves individually would have earned from such loans, (assuming that the loans were for investment purposes), only those borrowers who were very desperate would be able to borrow at this cost, whereas many would have also preferred had the interest rate been lower than  $r^1$ . Since the loan was for investment, at  $r^1$  rate of interest, only  $OQ_1$  investment was possible owing to scarcity of capital. Assuming that the economic conditions had become more favourable such that ultimate borrowers are now eager to borrow to take advantage of the economic prospects offered by the economy and all have reasonable collateral to assure ultimate lenders of repayments at

due date. Moreover, assuming further that the same favourable economic conditions generated a spillover on the lending business as well as on all other economic sectors such that many more people are now engaged in lending business. While the individual financial constraints remain relative as it was, in aggregate more funds become available as a result of increased sources of credit by way of more lenders. Consequently one would expect the rate of interest to fall to  $r_0$ , resulting in a considerable increase in quantity of investment which now stands at  $OQ_0$ .

This analysis of the price of investment capital in the unorganized money market is, no doubt very simple and hence does not accommodate some of the realities of the situation. For example, it does not show what would happen to the interest rate in the presence of organized capital markets. This will be taken care of in the analysis of a possible linkage between the two types of money markets. In reality, it should be pointed out that there are certain other contributing factors associated with high interest rate on loans in unorganized money market of Nigeria. One is that most of the borrowers in rural areas were largely small farmers and hence their credit needs were relatively small. Because of this, some moneylender might impose a fixed handling charges and this would raise up interest rate on loan. While this is the common practice with banks on small loans, it is not likely that moneylender could impose such fixed penalty for small loan. As a matter of fact, moneylender would prefer offering small quantity of loans to as many clients as possible since it would tantamount to the spreading of risks. Thus in case of default, he would not lose all his money since not all the clients would fail to pay.

#### 5.11 Empirical Evidence on the Risk of Default as an explanation for High Interest Rates in Unorganized Markets

There is mountain of evidence to support the view that in unorganized money markets, default rates are much higher than in the organized markets, and hence

a higher rate of interest in the former. However, the evidence is not clear to support this claim with respect to repayment of loans granted by moneylenders. But there is a mountain of evidence for high rate of default with respect to official loans from government to the rural farmers. For example, study by Stickley and Satana (1973)<sup>1</sup> reveals that in Turkey, there was a default rate of 37 per cent on agricultural credit and in Sri Lanka, it was reported that in 1963 default rate rose from 9 per cent to 16 per cent in 1969 on the government's agricultural credit scheme (Guntilleke et al. (1973a)<sup>2</sup>, p.217). Perhaps the highest record of delinquency on government loan was that recorded by Myers (1973)<sup>3</sup> for Bangladesh in which the default rate in seven years rose from 1 per cent to 28 per cent in 1967 (Stickley and Hayer (1973), pp. 2, 30) and finally reached a record high of 83 per cent during the struggle for independence. However studies conducted in some other less developed countries showed a lower rate of loan delinquency. For example, the study by Donald (1973), p. 15), showed that default rate on official credit to small farm in Colombia stood at 15 per cent. The study by Wai and Hoover (1973), p.36<sup>4</sup> recorded a default rate of 14 per cent for Malaysia, but the study by Roth and Goodall (1966)<sup>5</sup> on Ecuador showed 2.65 per cent default rate

It has been argued that the fact that default rates always tend to be larger in unorganized capital markets of the developing countries than the organized should not be taken to mean a lower standard of morality and unwillingness to repay on the part of ultimate borrowers. The major cause of this tendency lies in the unavoidable fluctuations in agricultural prices and hence farmers' incomes. Crop failures may cause lower income to farmers and hence disposition to default on loan borrowed. For example, in Sri Lanka, it was reported that 33 per cent of agricultural borrowers gave crop failure as the cause of their default (Guntilleke et al. (1973a), p.80, (1973b)<sup>6</sup>). What this means is that as the income of farmers are increasing, the ability to borrow and repay loans will also increase. Bottomley and Nudds have

1. See the work on Turkey by Sticley and Satana (1973)
2. See G, Guntilleke, et al. (1973a) on Small Farm Credit in Sri Lanka
3. D.Myers (1973); 4. Wai and Hoover (1973); 5. Roth and Goodal (1966)
6. G. Guntilleke, et al. (1973b).

argued that a rapid increase in the net income of farmers than the cost of borrowing would result in an increase in their ability to repay as opposed to their willingness to repay. Thus there is a strong possibility of a positive association between increases in borrowers' net income and levels of repayment and in fact Von Pischke (1974)<sup>1</sup>, pp.109, 158. has shown that the correlation is smaller than expected. In most of the studies conducted to find any association between the farmers' income and the volume of loans, the general conclusion appears to be the occurrence of positive association. For example the study conducted by Adams (1971)<sup>2</sup>, pp.164-65 showed a credit income ratio of 0.53 for United States where farmer's incomes are very high as against 0.15 in many of the poorer countries in 1967 or 1968. This supports our earlier assumption that as economic conditions become favourable, the volume of loans would increase, and the cost of borrowing would fall.

In Nigeria one other contributory factor to high interest rate on loan is associated with land tenure system which prevented land from being used as collateral by farmers. The consequence was the continued reliance on unorganized financial institutions like moneylenders for credit needs of farmers since these did not normally emphasize the need for collateral as a condition for granting of loans.

The cost of borrowing was so high in Nigeria in the past that the government made unsuccessful attempt to regulate the interest rate charged on loan by moneylender by requesting them to register. In addition, a ceiling was also imposed on the rate of interest to be charged. Thus it was stipulated that 18 kobo should be charged on every ₦2. This law was further strengthened in 1949 and made maximum rate of 12.5 per cent on 1st mortgage or property, 15 per cent on the 2nd and 45 per cent on promissory notes. However, the moneylenders cleverly circumvented the law and often gave receipt with lower interest rate than actually charged to their clients. This is not surprising in an economy with low domestic savings and hence very low level of investment funds. Wai (1977) also reported evidence of malpractices of moneylenders in African and Asian Countries.

1. See Von Pischke (1974); 2. D.W. Adams (1971) on "Agricultural Credit in L. America

5.10 A GENERAL APPRAISAL OF ESUSU CREDIT INSTITUTION IN NIGERIA BASED ON INTERVIEW

Before closing this section, it is necessary to point out that of all the unorganized financial institutions operating in the unorganized capital markets of Nigeria in 1940s and 50s, Esusu Credit Institution moves more nearer to the organized type of financial institutions. If it is accepted that a good credit institution should mobilize the savings of the people in order to ensure an adequate supply of loanable funds, Esusu Credit Institution comes very close to achieving this particular objective. Since a typical Esusu institution always had meetings regularly in which opinions were shared as to the need for thrift, it might not be an exaggeration to say that this institution was very important in meeting the credit needs of small farmers in a situation where savings and investment opportunity were very limited. The only source of credit to small farmers besides friends and relatives was the moneylender, some of whom might be very unscrupulous in their dealings with these small farmers. Its role as a past provider of soft loans to small businessmen and farmers, therefore, cannot be over emphasized. Out of 100 farmers interviewed in Nigeria in the course of this study, only 5 indicated that they were able to borrow from organized credit institutions, in particular State Finance Corporations while others obtained their loans from moneylenders and other informal sources. The five who indicated obtaining loans from organized institutions were relatively large farmers, three of them were cocoa farmers while the other two groundnut farmers. This supports the finding of Brown (1973) in his study of rural farmers in Costa Rica which shows that very large farmers were able to obtain loans from finance corporations at an interest rate of between 12 and 24 per cent as against between 18 and 36 per cent paid on loans from moneylenders by small farmers.<sup>1</sup>

Most of these informal credit institutions are still existing in Nigerian economy today, but with lower scope of operation. Unfortunately their activities in the economy cannot be quantify, but interewiew held

1. Small scale farmers cannot obtain loans from organized institutions since their credit needs are very small and hence very high administative costs. For example, the Nigerian Western Region Finance Corporation incurred 47 % of its revenues between 1958 and 1963 on administrative costs of loans to small farmers (Oluwasanmi and Aleso) 1965. Nigerian Journal of Economics & S. S. See A. L. Brown (1973).

with 50 merchant/moneylenders in Kano, Maiduguri, Ibadan and Ilorin clearly indicated that there are still large number of these moneylenders operating in various parts of the country, most of whom will not like their activities to be known. In order to get the information about their activities, the writer had to pose as a borrower in each of the interviews which were often broken off when agreement on interest rate and repayment method could not be reached.

In one such interview with Mr. Abdullai Musa in Maiduguri (Musa versus Adewumi), agreement could not be reached on 25 per cent interest on ₦200 loan payable in 6 months. This moneylender (Mr. A. Musa), actually owns a petrol filling station to cover up his moneylending activities.<sup>1</sup> The interview with him was only possible through somebody who knew him very well and through whom he was connected with many of his customers. This man indicated that their customers were all over the country from various sectors of the economy, some of whom borrowed to pay for dowry, or court fines and some for consumption purposes or for burials. It was indicated that only few customers borrowed for productive purposes.

Since the purpose of this chapter is to show the importance of the unorganized financial institutions in Nigeria before the advent of modern financial institutions, it will suffice it to say that there is no doubt that these unorganized institutions had played a major role in the supply of finance needs of small farmers and businessmen in Nigeria at a time when banks were largely unwilling to give loans to small farmers and businessmen whom they considered as poor risk. However, the establishment of some financial institutions for the purposes of providing soft loans to farmers and businessmen by the government seems to have reduced the influence of these informal credit institutions to some extent in the area of provision of credit. Lack of adequate data has precluded the quantification of the role of government in Nigeria before 1970s in the provision of credit needs for small farmers and businessmen who could not succeed in obtaining credit from banks.

In spite of the data limitation, however, the Central Bank of Nigeria succeeded in gathering some information from the annual reports and balance sheets of various government institutions in order to provide some figures on government contributions to

<sup>1</sup> Chandavarkar (1965)'s findings in India support the above; 14 moneylenders out of 613 interviewed in India had no other occupation (P. 324).

credit needs of the economy. Thus in 1960 the aggregate credit granted by the government institutions was ₦36.3 million and by the end of March, 1966, it had risen to ₦78.8 million<sup>1</sup>, representing an average yearly increase of ₦7 million. Although the magnitude of government contributions to the credit needs of the economy was very small as will be seen in the later chapters, there is no doubt that the government has taken a step in the right direction.

#### 5.13 The Possible Interactions Between Unorganized and Organized Money Markets and Institutions in Nigeria.

During the colonial era, the organized financial system was designed and fostered to accommodate the financial needs of the foreign businessmen who lived and transacted their business largely in the urban and industrial centres of the country. Most of the organized financial institutions, especially banks operated only in urban areas while leaving the rural areas to be taken care of by the unorganized financial institutions. This situation persisted in Nigeria for a long time and for this reason the Federal Government of Nigeria decided to act in order to bring the banking services to the rural areas of the country through the Rural Banking Programme instituted by the Central Bank of Nigeria in 1978 which shall be discussed later.

Most of the commercial bank investments were in foreign financial assets since the Nigerian money market was yet to be developed. The non-existence of organized money market means that the indigenous businessmen and the nascent industrialists had no where they could raise fund for their business other than the small number of foreign commercial banks operating

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in the country. Those with surplus funds which they did not require for immediate use (most of them expatriates) had no option than to repatriate those funds for investment overseas in London especially during the off-season and drew on them when the economic prospects warranted it. It was after the Nigerian independence that organized capital market was firmly established

<sup>1</sup> See Central Bank of Nigeria Annual Report, 1970.

<sup>2</sup> See T.A. Oyedepi (1977) on Strategy of Industrial Development in Nigeria.

thereby providing local investment outlets for the surplus funds in Nigeria as well as for the investments of funds repatriated from abroad following the government's generous offer of incentives to that effect.

However, inspite of the establishment of Nigerian Money Market, the unorganized money market still continued to exist, the phenomenon which can only be explained in terms of the credit policies of the organized financial institutions and their urban-oriented operation to the utter neglect of the rural areas. Although there are no adequate data, it is reasonable to assume that what obtains in some less developed countries<sup>1</sup> also obtains in some others, although with slight differences. Hence, India's experience can be assumed as common among developing countries with respect to the relative contributions of organized and unorganized financial institutions to the credit needs of the economy. It was estimated by the Indian Central Banking Enquiry Commission that in the 1930s the share of the unorganized credit institution was about 90 per cent of the total credit in the economy. Furthermore, the All-India Rural Credit Surveys in the 1950s and 1960s showed no significant change in this ratio inspite of the massive expansion of institutional banking facilities. Thus while unorganized institutions accounted for 85 per cent of the total credit, the organized banking institutions accounted for only 15 per cent.<sup>2</sup>

Owing to lack of data, the link between the organized and unorganized capital markets has not been adequately established by any researcher on rural agricultural credit of developing countries. However, there has been a suggestion by Wai (1957) on how to measure the degree of interaction and this involves the use of commercial banks' direct or indirect loans to agricultural sector of the economy as an indicator. Thus the larger the credit extended by the commercial banks to agricultural sector, the closer would be the link between the two types of capital markets. The weakness of this suggestion is the likely distortion associated with this criterion since it is highly possible that commercial

1. Tun Wai (1977) estimated the share of institutional credit in total credit for India as having risen from 7 to 25 per cent between 1950 and 1970, while that of Pakistan from 16 to 20, that of Sri Lanka from 8 to 19 and that of Taiwan 18 to 73 per cent. He suggested a share of between 40 and 50 % of total rural credit as being supplied by unorganized for Nigeria and Sierra Leone.
2. Reserve Bank of India (1965), p. 1309.

bank lending to agricultural sector might fall largely in the hands of big landlords and estate agriculture owners who might be reasonably regarded as part of the modern economic sector while leaving the small peasant farmers largely unaffected. In spite of this, however, one cannot totally dismiss this criterion as useless in so far as the money is spent on the rural agricultural sector. Using this criterion, Wai (1957) found that in most developing countries, commercial bank loans to agriculture were less than 10 per cent and in which case, the link between the two markets was concluded to be rather slight.

Following Wai (1957) criterion in this analysis, the findings stated in Table 5.2 emerged. According to this table, between 1960 and 1966, the commercial bank loans to agriculture were very considerable. In 1960, it was 19.8 per cent of the total bank loans. Steady increase was recorded in the share of agriculture in the total bank loans which reached its peak in 1965 with a record high of 25.3 per cent. However, a decline set in in 1966 and in 1981, it stood at just 10 per cent, implying a very slight link between unorganized and organized sector. The high records of share recorded in 1960 up to 1965 might be largely due to the distortion associated with this criterion already mentioned above. For example, there were a number of foreign firms which owned large agricultural plantation in Nigeria, especially in respect of palm produce and tobacco. These firms could easily get loan from banks since they were foreign-owned and because they could easily provide collateral for the loan. Moreover, another explanation for the high records of share of agriculture in the total bank credit is the fact that the government, shortly after independence, was aware that except something was done, the bank would continue to give little credit to agriculture as before. Thus through the Central Bank of Nigeria, which was itself established just a ~~year~~ earlier than country's independence,<sup>1</sup> the government persuaded the commercial banks to give more loans to agriculture.

Another way to measure the degree of connection or interaction between the two types of capital market in any developing country is to look at the

1. See Central Bank of Nigeria Annual Report, 1961.

magnitude of loans from banking institutions to the semi-organized financial institutions such as private agricultural banks, cooperative credit societies. These semi-organized financial institutions, like the moneylenders, often borrow large sum of money from the organized financial institutions and relend to farmers in small lots. In order to measure the magnitude of such loans from banks to semi-organized institutions, one has to compare the outstanding agricultural loans to such institutions with the national income earned by the agricultural sector and with the currency in circulation. Since agriculture engaged more than three quarters of the country's working-population one should expect to see a significant linkage of about 75 per cent using the percentage of agricultural loan to the gross domestic product from agriculture and to total currency in circulation in the economy as indicators. According to Table 5.2, in 1958 the commercial bank loan to agriculture was only 1.8 per cent of the agriculture gross domestic products (AGDP) and 21.7 per cent to total currency in circulation. The implication of this figure is that organized institutions contributed insignificantly to agriculture which suggests insignificant linkage between the two types of money markets. In 1966 and 1967, commercial bank loan to agriculture stood at 1.8 and 2 per cent of Agriculture GDP respectively and the corresponding percentage of bank agricultural loan to total currency in circulation stood at 29.6 and 26.5 respectively. The reason for the lower percentage recorded for 1967 was because of Nigerian Civil War which lasted from 1966 to 1970. The highest bank loan as a percentage of AGDP was recorded in 1963 and it was just 2.7. In absolute term, the highest organized loans to agriculture was in 1965 when it stood at ₦68.3 million, representing just 25.3 per cent of the total agricultural loan in that year which implies that the unorganized institutions supplied the remaining percentage. This clearly supports our argument about the importance of unorganized institutions in Nigeria in the past. Because of lack of data, it is difficult to explain how the interest rates were determined in each of the two types of market. However,

1. See Oluwasami and Alao (1965), on "The Role of Credit in the Transformation of Traditional Agriculture", Nigerian Journal of Economic and Social Studies (March).

(Table 5.2a)

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## LINKAGE BETWEEN ORGANIZED AND UNORGANIZED CREDIT INSTITUTIONS IN NIGERIA, 1958 - 1967

(IN MILLION ₦)

Year	Total Agric. Loan ₦	Agric. Loans from		B/Loan as % of Total Agric. Loan	Agric. GDP. ₦	Total A/Loan as Ratio of AGDP.	B/Loan as % of AGDP	Percentage of stage of col. 2 to col. 6	Total ₦	% of Total ₦	Agric. Loan as % of col. 10	Interest Rates		Remark
		Orgnd. Institutions	Unorgnd. Institutions									Orgnd.	Unorgnd.	
1958	76.6	23.5	53.1	30.7	1239.8	0.062	1.9	6.2	108.0	21.7	70.9	5	** 50	Highly insignificant linkage
1959	78.5	18.7	59.8	23.8	1226.0	0.064	1.5	6.4	108.9	17.2	72.1	5	50	do
1960	113.7	22.5	91.2	19.9	1280	0.088	1.7	8.89	154.1	14.6	73.7	6	40	"
1961	119.7	25.2	94.5	21.0	1331.2	0.089	1.9	8.9	160.2	15.7	74.7	6.5	35	"
1962	153.7	36.1	117.6	23.4	1388.2	0.11	2.6	11.1	174.6	20.7	88.0	6.5	30	Significant
1963	178.9	39.3	139.6	21.9	1437	0.12	2.7	12.4	183.4	21.4	97.5	7	30	Significant
1964	244.9	60.4	184.5	24.6	3291	0.074	1.8	7.4	214.9	28.1	113.9	8	25	Insignificant
1965	270.1	68.3	201.8	25.3	3345.8	0.081	2.0	8.07	175.3	39.0	154.2	7	25	"
1966	232.0	54.8	177.2	23.6	3052	0.076	1.8	7.61	185.3	29.6	125.2	8	20	Insignificant
1967	242.8	53.6	189.2	22.1	2609	0.093	2.0	9.3	202.1	26.5	120.1	8	20	"

\* The low figures recorded for the loan from organized institutions to agriculture in respect of 1966 and 1967 were due to Nigerian Civil War 1966 - 1970. Except for the currency in circulation, there was a slight fall in agric. GDP and total loan because of the same reason.

Compiled from various sources: CBN Annual Report and Statement of Accounts for various years

The Federal Office of Statistics.  
The Nigerian Statistical Digest of various years  
Western Nigeria Ministry of Agriculture.  
Federal Ministry of Agriculture.

it is possible to develop a model with an application of several assumptions to explain the interest rate and quantity of loan phenomenon in the two types of market and more so to explain the possible interaction between them.

5.13 A Model to Explain the likely Interaction Between Organized and Unorganized Capital Markets and Institutions

In order to build up a model like this, it is necessary to make some assumptions in order to make the analysis as realistic as possible. The following assumptions are, therefore, made:

- (i) That in each of the two types of market, there are only two types of financial assets; in the unorganized market, there are the real assets and credit while in the organized market, there exist commercial bank loans and  $M_1$ , otherwise known as the high-powered money according to Friedman<sup>1</sup>
- (ii) that there exists one interest rate for the whole economy, which can be construed as the normal marginal productivity of capital. This might also be regarded as a return on investment. In this model, the short-run dictates the supply of real assets, while the rate of interest follows closely the base rate for the whole economy and this is denoted by BR. Theoretically speaking therefore, the promissory notes, financial bills and cheques as well as other securities flowing into the unorganized capital markets are good substitutes for real assets. If the conditions in the market dictate the rate of interest on bank loans, for instance, the level of economic activities may increase and hence leads to greater demand for credit in the economy, this might lead to automatic extinction of the unorganized capital markets or the reduction of their scope of activities to the extent of making them highly insignificant in the in the economy. However, if the deposit rates of interest as well as loan rates are fixed at a level well below the equilibrium rates, this would lead to credit rationing. The consequence of this will be the emergence of the black capital market or the unorganized capital markets will expand in scope, thus implying the two types of capital markets have now developed into two separate and independent credit markets with different characteristics. Because of this,

1. See M. Friedman (1970) "A Theoretical Framework for Monetary Analysis" Journal of Political Economy, Vol. 78, (March/April).

bank deposits and unorganized securities are not substitutable for each other in the asset holder's portfolios. It follows also that the bank credit and the unorganized market loans are not perfect substitutes in the borrower's portfolio.

(iii) that unorganized credit and modern or organized markets can be substitutes in the eyes of the ultimate borrowers. Put differently, the borrower is indifferent between the two alternatives. However, the two can also be complements, depending on the nature of the financial system in general rather than the nature of the two kinds of liabilities.

and (iv) that in the real world situation, there are various types of loans from the banks and from the unorganized credit institutions with varying rates of interests according to the relative degrees of risk. However, for convenience as well as simple analysis, these rates have been converted into one representative rate of interest which is hereby called the base rate (BR) for both markets.

There is no doubt that all these assumptions are unrealistic. However, this model is intended to bring into sharp focus the likely interconnections between the organized and unorganized money markets and institutions. All the underlying assumptions of the model are mainly designed to simplify the analysis without necessarily altering the essential aspects or the workings of the two markets and, of course, the basic conclusions of the analysis.

In accordance with the foregoing assumptions, the asset demand and supply functions of the model may be specified as follows:

Public demand for currency and bank deposit model:

SC = Stock of currency

Hence SC =  $C^d$  where  $C^d$  stands for demand for currency (5.1)

R = Commercial bank Reserve

$D^d$  = Demand for deposits

Hence R =  $D^d$  (5.2)

Equations 5.1 and 5.2 are identities and they imply that in equilibrium, the total public demand for currency is the total stock of currency (SC) and the total public demand for bank deposits is the total bank Reserves (R).

## Currency Demand:

$$C^d = f(BR, r^d, r^e, Y, W) \quad (5.3)$$

where, BR = base rate

$r^d$  = bank deposit rate

$r^e$  = expected rate of inflation which is the expected rate of percentage change in domestic cost of living index or expected price instability.

Y = nominal national income

NW = Net Wealth which is the current value of total tangible wealth minus current liabilities (i.e., outstanding loans).

## Demand for deposits:

$$D^d = f(r^d, Q, D) \quad (5.4)$$

where,  $r^d$  = deposit rate of interest

Q = required reserve ratio

D = the total deposits i.e. the sum total of demand deposits as well as time deposits.

## Money Supply:

$$M^s = SC + R \quad (5.5)$$

where  $M^s$  = Money supply exogenously determined in the system.

## Bank Credit Market:

$$DD = D^d \quad (5.6)$$

$$D^d = f(BR, r^d, r^e, Y, W) \quad (5.7)$$

$$TD = TD^d \quad (5.8)$$

$$TD^d = f(BR, r^d, r^e, Y, W) \quad (5.9)$$

$$BD = DD + TD \quad (5.10)$$

$$L^s = (1 - r^d(r, Q), BD, +B^b) \quad (5.11)$$

$$L^d = f(BR, r^d, r^e, \frac{dY}{Y}, Y) \quad (5.12)$$

$$L^s = L^d \quad (5.13)$$

$$BR = r^d + u \quad (5.14)$$

where DD = demand deposits

TD = Time deposits,

BD = Volume of bank deposits

1. This is the Net Money Doctrine of Shaw, (1960) when he argued that being in debit inhibits expenditure, and hence only current sector wealth is relevant to private sector spending. See J.G. Gurley (1960) "The Radcliffe Report and Evidence (a review article)", American Economic Review, 45, 515-538.

$L^s$  = total bank loan supply

$L^d$  = total bank loan demand

$B^b$  = Bank borrowing from the central bank

$D^d$  = demand for bank demand deposits

$TD^d$  = demand for time deposits

The demand functions for demand deposits and time deposits are specified in equations (5.7) and (5.9) respectively. Equation (5.9) defines the total volume of bank deposits and the supply function of bank credit ( $L^s$ ) is derived implicitly from the commercial bank balance sheet identity and this is given in equation (5.11). Equation (5.12) specifies the demand for bank credit function while equation (5.14) indicates the relationship between the bank deposit rate or base rate and the loan rate where  $u$  is a constant.

Unorganized Financial Institutions Credit Market:

$$UL^s = f(BR, r^d, \frac{dY}{Y}, Y, W) \quad (5.15)$$

$$UL^d = f(BR, r^d, r_r^e, Y, W) \quad (5.16)$$

$$UL^d = UL^s \quad (5.17)$$

where  $UL^s$  and  $UL^d$  are the unorganized credit supply and demand respectively. Thus, equations 5.15 and 5.16 are supply and demand functions of unorganized credit market. The working of the model as specified by equations 5.1 to 5.17 is hereby presented in a diagrammatic form below. The exogenous variables in this model are  $M^s$ ,  $Y$ ,  $W$ ,  $r_r^e$ ,  $Q$  and  $B^b$  which implies that they are all determined outside the system.

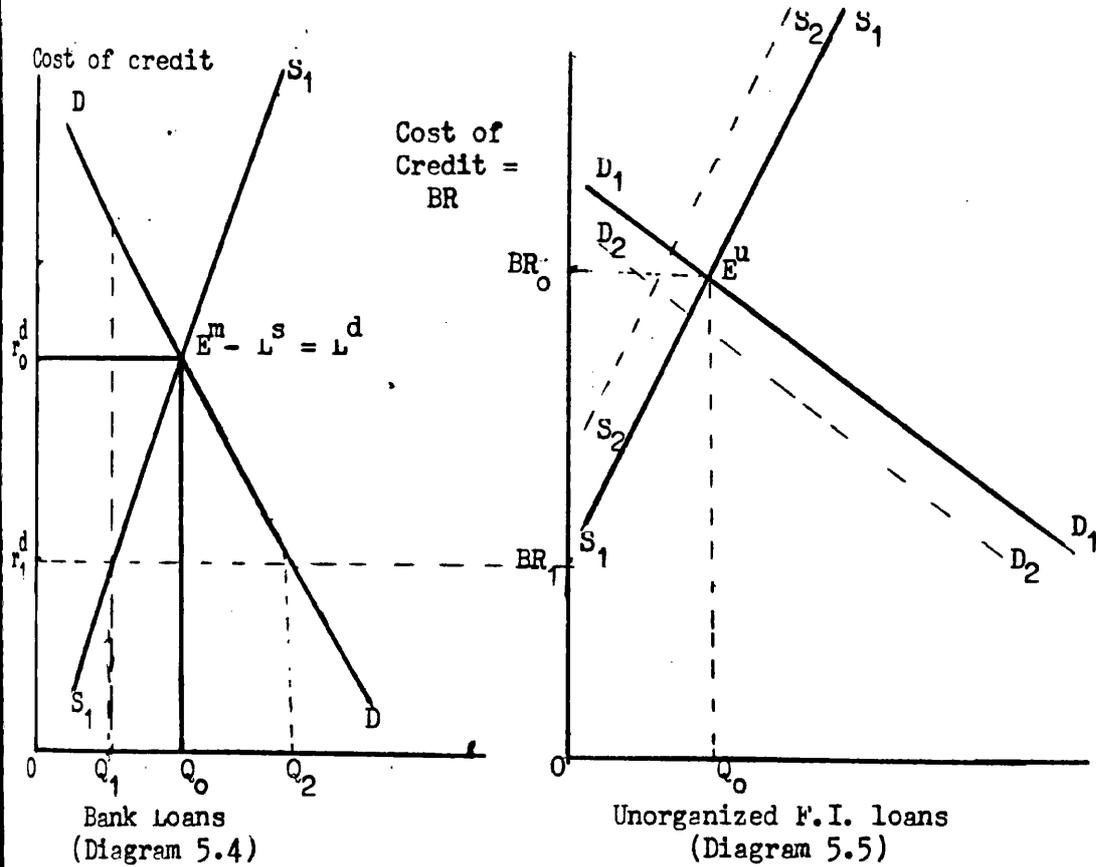
The demand curve 'DD' is sloping downward in the diagram below in line with the the assumption in the model that, other things being equal, the demand for bank credit will be negatively related to loan rate ( $r^d$ ). Thus an increase in BR, other things being equal, would result in a shift in demand curve 'DD' to the right indicating that the cost of bank credit has now become relatively cheaper. The supply of bank credit schedule, 'SS' is directly related to the public demand for indirect securities issued by the commercial banks. This is assumed to be positively related to loan rate  $r^d$

given BR and other exogenous variables in the system. It is expected that a leftward shift of 'SS' schedule would occur as a result of an exogenous increase in BR while holding other variables constant. This would induce the wealthholders to shift out of the bank deposit markets into the unorganized financial market. On the other hand, an increase in bank borrowings from the Central bank -  $B^b$  - would result in a shift of 'SS' schedule rightwards just as a reduction in required reserve (Q) would result.

The equilibrium point in the organized financial market is represented in the diagram by  $F^m = L^s = L^d$ . In the absence of any outside influence like the government regulations or intervention through the Central Bank, there would be no excess demand or supply at point  $r_0^d$  and hence there would be little or no demand for credit from the unorganized credit market. On the other hand, if the government or the Central Bank lower the BR or set the bank loan rate and deposit rate ( $r^d$ ) at  $r_1^d$  below the equilibrium rate, this intervention would result in an excess demand for bank credit situation. The excess demand is measured by  $Q_1 - Q_0$  in the diagram 5.4 below. In order to maintain the price of credit at  $r_1^d$  the Central Bank would have to accommodate the commercial banks with additional loans, or in the alternative, reduce the Q. This would make the supply schedule to be perfectly elastic at  $r_1^d$ . If this cannot be done, a situation of credit rationing among ultimate borrowers would occur. Various means would have to be employed through credit rationing to do away with the excess demand  $Q_1 - Q_0$ . In this situation, the ultimate borrowers who could not get credit accommodation from this market, as well as the ultimate lenders who consider the new deposit rates as being too low, would then meet in the unorganized credit market.

Now assuming that this low rate of interest situation has been in operation for some times in the whole economy, then the tendency is high that the excess demand for bank credit would spill over into unorganized markets as demand for credit. This situation is represented in diagram 5.5 by the demand schedule

$D_1, D_1$ , which is related fundamentally to the DD in diagram 5.4. Now if the organized credit market liabilities and the unorganized credit market liabilities are perfectly substitutable for each other. The magnitude of the spill over may be obtained by subtracting  $Q_1 - Q_0$  at all levels of  $r^d$  from the demand curve



Model Showing the Interaction Between the Organized and the Unorganized Credit Markets

DD.

As already discussed, the cost of credit in unorganized money market is very excessive in most cases. This is because the ultimate lenders in this market are subject to varying degrees of risk of default associated with the economic characteristics of the ultimate borrowers. Furthermore where there is a form of government regulations on the activities of moneylenders and other lenders, these ultimate lenders are also subject to an additional risks associated with the violation of the usury regulations and income-tax evasion. The unorganized credit market also involves high costs of information because of its imperfect nature. Because of all these, ultimate lenders are expected in this model to demand a risk premium over the rate of

return they could earn had they put their money in the bank (organized credit markets). This risk premium is a form of compensation to them for the informal loans they supply. The amount of risk premium charged is a positive function of the volume of loans granted since, other things being equal, the larger the amount of loan a borrower borrows, the higher will be the likelihood of his being unable to repay<sup>1</sup>. However, in the diagram 5.4 the risk premium is assumed to be invariant to the size or terms of loans and is measured by  $BR_0$  and  $BR_1$ . Thus  $BR_1$  is comparable with  $r_1^d$  in this diagram which implies that there would be no supply of loans forthcoming from the organized to the unorganized credit markets. At  $BR_0$ , however, the supply of loans schedule in the unorganized market will be positively related to  $BR$ . The magnitude of loan supply emanating from the organized market can be ascertained if it is assumed that bank deposits and unorganized market securities are perfect substitutes in the lender's portfolio. This can be obtained by subtracting  $Q_1 - Q_2$  from the  $SS$  schedule in the diagram 5.4 at all levels of interest rates  $r_0^d$ . The equilibrium level in the unorganized markets is obtained at point  $E^u$  where the rate of interest  $BR_0$  is in force.

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1.. See Bottomley (1975).

From all the evidence from the literature, there is no doubt that unorganized credit institutions have made important contribution to the economic development of the rural areas of Nigeria before the advent of organized institutions and after. Unfortunately, the lack of proper records precluded us from giving the quantitative analysis of their contributions. However, we shall examine the possible linkage and complementarity they have with banks.<sup>1</sup>

#### 5.15 The Possible Complementarity and Link Between the Unorganized and Organized Credit Institutions

We have tried to analyse how unorganized credit institutions developed in Nigeria. We have also discussed their importance in the economy, especially in the rural areas of the country where they provided the rural farmers with the credit they needed for their planned expenditures. We shall now examine the link between the two types of financial institutions as shown in Table 5.3. The concern here is to carry further the assumption of substitutability of loan from unorganized institution and that of the organized. Thus the ultimate borrowers would be indifferent as to the sources of the loan since the same interest rate operates in the two markets as already assumed. For the purpose of this analysis, it might be reasonable to regard the specialized institutions in Nigeria as part of the unorganized markets because of the characteristics of their customers, while the commercial banks represent the organized markets in order to establish the complementarity between the two markets. In fact Tun Wai (1977)<sup>2</sup> has suggested this line of reasoning for the measurement of complementarity between organized and unorganized credit markets in developing countries.

The complementarity relations could be more pronounced in most developing countries where the rates of interest in organized financial sector are kept below the equilibrium rates inspite of the high expected rate of inflation. One reason for this subsection is to examine the possibility of this seeming

1. We want to examine how the unorganized and organized institutions can be possibly linked and complemented each other.

2. See T. Wai (1977).

complementarity relationship and to discuss its implications for short-run as well as long-run financial policies. Since there is no reliable information on the volume of credit emanating from the unorganized credit markets, and the only information about the rate of interest is scattered about in the literature, one is precluded from having any meaningful empirical examination of the hypothesis of complementarity. Thus all one can do is to provide qualitative and some indirect quantitative evidence.

Discussion on complementarity relation between loans from commercial banks and those from the unorganized institutions is often related to the ways in which business enterprises finance each component of their real expenditures such as fixed and inventory capital, trade credit, and other liquid assets in the two types of markets. Thus, through the modifications of the model developed for interaction between the two markets, one can examine the capital relationships between firms' real expenditures and financing decisions. For the sake of simplicity, it is necessary to assume that the business enterprises expenditure decisions are made before the financing decision. This assumption, which is common in partial analysis like this is based on the ground that commercial banks do not ration their customers.<sup>1</sup> The two decisions, of course, are likely to be made simultaneously in a general equilibrium framework. Although the partial equilibrium analysis is being used in this case, yet the assumption already made may not hold if there is credit rationing in the commercial bank loan market, since the availability of credit and its cost often determine the scale of business operation in terms of the volume of sales and production inputs. But it is highly likely that with access to funds in other markets such as unorganized credit markets, the commercial loan market rationing would be offset and may completely be avoided. The assumption of separate decisions on the part of the business enterprise with regards to expenditure and financing may be considered reasonable and therefore, acceptable if it is considered that firms or business enterprises

1. See the Consortium for the Study of Nigerian Rural Development (1966).

first decide on expenditure on investment and afterwards modify their decisions in accordance with any borrowing constraint they may face in the commercial loan market. Even after the firm has ascertained its finance need, it still has to decide what would be the source of the amount needed. This will be the work of management to decide the finance needs of the firm between the available sources such as unorganized or the organized capital markets. This will *inter alia*, depend upon the structure of the enterprise's assets with regards to maturity, liquidity, acceptability as collateral, and the relative cash and availability of loans from the two types of markets.

If it is assumed that the term and cost of commercial bank loans are more favourable than those of the unorganized institution (and in reality they are), one should expect that the funds required by firms to finance their expenditures would largely come from the organized markets, i.e. commercial loan markets, perhaps without having to go to unorganized markets. However, in reality, it is not certain whether the firm would be able to obtain the size of loan it requires. If it is not possible for the firm to obtain all or part of its finance need, it has to face two options. With respect to its real expenditure and financing decisions. The first option is to reduce its real expenditures according to the size of the loan it has already got, or the second option is to adjust its net assets. However, it is not clear which assets it should reduce and by how much. The two options does not seem very realistic since some investment may be inform of capital investment which cannot be broken up into small pieces. One alternative option which seems more realistic would be for the firm in finance need to enter the unorganized money markets to obtain the remaining finance it needs. However, the firm's entry into this kind of markets poses two important questions. The first concerns the magnitude of loans

required from the unorganized markets and the second relates to the collateral or the classes of its assets which the unorganized markets loans would most likely finance.

In Nigeria before independence, commercial banks hardly extended credit to the indigenous businessmen or farmers because of fear of possible default. Default risk is very common in the developing countries' rural areas. In the past most farmers could not provide suitable collateral to enable them borrow from organized capital markets even at relatively cheaper cost than the unorganized. The only option opened to them was the unorganized market where they could obtain the loans they needed since provision of security was never an important condition for granting credit in this market. For example, Chandavarker (1965) study of India revealed that an estimated four-fifths of debt owed to professional and agricultural moneylenders were unsecured. And in Nigeria, four-fifths of loans granted by moneylenders were also unsecured. (Consortium (1966) p.13) This is one of the reasons why the interest rates are so high in unorganized capital markets relative to those of the organized. Of course, some studies have shown that some moneylenders do charge lower rate of interest. For instance, Sansom (1970) revealed that moneylenders charged 3 per cent to 4 per cent a month on secured loans while they charged 5 per cent on loans which were not secured in South Vietnam. Panandikar (1956) study of India reported that for secured loans, the rate charged by indigenous bankers varied between 6 and 18 per cent per annum, depending on the nature of the security as against 18 to 37.5 per cent charged on unsecured loan.

The Nigerian commercial banks were wholly foreign-owned with their head offices overseas. Since they were in business to make profits, they preferred to grant loans to foreigners and foreign firms who were able to provide suitable collateral at very low rate of interests. For example in 1955, commercial banks charged only 3 per cent on loans maturing in 6 months as against 50 per cent on loans from unorganized credit markets.

1. See A.G. Chandavarker (1965) ; 2. R.L. Sansom, (1970)

3. See S.G. Panandikar (1956) on Banking in India.

4. See J.K. Unon (1982) on Money and Banking in Africa, Longman London.

As already pointed out earlier, the commercial banks also lent money to moneylenders at low interest rates who in turn relent in small bits to farmers at high interest rate. In the discussion of complementarity between the organized and unorganized credit markets, one has to take cognizance not only of interest rate and ability to provide collateral securities on the part of ultimate borrowers, but also the credit policies of the respective markets. The credit policies of commercial banks in Nigeria before independence was not conducive to the economic needs of the country since the banks were operating in Nigeria under the same principles of banking obtained in the developed overseas countries. Thus their rigidity to these orthodox principles of banks only denied credit to indigenous businessmen and farmers who were in dire need of credit. Thus the low interest rate or low cost of borrowing and provision of collateral alone could not solve the credit needs of the country except the commercial banks modified their credit policies to incorporate the developing nature of Nigerian economy.

According to Table 5.1, in 1948, out of the total agricultural credit in the economy which stood at ₦7.7 million, commercial banks contributed 92.2 per cent while the unorganized markets contributed the rest. As the banks were giving more and more loans to the moneylenders, who in turn lent same to the ultimate borrowers, the share of the unorganized markets continued to increase and in fact reached the record high of 22.5 per cent in 1954.

Complementarity between the loans from each of the two types of markets may also be considered in terms of aggregate investment function under a number of assumptions. One assumption is that there is only one aggregate investment function in Nigeria which may be considered based on either the present value maximization or the celebrated Keynesian marginal efficiency of investment criteria. One can also assume that business enterprises which may be farmers with large acres of farmlands have no disposable income of their own and

1. Also see the work of M. Long (1973) and that of A. Bottomley (1975) on the causes of high interest rate on agricultural credit.
2. See P. Davidson (1978), The Money and the real World, Macmillan Press.

hence rely on the loans they could obtain from the organized and unorganized institutions. The implication of this assumption is that the enterprises total demand for loans is a function of total investment. The total investment per se depends on the level of interest rates, income, level of economic activities which indicates their future economic prospects, and other variables.

This assumption is quite reasonable in case of Nigerian Farmers who in fact have no other income of their own except the proceeds they can get after the harvest of their farm products. As a matter of fact, some farmers, in general borrow money for consumption and repay back after the sale of their harvest. This case is not limited to Nigeria, but includes many other developing countries. For instance, Tun Wai (1977) reported that for 15 developing countries he studied, about one-third of the demand for loans in the rural areas was for consumption, while borrowing for investment or productive purposes included borrowings for such current expenditures as purchases of seeds and payment for labour and taxes. Borrowing for payment of labour and taxes represented between 0.5 and 2 per cent in Nigeria and 2.5 per cent in Punjab, Pakistan. The capital expenditure for which the loans were usually required in Nigeria in the past included the purchase of farming equipment, land or cattle. However, as the economic development is taking place, new and better methods of agriculture are being adopted, borrowing for consumption purposes are on the decline. However, one should expect that included in the total credit to farmers is usually some fraction for consumption before the crop is harvested.

Another important assumption for this analysis is that firms are not subject to non-price rationing in the unorganized credit markets. This implies that any farmer or businessman who could pay the price would not go without getting loans in this market, but in reality there is usually an element of costly information because of the secrecy associated with the moneylending business in Nigeria.

The investment schedule in diagram 5.7 is based on all the foregoing assumptions. From the earlier equations 5.11 and 15.15, it is possible to derive an aggregate supply of funds for the whole economy as depicted by curve SS. Curve II shows the total demand for funds or investment goods for the whole economy. The interest rate remains constant at  $r_0^d$  up to the point  $Q_1$ . Thus the distance  $OQ_1$  measures the quantity of loans obtainable from the organized credit markets, i.e. commercial banks. This quantity represents the commercial bank loans to foreign firms and nationals, moneylenders, cooperative societies and some few indigenous businessmen who could afford the provision of suitable collateral for the loans. The aggregate amount of loans beyond  $Q_1$  represents loan borrowed from the unorganized markets at the cost determined by the level of interest rate in operation in those markets. The intersection of the two schedules indicates the level of investment for the whole economy.

Suppose it is assumed that there is an increase in commercial loan rate  $r^d$  to  $r_1^d$  resulting in excess demand for credit still yet in the commercial bank loan markets. In reality, this kind of phenomenon was witnessed in Nigeria between 1970 and 1980 when the economy was booming because of high oil revenues accruing to the government resulting in high government expenditure on investment projects. Inflation rate was very high and in an attempt to control it, as well as bank credit, the Central Bank of Nigeria raised the CBN rediscount rate designed to reduce the ability of or willingness of commercial banks to grant credit. Since the banks borrow largely from the Central bank, they in turn increased their lending rate by a minimum of 2½ per cent.<sup>1</sup> The increase in bank rate is expected to induce, in the first instance, the ultimate lenders to accumulate bank deposits since the deposits rates were also raised. Thus if interest rates are truly instruments for more effective mobilization of savings through the offer of realistic rates on monetary savings, one should expect a flow of fund from the unorganized

See Central Bank of Nigeria, Economic and Financial Review, December, 1981.

credit markets to the organized commercial banks in form of bank deposits. Thus interest rate-induced increase in demand for bank deposits would enable commercial banks to expand their lending activities by increasing their supply of loanable funds, holding commercial bank credit policies constant. Consequently there would be a shift in supply of loan schedule SS upward to SS', while the investment demand curve II would remain intact as in diagram 5.7 below. The overall effect of this increase in  $r^d$  would be to reduce the level of investment. Since the excess demand still occurs, the consequence of this increase would be a further reduction in the volume of loan from the unorganized institutions, resulting in increase in loan from organized.

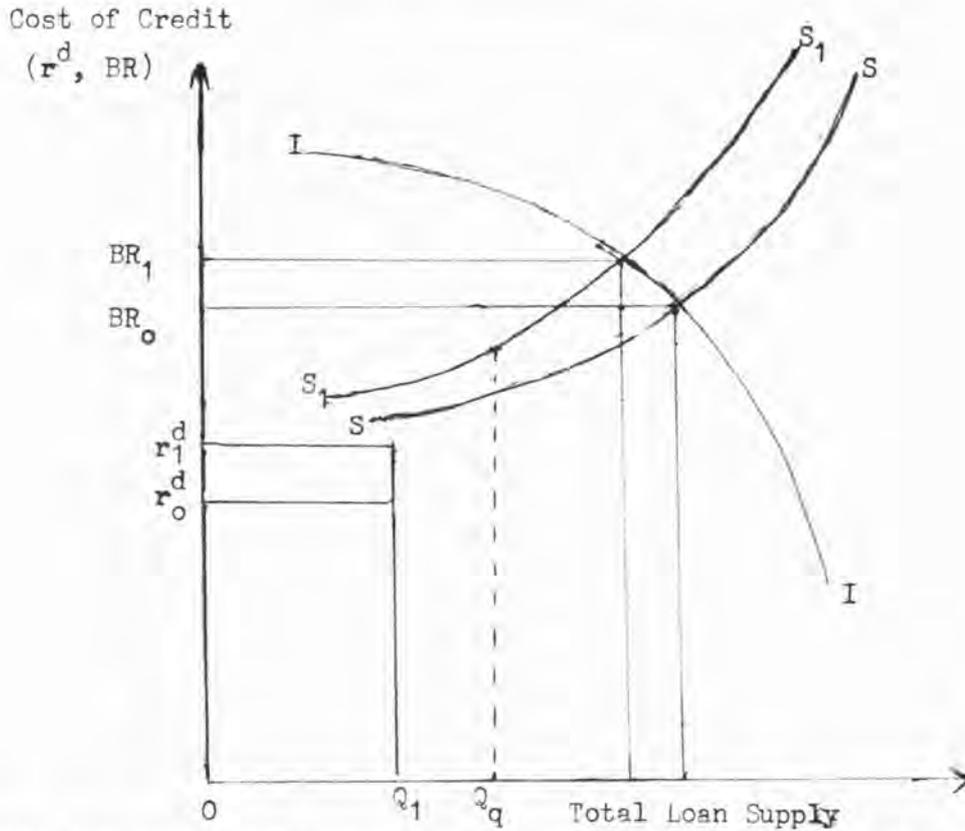
The foregoing analysis is based on aggregate investment functions. However, there are deficiencies in the analysis even though it depicts to a very large extent the actual workings of the two markets in Nigeria as well as many other developing countries. One such deficiency lies in the fact that it fails to analyse the different characteristics of the two markets in terms of the loans they offer. For example loan terms may either be long or short, while one type of market may prefer small loans to large ones. The analysis also fails to make distinctions between fixed and working investment capital. This is quite unrealistic because the underlying theoretical structures of these investment types are different from each other. In fact they have different mode of behaviour over the business cycle according to the theories and empirical studies of fixed inventory investment behaviour. It is therefore necessary to present the analysis using a disaggregated investment functions.

#### 5.16 Analysis of Complementarity Between the Unorganized and the Organized Credit Markets Using Disaggregated Investment function

It should be pointed out that the assumption of the existence of aggregate investment function only indicates that firms' decisions on how to satisfy their finance needs from either of the two markets will depend

on the relative cost and availability of the two liabilities and this is invariant to the nature of the assets the firms intend to finance.

Diagram 5.7  
Investment Demand and Supply of Loans



With the disaggregation of the investment between fixed and working capital, the structure of firm's assets then becomes one of the variables which can influence firm's decision on the relative amount of loan it can obtain from both markets. One assumption necessary for this analysis is that for the inventory behaviour the desired stocks of inventory depend on the expected sales of the firm and that they are insensitive to either the cost or the availability of funds.

The common practice of firms in Nigeria from time immemorial is to regard loans from banks as long-term liabilities against which they must provide collateral of fixed real assets. Because of this firm loan

behaviour and the relatively low cost of bank loans, it should be expected that a relatively large proportion of fixed business investment would be financed by the organized credit institutions, i.e. commercial banks, and very small by the unorganized markets. However, one would expect that the unorganized credit market would finance larger percentage of the working capital requirement since the working capital of business firms embodied in the inventory normally have a shorter gestation period between borrowing of funds and the proceeds from sales due to these funds, but this would be more costly.

As already explained, loans from the unorganized credit markets are always more costly than those from the organized and generally of short-term nature since on the average, the size of such loan is usually small in developing countries. For example, in 1958 <sup>1</sup> 43 per cent of surveyed agricultural loans were less than \$28 and 88 per cent less than \$84. This tendency is general to all developing countries. For example, Hunt (1966) <sup>2</sup> in his study on Uganda, reported that the average size of loan to ordinary cooperative members between 1964 and 1965 was around \$20. The figure for the mean size of surveyed private individual loans in agriculture in Ecuador was \$33 and for Chile and Ceylon in 1960, the figures were \$84 and \$28 respectively (United Nations (1963), pp. 41, <sup>3</sup> 43). Because the loans were always awarded in small units according to demand by the borrowers, they were always very expensive to administer and hence made the cost of credit still more expensive. For example, the study of the then Western Regional Finance Corporation by Oluwasanmi and Alao (1966) revealed that the corporation devoted 47 per cent of its revenues to cover administrative costs of loans between 1958 and 1963.

Having given the reasons why the firms would have to pay high cost for credit from the unorganized market like any individual, it is now obvious to know what the effect of credit rationing by the commercial banks can have on the firm's inventory. However since cost of loan is really not relevant to inventory financing, it is the firm's fixed capital investment which would feel the impact. This is because in response to credit rationing in the organized

1. V.S. Wigo (1958); 2. D. Hunt, (1966); 3 United Nations, (1965).

credit markets, firms in general, would likely in the process of adjusting, curtail investment in fixed capital while leaving their assets intact.

Should the rationing persist for long, this would affect the level of fixed investment. In the short-run, one should expect the unorganized credit markets to serve a buffer function in the supply of credit for fixed investment. The large firms with good creditworthiness might be able to renew their short-term loans and make these available for fixed investment. It should be expected that this tendency would be stronger, the larger the discrepancy between the rate of return to capital and the rate of interest in the unorganized credit markets. In the long run, however, the proportion of fixed capital financed by unorganized markets is likely to be very quantitatively insignificant since sources of funds to these markets are very limited to their individual savings and in some cases to the amount of money they can borrow from organized markets in addition. But if this is the case, the unorganized markets, too, are subject to credit rationing by the organized markets like firms which now turn to them for credit in this analysis. Since there is not enough evidence to support this claim, one can reasonably argue that the loans from the unorganized institutions to the firms would be insignificant on the following grounds. Firstly, in general usurious interest rate operates in unorganized capital markets and because of this business firms would be reluctant to plan on long term investment with finance obtained from these markets. Secondly, the ultimate lenders, although allowed the role-overs of their loans, will be in general, reluctant to tie up their resources with a particular borrower for an extended period of time. This might endanger the anonymity as lenders in the unorganized markets and hence lead to subsequent encounters with the tax collectors as well as colonial authorities. The recent currency reform in Nigeria embodied in the Decree of April 6, 1984<sup>1</sup> entitled "Anti-Sabotage Decree" was in recognition of the

1. See Central Bank of Nigeria, Annual Report, 1984

unorganized capital markets in Nigeria and the need to stop their illegal dealing not only in local currency but also in foreign exchange. This decree like other regulations before it, might reduce volume of credit in rural areas and create uncertainty among lenders as to the dangers of surprised government's crackdown on the activities of operators in the unorganized capital markets.<sup>1</sup> Thus as a way of protecting themselves against such danger, the moneylenders in the unorganized markets would, therefore, like to maintain their portfolio in liquid form.

Another reason concerns the ruthlessness of the moneylenders. Thus at the first sign of poor performance of their borrowers, even though it was just for a while, these moneylenders might decide to pull out their loans. For example, Tun Wai (1957)<sup>2</sup> in his article on interest rate outside the organized market stated that in many developing countries, moneylenders often appropriated the collateral whose value was much in excess of the loan in the event of failure to repay at appropriate time. Lastly and perhaps one of the most important reasons is the seasonal nature of most credits from the unorganized markets and which are therefore subject to fluctuations.

With all the foregoing assumptions and some evidence from the literature in support, there is no doubt that both the organized and unorganized capital markets can complement each other. With disaggregated business investment and fixed investment being constrained by the availability of commercial bank loans, other things being equal, an exogenous decrease in  $r^d$  would lead to the expansion of loans in the organized markets and hence an increase in demand for investment goods, which through national income multiplier would increase the level of income.

It is clear that in the short-run, this increase in demand for investment cannot be matched by an equal increase in production because of the production lag. Consequently, as should be expected, the latent result of any increase on commercial bank loan will be an unintended decumulation of the inventories, which gives the firms the opportunity to reduce their unorganized markets

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1. See Blizt and Long (1965) for more details about the economic implications of usury regulations.
  2. See Tun Wai (1957)

liabilities. There will be a discrepancy between the desired and actual level of inventory stocks because of the initial decumulation and the consequent increase in the expected sales resulting from the expansion of investment and the associated increase in income. Consequently, the firms will have to start building up their inventories to a new desired level higher than before. The financing of inventories, therefore, will be through the trade credit and other liquid assets at the firms' disposal and partially through the loans from the commercial banks. In case of Nigeria, most of the financing would be done through the unorganized markets, assuming the firms were insensitive to cost of credit differential between the organized and the unorganized markets. And in fact, studies have shown that bulk of the credit needs of rural areas are being financed by the unorganized markets and that the borrowers are invariably in favour of loans from the unorganized than the organized because the loans are given without delay as a result of much paper work associated with organized credit institutions.<sup>1</sup>

One may conclude that in the short-run, firms in general, will reduce their security holding in the unorganized markets, but in the long run, they will borrow more from them as the desired level of inventory stock gradually rises. However, at the new point of equilibrium, it is not clear whether firms' short-term liabilities from unorganized market would rise, fall or remain unchanged. There will, of course, be a rise in interest rate.

Finally, it should be expected that the expansion of loans in the organized markets will have impact on small firms. For instance, through linkage effect, it will stimulate demand for more investment by those small firms which have no access to commercial bank loan. They would, therefore, have to finance their inventory investment through the unorganized markets thereby increasing the demand for loans in those markets.

The foregoing analysis is designed to support the hypothesis that in Nigeria, and for that matter, in most developing countries, a high

interest rate policy may not necessarily reduce the volume of loans in the unorganized money markets at least in the long run in an economy with two active but distinctive loan markets. Moreover, it also confirms the hypothesis that the unorganized financial institutions and markets have played a great role in the provision of finance needs of the Nigerian economy, especially with respect to agricultural finance. Many studies on other developing countries have also indicated the important role played by the unorganized financial institutions in the provision of finance in the agricultural sector. This is why Tun Wai (1977) wrote:

"For the majority of developing countries, noninstitutional sources of rural credit are still more important than institutional sources. Noninstitutional sources of credit in Africa and Asia amount to about 72 per cent of total rural credit in each region, followed by the Middle East (63 per cent)."

#### CONCLUSIONS

The unorganized institutions in Nigeria as well as in many developing countries constituted a major source of credit for the rural agricultural communities for so many years and they were very important during the time when there was no organized credit institutions. In fact, these unorganized institutions were very useful sources of credit to peasant farmers in Nigeria since the banks were not willing to lend money to agricultural sector for lack of collateral securities. The unwillingness on the part of commercial banks to lend money to agriculture led the Federal Government of Nigeria to establish one Agricultural Bank which is designed to provide soft loans to farmers as will be discussed in chapter 10.

The structure of unorganized institutions varies from one country to the other. However, there are many similarities, some of which are the high cost and size of loans, the characteristics of the moneylenders and the type of their customers. Unorganized institutions are generally noted for their high cost rate of interest, the reason for which may be adduced to the risk involved, the size of loans, and the conditions of demand and supply. In Nigeria, as well as in any other developing countries, the size of loans demanded by farmers are usually small and hence can be difficult to administer by banks. Farmers, therefore,

are not the type of customers the banks generally want. The moneylenders and other types of unorganized credit institutions such as Family, friends relatives, cooperative societies and credit unions provide important source of credit to farmers as well as small businessmen. Traders also grant credit to farmers against their harvest.

Although lack of data on the activities of the unorganized institutions precluded us from presenting a quantitative analysis of their operation, with the aid of a model and the empirical studies in those developing countries where data are available, we have been able to present a qualitative analysis of the unorganized institutions in Nigeria. With the model developed, it has been shown that there is a possibility of interactions between the unorganized and organized money markets and institutions in Nigeria. It has also been shown that there is a possibility of complementarity as well as linkage between the two types of credit institutions. Since the discussion on complementarity relation between loans from commercial banks and those from the unorganized institutions is often related to the ways in which business enterprises finance each component of their real expenditures, such as fixed and inventory capital, trade credit, and other liquid assets in the two types of markets, we have modified the model developed for the interaction between the two markets to explain the possibility of complementarity.

From the analysis, it is clear that as long as the organized and unorganized institution co-exist in Nigerian economy, the ultimate borrowers have a choice to make between borrowing from banks or from unorganized institutions. Even in developed countries, there are various credit institutions providing loans to small businessmen and other small borrowers. The unorganized institutions in Nigeria will continue to function for a long time to come. However, one can say that as more and more people become literate and as banks are more willing to liberalize their loan policies, the unorganized institutions in Nigeria will become less and less important source of credit to small borrowers and farmers.

Put more succinctly, with the increasing pace of economic development, there would be a proportionate fall in the demand for credit from the unorganized markets (See Ghatak, 1976).

## THE DEVELOPMENT OF BANKING SYSTEM IN NIGERIA

## INTRODUCTION

In the last chapter, the role of the unorganized financial markets and institutions in developing countries in general and in Nigeria in particular has been examined. Most writers on Nigerian monetary development have always been silent on the possible role those unorganized institutions had played in the past in the provision of finance needs of agriculture which stood as the mainstay of Nigerian economy until early 1970s. Another reason for examining the unorganized institutions is that most of the indigenous banks which were established in 1940s and early 1950 actually evolved from these institutions according to the interviews the writer had with some officials of indigenous banks in course of this study. This is an area which has been neglected by most writers and therefore, the purpose of last chapter is to bring into the focus the importance of these unorganized institutions to the small businessmen and rural farmers in Nigeria before and some years after independence.

It should be pointed out that in all countries, there are elements of unorganized credit institutions in different forms and degrees. For example, in Britain, there are various small credit institutions which give credit to people who are in need and who perhaps, because of the size of loan required or inability to obtain loan from the banks. Some people who use the credit services of these institutions often pledge their social security weekly allowances as collateral. In addition to this, there are various pawn brokers and credit agencies which often borrow money from the banks and relend in small lots to people. Also in America, France and Italy, there are various brands of these credit institutions. The only difference between them and those in developing countries is that most of them are registered with the government and hence their activities are well known.

The focus of attention in this chapter is on evolution of organized financial institutions in Nigeria. Because of the importance of commercial banks, this chapter

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1\* See also L.A. WILLIAMS (1980), A Competitor's View in The Banks and Their Competitors, Cambridge Seminar, Institute of Bankers, London.

examines the growth of commercial banking in Nigeria as a starting point being the heart of the vehicle through which payments are made, credit allocated and monetary policy is often conducted, and hence the favourite of almost every writer on financial institutions. Because there are many writers on how banking institutions started in Nigeria, the specific purpose of this chapter is to try to examine critically the salient factors in the development of banking and how these compare with those of other countries. For example the factors responsible for the failures of many indigenous banks in Nigeria as compared with banking debacle in United States will be examined. This is a very important point in that it helps to explain why most banks established in the later part of 1960s have not experienced failure and why the structure of commercial banking in Nigeria is as it is today. Unfortunately many writers failed to look at this point and hence this study attempts to fill the void. The present commercial banking structure is such that only the old formerly foreign-owned commercial banks are still very dominant with their operation nearing monopoly or oligopoly.

This chapter is being divided into three sections. Section I deals with the concept of a bank in comparison with a commercial bank and how banking started operation in Nigeria. Also in this section, a model is developed to explain the major determinants of money supply in Nigeria in the light of the operation of West African Currency Board while in Section II deals with the expansion of banking in Nigeria and bank competition among the emerging foreign banks. Finally, section III examines the development of indigenous banking business in Nigeria and government regulations on banking operations.

## SECTION I

### 6.1 THE CONCEPT OF A BANK AND A COMMERCIAL BANK

The term 'Bank' can be given several definitions. In a broad sense, Any financial institution operating a short-term deposit account for customers might be technically termed a bank. This means that any such institution is subject to the risk of its deposit liabilities being substantially withdrawn

probably with very short or without notice by their depositors. Since differences exist in the nature of deposit liabilities and in the characteristics of the assets of the various financial institutions, economists customarily distinguish between commercial banks and savings banks. Thus the characteristics of a pure commercial bank in the actual sense of that word, is short-term, and highly volatile nature of its deposit liabilities, capable of being used as money in normal course of events. This means that such a bank would have a relatively high degree of preference for short term assets in substantial magnitude in order to meet the deposit withdrawals by its customers. In addition, it would hold large quantity of short-term commercial loans. On the other hand, a bank dealing with savings purely would be characterized by long-term, lower-volatility savings deposits since such bank has a lower degree of banker's risk. The institution of this kind will be well disposed to longer term assets such as bonds, equities and mortgages. Such an institution always invest their surplus funds on projects or capital formation which involves long term financing.<sup>1</sup>

The commercial banks, by tradition, have been identified with institutions that accept deposits from customers, but so also are other kinds of financial institutions. However, one unique characteristic of commercial banks is the statutory right of redeeming withdrawal requests with their own notes. Unfortunately such right has never been granted to other financial institutions. In addition the use of cheque facilitates the system of payments in the economy and this puts commercial banks in an enviable position among all other types of financial institutions. Since their demand deposit liabilities form the major proportion of the money supply in any economy, banks remain unique in all countries the world over. The term commercial bank is applicable only to institutions that accept deposits which are payable de jure and de facto on demand.<sup>2</sup>

1. See P.F. Smith, (1979), Money and Financial Intermediation, Princeton-Hall.

2. See R.S. Sayers (1967), Modern Banking, Oxford University Press.

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2. See R.S. Sayers (1967), Modern Banking, Oxford University Press.

## 6.2 The Early History of Banking in Nigeria

In most developed countries of the world, bank developed as a private enterprise owned by the citizens of those countries. For example, the year 1750 marked the beginning of English Banking system which was dominated by the private banks.<sup>1</sup> However, by 1844, the private banks were already in decline and their place taken over by the new joint-stock banks and branches by this time, the English industry had already reached take-off stage and there was a great need for banking legislation and this was met in 1844.

In Nigeria, however, in common with the United States of America because of the historical colonial past, banking system developed as an extension of British banking system. Thus the first ever British bank to be established in Nigeria was the Bank of British West Africa which started operation in 1892. This marked the start of the pace of economic and financial progress in Nigeria. For this establishment, regardless of the type of ownership, clearly put Nigeria in line with the economic development of other nations of the world in terms of the development of financial institutions. Thus as a matter of natural evolution and in support of claims by some writers as already explained in chapter III of this study, bank was the first financial institution to develop in Britain as well as in any developed country. At first the institution provided a form of depositories for those who had valuable treasures like gold, and as economic development was progressing, there developed in the British economy sound financial institutions as a mark of financial development. Thus from the provision of depositories for valuables, banks in Britain developed into general deposit-taking institutions with the attendant provision of more efficient means of payments.<sup>2</sup>

In U.S.A., unlike Nigeria, banks were founded simultaneously with the attainment of independence with the efforts of Robert Morris and Alexander Hamilton who were some of the leaders that established the bank of New York

1. See R. Fry (1976), Bankers in West Africa, Hutchinson, London.

2. A.D. Crockett (1973), Money: Theory, Policy and Institutions, Nelson & Sons.

in 1784. In case of Nigeria, banking started as a branch of one of the banks in Britain during the colonial period.

The French colonial administration brought the taste of modern credit institutions to French West African colonies much earlier than the British. For instance by 1853<sup>2</sup>, a bank had started operation in Senegal, which was 39 years earlier than that of Nigeria. The common reason adduced to the lateness of banking operation in Nigeria had generally been the backwardness of most parts of the British West African colonies between 1800 and 1890 as reflected by the traditional barter system which was still very much in evidence by that time. This is because no common currency had been imposed as a medium of exchange by the colonial administration until 1902 when the law was imposed to abolish all the indigenous currencies being widely used in different parts of the country. Thus by such law, the adoption of a common currency for use in Nigeria became possible and this enabled the colonial authorities to secure a firm control of the Nigerian economy like France in French colony of Senegal. To make for the efficacy of this law, otherwise known as "The Native Currency Proclamation 1902", the colonial authorities imported very large amount of silver coins into West Africa in January, 1892 some of which found their way to Nigeria.

Prior to this importation, a bank known as "The African Banking Corporation", the first bank ever, had begun operation in British West Africa and to this same bank was entrusted the responsibility of importing and distributing the silver coins since it was also the banker to the colonial government in Nigeria. The name of the bank was later changed to British bank of West Africa (BBWA), then to Standard Bank and in modern times, it is now known as the first bank of Nigeria Ltd. The success of this bank was without challenge for so many years since it enjoyed the monopoly of importing silver coins from the Royal Mint, London and the distribution of same to all other centres along the West African Coasts which belonged to colonial government, namely Accra in the then Gold Coast, now Ghana, Freetown in

1. See M. Friedman and A.J. Schwartz (1963), A Monetary History of the United States, Princeton, New Jersey.

2. See R. Fry (1710).

Sierra Leone and Barthurst in Gambia now called Banjul.

### 6.3 The Evolution of West African Currency Board and the Determinants of Money Supply During the Colonial Period

In all the British West African colonies, the silver coins in use in Britain were also in use until a permission was given for the operation of a separate currency for the colonies which led to the establishment of West African Currency Board in 1912 to play the unique role the modern central banks are playing in any economy.<sup>1</sup> Prior to this permission, all the colonial governments had expressed strong desire to have a share in the profits derived by the British Treasury from the printing and exporting of the silver coins but which was flatly denied to them. Thus the permission to operate a separate currency for the colonies was a compromise.

Although the permission had been given, yet there were certain conditions which the Treasury considered should guide such operation. Firstly a case must be established to show that there was a need for separate currencies for colonies. Therefore, in order to establish this case, a committee was appointed by the then British Colonial Secretary, Lord Joseph Chamberlain in 1899 and was asked to work within these two terms of reference:

- (i) To examine the possibility of retention of the British silver coins in the West African colonial territories and the sharing of the seigniorage between the British Treasury and the colonies.
- (ii) To examine the possibility of creating a separate currency system for West Africa by which the colonies would take over the costs, risks, profits as well as liabilities resulting from the issuance of currency.

The committee found that the case for a separate currency system did exist and made recommendations for its establishment accordingly.

However, inspite of the permission given earlier by the Treasury and the

1. See J. B. Loyncs, The History of WACB 1912 - 62, Grosvenor Press, 1962

subsequent recommendation for its establishment by the committee, the West African Currency Board did not come into existence until 1912.<sup>1</sup> Thus the importation of silver coins from Britain continued unabated and between 1900 and 1910, it had grown from £360,200 to £1,259,450. The amount silver exported still increased further to a tune of £2201,615 from 1886 up to 1911 as a result of change in world trade in favour of silver coins. The increase in export of silver resulted in further increase in profits accruing to the British Treasury, but which was later shared with the colonies. However, the sharing of profits with the colonies only increased the tempo of agitation for more share in the profits. Since the persistent demand by the colonies on this score could no longer be ignored, a committee was set up in 1911 to look into the two sides of the dispute, which, having found that the colonies had a genuine case, recommended the establishment of a West African Currency Board. Such board, according to the committee's recommendation, was to be specifically charged with the responsibility of issuing new currency notes and coins for the member colonies and redeeming the British silver coins.

As would be expected, the Board's headquarters remained in London,<sup>2</sup> so also was the financier responsible for purchasing silver bullion, minting and printing currency notes. The board was made up of representatives from the London Joint Stock Bank (now called the Midland Bank) and all member colonies, whose capitals soon became distribution centres for the Board.<sup>3</sup> These were Accra for the Gold Coast (Ghana), Lagos for Nigeria, Bathurst (now Banjul) for Gambia and Freetown for Sierra Leone. The idea of separate currency system for the colonies was not limited to British West Africa but to all other colonies belonging to Britain in Africa. The table 6.1 shows the currency liabilities and reserves of both West African Currency Board and East African Currency Board between 1925 and 1965. Since the conditions of world trade always dictated the currency liabilities of these

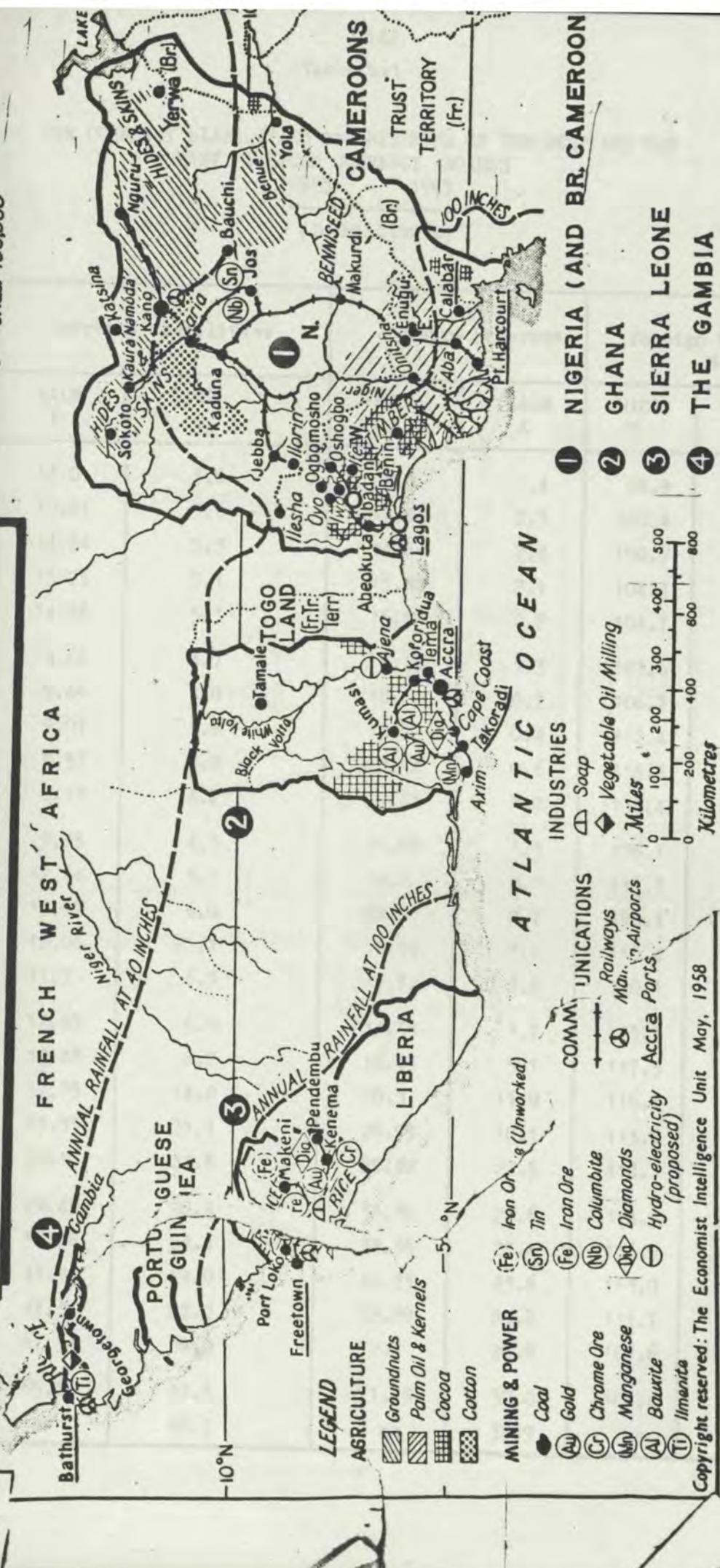
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1. See J.B. Loynes (1957), "Report on the Establishment of a Nigerian Central Bank"
  2. J. B. Loynes, (1962), "The History of West African Currency Board, 1912 - 1962"
  3. Map 1a overleaf shows the West African British Colonies which were members of the Board. The Map also shows the export products of these colonies.

Showing the countries who were formerly members of the West African Currency Board and their resources. M.A.

# GHANA, NIGERIA, SIERRA LEONE AND GAMBIA

POPULATION OF PRINCIPAL TOWNS

- 300,000 - 460,000
- 100,000 - 300,000
- Under 100,000



**LEGEND**

**AGRICULTURE**

- ▨ Groundnuts
- ▩ Palm Oil & Kernels
- ▧ Cocoa
- ▦ Cotton

**MINING & POWER**

- Coal
- Gold
- Chrome Ore
- Manganese
- Bauxite
- Ilmenite
- Iron Ore (Unworked)
- Tin
- Iron Ore
- Columbite
- Diamonds
- Hydro-electricity (proposed)

**COMMUNICATIONS**

- +— Railways
- ⊕ Main Airports
- ⊖ Accra Ports

**INDUSTRIES**

- ⊖ Soap
- ⊖ Vegetable Oil Milling

**Miles**

0 100 200 300 400 500

**Kilometres**

0 200 400 600 800

① NIGERIA (AND BR. CAMEROON)

② GHANA

③ SIERRA LEONE

④ THE GAMBIA

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Table 6.1

THE CURRENCY LIABILITIES AND RESERVES OF THE WEST AND THE  
EAST AFRICAN CURRENCY BOARDS

1925 - 1965

(In Million £)

Year	Currency Liabilities		Foreign Reserves		Foreign Reserve %	
	WACB £	EACB £	WACB £	EACB £	WACB %	EACB %
1925	13.0	5.6	12.8	2.4	98.8	43.6
1926	12.81	5.3	12.84	2.3	100.4	43.8
1927	14.74	5.3	14.84	2.4	100.6	45.1
1928	15.23	5.1	15.88	2.1	104.4	42.3
1929	14.86	5.1	15.52	2.2	104.7	43.4
1930	13.66	4.7	14.15	1.3	103.6	27.9
1931	9.46	4.0	10.1	0.7	106.7	17.6
1932	9.07	3.6	10.2	0.4	112.4	9.9
1933	9.57	3.8	10.94	0.6	118.4	16.8
1934	8.13	4.2	9.61	1.0	118.4	24.8
1935	9.95	4.3	11.96	1.3	126.1	30.2
1936	12.54	5.1	14.2	2.0	113.3	38.1
1937	19.27	6.0	20.11	2.7	104.3	45.5
1938	18.06	21.1	19.19	3.2	110.4	49.8
1939	11.7	6.9	12.74	3.2	110.1	49.5
1940	12.65	6.9	14.33	3.7	113.3	54.0
1941	13.48	8.2	15.93	5.1	117.3	62.1
1942	17.75	14.0	20.5	11.0	116.4	78.3
1943	23.95	21.1	26.95	18.1	113.8	86.0
1944	26.15	24.8	29.49	22.5	114.1	90.7
1945	29.43	28.4	33.38	26.6	114.3	93.9
1946	33.38	24.4	38.36	23.4	116.0	95.4
1947	41.38	24.0	46.23	23.6	113.0	96.8
1948	47.33	27.2	52.29	23.2	111.7	98.1
1949	67.31	29.6	72.2	26.8	107.6	98.3
1950	65.65	39.3	71.73	30.0	109.4	101.2
1951	na	48.3	na	39.9	na	102.3

Year	Currency Liabilities		Foreign Reserves		Foreign Reserves %	
	WACB £	EACB £	WACB £	EACB £	WACB %	FACB %
1952	na	48.6	na	46.5	na	96.2
1953	na	53.3	na	50.3	na	103.6
1954	na	53.3	na	57.6	na	108.0
1955	na	60.4	na	61.8	na	102.3
1956	na	na	na	na	na	na
1957	na	na	na	na	na	na
1958	-	58.7	-	63.4	-	108.1
1959	-	na	-	na	-	na
1960	-	60.4	-	66.8	-	110.5
1961	-	59.2	-	66.1	-	111.7
1962	-	58.5	-	68.4	-	113.5
1963	-	66.9	-	75.2	-	112.5
1964	-	69.3	-	75.9	-	109.5
1965	-	61.8	-	69.9	-	113.1

Source: W. T. Newlyn and D.C. Rowan, Money and Banking in British Colonial Africa, Oxford 1954 p. 50, 59 and Ernest Joseph Paun. Das Bankwesen in Osrafrica, Munich, 1969 p.254

Boards, the unsteady growth of currency liabilities as exhibited by the table cannot be a surprise. However, after the Second World War and from 1940 onwards, the growth of currency liabilities in both Boards had been very steady. Thus from 1940 figures of £12.65 million and £6.9 million respectively, the currency liabilities of the two Boards rose to £65.6 million and £39.3 million respectively which can be associated with the general growth in world trade which benefited the colonial master's economy greatly. More will be said about this when discussing the specifications of the model for supply of money under the currency board system.

#### 6.4 The Appraisal of West African Currency Board:

The West African Currency Board was a caricature of modern central bank created by the colonial authorities for the issuing of West African currency. In an economy characterised by the use of many kinds of commodity currency as well as commodity exchange in some cases, the establishment of West African Currency Board was an important single action which turned the economies of the colonies into true market economies. With the use of the West African Currency Board pound sterling - EWACB - the last vestiges of barter economies started to disappear in the British colonies of West Africa. With the currency so standardized and in parity with the British pound sterling, the necessary confidence in its use was secured and great was the attraction of this standardization to foreign investors who now found economic sanctuary in the colonial economies in terms of establishment of trading enterprises and nucleus of manufacturing companies. Owing to the relatively undeveloped nature of most parts of the colonies, there was very few or no avenue for security portfolios. However, since the EWACB was in parity with the British pound sterling, the board invested large sum of its surplus funds on sterling securities which yielded interest. The share of each member colony in the such profits had been used for many development projects when the board was dismantled on attainment of independence. In this regard, WACB had assisted

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1. See J. B. Loynes, 1962.

most of the colony members in their economic development while at the same time involved the people to a greater extent in the market economy. So far for the advantages of the currency board.

However, the operation of the West African Currency Board (WACB) largely reflected the dependent nature of the British colonies per se. This is reflected by the fact that the function of this board was very restrictive, being tied up with the primary export trade between the colonies and their master Britain. The colonies were subjected to the production of raw materials to feed the British industries and the quantity produced determined the price and hence the quantity demanded by the British manufacturers. Since no money could accrue to the colonies without trade with the colonial master, as will be specified later, the money supply, therefore largely depended on demand for raw materials by the colonial master, and the demand in the world trade for colonial master's goods, rather than to the growing economies of the colonies. Thus, the board was nothing short of a toothless bull dog, having neither control of banks nor ability to encourage the development of the money and capital markets in the member colonies. However, this inability can easily be adduced to its limited activities which largely involved the maintenance of the WACB in strict parity with the British pound sterling. As a mark of its inferiority to the modern day central banks, the board was totally unable to prevent the occurrence of the banking boom in Nigeria and its consequent collapse in the 1950s. In spite of its importance as a currency issuing institution for the whole British West African Colonies, it could not give any financial directives to the member colonies' emerging financial institutions and neither could it control the unhealthy competition which was very much in evidence and very endemic in the banking system in its infancy. This competition had resulted in the failures of many indigenous banks in Nigeria and Ghana.

The WACB cannot be regarded as an independent issuing authorities in the British West African colonies since the note issued was simply

1. S. J. B. Loynes (1962).

a British pound sterling in disguise and hence the board was merely a changing and accounting institution. Or put another way, the board was merely a glorified institution in name but actually, it was largely a representative branch of the colonial office and the Crown Agents. As a matter of fact, all the board members held their posts only at the discretion of Colonial Office in conjunction with the British Treasury<sup>1</sup>. This element of unnecessary affiliation with the British Treasury only points to the dependency of West African countries on British monetary system, and put the board in line with banks operating in the colonies at that time, but which owed their primary allegiance to their head offices overseas.

Since its activities were strictly tailored to suit the economic interest of Britain, all the board could do was to invest its surplus funds on long-term low-yielding British securities only without any opportunity to diversify such investment in assets portfolio of other countries such as American dollar, the German mark, the French franc and the Swiss franc. The board continued operation in this fashion without any change in either its functions or in its headquarters and organization generally until the the member colonies were emerging into sovereign states.

The first country to call it a day with the WACB is Ghana, which shortly after independence in 1957 opted out of the Board to establish her own Central bank, which is of course inevitable if she were to have independent control over her monetary policy as a sovereign nation. The then President of Ghana, Dr. Kwame Nkrumah, bursted out his silent resentment against the board when after independence of Ghana he branded it as "a Static colonial monetary institution which was thoroughly incapable of changing the Ghanaian economy." Thus when the Central Bank of Ghana was established, a full monetary functions similar to those of the Bank of England were assigned to it. As will be discussed in the later chapter, even before the Nigerian

1. See J. B. Loynes (1962) for a full account of how members of the board were chosen.

independence, there had been a call for the establishment of a central bank in Nigeria which would be capable of providing a good leadership for the other financial institutions in the country as well as performing its developmental role by a private member's motion.

This agitation for the establishment of a central bank in Nigeria became more pronounced shortly after the attainment of internal political autonomy. Thus following the recommendations on the establishment of a Nigerian Central Bank by Mr. J.B. Loynes from the Bank of England appointed by Nigerian government to look into the case for such bank, the dream of Nigerians for a central bank came true when the bank was established in 1958, two years before full independence. However, it was on 1st July, 1959 before the bank finally commenced effective operation.<sup>1</sup> But in spite of Nigeria and Ghana's exit from the WACB, there was still no change in its operation with the remaining members Sierra Leone, Gambia and Western Cameroon were still operating their monetary policies under the board. However, in 1965, the board stopped operation on attainment of independence by Sierra Leone, Gambia and also Western Cameroon which was a British mandate until 1960. All the assets and liabilities of the dead board were shared among all its former colony members.

#### 6.5 A Model to Explain the Determinants of Money Supply in Nigeria Under The West African Currency Board System

As already explained earlier, the money supply in any of the former British colonies of West Africa was tied up with export trade<sup>2</sup> with Britain whose currency bore a one to one relation with the WACB's currency. The implication of this is that the level of money supply in a colony was associated with its export trade level with Britain. The trade level itself was determined by demand for British goods in the world market. This means that if the world market prices for manufactured goods from the raw materials supplied by the colonies fell, this fall would be impacted on the money supply magnitude in those colonies. Or if the British goods could not sell well in the world market, this would have impact on the price and quantity that would be demanded

1. See O. Olakanpo (1965), Central Banking in the Commonwealth, Bookland, Calcutta.

2. See External Economic Relations and Problems of Integration in Nigeria, "Paper presented to Conference on Nigeria National Unity, Northwestern Unity," March 31 - April 2, 1966 by O. Olakanpo.

for the colonies' tradeable goods such as rubber, cotton, cocoa, timber and oil produce. Thus if the economy of Britain was booming, it would have impact on the colonies through the money supply process.

It is, therefore, possible to hypothesise that "Money Supply in Nigeria or any other former British colonies under the West African Currency Board System was a function of the level of exports, the level of economic activities in Britain, the amount of money received from Britain as aid for development of the country and an error term to take account of other variables such as weather conditions which can affect the level of exports. Thus the money supply in Nigeria during the currency board system might be formalized as follows:-

$$M^S = f(YB, FA, EX, U_t)$$

where  $M^S$  = Money Supply

$FA$  = Foreign Aid.

$EX$  = Exports of Nigerian tradeable commodities

$U_t$  = The error term to capture all other unforeseen contingencies.

The result of the estimates are as presented in table 6.2 below. As a standard procedure, the equation was estimated by ordinary least squares.

TABLE 6.2

ESTIMATION OF MONEY SUPPLY MODEL UNDER THE CURRENCY BOARD SYSTEM

C	YB	FA	EX	Time	R <sup>2</sup>	D.W.
0.24501 (2.0032)	0.6945 (3.267)	0.4223 (3.078)	1.3264 (4.5671)	-0.5671 (-3.371)	0.9824	1.8731

As is expected, the estimates of these parameters do not conflict with the theoretical preconception in regard to sign. The result of the regression lends support to our hypothesis and all the variables are positive and significant at the 5 per cent level. The Durbin Watson statistics, concerning the independence over time of the disturbances was estimated at

1.8 which indicates the absence of autocorrelation, while the  $R^2$  of 0.98 suggests the appropriateness of this model and indicates a good fit. The T-statistics in parentheses clearly show the significance of all the variables. The trend variable was entered as linear in natural units, and hence its parameter estimates cannot be interpreted directly as an estimate of elasticity. Other estimates may be interpreted in the form of the following ceteris-paribus economic statements since the equation is log linear.

- (a) A 1 per cent increase in the level of economic activities in Britain would yield approximately 0.69 per cent increase in demand for raw materials from British colonies and hence proportionate increase in money supply
- (b) A 1 per cent increase in foreign aid, given that it was in money, would lead to 0.42 per cent increase in money supply and
- (c) A 1 per cent increase in exports would lead to 1.3 per cent increase in money supply.

As can be seen from the result, the level of exports with elasticity of more than 1 was the most significant determinant of money supply in Nigeria and also for other colonial countries under the West African Currency Board System. Since this model represents the first attempt ever at estimating the determinants of money supply in a colonial country under the currency board, this result should be accepted as an approximation. The result has shown at least that level of exports, the amount of foreign aid in money and the level of economic activities in Britain were the major significant determinants of money supply in Nigeria.

## 6.6 The Expansion of Banking in Nigeria

There are certain economic conditions which can induce the growth of banking business in any country of the world. The most important of these are the level of economic activities and the degrees of monetization of the economy. Others include the level of education, which dictates the level of public confidence in the monetary and banking system and finally, the type of regulatory control over the operation of banks. In Nigeria, some of these conditions were present to some limited extent by the time of the first bank ever was established. This bank was called the African Banking Corporation with its headoffice in South Africa. After

two years of operation, it was taken over by Elder Dempster in 1893 and later replaced by the Bank of British West Africa (BBWA) which was established on 31st March, 1894, with an authorized capital of £100,000 of which £30,000 was called up and £12,000 paid up.

This bank (BBWA) was confronted with many difficulties most of which resulted from the personality clash between the manager of the Bank, Mr Alfred Jones and some officials of the Government in Lagos. This kind of problem should be expected since the bank was the only bank in the whole country and hence the government banker. However, in spite of these initial difficulties, the bank succeeded in opening three branches between 1894 and 1910 and within the next nine years, the bank opened up offices in another five commercial centres in Nigeria and one in Duala in Cameroon. Being the banker to the colonial government, the bank was subjected to careful scrutiny by the Crown Agents with respect to the movement of coinage, since as a matter of fact, it was the only institution given the monopoly right for importing silver coins into the country. However, with the arrivals of other banks, the BBWA's monopoly of silver coin importation and distribution was challenged. Realising the great advantage the monopoly right had given BBWA, and the need to ensure fair competition in banking industry, the colonial officials agreed that the supply of silver coins should be shared among the operating banks in the economy. However, since the manager of the bank was very influential, nothing was done to stop the bank's monopoly until 1912 when the West African Currency Board was established, thereby replacing the BBWA as a banker to the government, and as the importer and distributor of silver coins.

#### 6.7 Early Nigerian Banking Competition:

The banking competition began in earnest in Nigeria when the other bank known as Nigerian bank was established, but which was later taken over by

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1. See British Overseas Banks in Developing Countries from inception to 1945, in the Institute of Bankers Journal, (June 1972).  
Also see R. Fry (1976).

the BBWA in 1912 in order to forestall any kind of competition. In spite of this, competition continued between the organized credit institutions, i.e. commercial banks and the informal or unorganized institutions represented by the wealthy traders who offered credits to farmers and small scale indigenous traders. These wealthy traders, who were largely foreign nationals, assisted farmers and small indigenous businessmen by providing for their credit needs even though at very high rate of interest.

Considering the level of education at that time in Nigeria and the necessary formalities one had to undergo before opening an account or before one can obtain a loan from the bank, there is no doubt that these wealthy traders as already mentioned, were very important to the rural communities as well as some small businessmen in commercial centres, majority of whom could not read or write and hence could not obtain loans from the bank. Furthermore, most of these borrowers could not provide collateral which was one of the conditions for the accommodation of loan by the banks, most of which operated only in capital and commercial centres to the utter exclusion of the rural areas.

In order to remove the competition between the banks and the traders, the BBWA decided not to grant credit to these traders, thereby crippling their ability to grant credit to ultimate small borrowers. Through this, the bank was able to reduce the magnitude of the competition. However, a bank called Colonial Bank started operation in Nigeria as a branch office to challenge the apparent monopoly of BBWA in the banking industry. With the moral and financial support from the major firms in the country, and in particular the Royal Niger Company, this bank succeeded in avoiding the takeover bids proposed by the BBWA and thus was able to pose as a formidable rival in the banking industry. In 1934, the bank changed its name from Colonial Bank to Barclays Bank, while the BBWA changed its name to Standard Bank of West Africa in 1956, which

1. A full discussion about the unorganized institutions is in chapter V.

2. See R. Fry (1976).

was later changed to its present name "The First Bank of Nigeria Limited" following the indigenisation of banking in Nigeria in 1976.

Another bank which was established to rival the BBWA was called the Anglo-African Bank. This bank was formed by the wealthy traders operating in the country with a nominal capital of £150,000 and the subscribed shares of £32,000 out of which £24,000 was called up and £18,000 paid up by 1903. However, unlike the BBWA which had its headoffice in Lagos, the Anglo-African Bank had its own headoffice in Calabar basically designed to take advantage of the port facilities being used by the powerful merchants. Within very short time, this bank was able to establish more than six branches around the southern part of Nigeria.

By 1916 two important commercial banks in Nigeria were the BBWA and the colonial Bank. The colonial bank not only opened branches in Lagos but also in the northern part of Nigeria such as in Zaria and Kano, thereby bringing the taste of modern banking to that part of the country for the first time. Since the colonial bank had been operating as far back as 1836 before its rival, BBWA, it did not find it difficult to compete with the BBWA. Below is the comparative analysis of the balance sheet of the two foreign banks in Nigeria in 1916.

Table 6.3

COMPARATIVE BALANCE SHEET OF FOREIGN BANKS  
IN NIGERIA. 1916

Items	Banks	
	Colonial Bank	British Bank for West Africa
Nominal Capital	£2000,000	£2000,000
Paid-up Capital	600,000	560,000
Reserves	150,000	220,000

Source: Bankers in West Africa.

1. See. A. Oyejide and Soyide (eds.) (1979), Commercial Banking in Nigeria, Evolution, Regulation, Structure and Performance, Ibadan University Press

From the above, the two banks were equal in terms of nominal capital but there ended the similarity. The paid-up capital of Colonial Bank was greater than that of the BEWA whose Reserves was more than offset the imbalance between its paid-up capital and that of its rival, the Colonial Bank. The BEWA's reserve stood at £220,000 as against £150,000 for the Colonial Bank. The ratio of reserve to nominal capital for the two banks stood at 11 per cent for BEWA as against 7.5 per cent for the Colonial Bank.

In spite of the difficulties experienced as a result of competition between it and its arch rival BEWA, the Colonial Bank succeeded in opening bank branches in other parts of the country designed to increase its deposits as well as its sphere of influence and by 1920, it had opened 15 branches. It is interesting to note that the type of competition going on in Britain between the banks in the British Banking system was also extended to Nigeria as well as other colonial countries where these banks had offices. Thus the BEWA increased its share capital to £3,000,000 with funds from Lloyds Bank in 1919, basically designed to swallow up its rival Colonial Bank. The foreign banks in the developed countries had become well established at their respective countries and with the surplus funds they possessed, they were looking for profitable investment outlets in other parts of the world. The British banks, with the backing of the government with the necessary regulations, were ready to invest and extend their business operation in the colonial countries which offered suitable economic prospects. Thus, Nigeria, being a promising country, attracted the British Banks. By 1920, therefore, instead of establishing their own branch office in Nigeria, the London County Westminster and Paris Bank (now called National Westminster), National Provincial and Union Bank of England, and the Standard Bank of South Africa now called the Standard Bank, decided to take up shares in BEWA, which enable this bank to increase the tempo of its banking activities in the country. Thus the BEWA was able to attract more customers through the provision of long and short

1. The British Overseas Banks in Developing Countries from inception to 1945, in the Institute of Bankers Journal, (June 1972).

term loans to expatriate firms and institutions far more than its rival. This non-price method or non-price competition hit very hard on the Colonial Bank which lost many of its customers to its rival, BBWA, and sustained a considerable fall in deposits.

In order to survive, the Colonial bank called for a rescue from some foreign banks, but only the Barclays Bank responded by integrating it as a component of integrated international bank. The new bank from this Union became known as Barclays Bank (D.C.O) and is known nowadays as the Barclay's Bank (PLC). With this development, the Colonial bank was able to tell the BBWA that it had come to stay and operate permanently in the emerging Nigerian banking.

#### 6.8 Increasing Competition in the Emerging Nigerian Banking Industry

The importance of unorganized credit institution as a precursor of organized credit institution is clearly reflected by the fact that from merchant credit institution operating in the unorganized capital market of Nigeria emerged another foreign bank. While two big foreign banks were operating in the commercial centres between 1916 and 1945, there were numerous unorganized credit institutions operating in the rural areas and very few in large cities and commercial centres as well. One of these unorganized credit institutions was the United African Company (UAC), which was a very wealthy trading company. This company not only offered credit to small businessmen and rural moneylenders, but also to the colonial government in the form of payment for customs and other duties in London and Liverpool rather than in Nigeria. This forced the two banks to soften the conditions of their credit in order to attract more customers away from the UAC. However, because of the nature of credit being offered by this informal bank without too much paper work and rigid security requirement associated with the bank credit, UAC as a source of credit remained in operation until 1957.

##### (a) Emergence of other Foreign Banks:

As the trade and commerce were growing, economic prospects in the country

1. See R. Fry (1976).

were increasing as a result of a general increase in the level of economic activities in the country soon after the Second World War, other foreign investors started to put their interest in the Nigerian emerging banking industry into reality. Among these new foreign investors were the French bankers. The late arrival of these French bankers in Nigeria was due to the market sharing agreements between them and their British counterparts with respect to the spheres of influence and market areas. In line with this agreement, the French Bank took its leap forward not from Paris but from London. The Banque National pour le Commerce et l'Industrie (BNCI) founded a subsidiary company in London in 1943. This bank soon changed its name to British and French Bank for Commerce and Industry, under which it established a branch office in Nigeria in 1948. After a period of intense competition with the other two foreign banks, the bank managed to survive.

It should be noticed that all the three banks had one element in common. Both of them were operating with the capital subscribed by various international banks and this is one reason behind their success inspite of fierce competition. As will be seen later, any indigenous bank which grew up certainly had to struggle very hard to survive a banking system dominated by the branches of two of the world giant banks with their enormous resources and long banking experience with competent workers.<sup>1</sup>

The three banks, the BBWA, the Colonial Bank or Barclays Bank DCO, and the British and French Bank for Commerce and Industry, are now the three biggest banks in Nigerian banking industry. The fourth big bank was registered in 1959 with the statutorily required initial capital of £1.5 million or ₦3 million. Like other foreign bank before it, the bank was a joint venture of many big banks overseas. Unlike other banks before it, it started operation in Kano in the northern part of Nigeria where it had no rival at all. Having established a bridgehead at Kano, it was able to open new branches in Lagos, Apapa and Port Harcourt to compete for deposits. Using the magnitude of its capital and reserve as a measure of its success, one can easily see that by 1970, its

1. See Table 6.2 showing the profitability of commercial banks in Nigeria. The three banks are easily the most profitable of all banks in Nigeria.

capital had risen to paid-up shares of ₦3 million as against the reserves which stood at ₦26.4 million. By 1975, the paid-up capital had a further jump to ₦6.0 million with additional reserves of ₦1.4 million. In 1980s, the bank's branch network had risen to 36 while its assets and liabilities rose from ₦37.9 million in 1973 to ₦95.4 million in 1974 to ₦339.1 million in 1977.<sup>1</sup> In recent years, the IBWA has increased its branch network considerably in line with the Central Bank directives which will be discussed in later chapter.

## SECTION II

### 6.9 THE EVOLUTION OF FIRST INDIGENOUS BANK IN NIGERIA

In common with the BBWA which started operation with capital supplied by the shipping companies and some British traders, the first ever indigenous bank in Nigeria started operation with the capital supplied by the British merchants and some enlightened Nigerian traders in 1899<sup>2</sup> under the registered name of Anglo-African Bank. This name was chosen, essentially as a compromise to the subscribers of its capital. However, as mentioned before, the name of the bank was later changed to Bank of Nigeria.

To be sure, the establishment of the Anglo-African Bank in 1899 was a direct response to the monopoly of the BBWA as mentioned earlier. The survival of this bank owed largely to the financial backing it received from the giant British trading companies in Africa. For example, the Royal Niger Company, Alexander Miller Brothers and Company, and the African Association led by the Chairman of John Holt and Co. and many others were very prominent in ensuring the survival of the bank in the face of strong competition from the foreign banks.

Although Anglo-African bank did not keep government's account, it still operated successfully as reflected by the numbers of accounts it kept for its customers. For example by 1911 its African customers had grown considerably to the extent that as many as 463 African accounts were with the banks as against

1. See the IBWA Annual Reports, 1980 - 1984.

2. R. Fry, (1976).

26 expatriate bank accounts. As would be expected of course, the expatriate customers' deposits were very large and hence more important than those of the African customers. However, the most important thing was that the banking habit had started to grow amongst the African customers which was a sure precursor to holding large deposits accounts in the bank. Even then, some African customers' deposits were already growing and becoming very important to the banks, even though they were meant only for a term. Most of the African customers kept deposit accounts with the bank only as a conformity with the lending requirement at that time which stipulated that there should be liquid securities kept by customers before any loan could be granted to any African customers. This requirement was prevalent and very important to the banks by then, since the property and mortgages were not popular because of the difficulties in establishing and proving the title right.<sup>1</sup>

This Anglo-African bank whose name was later changed to Nigerian Bank gave loans to African indigenous businessmen and small farmers who kept accounts with it. It enjoyed considerable patronage from Nigerians especially when it changed its name to Nigerian bank and all told it awarded loans to a tune of £30,000 during the short period of its operation.<sup>2</sup> The conditions for granting loans to indigenous borrowers were much more relaxed than those of the foreign banks and this soon put the Nigerian Bank into the brim of collapse, in the face of teething competition with BBWA and Barclays Bank. The economic dominance of the BBWA in particular in the emerging Nigerian banking system continued almost unabated up to 1916, since it was the only bank acting as a modern central bank, a banker to the government, and being the only well organized channel through which credit could be got for business purposes. When the Nigerian bank could no longer survive economically as a bank, it was swallowed up by the BBWA on 20th June, 1911, thereby putting an end to an indigenous bank in Nigeria for the time being.

1. See also G. O. Nwankwo, Nigerian Financial System, 1980.  
and C.V. Brown, The Nigerian Banking System, London: George Allen and Unwin, 1966.
2. R. Fry (1976).

#### 6.10 Appraisal of the Foreign Banks'-Operations in the Emerging Nigerian Banking System.

As already mentioned, all the expatriate banks operating in Nigeria in the early stage of banking were controlled from outside the country<sup>1</sup>. The BEWA, for instance, was subject to control from London where its board of directors was and only a very small measure of discretionary power was vested in the management of the bank in Nigeria. Consequently, one should expect it to follow the banking principles of its headquarters office overseas. The kind of competition operating in the headquarters would surely be its view of competition in the Nigerian economy in which it was operating. Most banks did not want any rivals and they could go a long way to eliminate any rival as already stated with respect to BEWA's operation in Nigeria.

One of the most important way a bank can help a developing country is in the provision of credit facilities for economic projects as well as for business ventures. However, the foreign banks' ability to grant credit was largely curtailed by the control imposed by their head office. Consequently no special treatment or consideration was given to the colonies; the same standards of granting loans and advances were set for all nationals without consideration of peculiarities of different localities. The direct result of this was that the Nigerian traders and businessmen as well as farmers found it difficult to obtain loans and advances. This tendency owed largely to the inability of these potential borrowers to fulfil all the necessary conditions for the accommodation of loans and advances.

The Colonial Bank which started operation in 1916 also followed the same rigid principles of banking as obtained in its home office with respect to the granting of credit. Since these two banks were being controlled from outside Nigeria<sup>2</sup>, the suspicion, however unjustified, no doubt arose among the indigenous businessmen that these banks did not necessarily operate with the interests of the country uppermost in their minds. To many Nigerians,

1. See G.A. Jawando, "Trend in Commercial Bank Ownership in Nigeria, (9th Annual Banking Seminar)" Nigerian Institute of Bankers, Sept. 1972  
 2. C.V. Brown (1966).

therefore, these banks were only serving the economic needs of the foreigners rather than the indigenous people. Consequently, there was a general feeling of resentment against the two banks for not giving credits to many Nigerians who needed credit, but only interested in their deposits. Only very small minority of indigenous businessmen who could fulfill the necessary conditions got loans from the foreign banks.

Perhaps one should not lay the blame for not providing enough credit to the indigenous people squarely on the foreign banks since they were being guided by the sound banking principles operating at their home offices. To be sure, they were in business to make profits and in order to do this, they had to abide with those basic banking principles, some of which pertained to the granting of loans. Thus banks would not grant credit to people except they were quite sure of repayment at maturity. Most ultimate borrowers in the Nigerian economy at that time were often very poor to own property which would have served as collateral. The first Nigerian indigenous bank ever, the Anglo-African bank ended up in being absorbed by the ABWA when it could no longer survive as a result of immense default by its indigenous customers.<sup>1</sup>

It should also be understood that for the local Nigerian traders and farmers, the habits of borrowing from the banks did not develop early since they relied on trade credit and small loan from moneylenders. For the indigenous traders, they used the banks as a safe and secure place to store their money. The illiterate Nigerian traders would prefer credits from the unorganized credit institutions since such credits were readily available on request without any ceremony in terms of rigid procedures and writing of documents associated with the modern credit institutions.<sup>2</sup> The expatriate banks did give loans to small number of Nigerian businessmen only if they were traders since the banks believed that after the sales, these traders would repay the loans from the proceeds. However, this type of loan was not scarce to get since many expanding commercial houses such as UAC, the Royal Niger

1. See the discussion on unorganized credit in chapter VI

2. See G. D. Paton (1949) Report on Banks and Banking in Nigeria, Sessional Paper No. 7 available in the University of Lagos Library.

company, the John Holt Company and many others, did give loans to large number of Nigerian traders in form of trade credit. What the Nigerians could not get was the medium and long term loans which, of course, the commercial banks, though well abled, could not grant because of the possible violation of the sound banking principles they so much enjoyed and cherished since the time immemorial. This apparent unwillingness to grant loans to the indigenous businessmen who could not procure collateral securities had led to old time accusation of the foreign banks as discriminating against Nigerians. The counter accusation on the part of these banks was that the Nigerians were poor risk. Many Nigerians who were well educated were, therefore convinced that the establishment of indigenous banks would be the only solution to their problems of shortage of working capital. This desire for Nigerian banks was put into reality between 1929 and 1952 as is being discussed below.

#### 6.11 The Establishments of other Indigenous Banks in Nigeria

After the demise of the first ever indigenous bank in Nigeria in 1911 as already stated, there was no other indigenous bank established until 1929 when the Industrial and Commercial Bank Limited was established by a few indigenous businessmen cum moneylenders based in Southern part of Nigeria. However, owing to lack of banking experience, competent personnel and the on-going teething competition in the banking industry, this bank went into financial liquidation within a year of its establishment. To a large extent, the bank's operation and lending policies did not augur well with to the standard doctrine of banking. Loans were awarded to people who could not even provide good collateral securities. While this might easily ruin a bank of fragile economic resources, the presence of unfair competition could also send packing any bank with great banking experience. In view of the nature of banking competition in the country by that time as discussed earlier, only banks with financial supports from big banks of international repute could survive as new banks, except of course, the one established by the government or which enjoys its financial support.

1. See the comments made on the type of securities Nigerian borrowers usually presented in Newlyn and Rowan's Money and Banking in British Colonial Africa, p. 82.

Another indigenous bank which started operation but collapsed after some years was the Nigerian Merchantile Bank. This bank lasted till 1936 when it went into liquidation as a result of competition.

Success in indigenous banking began in 1933 with the establishment of the National Bank of Nigeria. However, this bank owed its survival to the financial backing it enjoyed readily from the then Western Nigerian Government which was determined to see that an indigenous bank was firmly established in Nigeria to cater for the credit needs of the country in the context of the developing nature of the economy. Thus inspite of various times of financial difficulties in the life of National Bank, the bank was able to weather the storm of the raging competition and since 1970s, it has been growing in financial strength as reflected in its huge deposit liabilities from over ₦120 million at the end of 1976 to over ₦300 million by the end of 1985<sup>1</sup>.

The National Bank of Nigeria, in common with the other big banks in the country now owns offices in some financial centres of the world, apart from over 80 branch offices it has in Nigeria. Its paid-up capital and reserves had risen considerably from under one billion naira in 1976 to over one billion naira by the end of 1985. In terms of personnel management, the staff strength of this bank had grown from 601 in 1966 to 1,859 by the end of 1985.

The second surviving indigenous bank is called Wema bank. This bank was initially established by a group of businessmen and moneylenders with a fully paid-up capital of just ₦10,000, which was later increased to ₦25,000 in accordance with the requirements of the Nigerian Banking Ordinance of 1952. Like the National Bank of Nigeria before it, its loan policies were too liberal to the extent that over 70 per cent of its deposits was loaned out by the end of 1958 fiscal year<sup>2</sup>. Hence the bank could only operate as a private banking institution until 1960 when it lost control of its management to the then Western Nigerian Marketing Board which finally took it over in 1969.

1. See the National Bank of Nigeria Annual Reports, 1976 - 1985.

2. See R. Fry (1976).

The third surviving indigenous bank, the African Continental Bank Ltd., also owed its continued existence to the financial support it received from the then Eastern Nigerian Government. This bank, like the National Bank of Nigeria has experienced considerable financial crisis from time to time owing to its liberal loans policies. However, inspite of strong competition, it has been able to survive with more than 50 branches in Nigeria and about three branches in some financial centres of the world.

While the National Bank of Nigeria, the Wema Bank and the African Continental Bank were so lucky to survive, many other indigenous banks which were established after them before the 1952 Nigerian Banking Ordinance<sup>1</sup> were not so lucky. Because these indigenous banks that were established were so many and so short-lived, some Nigerian economists have referred to the period 1947 and 1952 as the Indigenous mushroom banking period.

The question which easily comes to mind is "Why did many banks developed and failed during the period 1947 and 1952?" In other words, "What caused the indigenous banking boom?" Many writers have tried to answer the question, but there seems to be no agreement on the actual cause of this banking phenomenon. Newlyn and Rowan<sup>2</sup> (1954) among others, attributed the main cause to the very appointment of Paton Commission of Enquiry into the banking business in Nigeria by the government in 1948. The reason for the appointment of Paton Commission was because of the abuses in the Nigerian banking system which had resulted in losses of money by many bank customers. Since the action of the government was to put a stop to the abuses in the Nigerian banking system, thereby safeguarding the interests of the public against the unscrupulous banks, the argument was that owing to the uncertainty about what government would do in the aftermath of the Paton's Commission's Report, the Nigerians decided to establish banks. However, while this might be part of the reasons for the indigenous banking boom, it is certainly not the only one. There are other reasons. The reason advanced by the earlier writers such as Newlyn and Rowan must be challenged on the strength of available relevent statistics, as argued by Nwankwo (1980).

See Nigeria Banking Ordinance, 1952, Lagos

2. Newlyn and Rowan (1954), Money and banking in British Colonial Africa, (London

It should be realized that in view of the on-going competition in the banking system at that time, anybody wishing to dabble into banking business must have huge financial resources. Furthermore, the number of banking establishments at that time were so few that they could not satisfy the credit yawning of the Nigerian populace. Besides, those banks as at that time were largely foreign-owned and they were much more in favour of the foreign nationals to which they gave credit while leaving the indigenious businessmen to the mercy of unorganized financial institutions. Thus in such a situation of excess demand for credit, the urge could be too strong be ignored by anybody with enough financial resources to establish banking business in order to tap the potential profits the system could offer. Moreover, there was no regulatory barrier to entry into banking business in Nigeria. All that was required was to register as a banking company.

In summary, therefore, three basic factors can be adduced for this indigenious banking boom in Nigeria during that period. One is the availability of funds, the second is the apparent profitability associated with the banking business at that time because of the lopsided banking services being provided by then by the few available banking institutions and the third is the absence of any strong government regulation on banking business.

The availability of fund factor raises another question. Where did the funds come from? Again many writers tried to find answers to this question since the establishment of a bank required a huge amount of capital which was very hard to come by. One school of thought, for instance, argued that the boom in indigenious banking coincided with the period when the World War II had just ended. Thus the huge profits made by people during the war from selling very vital products which were scarce as a result of war. The dislocation and distrupction of producing channels caused by war only created price inflation in the economy and this had benefited only the few traders who were able to keep up with the supplies of essential commodities. In support of this argument, it

1. See G. O. Nwankwo (1972), "Indigenisation of Nigerian Banking", The Bankers Magazine, July, pp. 15-21; Also see chapter 9 of Nigerian Financial System by the same author on his view on expatriate banks alleged discrimination.
2. See also Zik, Selected Speeches of Dr. Nnamdi Azikiwe, (Cambridge 1961)

should be remembered that during the World War II, Nigerians as well as other nationals under the British colonies actually served under the British Royal Arm. They provided the take off bases as well as many vital scarce products such as vegetables, oil, <sup>1</sup>cocoa, timber and tin. The huge proceeds from the sale of these products were accumulated in the hands of indigenous people involved in such trade. Furthermore, it must be strongly stated that most of the indigenous bankers who started banking business were most probably formerly the age-long moneylenders who were operating in the Nigerian economy to cater for the needs of those who could not obtain credit from the banks. The interview held with some farmers in the Northern part of Nigeria confirmed that many farmers turned to the moneylenders because they could not get loan from the bank. Since the moneylenders charged very high interest on their loans, they were able to accumulate large amount of money with which they started their banking business. A well known example was the originator of the Agbonmagbe bank which is now known as the Wema bank. The chairman of this bank when it was first established started as a moneylender and provided all the necessary capital in partnership with another moneylenders as already mentioned. Apart from moneylending business which they did not do openly for fear of being caught by government officials, many of them were largely successful traders and businessmen. (See Chapter V).

The unorganized credit institutions like money-lending has had a long history and exists till today in every country of the world in one form or the other. In fact in most countries of the world, banking institution evolved from the unorganized credit institutions. In the early days of banking in Britain when the Goldsmiths were pioneering the art of banking business, they were certainly in an unorganized form in the absence of any legislative control. Even with the present level of development and the adoption of modern computer technology by many banks in Britain and other developed countries, the informal or unorganized credit institutions are still operating in various degrees and forms as already mentioned in chapter V. Unlike developing countries,

1. See G.K. Helleiner (1966), "Agriculture, Government and Economic Growth in Nigeria", Irwin Homewood Ill.

most of which find it difficult to control the operation of these unorganized institutions, most developed countries have succeeded in bringing their own unorganized institutions under the ambit of law. The various pawnbroking houses in Britain are equivalent of the moneylenders in developing countries but they operate under the law. They give loan to people at exorbitant interest rate and in fact, because of the social security system, some ultimate lenders who find it difficult to obtain loans from banks often pledge their weekly social security allowance to obtain loans from the loan shops or pawn-broking houses.<sup>1</sup> Many such borrowers have become engulfed in debt that it seems they will never be able to repay in full. For example on August 15th 1985, it was reported in Thames News at 1.30 p.m. that some loan shops hired collectors who go about collecting debt from borrowers every week. On 12th June, 1986 it was also reported by the South East News of BBC One on an interview by the cameraman of some borrowers on the nature of interest rate charged by loan sharks operating in London. It was reported that many borrowers pay more than 100 per cent interest rate on loans borrowed. In fact one borrower who was interviewed live reported that she used to run away from home whenever the loan collector called because she found it difficult to pay back. In spite of the high rate of interest being charged, it was reported that the business of moneylending continues booming, because of the high patronage being enjoyed from those in desperate need of credit. Since London is a cosmopolitan city, one is, however, not sure whether those who are still borrowing from the loan shops in spite of widespread of banking services are foreigners or British citizens.

In India, there were many professional moneylenders<sup>41</sup> who collected deposits in the form of money from their clients for safe custody and from this practice, some indigenous banking institutions have emerged. Thus Nigerian case of moneylender becoming indigenous banker is not an isolated one.

1. See G.K. Helleiner (1966).

On the question of potential profitability of banking business, the indigenous banking entrepreneurs in Nigeria had visualized the prospective profitability climate the Nigerian economy offered at that time. The high demand for agricultural products by the overseas manufacturers created considerable growth in export trade in Nigeria and hence growth in National Income. For example, as can be seen from table 2 in chapter V, the agricultural sector of Nigerian economy accounted for ₦681.3 million of the total domestic product of ₦1377.4 million. The share of agriculture increased to ₦778.2 in 1951 which represented more than 14 per cent of that of 1950, and in 1952, the share increased further by approximately 29 per cent, a strong indication of booming economy of a country where the agriculture was the mainstay. Thus the need to finance agricultural projects by farmers to meet the growing demand for cash crops was far too great to be met by the few banking institutions, majority of which were owned and operated by expatriates and which of course were not ready to give loan accommodation to indigenous businessmen who could not provide suitable collateral securities. Since the general economic outlook in the country was very promising, any Nigerian with adequate knowledge of the local people and their credit needs could easily dabble into banking business. The expatriate banks at that time catered for the needs of government and parastatals as well as the foreign companies, while the indigenous banks concentrated on the small indigenous businessmen market. The foreign banks collected large deposits from the government and other foreign firms and government officials. For example as can be seen Table 6.4 the foreign banks had a total nominal capital of ₦6 million, paid-up capital of ₦2.4 million, deposits of ₦0.8 million and a total reserve of ₦2.82 million in 1916 as against a total nominal capital of ₦0.2 million, paid-up capital of ₦0.05 million a total deposits of ₦0.01 million and a total reserves of ₦0.002m. for indigenous. In percentage terms of the totals for the economy, the foreign bank had 96.8 per cent of the total nominal capital

1. Also see HETLEINER (1966) on the importance of agriculture to Nigerian Economy.

THE RELATIVE SHARE OF THE EXPATRIATE AND THE INDIGENOUS BANKS IN  
 TOTAL NOMINAL CAPITAL, PAID-UP CAPITAL, RESERVES AND BANK  
 DEPOSITS IN 1916, and 1951 - 1952  
 ( in Million Naira )

Items	Total			1916						1951						1952					
	1916	1951	1952	Expatriate		Indigenous		Expatriate		Indigenous		Expatriate		Indigenous		Expatriate		Indigenous			
				Abso- lute	%	Abso- lute	%	Abso- lute	%	Abso- lute	%	Abso- lute	%	Abso- lute	%	Abso- lute	%	Abso- lute	%		
Nominal Capital	6.2	8.045	10.95	6.0	96.8	0.2	3.2	8.0	99.4	0.045	0.6	10.0	91.3	0.95	8						
Paid-up Capital	2.45	4.53	6.32	2.4	97.9	0.05	2.1	4.5	99.3	0.03	0.7	5.5	88.6	0.95	11						
Deposits	98.8	98.51	106.1	0.8	99.9	0.01	1.3	97.8	99.2	0.71	0.8	97.9	92.2	8.2	7						
Reserves	2.822	5.1	9.7	2.82	99.9	0.002	0.04	5.0	98.0	0.1	2.0	8.2	84.5	1.5	15						

Sources. Compiled from various sources since the data were just scattered about in Nigerian Government Gazette,  
 Ministry of Finance and Federal Office of Statistics.

as against 3.2 per cent share of the indigenous banks. While the foreign banks shared 97.9 per cent of the total paid-up capital, 98.7 per cent of the total deposits and 98.6 per cent of the total bank reserves, the indigenous bank which was only one in 1916 as against two foreign banks had 3.2 per cent, 2.1 per cent, 1.3 per cent and 1.4 per cent share of the total nominal capital, paid-up capital, deposits and bank reserves respectively. In 1951, the share in the total nominal capital by the expatriate banks had increased considerably to 99.4 per cent as against only 0.6 per cent for the indigenous, and the share in total deposits was down to 99.2 as against a share of 0.8 per cent for the indigenous banks. However, in 1952 the share in total deposits of the foreign banks had fallen down to 92.2 per cent while the indigenous banks increased their share to 7.8 per cent. This high increase in deposits by the indigenous banks can be accounted for in terms of the large increase in the number of indigenous banks which reached its peak in 1952. Unfortunately, because of the absence of lender of last resort, many of the indigenous bank collapsed. The foreign banks on the other hand had no liquidity problems since they were just branches of the giant banks in economically advanced countries.

Thus considering all the reasons above, one needs not wonder why there were so many indigenous banks established in Nigeria between 1947 and 1952. However, one thing is to establish a business, the other is to make it a success. The failures of many of these indigenous banks owed largely to several factors apart from the absence of a central bank already mentioned. Perhaps the most important of these was the nature of the banking competition which is discussed together with other reasons below.

#### 6.12 Factors Responsible for the High mortality of Indigenous Banking Business

Prior to the establishment of Central Bank of Nigeria, the general structure of Nigerian banking system was one in which two classes of banking institutions were operating, namely the expatriate and indigenous. In the newly emerging Nigerian economy at that time, there was a situation of excess demand for credit

largely because of the loan policies of expatriate banks which were quite unfavourable to prospective Nigerian borrowers, more especially those who were not able to provide good collateral securities. The few indigenous banks which were weakly operating could do little to satisfy the credit needs of the indigenous because of the low level of their deposits, the nature of their depositors which were largely small savers most of which were term savers and more importantly because of the on-going cut-throat competition among the banking institutions in the economy. (See Table 6.4 for the relative shares in the total deposits by the foreign and indigenous banks). In a situation of high demand for credit as well as virtual absence of any legislation on banking, people with necessary funds found it easy to establish banking business, but found it difficult to survive. The result was that there were many banking businesses in Nigeria without strong financial foundation.

As a direct action towards the building of a virile financial system in Nigeria, the banking ordinance of 1952 was promulgated consequent upon recommendations of Paton Commission Report.<sup>1</sup> However, while this Ordinance laid the first legislative banking foundation ever, it represented a sharp axe through its various provisions against the weaker indigenous banks already in operation and a guardian of banking system for the few which could meet its requirements.

The absence of central bank in Nigeria until 1959 means that those indigenous banks which found themselves in financial problems had no option but to liquidate. This is why the history of indigenous banking in Nigeria was more or less the history of failure and success. The successful ones are largely state-owned, unlike in most countries of the world like U.S.A. and Britain where State support for banks were in those days transmitted through the Federal Reserve Bank or the Bank of England respectively.

Other reasons for the failures of those indigenous banks which could not get State's support were very common among the developing countries of

1. See P.D. Paton (1949), Report on Banks and Banking, Sessional Paper No. 7.

of the world and also at the early stage of banking in most developed countries of today. Competition aside, corruption among the bank officials, acute mismanagement of funds, and lack of banking experience were some of the factors which caused collapse of many indigenous banks in Nigeria.

As already mentioned, bank failure in Nigeria is not an isolated case. For example in India there was also a record of high banking mortality between 1833 and 1860 which was a direct consequence of fraud and defective auditing in common with Nigeria. The Paton Commission Report gave a very clear picture of one case of corruption associated with the failure of one of the indigenous banks which can be quoted as follows:

" . . . in one case it was found that Managing Director of the so-called bank was a man with a shady past. The prospectus originally issued by the 'Bank' was a highly misleading document. It gave prominence to names of companies' solicitors, auditors, and secretary who were leading London firms. These firms had never been informed that their name would appear on the prospectus and when their attention was drawn to it, they ceased to have any dealings with the company. Prominence was also given to the authorized capital which was stated to be ₹200,000. The state of company's records was also chaotic that liquidators were unable to find out what the paid-up capital was though it would be safer to assume that it was small in relation to the authorized capital. The liquidator found it impossible to produce anything to get an accurate statement of the position."<sup>2</sup>

In most developed countries of the world, bank failures were often a direct consequence of competition rather than mismanagement. For example, in U.S.A., the high mortality rate for banking at the early stage of commercial banking was ascribed largely to overbanking which resulted in intense competition among banks for customers' deposits.<sup>3</sup> The overbanking was so intense that a village of just 2000 people were often served by three or more banks. In the case of Nigeria, however, the indigenous banks were established when the major expatriate banks were in keen competition among themselves for larger share of Nigerian banking market.

1. K. L. Gupta, (1959) The Reserve Bank of India and Monetary Management
2. See P.D. Paton (1949)
3. See W.R. Goldsmith (1958), Financial Intermediaries in the American Economy since 1900 Princeton University Press

Although the number of banking institutions were very small relative to the geographical size of the country, only the few who were educated at that time were able to patronize those institutions while the majority of the people made use of the unorganized financial institutions. Hence the competition among banks was real than apparent. The establishment of indigenous banking institutions only aggravated the intensity of competition which consequently resulted in the collapse of many indigenous rather than foreign banks. Apart from the on-going competition, the inexperience of these indigenous banks in banking business only helped to hasten their liquidation, for they granted loans to indigenous people who could not even present collateral and this was contrary to the long cherished banking tradition and expertise associated with the foreign banks. Most of the foreign banks also enjoyed considerable support from the colonial government to the extent that one of them was a banker to colonial government and large majority of government officials patronized only the foreign banks.<sup>1</sup> Even the celebrated banking ordinance of 1952 can be easily construed as a form of covert support for the foreign banks since its provisions were designed to deter the potential indigenous bankers from establishing while at the same time seemed to deny life to those already established, majority of which could not meet all its requirements. Consequently, the expatriate banks' market was expanding while that of the indigenous was continually contracting as more and more indigenous banks were liquidating.

### 6.13 The Nigerian Commercial Banks Under the 1952 Banking Ordinance

The 1952 Banking Ordinance was clearly a product of the Paton Commission Report of 1948 which aimed at bringing the banking business in Nigeria within the ambit of law. Although the ordinance marked another important milestone in the development of banking system, yet it did not measure up to expectations since it did not provide any reserve force! While it required all the banks in Nigeria to maintain adequate liquidity at all times, it certainly failed to provide

1. See Central Bank of Nigeria, "The Growth of Commercial Bank Activities 1959-66", Economic and Financial Review, Vol. 6 No. 1, June 1968 on early history of Nigeria's commercial banks.

a lender of last resort to assist the banks in their rainy days. This is a serious omission and very detrimental to indigenous banks who did not have the financial opportunities the expatriate banks had, since they were extensions of overseas banking giants. The seriousness of the absence of the lender of last resort will be appreciated if it is known that the Nigerian financial system by then was such that had no money and capital markets in which banks could operate to cash on and to reinforce their liquidity position. Under this law, therefore, the operation of banks, more especially the indigenous ones, was at a very great expense in terms of loss of investment income since they must by law maintain all their liquid in idle and barren cash. The indigenous banks had no source of financial reinforcement in time of need and neither did they have any investment outlet for their surplus funds to earn profits. In this aspect, the expatriate banks had financial hedge over the indigenous banks in that the former relied heavily on their headoffice overseas as lenders of last resort while at the same time, the entire London Money and Capital Markets represented a sure outlet for their investible surplus funds. This is also one of the reasons why the expatriate banks were more successful than the indigenous ones.

Since 1952, there was no major development in the Nigerian banking system until 1959 when the long debates over the establishment of Central Bank of Nigeria were actually actualized. The importance of this development cannot be overemphasized since central banks all over the world are the apex of financial institutions and they variously perform the role of lenders of last resort.

#### 6.14 The Establishment of Nigerian Central Bank

In any market economy, the central bank stands as the apex of financial system to perform its major role such as providing a reserve force and leadership for the banking system. Realizing the importance of a central bank in any economy the Nigerian authorities appointed a commission known as Loynes Commission in September, 1958 to look into the possibility of establishing a central bank. The outcome of this commission found expression in the establishment of the Central Bank of Nigeria on 1st July, 1959. This was immediately

1. See C.V. Brown, "The Effectiveness of Monetary Policy in Nigeria, pp. 47-59" in Conference Proceedings, Nigerian Institute of Social and Economic Research, Dec. 1966.

followed by the establishment of the Nigerian Money and Capital Markets on April 1960. The establishments of both the Central bank and the Nigerian Money and Capital Markets were no doubt a watershed in the history of Nigerian Financial System. Because of these developments, the **first** Treasury bills ever were floated in the Money and Capital Markets in 1960, thereby providing an investment avenue for the Nigerian commercial banks with surplus liquid funds. The task of building an efficient banking environment which started in 1959 with the establishment of Nigerian Central Bank continued through 1960 and on **June 5, 1961** the Lagos Stock Exchange started operation (See chapter 10).

With the establishment of Central Bank together with other financial institutions already mentioned, the Nigerian Financial system became firmly established.<sup>1</sup> A direct result of these developments in the monetary economy of Nigeria was the establishments of eight new commercial banks between 1959 and 1962. In 1959 alone, four new banks started operation. What is of great interest is that all the eight commercial banks established during this period are still in business today along with other banks before them. The survival of these banks owed largely to the role being played by the newly created financial institutions - Central bank, Money and Capital Markets, Stock Exchange Market - in providing lender of last resort services, profitable investment outlets, and avenue for issuing and selling shares respectively. Table 6.5 depicts the trend in commercial bank investments between 1958 and 1966. In June 1958 90.1 per cent of the total commercial bank investments went abroad. However by June 1966, the trend had reduced very considerably to 0.12 per cent of the total. In June 1960, only 11.8 per cent of the total investment actually went abroad. This clearly shows the importance of Lagos Stock Exchange Market established in April 1960 as well as the Money and Capital Markets.<sup>2</sup> Commercial banks invested largely on treasury bills as can be seen from the table. In percentage term, their investment in treasury bills was between the range of 80.8 and 64.7 per cent in 1960 and in 1966, it was between 93.6 and 77.8.

1. See C.V. Brown, The Nigerian Banking System, 1966.

2. This is treated in chapter 10.

Table 6.5

## COMMERCIAL BANK INVESTMENTS: 1958 - 1966

(Quarterly Figures in Thousand ₦)

YEARS AND QUARTERS	Total Investment ₦	In Nigeria		Others ₦	Abroad	
		Treasury bill ₦	% of Total		Amount ₦	% of Total
<u>1958</u>						
March	3744	-	-	380	3364	89.8
June	5288	-	-	522	4766	90.1
September	6562	-	-	522	6040	92.0
December	1196	-	-	522	674	56.3
<u>1959</u>						
march	6678	-	-	940	5738	85.9
June	10162	-	-	1296	8866	87.2
September	630	-	-	212	418	66.3
December	2632	-	-	1402	1230	46.7
<u>1960</u>						
March	2410	-	-	1866	544	22.6
June	12278	9066	73.8	1758	1454	11.8
September	11026	8910	80.8	1758	358	3.2
December	5710	3694	64.7	1658	358	6.3
<u>1961</u>						
March	10802	8174	75.6	2570	58	0.5
June	15812	13296	84.1	2458	58	0.3
September	27356	24832	90.8	2466	58	0.2
December	8658	5942	68.6	2658	58	6.7
<u>1962</u>						
March	12654	9662	76.3	2934	58	0.4
June	21794	17740	81.4	3996	58	0.26
September	21180	17734	83.7	3388	58	0.27
December	10002	6740	67.4	3204	58	0.58
<u>1963</u>						
March	9290	5818	62.6	3416	58	0.62
June	13734	10684	77.8	2992	58	0.42
September	17086	13958	81.7	3070	58	0.34
December	4684	2382	50.8	2244	58	1.23

YEARS AND QUARTERS	Total Investment N	In Nigeria		Others N	Abroad	
		Treasury Bill N	% of Total		Amount N	% of Total
<u>1964</u>						
March	15760	13536	85.9	2166	58	0.37
June	20528	18392	89.6	2078	58	0.28
September	22524	19400	86.1	3066	58	0.25
December	13978	10726	76.7	3194	58	0.45
<u>1965</u>						
March	19642	16412	83.5	3172	58	0.29
June	15820	12652	79.9	3110	58	0.37
Sept	36152	33106	91.6	2988	58	0.16
December	15910	12906	81.1	2946	58	0.36
<u>1966</u>						
March	14842	11882	80.05	2902	58	0.39
June	29266	26740	90.4	2738	58	0.12
Sept	42380	39678	93.6	2666	58	0.4
Dec.	28848	22458	77.8	2674	58	0.2

Sources: Compiled from Central Bank of Nigeria Annual Report and Statement of Accounts  
CBN Economic and Financial Review of various years.

per cent which is not surprising since the banks were concerned for their obligation of keeping maximum liquidity to their depositors and lenders.

After 1959, there was no further establishment of banking business in Nigeria and even the achievement of a Republican status in 1963 did not make any difference in the nature of banking industry. The reason for lack of new established bank in Nigeria between 1962 and 1966 can be found in the more stringent banking regulations imposed on commercial banks by the Nigerian authorities largely to dissuade people from establishing bank without adequate financial resources.<sup>1</sup> Added to this was the uncertainty caused by political violence following the general election between 1960 and 1966 which finally culminated in a military coup of 1966. The reason for lack of new bank establishment during the period 1966 and 1970 may be adduced to the Nigerian Civil War which represented a period of economic and political stalemate which only shied away both foreign and home investors not only from the banking sector but also from all other sectors of the economy. One can, therefore, not expect any commercial bank to develop in such a situation of political and economic uncertainty.

#### 6.15 The Period of Government Regulations on Commercial Banking Industry

The period 1959 and 1969 witnessed the government imposition of regulations on the Nigerian banking industry through the series of legislations. At least five such banking legislations can be enumerated.

- (i) the 1958 Banking Ordinance which became operative in 1959
- (ii) the 1961 Banking Amendments Act
- (iii) the 1962 Banking Amendments Act<sup>2</sup>
- (iv) the 1964 Banking Amendments Act
- and (v) the 1969 banking Decree.

Perhaps the 1962 Amendments Act was the most stringent of all Nigerian banking legislations before it. The purpose of this Act may be divided into two, namely to protect further the interests of depositors and to enhance the Central Bank's control over the monetary system. Thus with regards to the first purpose, the indigenous banks were required by the provisions of this Act to increase their minimum capital reserve by 100 per cent from ₦25,000 to ₦50,000, while expatriate

1. See also A. Ayida, A critical Analysis of Banking Trends in Nigeria, pp. 28-38; C.V. Brown, The Nigerian Banking System (George Allen and Unwin, 1966).

2. See also the Federal Government Budget Speeches, 1962, 1964 and 1969.

banks were expected to hold assets of not less than ₦500,000 in Nigeria in order to stop the repatriation of funds overseas for investment which was the usual habit of these banks.

The 1969 Amendment Decree was further directed at the expatriate banks operation in Nigeria. This Decree required these banks to raise their paid-up capital from ₦400,000 to ₦1.5 million while at the same time each of these banks must maintain a capital-deposit ratio of between 10 - 30 per cent. In order to increase their lending capacity in the economy, this Decree raised the capital-loan ratio from 25 to 33½ per cent. Because of the urgent need to control the banking competition in Nigeria by that time, especially because of the indigenous banks, the 1969 Decree also invested in the Central Bank of Nigeria the power to monitor and vet bank advertisement and to authorise closure or opening of bank branches as well as bank amalgamation.<sup>2</sup> However, as will be explained in later chapter, it is doubtful whether the Central Bank actually made use of this power because the opening of branches and advertisement by individual banks were left to the bank's discretion until 1977. This explains why most banks concentrated their activities only in the major commercial centres of Nigeria to the total exclusion of the large number of rural areas.

In general, it can be safely said that all the amendments and legislations on banking industry so far were designed primarily to improve the banking environment, boost the public confidence in banking institutions, make the foreign banks invest more in the Nigerian economy and equip the Central bank of Nigeria with enough power to control and monitor the banking activities as well as to maintain sound and efficient financial system.

#### 6.16 The Indigenisation of Banking Industry in Nigeria:

The indigenization of banking in Nigeria took the form of acquisition of 40 per cent equity shares of the foreign-owned banks in the country by the Federal Government. The 1973 Banking decree defined the first phase and

1. For full details, see Federal Government Gazettes

2. See O. Teriba (1969), "The 1967-69 Banking Amendments in Nigeria. An Appraisal of Financial Adaptation in an Underdeveloped War Economy," NJES, Vol. 11, No. 1

under the 2nd phase, the equity share participation by the Federal Government increased by 60 per cent in 1975.<sup>1</sup>

The indigenisation of banking in Nigeria was promoted by political motives rather than economic. While it might be true that the foreign banks did not do much to give credit accommodation to indigenous customers, the radical approach taken is not the right approach since the country was still grossly in need of competent personnel in the art of banking. Thus contrary to the view held by many writers who hailed the indigenization policy it is necessary to point out the unintended consequences of this action which can be seen in the impact it had on rate of inflation. Before the indigenisation, the rate of inflation, although very high, was only 12 per cent but increased to 21 per cent when the indigenisation decree was imposed and effected. Realising the possibility of failure of this indigenisation policy, the government<sup>2</sup> quickly set up a Committee to review the Financial System of Nigeria in 1976 which made recommendations for improvement. This committee, otherwise known as "Okigbo's Committee on the Review of Nigerian Financial System" came out with a set of objectives designed to improve the commercial banking system still further. Some of these objectives which were accepted by the government, include the even spread of banking facilities in the country, encouraging the commercial banks to grant more medium and long term loans rather than short-term, encouraging the banks to take a more active role in the financing of the economic development programme of national priority and encouraging the banks to localise their decision making process. The actualization of these objectives depends on the Central Bank of Nigeria's competence and willingness to use its enormous power of control over the commercial banks in Nigeria. Unfortunately, as will be seen later, inspite of the enormous power vested on it, the CBN had shown greater lack of competence or willingness to use them.

In the next chapter is discussed the structure of Nigerian commercial bank operation and commercial bank equations, but to end this chapter, it is suffice to say that Nigerian commercial banks have grown tremendously from the initial number of 6 before 1948 to 27 by the end of 1985 which compared

1. Central Bank of Nigeria Annual Report, 1976

2. O. Okigbo (1981), Nigeria's Financial System, Longman Group Ltd London

favourably with Indian Commercial bank number of 26<sup>1</sup> if the relative population of the two country is taken into account. Further expansion in banking industry has taken the form of branch network. From 991 bank branches in 1982, by the end of 1985, these had increased to 1,248 as a result of the Central Bank Rural Banking Programme imposed on commercial banks in 1980s.<sup>2</sup> Even then, if this number of bank branches is compared with the census figures in Nigeria, it is quite clear that Nigeria is still poorly banked and hence there is greater need for more banks and branches if the habit of thrift is to be further encouraged and mobilization of savings to be facilitated.

Other aspect of banking expansion takes the form of opening of representative offices in Nigeria by foreign bankers and abroad by Nigerian banks. To be sure, the establishments of banks' representative office in Nigeria started in 1961 with the opening of representative office in Lagos by the Bank of Tokyo Limited. The number had since increased to 12 by the end of 1984. The number of representative offices abroad by the Nigerian banks stood at four while the number overseas branches stood at 5.

According to the Central Bank Report, a bank representative office represents an information centre from which the banks collect information on the economic and investment opportunities in the region where the office is established. In addition, it serves as the information centre for the business community within the region on loans and other credit facilities as well as advisory services provided by the bank represented. In the majority of cases, a representative office often heralds the establishment of a branch office in a foreign country. However, a bank representative office must be converted into a branch office before it can be allowed under the law to operate as a commercial bank. The bank of Credit and Commerce International started as a representative office, for instance, before it was upgraded to operate as a commercial bank. The Bank of Credit and Commerce International is now operating as a full-fledged commercial bank under a joint venture agreement between it and some Nigerian investors.

1. V.G. Pendharkar and M. Narasimham (1966) "The Recent Evolution of Monetary Policy in India", in the Reserve Bank of India Bulletin, April
2. Central Bank of Nigeria Annual Report, 1981-84.

## 6.19 CONCLUSIONS:

The purpose of this chapter has not only been to show how the banking institutions developed in Nigeria or the ways in which the expansion of banking system and real growth of the economy may be causally related but also to show that the chief cause of bank failures in Nigeria was the competition. The indigenous banks were not able to compete successfully with the expatriate banks which were largely extensions of banks in overseas from which they derived their financial support in the event of financial crisis. However, the indigenous banks were not so lucky and hence many of them went into liquidation while some were taken over by one of the foreign banks after a few years of operation. This explains why none of the foreign banks failed.

It has been shown that most of the indigenous banks which failed actually started as unorganized institutions. For example, the Anglo-African Bank was established by wealthy British and Nigerian traders in partnership with the shipping companies in 1899, but only to be taken over by the British Bank for West Africa in 1911. Those indigenous institutions which are still operating today, such as the National Bank of Nigeria, the Wema Bank, and the African Continental Bank, were only able to survive because of financial support they received from state governments whenever they were in financial crisis.

Failure of most indigenous banks in the past, apart from mismanagement, can also be adduced to the absence of central bank. The West African Currency Board was only established to be a channel of money supply in British West African colonies. The model of money supply under the West African Currency Board system which we developed shows that money supply in the past was a function of export trade, government expenditure and the level of income in Britain. Since the value of colonial countries exports in Britain determined the amount of British pound sterling worth of currency board money to be printed, in the event of crop failures, resulting in reduction of export, other things remaining equal, would result in a fall in money supply.

The crave for the establishment of central bank by Nigeria even before independence, was a direct result of the weaknesses of the West African Currency Board, the chief of which was its inability to prevent bank failures in Nigeria. This was evidenced by the fact that since the establishment of Central Bank of Nigeria, no indigenous bank has failed.

The growing interest in the establishment of indigenous banks in the past was generated by the credit policies of foreign banks which were alleged to discriminate against the indigenous businessmen.<sup>1</sup> Since the foreign banks failed to change their policies, the Nigerian government decided to take over 60 per cent of their equity shares in 1976.

Nigeria is relatively underbanked when compared with most nations of the world owing to the affection for cities and urban areas of the country shown by most banks. This has led the Central Bank of Nigeria to indulge in the policy of artificially encouraging and fostering the spread of bank offices, which found expression in the operation of rural banking programme. This policy is premised on the belief that Nigeria needs to develop the banking habit in order to promote further the real growth of the economy. However, the work of most economists have nothing to say about this belief (See Gurley and Shaw (1955) and Goldsmith (1955)). Moreover, the experience of bankers in Nigeria under this policy, like other countries before them,<sup>1</sup> did not seem to favour this policy according to the economic survey of Nigeria by the Financial Times, London. Since most banks are alleged to be sustaining losses in their rural branches, it is necessary that the central bank of Nigeria reviews its rural banking policy in order to find ways of compensating those banks sustaining loss or to avoid loss entirely. The expansion in banking system will continue to be in form of opening of new branches as obtained in most developed countries.

1. See Chandler (1962) p. 7

It is important to note that the former expatriate banks in Nigeria have continued to dominate the banking system as evidenced by the Table 6.6 showing the profitability profile of most of Nigerian banks. The first four banks are easily the most profitable of all the banks in Nigeria as can be seen from the table. The most successful of all the indigenous banks is the Bank of the North with more than ₦11 million naira profit in 1980 and ₦12.1 million naira in 1984. The reason behind the success of Bank of the North over all other indigenous banks may be adduced to the fact that for many years, it represented the only indigenous bank in the Northern states of Nigeria, and hence enjoys the government patronage and financial support in time of financial crisis.

The dominance of the five largest banks in Nigerian banking system is likely to continue for many years as obtains in Britain and other developed countries of the world, since they have the resources and expertise to maintain and expand their share of the market. Thus inspite of the enormous increase in the number of commercial bank - from 6 in 1960 to 27 in 1984, the five largest banks are still enjoying the lion share of the Nigerian bank deposit market. Moreover, in terms of asset size and a wide range of additional profit and performance-related information, three of these former foreign banks, namely United Bank for Africa, First Bank of Nigeria, and Union Bank of Nigeria are among the top 500 world most successful banks since 1980.

Table 6.6.

NIGERIAN COMMERCIAL BANKS PROFITABILITY PROFILE  
1980 - 1984 (In Million Naira)

Commercial Banks	1980			1982			1984		
	Net Income (N m)	Dividend paid %	Amt. of Loans granted N.m.	Net Income (N m)	Dividend paid %	Amt. of Loans granted N.m.	Net Income (N m)	Dividend paid %	Amt. of Loans granted N.m.
1. First Bank *	23.9	19.1	1074	28.2	22.2	2564	34.1	25	2960
2. U.B.A. *	22.7	26.4	1213	27.3	30.1	3781	33.2	33	4500
3. Union Bank *	20.7	27.9	964	26.9	28.1	1978	31.1	30.2	2142
4. I.B.W.A. *	11.5	37.6	379	15.2	38	580	17.8	38.9	940
5. Bank of the North	10.4	29.1	405	11.3	40.0	664	12.1	42.1	812
6. Savannah Bank *	3.2	17.4	214	4.1	18.0	250	5.2	18.9	314
7. National Bank	2.7	21.0	245	3.5	21.5	252	3.9	22.0	265
8. Societe Generale	2.3	62.8	230	2.8	63.0	250	3.1	64.0	300
9. Nigeria-Arab Bank *	2.1	22.5	31	2.5	23.0	41	2.9	23.5	43
10. Allied Bank *	1.5	27.0	32	1.9	28.0	38	2.5	41.0	42
11. New Nigerian Bank	1.2	16.2	91	1.8	18.2	98	2.0	19.5	100
12. Pan African Bank	0.17	2.5	105	0.5	3.1	120	1.0	5.0	150
13. Cooperative Bank	n.a.	n.a.	185	0.4	3.0	200	0.8	5.0	247
14. African Continental	n.a.	n.a.	403	1.2	10.2	614	2.1	12.1	702
15. Cooperative Bank of E.	n.a.	n.a.	59	0.4	9.3	65	0.8	10.5	76
16. Wema Bank	n.a.	n.a.	54	1.1	10.2	60	1.5	11.0	75
17. Mercantile Bank	n.a.	n.a.	71	0.3	10.2	87	1.0	12.5	96
18. Bank of Credit and Commerce	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	0.9	5.5	0.5
19. Owena Bank Nig. Ltd.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	0.5	9.2	0.9
20. Kano Coop. Bank "	n.a.	n.a.	98	n.a.	9.5	100	1.2	10.0	105
21. Kaduna Coop. Bank "	n.a.	n.a.	120	1.1	10.0	120	1.3	11.5	122
22. Coop. & Commerce Bank Ltd.	n.a.	n.a.	62	0.4	9.1	64	0.7	10.0	75
23. Commercial bank Credit Lyonnais Ltd.	-	-	-	-	-	-	-	-	-
24. Habib Nig. Bank Ltd.	-	-	-	-	-	-	-	-	-
25. Lobi Bank Nig. Ltd.	-	-	-	-	-	-	-	-	-
26. Progress Bank of Nig. Ltd.	-	-	-	-	-	-	-	-	-
27. Universal Trust Bank of Nig. Ltd.	-	-	-	-	-	-	-	-	-

Source: Annual Report and Accounts of the various banks for various years

\* These are banks with foreign participation.

-- The last five banks are still very new.

n.a. = Not available

## CHAPTER VII

THE GROWTH AND THE STRUCTURE OF COMMERCIAL BANKING  
OPERATION AND THE SPECIFICATION AND ESTIMATION OF  
COMMERCIAL BANK EQUATIONS, 1960- 84

## INTRODUCTION

There has been a considerable literature on the commercial banking in Nigeria on various aspects of banking operations such as sectorial and maturity distributions of commercial bank credits in the country. There is also a recent study on the branch network of commercial banks<sup>1</sup>. However, there has never been any study on the growth and mobilization of domestic savings and neither has there been any study on the effects of the lopsided distribution of commercial banks in the country on such vital banking variables like domestic savings and deposit distribution among the component states of the Federation of Nigeria. There is also no study on the distribution of volume of credit in each state which can account for the reasons for the real widespread disparities among the unit states of Nigeria. While the recent study<sup>2</sup> on the distribution of commercial bank offices in the country highlights the disparities between one state and another in terms of number of offices, it fails to relate the effects of the distribution on the nature and structure of commercial banking operations and on the distribution of money supply in Nigeria in general.

It is very important to know the growth in the volume of credit in the country and its distribution among the economic sectors as an indication of commercial banks' performance in the economy. It is equally important to examine the reasons behind the uneven distribution of credit among the states of the federation so that policy changes might be recommended to ensure even development of all the states in Nigeria.

Most writers on Nigerian commercial banking have shown greater interest in the growth of commercial bank deposits and volume of loan in the economy but have made no attempt at empirically examining the factors for the growth.

1. See A. Boyode and T.A. Oyejide (1975) on Branch Network and Economic Performance: A Case Study of Nigeria's Commercial Banks, N.J.E.S.S., Vol. 17 No. 2 pp.119-133
2. B. Ogundipe (1979), "Rural Branching and Central Bank Control, The Nigerian Journal of Economic and Social Studies, March.

Since the knowledge of those factors responsible for the growth of bank deposits and savings as well as the volume of bank credit to the Nigerian economy is very vital for the effective formulation of monetary policies, this chapter attempts to empirically examine those factors through the specification and estimation of commercial bank equations in Nigeria.

This chapter is divided into three sections. Section I deals with the commercial bank growth and mobilization of domestic savings in Nigeria while section II examines the growth of bank credit and its pattern of distribution among the states of Nigeria since the time of independence in 1960 till 1985 in relation to the distribution of bank offices, bank deposits and the amount of cheques cleared in each state. Where discrepancies occur, it tries to critically examine the reasons and recommend the policy implications to correct them. Finally, section III examines the commercial bank equations and estimate the model for commercial bank deposit and investment behaviour based on Nigerian data from 1960 to 1984. The results and their interpretations are discussed in the final part of the section.

## SECTION I

### 7.2 THE COMMERCIAL BANK GROWTH AND THE MOBILIZATION OF DOMESTIC SAVINGS

For many years, specialists in economic development have been trying to find answer to the question why the actual rates of development have always been below the attainable rates in most less developed countries. They have been concerned with how to formulate policies in a strategy of development which are capable of removing the apparent poverty, inequalities and at the same time increasing employment opportunities in less developed countries (LDC). Many economists are of the view that the reasons lie with the internal obstacles to development. However, there is a divergent view on whether the obstacles to development should be found mainly within the economies of LDC or whether there are also external forces inhibiting the economic development of LDC.

See G.M. Meier (1976) Leading Issues in Economic Development, 3rd Edition. Oxford University Press.

The solution to these problems, many economists argue, can be found in the promotion of the market mechanism or ~~comprehensive~~ central planning. There is yet to be an agreement among economists as the proper solution. However, there is a general belief that the major constraints on economic development are four one of which is the inability on the part of LDC to mobilize sufficient domestic resources or to supplement domestic resources with external resources.<sup>1</sup> Therefore, the importance of domestic savings in any economy can never be overemphasised. Because of its importance, there have been various suggestions on how domestic savings can be mobilized. One suggestion leaned on forced savings measures which may be used by the government of LDC. This includes the raising of income tax that people pay or other form of taxation which in itself has inherent economic and political problems. In Nigeria, there was an example of forced savings during the Nigerian Civil War, but this was restricted to salary-earning people rather than the generality of Nigerian working population. When the Civil War was at its critical stage, Nigerian Military Authorities imposed a compulsory saving of 5 per cent of individual worker's earning in order to raise domestic savings for the prosecution of war between 1967 and 1970.<sup>2</sup> However, political considerations forced the government to repay back the money immediately after the war.

The solution for effective mobilization of domestic savings in Nigeria as well as in any developing country cannot be found in "demand-following supply arguments" but rather in "Supply-leading".<sup>3</sup> The "demand-following" arguments imply that an economy is such that provides growing economic opportunities for profits which result in the establishment and expansion of financial institutions and hence provision of financial services. Or put succinctly, the nature of the economic environment is inducive to the financial institutions, and an example in history was that of eighteenth and early nineteenth century England.<sup>4</sup> This approach is likely to be very

1. See A.P. Thirlwall (1972) Growth and Development Chapter 12.

2. Central Bank of Nigeria Annual Report, 1971

3. H.T. Patrick, (1966) "Financial Development and Economic Growth in Underdeveloped Countries", Economic Development and Cultural Change, Vol. 14, pp. 144-89.

4. A. Gerschenkron (1962).

expensive to most developing countries including Nigeria, the more so since it was not successful in some other developed countries such as France and Italy as depicted by Gerschenkron's analysis of the Italian Industrial development in 1880s.<sup>1</sup> On the other hand, the "supply-leading" approach to financial development and mobilization of domestic savings implies the creation of financial institutions and the supply of financial assets and liabilities as well as other financial services in advance of demand for them. This approach is akin to Schumpeterian innovation financing concept in that it involves the transfer of resources from the non-growing sectors of the economy to the growing sectors. The financial institutions do this by transferring resources from the traditional sectors through collection of saving and wealth in exchange for their deposits and other financial liabilities or through credit creation and forced saving.

The "supply-leading" approach is supported by the common view held by many writers on development that many peoples in developing countries are generally incapable of a high level of individual savings for some reasons. This incapability is associated with low per capita income and subsistence income since majority of the working population depends on agriculture.<sup>3</sup> It is also a common belief among writers on developing countries that the middle and upper classes in those economies who could afford to save often indulge in luxurious and conspicuous consumption and hence low level of savings in LDC. Although there are some grain of truth in this view, the most important reason for the low level of savings should be associated with the lack of adequate vehicles of mobilizing domestic resources as well as low level of education in most LDC including Nigeria. One can argue in the case of Nigeria that given the adequate facilities and adequate knowledge of how to make use of them, Nigeria would probably compare favourably with the peoples in economically advanced countries of the world with respect to domestic savings for development purposes.<sup>4</sup>

1. See A. Gerschenkron (1962)      2. See J.A. Schumpeter (1934)  
 3. Also See J.G. Gurley and P.S. Shaw (1956)  
 4. See S.P. Schatz (1965) on The Capital Shortage Illusion: Government Lending in Nigeria, Oxford Economic Papers, Vol. 17 (July).

While the discussion about the savings will be taken up in chapter 9, it is necessary to show the importance of commercial banks relative to other financial institutions in Nigeria in terms of the magnitude of its savings deposits.

#### Commercial Banks and Other Savings Institutions in Nigeria

Traditionally, commercial banks are regarded as effective instruments of mobilizing savings from all classes of a community and also particularly more efficient than other financial institutions in the process of mobilizing savings from the lower income brackets. One reason for this is that savings with the commercial banks are more liquid than savings with elsewhere. However, the recent development in modern banking innovations such as the use of computer, and the many facilities being offered by other financial institutions such as the building societies in Britain, resulting in intense competition between banks and non-bank financial institutions only weakens the reason advanced above with respect to developed countries. But in developing countries like Nigeria, the reason is still very valid. Yet in some cases, especially savings in insurance companies are relatively illiquid since withdrawal is not possible until after the duration of a certain prescribed minimum of years if it is life insurance. Even then, the possibility of withdrawal after the duration of the minimum period depends on the willingness to take loan of some part of the actual savings without any interest. The non-bank financial institutions like insurance companies, however, are much better for the mobilization of savings of the middle and higher income groups.<sup>3</sup> Since in Nigeria, the majority of working population are in the low income brackets, the commercial banks have been more effective than any other financial institutions in mobilizing savings. The table 7.1 and figure 7.1 clearly summarise the position Nigerian Commercial banks with respect to the mobilization of national savings from 1960 to 1984. In 1960 90.9 per cent of the total national savings in the country came under commercial banks. This high percentage share of the total national savings by the commercial bank may be explained in terms of the absence or restricted level of operation of other financial institutions

1. C.A.C. Greenberg, (1975), The Role of Commercial Banking in Regional Economic Development - Philadelphia. 1945 - 1970 Ph.d Thesis. Unpublished.

2. See A.D. Bain (1981) p. See Financial Times, 1981 "The Banks and their Clients, June 8.

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Table 7.1

DOMESTIC SAVINGS IN NIGERIA 1960 - 1984 (In Million Naira)

Commercial Banks and other Savings-Type Institutions								
Commercial Banks	% Share of total	National Provident Funds	Federal Savings Bank	Federal Mortgage Bank	Merchant Banks	Others	Total	
N	%	N	N	N	N	N	N	
72.9	90.9	1.8	5.5	na	-	-	80.2	
76.0	91.2	1.9	5.4	na	-	-	83.3	
83.3	91.1	2.2	6.0	na	-	0.016	91.4	
94.2	86.4	8.9	5.9	0.5	-	-	109.0	
114.4	82.8	17.8	5.9	0.8	-	-	138.1	
141.0	81.0	27.5	5.5	1.0	-	-	174.0	
162.6	81.0	32.6	5.6	1.2	-	-	200.8	
131.2	73.9	41.4	4.9	-	-	-	177.5	
183.6	76.1	50.8	5.0	1.4	-	-	241.4	
215.4	76.6	58.6	5.1	2.01	-	0.2	281.2	
336.8	81.8	67.4	4.4	2.6	3.1	0.13	414.9	
371.8	81.1	76.2	4.5	2.9	5.8	0.2	458.5	
456.9	81.7	85.0	4.3	3.4	8.5	0.3	558.4	
582.3	99.2	93.8	4.5	4.0	8.7	0.4	586.8	
973.2	85.6	129.8	4.7	7.3	22.0	0.1	1137.1	
1572.4	86.6	159.9	8.1	11.3	63.4	0.9	1815.2	
1979.2	87.7	193.9	6.9	16.3	58.9	0.9	2255.3	
2255.1	87.0	230.4	8.0	16.8	62.4	1.3	2592.8	
2601.7	86.5	269.9	8.1	19.2	110.7	1.4	3009.7	
3702.1	88.9	306.7	7.7	27.9	117.3	1.9	4161.8	
5163.2	89.5	338.9	7.3	40.7	219.7	1.8	5769.9	
5796.1	88.3	375.3	7.1	56.0	328.0	1.9	6562.6	
6496.2	88.3	389.1	7.4	58.1	401.2	2.0	7354.0	
6709.2	88.0	412.4	7.6	59.9	432.0	2.4	7623.5	
6730.8	87.9	415.0	7.7	60.0	436.0	2.5	7652.0	
Relative Average Share	1820.7	85.5	157.8	6.1	15.7	91.03	0.73	2141.2

Source: Compiled from Central Bank of Nigeria Annual Report and Statement of Accounts as well as the CBN Economic and Financial Reviews of various years.

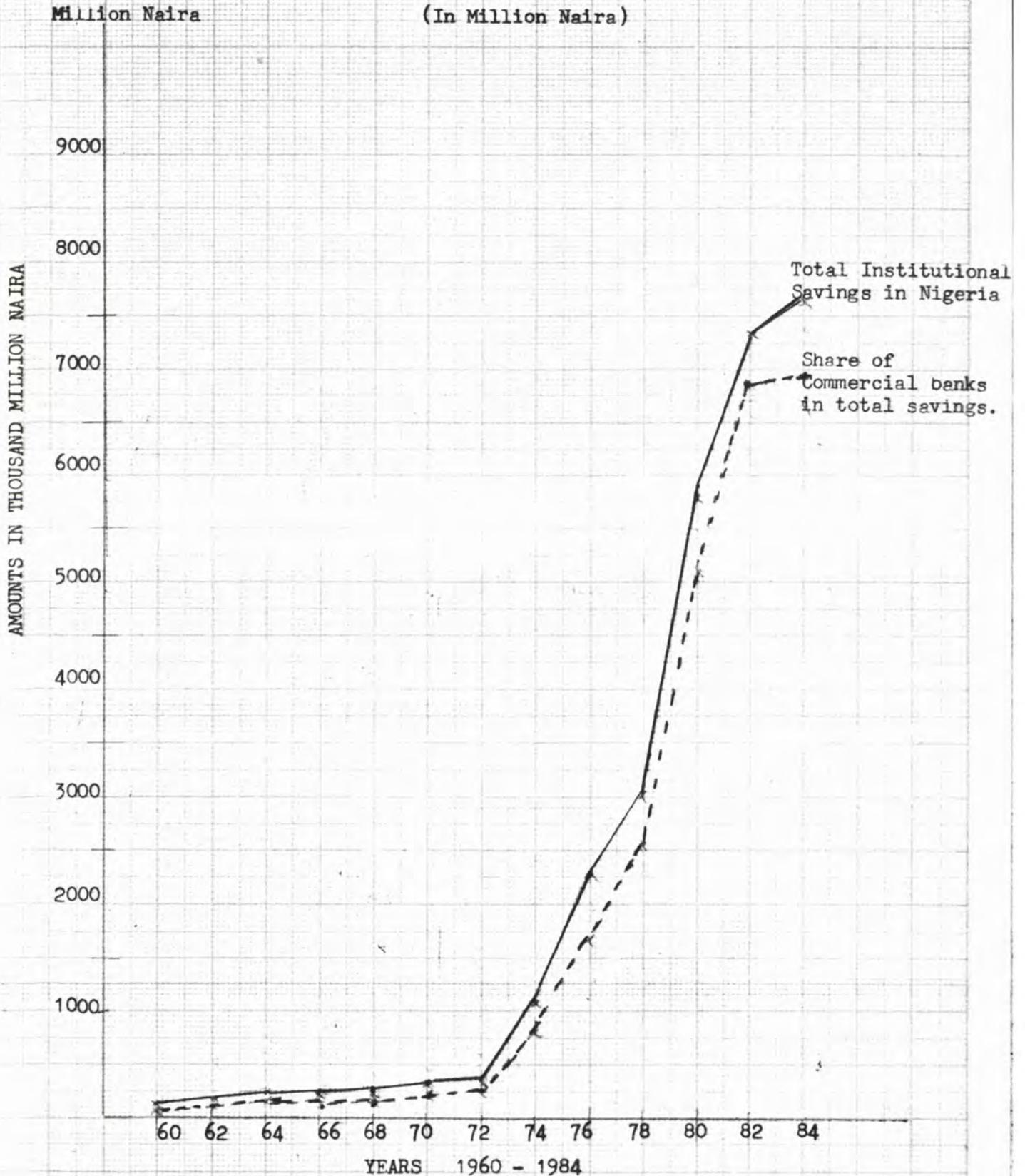
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Figure 7.1

THE SHARE OF COMMERCIAL BANKS IN THE TOTAL  
NATIONAL SAVINGS IN NIGERIA

1960 - 1984

(In Million Naira)



in the country by that time. As more and more financial institutions came into operation, commercial banks' share in the national savings continued to fall until in 1967 when it reached its lowest level in the trend with a share of 73.9 per cent, which might be due largely to the Nigerian Civil War of 1966 - 1970 which for some time cut off banks in war-affected areas of the country. However, commercial banks had its share of national savings increased considerably to 99.2 per cent in 1973 which represents their highest record. The reason for this increase was that immediately after the war, there was a general boom in economic activities generated by high government expenditure. Money was spent on huge reconstruction and rehabilitation programmes embarked upon shortly after the war. This created many employment opportunities to people and hence large disposable income and associated high propensity to save. The economic situation in the country was helped further by very high increase in oil prices which resulted in the development of Nigerian oil industry. The literacy level had improved to the extent that large number of working population could read and write and hence were able to operate savings accounts in banks rather than in other financial institutions. However, when people became aware of other financial institutions, commercial banks started to experience continued falls in their percentage share of the national savings. Thus in 1974 it fell considerably down to 85.6 per cent of the total. Since then, the banks' share has never gone down below 86 per cent. The average share between 1960 and 1984 stood at 85.9 per cent of the total average of national savings.

There are many reasons why the commercial banks in Nigeria are still controlling the lion share of the domestic savings market. One of the most important reasons relates to one of the conditions highlighted before for effective mobilization of savings which is accessibility to savings institutions. The commercial banks tried to fulfill this condition by method of branch network. The Table 7.2 below depicts how the commercial banks have been expanding through the opening of more bank branches. According to the table, while

1. See also T. Adewumi (1980) Price Policies of Opec and Their Economic Consequences for the Developing and Developed Countries. Unpublished Graduate Thesis, University of Maiduguri.

See also the Press Release by the OPEC Information Dept. in the 32nd Meeting, 1973

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Table 7.2

NIGERIAN COMMERCIAL BANK GROWTH/EXPANSION INDICES 1948 - 1984

No. of Banks	No. of Branches	Average Branch per bank	Rate of Growth of Branches	Total Deposits Net of Govt. Deposits	Average Deposits Per branch	Total Deposits as percentage of G.D.P.
				N	N	
6	7	1.17	-	-	-	-
6	44	7.33	258.57	-	-	-
33	60	1.81	54.54	-	-	-
30	65	2.17	8.33	-	-	-
27	69	4.72	6.15	-	-	-
28	71	2.53	2.89	63	0.88	4.73
20	78	3.9	9.85	81	1.04	5.23
19	79	4.15	1.28	84	1.06	4.91
19	85	4.47	7.59	92	1.08	5.28
18	90	5.0	5.88	104	1.15	2.9
18	122	6.77	35.55	117	0.95	5.73
18	189	10.5	54.15	130	0.68	5.92
13	200	15.38	5.82	137	0.68	5.5
13	200	15.38	-	154	0.77	6.16
17	209	12.29	4.5	171	0.81	6.53
17	218	12.82	4.3	191	0.87	6.73
15	227	15.13	4.1	229	1.0	7.77
15	229	15.26	0.88	265	1.15	8.49
18	231	12.8	0.87	298	1.29	24.12
13	281	21.6	21.64	241	0.86	9.26
14	308	22.0	9.6	331	1.07	12.2
13	302	23.23	- 1.95	401	1.32	7.55
18	367	20.39	21.52	626	1.70	8.93
18	370	20.55	4.6	657	1.77	10.0
19	375	19.73	1.33	794	2.11	7.25
19	381	20.05	1.6	1013	2.66	9.02
19	389	20.47	2.1	1694	4.35	9.1
19	401	21.1	3.1	2839	7.1	10.39
19	470	24.74	17.2	4164	8.86	13.0
19	477	25.1	1.49	5235	10.97	16.33
19	601	31.63	25.99	4950	8.23	14.7
19	720	37.89	19.8	6773	9.39	16.93
20	801	40.05	12.42	9585	11.96	22.14
20	869	43.45	18.48	10196	11.73	23.47
21	991	47.19	14.04	11583	11.69	27.6
23	1108	52.76	11.8	13388	12.07	32.19
27	1200	52.17	8.3	13433	12.44	35.6

Source: Compiled from the CBN Annual Report and Statements of Accounts of various years and CBN Economic and Financial Reviews of various years

the number of bank establishments has been increasing and decreasing at a low rate, the number of bank branches has continued to increase steadily. Thus bank branches increased from 7 in 1948 to 1,200 by the end of 1984 as against the number of bank establishments which increased from 6 in 1948 to 33 in 1950 and then took a downward turn to its lowest level of 13 in both 1967 and 1969. However, from 1969, it has been increasing steadily until it reached 27 licensed banks by the end of 1985. The reason for the low number of bank establishments between 1967 and 1969 owed largely to the stringent banking regulations imposed by the monetary authorities on commercial banks in the country as already stated. However, the fall in the number of banks from 33 in 1950 to 13 in 1960 was due to failures of many indigenous banks because of competition and other important reasons as already mentioned before in chapter 6.

#### b. The Growth of Commercial Banking Activities in Nigeria

One of the ways of considering the growth of commercial banks in any economy is to look at the level of bank deposits. There is no doubt that bank deposits have been increasing in Nigeria since 1940s as development process in the country continues to take pace. Thus according to Table 7.2, the total bank deposits net of government deposits stood at ₦63 million naira in 1953 and steadily increased to ₦298 million in 1966 before the Nigerian Civil War. Because of the Civil War, it fell down to ₦241 million from where it has continued to increase till the end of 1984 when it stood at ₦13433 million.

The percentage of total bank deposits to the GDP at factor costs is another method of considering the growth of banking business in any economy<sup>1</sup>. In Nigeria, this percentage has steadily been increasing and also falling in some occasions. This is clearly noticeable in 1979 when it stood at 16.93 per cent and reached a record high of 35.6 per cent by the end of 1984. The continued increase in the percentage of total bank deposits to GDP might be due largely to increase in number of bank establishments or in number of bank branches.

The competitive opening of bank branches in Nigeria became a visible

1. See U. T. Wai (1972). Financial Intermediaries and National Savings in Developing Countries New York,

outward manifestation immediately after the Nigerian Civil War and the subsequent emergence of oil boom in Nigeria between 1973 and 1975. However because of the lopsided nature of the bank spread in the country to the extent that most banks preferred opening bank branches in the business areas of the country such as Lagos, Ibadan, Kano, Kaduna, Benin City, Port Harcourt and others which are mostly state capitals, to the utter neglect of the rural areas, the Central Bank of Nigeria considered it necessary to even out the spread through its Rural Banking Programme in 1977. Under this programme, areas were allocated to each of the banks in which they must open their branch offices. For example according to Table 7.3, between 1977 and 1980, 195 branches distributed in rural areas of the country were allocated to commercial banks of various sizes by the Central Bank of Nigeria under the second phase as against 200 under the first phase as shown in table 7.4. There is no doubt that there was a great increase in the number of bank branches in the later part of 1970s, aside from the Central Bank's Rural Banking Programme and this has resulted in great increase in the level of national savings. However, the CBN Rural Banking Programme's impact on national savings is still hard to ascertain since these branches were allocated to banks without due economic consideration. Thus the Financial Times of November 3, 1981 in its yearly survey of Nigerian economy found that many banks sustained losses as a result of this policy. The following quotations from the paper speak for themselves:

"Mention the rural banking scheme to a banker in Lagos and he will put his head in his hands. 'We lose ₦100,000 a year on each one'. One banker said 'And that is not counting the ₦50,000 start-up costs' another banker said: 'We have 27 rural branches and we lose money on all 27. I don't expect some of them to make a profit for ten years'"

Interview held with some officials of First Bank of Nigeria and the Union Bank in both Lagos and Maiduguri revealed that very small number of people in the rural areas patronise their bank branches opened under the CBN's scheme and that majority of the depositors are for short term only.

Although increase in the level of bank deposits may be attributed to general increase in the number of bank offices in the country during the

1. See. Central Bank Annual Report, 1977  
 2. Financial Times, 3rd November, 1981

Table 7.3

## NIGERIAN RURAL BANKING DEVELOPMENT 1977 - 1980 BRANCH ALLOCATIONS

Names of Banks	No. of branches allocated	Percentage of total
1. African Continental Bank Ltd.	17	8.7
2. *Arab Bank (Nigeria) Ltd.	7	3.6
3. Bank of the North Ltd.	6	3.1
4. **Barclays Bank of Nigeria Ltd.	28	14.4
5. *Bank of India (Nigeria) Ltd.	6	3.1
6. Cooperative Bank Ltd.	5	2.6
7. Cooperative Bank of Eastern Nigeria Ltd.	7	3.6
8. *International Bank for West Africa Ltd.	11	5.6
9. Kaduna Cooperative Bank Ltd.	3	1.5
10. Kano Cooperative Bank Ltd.	5	2.6
11. Mercantile Bank of Nigeria Ltd.	3	1.5
12. National Bank of Nigeria Ltd.	15	7.7
13. New Nigeria Bank Ltd.	3	1.54
14. *Pan African Bank Ltd.	5	2.6
15. Savannah Bank of Nigeria Ltd.	7	3.6
16. **Standard Bank of Nigeria Ltd.	35	17.9
17. *United Bank for Africa Ltd.	27	13.8
18. Wema Bank Ltd.	5	2.6
	195	100

Source: Computed from CBN Annual Reports and Statements of Accounts, 1977.

\* All the starred banks originated as foreign banks in terms of control and ownership.

\*\* These banks with two stars have changed their names to Union Bank and First Bank respectively. Besides, they all originated as expatriate banks.

Table 7.4

NIGERIAN RURAL BANKING DEVELOPMENT: 1ST AND 2ND PHASE ALLOCATION OF BRANCHES

Name of Banks	Allocation Under 1st Phase	Percentage of total	Allocation Under 2nd Phase	Percentage of total
1. African Continental Bank Ltd.	16	8	19	7.1
2.* Allied Bank (Nig.) Ltd.	6	3	7	2.6
3.* Bank of Credit and Commerce International	--	-	6	2.2
4. Bank of the North Ltd.	6	3	19	7.1
5. Cooperative Bank of Nigeria Ltd.	9	2.5	8	3.0
6. Cooperative Bank of Eastern Nigeria Ltd.	7	3.5	8	3.0
7.* First Bank (Nig.) Ltd.	40	20	37	13.9
8.* I.B.W.A. Ltd.	11	5.5	13	4.9
9. Kaduna Cooperative Bank Ltd.	3	1.5	6	2.2
10. Keno Cooperative Bank Ltd.	6	3	6	2.2
11. Mercantile Bank of Nig. Ltd.	3	1.5	6	2.2
12. National Bank of Nigeria Ltd.	15	7.5	19	7.1
13. New Nigerian Bank Ltd.	4	2.0	9	3.4
14.* Nigerian Arab Bank Ltd.	7	3.5	6	2.2
15. Pan African Bank Ltd.	5	2.5	6	2.2
16. Savannah Bank of Nigeria Ltd.	7	3.5	11	4.1
17. Societe Generale Bank Nigeria Ltd.	-	-	6	2.2
18.* Union Bank (Nig.) Ltd.	27	13.5	36	13.5
19.* U.B.A. Limited	27	13.5	32	12
20. Wema Bank Ltd.	5	2.5	6	2.2
Total	200	100	266	100

Source: CBN Annual Report and Statement of Accounts, 1980 December.

\* All banks with asterisk originated as expatriate banks.

period under review, there are other factors which have contributed to this increase. For example, immediately after the Civil War, there was reconstruction programme coupled with the government policy of industrialisation which generated a huge demand for banking services. The fast rate of growth of national income as a result of monetization of huge government revenue from oil to finance development and reconstruction programmes created more income in the hands of working population and hence a relatively high propensity to save. Thus as the government oil revenues were increasing, the banking industry liquidity too was mounting and hence more credit-accommodation capacity for banks. Because of this favourable economic climate, the foreign banking institutions also manifested their interest in the Nigerian economy through the establishment of representative offices, standing as a bedrock for future commercial banks.

In general, some of the factors which are conducive to growth of banking services are the fast rate of growth of national income which measures the level of economic activities, the high saving propensity, the continuous inflow of funds from oil industry and the relative financial stability enjoyed by the country during the period under review. However, all these are only necessary and not sufficient conditions for the growth of banking services. The real growth also depends on the banking institutions per se to take initiative and exploit the full potential of the favourable economic environment.

The major theoretical question which has aroused the curiosity of some economists is whether savings in developing countries are institutionally induced<sup>1</sup>, that is to say whether savings are in response to the existence of or emergence of banking institutions? This calls for a clear distinction between mobilization of savings and creation of savings capability of the financial institutions. Although this section is not concerned with this question, it must be pointed out that it cannot be said that savings are not institutionally induced in spite of the evidence provided by banks' experience under the Central Bank of Nigeria Rural Banking Programme as reported earlier.

1. Also see Robinson (1952) on the causation between real and financial growth, p. 86.

See also Coats and Khatkhate, 1978.

While it is necessary to discuss other aspects of commercial bank growth in other section and subsequent chapters as they become relevant, it is sufficed to state here that the banking sector in Nigeria has no doubt, succeeded in attracting the savings of the public through a rigorous campaign of branch establishment, advertising, which is a form of non-price competition, and through improvement in banking services. Of critical consideration is their ability to cultivate banking habit among the lower-income strata by providing extremely convenient facilities especially in the southern part of the country where the literacy level is very high. Branches, sub-offices and mobile units have been established in densely populated and commercial areas of the country. Mention must also be made of the fact that banks per se have also been helped by the small competition from non-bank financial institutions as well as the various banking ordinances aimed at regulating banking activities, thereby providing suitable environment for banking operation in Nigeria. For example, the 1952 Banking Ordinance, the 1962 Banking Amendment Acts and the Banking Decree<sup>1</sup> of 1969 have all helped to create favourable environment for banking industry.

However, it is rather very difficult to establish empirically whether the banks have been able to stimulate or raise the saving propensity in the country. On a priori grounds, one should expect the existence of savings facilities to produce saving-creating effects by the shift in the savings schedule because of the existence of banks. In chapter 9 bank-spread as a variable will be tested.

## SECTION II

### 7.3 THE GROWTH OF BANK CREDIT AND THE PATTERN OF ITS DISTRIBUTION IN NIGERIA

The provision of bank credit for the economic development process has been the most important way the banks can contribute meaningfully to the development aspirations of any developing country. Commercial banks in Nigeria have no doubt contributed to the finance need of Nigerian economy inspite of the fact that for many years such credits were largely short-term in nature. As can be seen from Table 7.5, the total commercial bank credit to the economy was ₦76.6 million in 1958 and by 1967, it had increased to ₦275 million

1. For an appraisal of the 1962 amendments see C. v. Brown, "The Recent Nigerian Banking Amendments - A Tentative Appraisal," The Nigerian Journal of Economics and Social Studies, Vol. 4 No. 2 July, 1962 pp. 156-164.

ANALYSIS OF BANK LOANS AND ADVANCES IN NIGERIA 1958 - 1967. (In Million Naira)

Sectors	1958		1959		1960		1961		1962		1963		1964		1965		1966		1967	
	Amount N	%																		
Agri. Forestry & Fishing	23.0	30.8	18.8	23	22.6	19.8	25.2	21	36.0	23.3	29.3	22	60.4	24.6	68.3	23.3	4.8	1.6	3.7	1.3
Mining & Quarry- ing	0.6	0.8	0.8	1	1.0	0.9	1.0	0.8	1.0	0.6	1.2	0.7	1.2	0.1	1.3	0.5	1.4	0.5	2.0	0.7
Manufacturing	3.6	4.7	3.2	3.9	4.8	4.2	6.6	5.5	11.8	7.7	17.9	10.0	26.2	10.7	29.0	10.7	39.1	13.1	39.6	14.4
Real Estate & Constructions	5.0	6.5	6.2	7.6	7.2	6.3	11.0	9.2	10.4	6.8	12.9	7.2	11.6	4.7	12.9	4.8	25.5	8.6	22.4	8.1
Public Utilities	0.6	0.8	0.6	0.7	3.2	2.8	2.0	1.7	1.8	1.2	3.3	1.8	1.6	0.2	5.3	2.0	2.4	0.8	5.2	1.9
General Commerce	26.8	35.0	29.4	34.7	44.6	39.1	41.0	34.3	61.6	40.0	76.3	42.6	97.2	40.7	99.8	36.9	183.4	61.5	164.9	60.0
Transport & Communications	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10.3	3.5	8.7	3.2
Credit & F. Institutions	3.1	4.4	6.8	8.3	5.8	5.1	4.8	4.0	1.8	1.2	2.6	1.5	7.2	2.9	3.2	1.2	7.6	2.5	9.1	3.2
Personal & Professionals	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.6	1.9	7.3	2.7
Miscellaneous	13.0	17.0	17.0	20.8	24.8	21.8	28.2	23.5	29.6	19.2	25.4	14.2	37.6	16.1	50.2	18.6	17.9	6.0	19.1	7.4
Total	76.6	100	81.8	100	114.0	100	119.8	100	154.0	100	179.0	100	244.8	100	270.1	100	298.1	100	275.0	100

Sources: Computed from (i) CBN Annual Report and Statements of Accounts of Various Years

(ii) CBN Economic and Financial Review of Various Years.

naira which represents an increase of 359 per cent. Bank credit to the economy has continued to increase and in the later chapters, what influences this increase will be discussed along with Central Bank policies. Meanwhile, this section will concentrate on the pattern of distribution of bank credit among the unit states of Nigeria since 1958. Since there have been series of political changes in the country since 1960 shortly after independence, it is necessary to examine the pattern of distribution of bank credits according to each period as expressed in the form of political division of the country into states. Thus one can examine the period 1960 to 1967, 1968 to 1976 and 1977 to 1983. See Maps 1 and 2 showing the political divisions of Nigeria.

#### 2. Bank Credit Distribution Patterns 1960 - 1967

The total loans and advances from commercial banks to the economy stood at ₦14.0 million in 1960. Table 7.5 below showing the sectorial allocation of bank loans shows that agricultural sector accounted for more than 30 per cent of the total loan in 1958 but by 1964, its share had declined to 24.6 per cent and three years later it was well below 10 per cent. This fall in the share of agriculture in the total bank credit was due primarily to the Civil War in Nigeria with its associated considerable economic dislocations and destructions.

Commercial bank loans to manufacturing industry was 4.7 per cent of the total in 1958 and by 1963 it had increased to 10 per cent and reached the record high of 14.4 per cent in 1967. Although it is difficult to assess owing to lack of reliable data, yet on a priori ground, the distribution of manufacturing loans among the regions was likely to be uneven depending on the size and population of the various towns in each region as well as the type of industries in operation and the relative rate of unemployment. Most of the industries in Nigeria during 1960 to 1967 were largely import-substituting, producing consumer goods. Another important variable which is likely to determine the magnitude of loan to manufacturing in each region is the number of bank offices since banks the world over give loans to their customers mostly. Moreover the deposits collected from customers form the basis of the magnitude of loans and advances

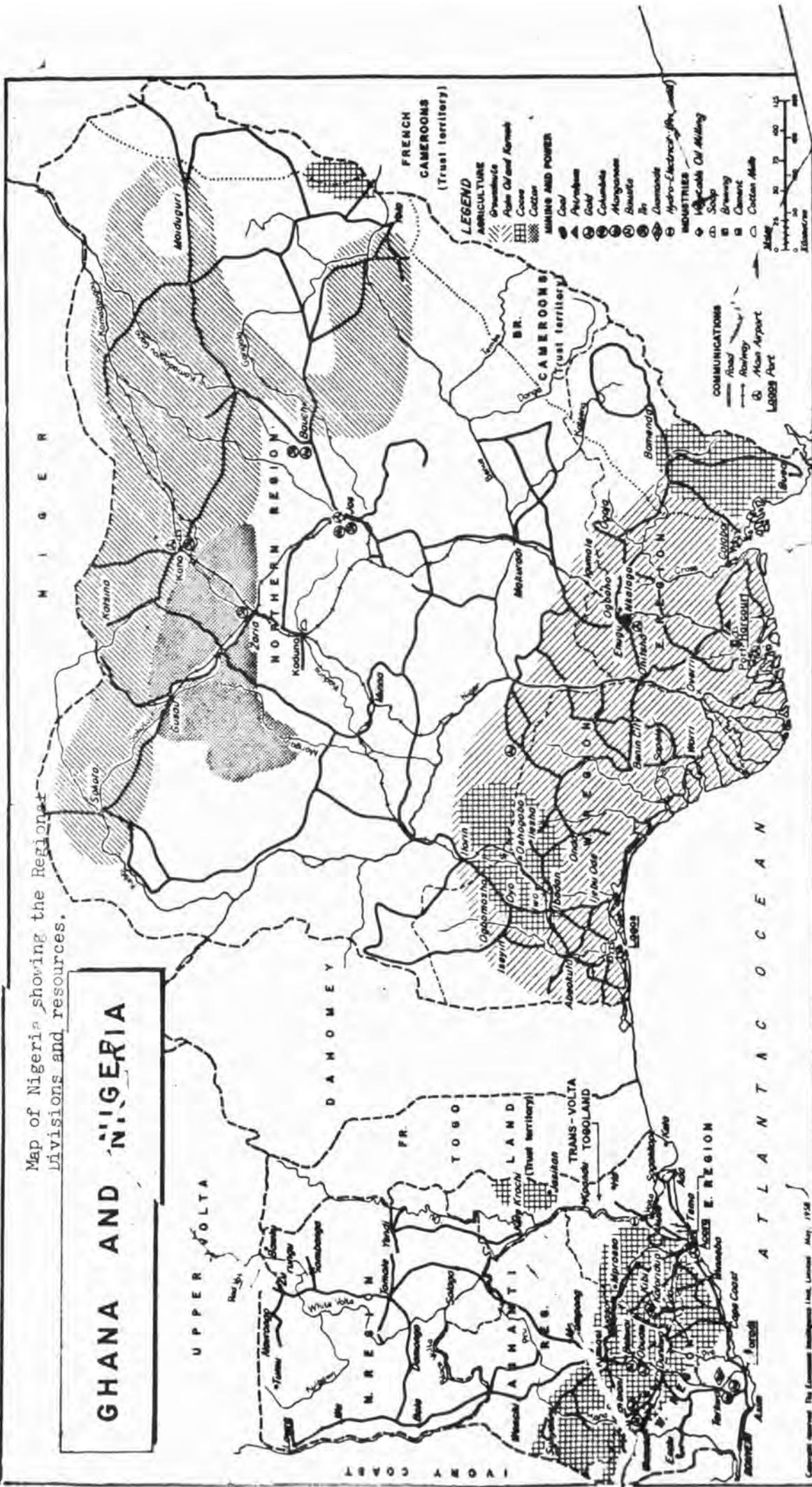
1. See The Central Bank of Nigeria, Economic and Financial Review issues from 1963 to 1978 and Federal Office of Statistics, Economic Indicators of various years.

Figure 1.11. Nigeria: the constituent states and their capitals



Map of Nigeria showing the Regional Divisions and resources.

# GHANA AND NIGERIA



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a bank can give. Tables 7.6 shows the towns and population of respective regions of Nigeria while Table 7.7 depicts the distribution of bank offices among the regions.

As can be seen from the two tables, Lagos and environs had a population of 324,000 according to 1957 census estimates, with 11 banks in operation. In percentage term this represents 44 per cent of the total banks in the country. The reason for this lion share of the total number of bank offices is quite obvious since Lagos is the Capital of Nigeria and like the capital cities of other countries of the world enjoyed all the benefits of being a nation's capital. Thus in contrast, Ibadan with a population of 460,000 had only 6 banks or bank offices which in percentage term represents only 24 per cent of the total. In terms of employment, 98 per cent of the working population of Lagos and environ were gainfully employed in government offices and industries compared with 80 per cent in respect of Ibadan. The Eastern and Northern Regions had 3 and 4 bank offices which represent 12 and 16 per cent of the total respectively. Looking at the population and percentage figures of those employed in government and industries, it is easy to see that only Kano had a population which was greater than any of the towns in Eastern Nigeria, but lower level of population employed gainfully in government and industry which was just 40 per cent. Thus density of population with high percentage gainfully employed might be attributed to the high number of banks or bank offices recorded for Western Nigeria. About four towns in the region had population of more than 100,000 with working population gainfully employed in government offices and industries of not less than 20 per cent., as can be seen from table 7.7. The Northern Nigeria was the least banked area of the country by the end of 1967 and also the least in the share of aggregate bank deposits in the economy and hence in aggregate bank loans. Table 7.7 seems to support this view because Northern Nigeria in spite of its large size, had only four towns whose population was not below 51,000 with a range of between 60 and 18 per cent of the working population gainfully employed in government

## REGIONAL TOWNS AND POPULATION OF NIGERIA ACCORDING TO 1957 CENSUS ESTIMATES

Western Region and Towns		Eastern Region and Towns		Northern Region and Towns		Lagos Territory	
Towns	Population	% Employed	Towns	Population	% Employed	Towns	Population
Ibadan	460,000	80	Rauha	62,000	78	Kaduna	51,000
Ogbomoso	140,000	25	Oritsha	77,000	50	Kano	130,000
Oshogbo	123,000	22	Port Harcourt	72,000	30	Yema/ Midupuri	57,000
Ife	111,000	25	Aba	58,000	35	Zaria	54,000
Two	100,000	20					
Abeokuta	84,000	20					
Ilesha	72,000	21					
Oyo	72,000	20					
Benin	54,000	18					
						Lagos & Enviroms	124,000
							98

Sources: Compiled from various sources: Economic Review of Ughna, Sierra Leone, Nigeria and Gambia 1954 - 1958 Nigerian Census, 1957, and the Nigerian Statistical Digest, Federal Ministry of Statistics.

Table 7.7

DISTRIBUTION OF COMMERCIAL BANK OFFICES IN NIGERIA; 1960 - 1967

Commercial Banks & Offices	No. of Offices	Regional Locations			
		N. Region	W. Region	E. Region	Fed. Territory
Standard Bank, Nigeria Ltd.	2	-	-	-	2
Barclays Bank DCO	5	1	1	1	2
The Industrial Development Bank	2	-	1	-	1
The Agbonmogbe Bank	1	-	1	-	-
African Continental Bank	2	-	-	1	1
United Bank for Africa	4	1	1	1	1
Lebanon (Beirut Riyal Bank)	1	-	-	-	1
Bank of the North	1	1	-	-	-
Bank of America	2	-	1	-	1
Chase Manhattan Bank	1	-	-	-	1
Bank of India	1	-	-	-	1
Arab Bank	1	-	-	-	1
Cooperative Bank of W. Nigeria	1	-	1	-	-
Cooperative Bank of Eastern	1	-	-	1	-
Total	25	3	6	4	12

Sources: Compiled from Annual Statistical Abstract of Nigeria and CBN Report and Statement of Account of various years.

offices and industries compared with that of each of the other Western Region and Eastern Region with a range of between 80 and 20 per cent and 78 and 30 per cent respectively. It should be emphasized that concentration of population in cities is a clear sign of concentration of economic activities of various kinds which means, therefore, a good market for the sale of financial services in accordance with demand-following supply theory as propounded by Patrick (1964) and supported by Lewis (1955) <sup>1</sup> who argued that once the real economic growth takes place, financial markets will develop, widen and consequently become more perfect, thereby increasing the opportunities for getting liquidity with attendant risk reduction and inducing real savings. Thus in those areas of the country which exhibited clear sign of economic activities, and hence profitable environment for banking business, commercial banks were established and this is one of the major reasons for the lopsided nature of commercial bank establishments in Nigeria. The Northern Region's population, though the largest, was not concentrated. People were scattered over the large territory of the region living in hamlets as farmers and pastoralists. Except those living in the few towns and commercial centres, overwhelming majority of the population were illiterate farmers and traders who were probably not in need of banks by that time. In fact, the banks would not find it economical to establish in such remote areas.

As already mentioned, the idea of rural banking programme initiated by the Central Bank of Nigeria in 1977 was meant to extend banking services and habits to the rural areas of the country, particularly in the northern Nigeria. This was in recognition of the extent to which bank services in the country have been unevenly distributed. The first phase of the programme (1977 - 80) was completed when the second phase was in progress. Under the first phase, only 196 branches were allocated to banks to be opened in the rural areas and under the second phase, (1980 - 1983) the bank branches to be opened was increased in number to 266.

The programme has somehow contributed to the improvement of banking habits

1. See also Lewis (1955), Gurley and Shaw (1955), Habakukk (1954), p.117 and Rostow (1960)

in Nigeria. For example, by the end of June 1980, a total of ₦116.4 million was collected as bank deposits in all the rural branches opened under the first phase while the total loans and advances from them stood at ₦22.4 million which represented just 19.2 per cent of the total deposits collected. The magnitude of loans awarded by the banks in the rural areas was indeed small relative to the amount of deposits collected and thus, one can argue that there is an element of transfer of resources from the rural to the modern sector of the economy. In spite of the complaints by most banks about the effects of this programme on their operation as reported earlier, there is no doubt that there has been some improvement in the mobilization of savings in the country.

**b. Bank Credit Distribution Patterns 1968 - 1976**

Table 7.8 shows the pattern of distribution of commercial bank credit amongst the 12 states of Nigeria between 1968 and 1976. As one should expect, Lagos State alone had on the average 54.2 per cent of the total bank credit because of its being economically more developed than the rest of the states. Western State followed with just 12.9 per cent while Kano State came third with 9.5 per cent. The economic importance of Western State and Kano State is largely their respective well concentrated population especially in their state capitals. With population well concentrated, large market is made available for the many industries located in the two states. For example, the population of these two states stood at 5.2 million and 5.7 million respectively. As already explained, banks always prefer commercial cities to locate their business because of the potentialities for profits the concentrated population can offer. Thus more loans were granted in those two states than in any other except Lagos as more deposits were collected. The East Central State is also an enterprising state but smaller loans were allocated to it largely because of the temporary economic dislocations caused by the Nigerian Civil War 1967 - 1970. Kwara State is easily the least favoured with bank credit with just 0.7 per cent of the total on the average. The reason for this is that during the period under review, majority of the people in the State were rural dwellers and

1. See Central Bank Report, 1981.

THE PERCENTAGE DISTRIBUTION OF BANK CREDIT TO PRIVATE SECTOR ACCORDING TO 12-STATE  
STRUCTURE IN NIGERIA BETWEEN 1968 AND 1976

(AMOUNT IN MILLION ₦)

Period	Sectors	Benue Plateau %	East Central %	Kano %	Kwara %	Lagos %	Midt %	North Central %	North East %	North West %	Rivers %	South East %	Western %	Amount for Each Sector in Million ₦	Total %	
1968	A Agric. Forestry & Fishing	0.2	-	14.0	5.1	38.0	5.1	8.1	5.3	5.4	0.2	0.5	18.1	3.8	100	
	B Mining & Quarrying	8.0	-	-	5.0	-	0.5	-	-	20.0	20.0	-	36.5	1.2	100	
	C Manufacturing	2.1	-	6.5	3.1	80.5	0.2	1.4	2.1	2.0	2.0	0.9	1.2	27.0	100	
	D Real Estate & Construction	1.2	-	1.5	2.4	59.1	2.0	1.9	1.2	1.0	0.7	-	27.0	19.9	100	
	E Public Utilities	10.2	-	12.5	10.1	16.9	6.9	5.1	3.4	5.0	5.0	5.0	19.1	5.2	100	
	F General Commerce	12.0	-	14.0	12.1	30.0	10.0	2.2	5.0	2.4	0.8	-	20.5	117.7	100	
	G Transport. & Commun.	5.0	-	13.1	4.0	14.2	3.5	8.9	7.1	3.5	3.5	1.5	27.1	9.2	100	
	H Credit & F. Institn.	-	-	3.5	5.8	56.0	0.2	0.1	0.3	0.1	0.1	5.9	-	28.1	9.1	100
	I Personal & Professional	5.0	-	10.5	6.2	40.1	2.0	1.5	1.2	2.0	2.0	2.1	-	28.4	7.2	100
	J Miscellaneous	10.5	-	20.1	10.5	25.5	8.2	8.6	6.5	4.6	4.6	3.0	-	18.5	15.3	100
1969	A-J as above	3.0	-	16.0	10.1	30.0	6.1	15.0	5.4	6.1	2.0	-	6.3	4.4	100	
	B as above	10.1	-	-	27.1	-	1.2	-	-	20.2	18.1	-	23.3	3.1	100	
	C as above	3.1	-	8.9	4.1	71.1	0.9	2.0	2.9	3.1	1.2	-	4.7	41.9	100	
	D as above	10.0	-	3.5	3.0	50.3	0.1	3.5	2.1	2.5	1.2	-	21.6	17.7	100	
	E as above	11.5	-	11.1	9.8	8.0	17.0	3.6	4.9	2.0	2.0	-	21.3	6.6	100	
	F as above	12.1	-	14.0	10.0	20.0	11.5	10.0	4.9	4.0	4.0	1.0	12.5	26.8	100	
	G as above	7.5	-	12.1	10.0	12.1	6.1	5.9	7.5	6.9	6.9	2.0	29.9	9.8	100	
	H as above	0.1	-	4.9	4.2	46.0	4.0	2.1	2.0	4.0	4.0	6.0	-	29.7	4.7	100
	I as above	6.0	-	11.0	7.5	42.0	5.0	3.0	3.5	3.5	5.1	2.6	-	20.4	11.5	100
	J as above	10.9	-	20.5	10.9	5.0	10.1	10.0	7.0	7.0	8.1	4.1	-	13.4	16.5	100

Period	Sectors	Benue Plateau State %	East Central State %	Kano State %	Kwara State %	Lagos State %	Mid-West State %	North Central State %	North East State %	North West State %	Rivers State %	South East State %	Western State %	Amt. for each Sector Million	Total %
1970	A Agric. Forestry & F	3.9	-	15.0	11.5	34.0	2.0	12.0	6.0	5.5	1.0	-	9.0	7.0	100
	B Mining & Quarrying	16.0	-	-	28.0	-	-	-	-	21.1	20.2	-	20.7	5.6	100
	C Manufacturing	3.5	-	6.0	4.5	67.0	2.1	2.0	4.1	2.2	1.5	-	6.1	76.4	100
	D Real Estate & Constrn.	11.1	-	2.5	3.5	40.0	10.0	2.0	2.5	2.9	2.0	-	27.3	26.0	100
	E Public Utilities	10.1	-	10.1	8.0	4.0	1.0	3.9	13.5	12.5	12.5	-	24.1	1.8	100
	F General Commerce	11.5	-	15.0	10.5	18.0	2.0	10.1	4.4	4.1	4.1	-	23.3	167.5	100
	G Transport & Communication	7.0	-	10.1	8.1	14.0	12.1	3.0	1.9	2.2	2.2	-	9.4	19.0	100
	H Credit & F. Institutions	1.5	-	2.0	4.5	40.0	6.5	2.5	1.9	1.5	1.5	-	27.6	2.8	100
	I Personal & Professionals	11.0	-	10.1	8.0	12.0	9.0	3.2	3.9	7.5	7.5	-	9.1	23.2	100
	J Miscellaneous	10.5	-	21.5	10.0	20.0	6.5	10.1	8.1	8.1	9.0	5.1	-	9.1	21.0
1971	A as above	7.5	10.5	13.5	8.5	41.0	1.9	10.0	5.0	6.0	5.1	1.0	4.4	4.4	100
	B "	9.5	1.1	-	3.5	5.0	-	-	16.8	15.2	38.1	2.0	18.8	18.8	100
	C "	3.0	2.0	5.1	4.0	40.0	2.5	3.0	3.1	4.1	2.3	0.7	2.0	2.0	100
	D "	12.9	10.5	13.0	7.5	21.9	10.0	2.5	2.2	3.0	1.5	5.9	9.0	9.0	100
	E "	8.5	10.1	8.1	10.0	20.4	1.0	2.9	8.5	10.0	10.5	1.0	9.0	9.0	100
	F "	12.0	10.0	12.5	8.0	20.1	1.0	8.9	2.2	5.9	5.9	2.0	15.9	15.9	100
	G "	8.1	5.0	9.0	3.5	40.5	2.0	2.1	2.0	2.5	2.5	1.0	23.1	23.1	100
	H "	2.0	1.5	3.2	18.1	28.0	12.9	2.0	1.6	1.2	1.2	3.0	3.0	20.3	100
	I "	9.8	9.5	2.5	15.0	19.1	6.6	2.0	2.0	2.0	8.0	6.2	1.0	21.0	100
	J "	9.5	6.5	10.5	8.0	10.0	9.1	9.1	8.9	8.9	6.0	4.1	2.0	16.0	100
1972	A as above	1.5	8.5	12.1	6.5	20.0	6.2	9.5	6.0	5.1	5.2	1.0	8.4	8.4	100
	B "	8.5	1.5	-	1.0	4.5	1.5	-	15.8	14.2	34.1	2.5	13.4	13.4	100
	C "	3.3	2.2	6.0	3.9	48.1	8.3	4.0	3.9	3.9	2.5	3.9	10.0	10.0	100
	D "	10.9	9.5	12.1	8.0	20.9	8.4	2.1	2.0	3.0	1.9	6.0	22.1	22.1	100
	E "	6.9	9.5	5.5	9.5	20.5	1.5	2.4	7.1	10.1	8.5	2.0	15.5	15.5	100
	F "	10.2	8.0	12.0	8.1	20.0	1.6	7.8	2.1	4.9	4.9	2.0	12.5	12.5	100
	G "	9.2	6.1	8.5	3.0	40.0	1.1	2.4	2.5	2.5	1.0	3.5	18.3	18.3	100
	H "	2.6	2.5	3.5	18.0	28.1	11.5	2.5	2.0	2.0	2.5	3.9	3.9	19.2	100
	I "	9.5	8.0	2.9	15.0	28.9	5.5	4.0	2.0	7.0	6.9	3.2	4.1	9.0	100
	J "	6.5	6.0	12.5	7.5	19.0	8.1	14.5	8.5	8.5	7.0	4.5	2.1	10.4	100

Period	Sectors	Benue State	Central State	Kano State	Kwara State	Lagos State	Mid-West State	North Central State	North East State	North West State	Rivers State	South East State	Western State	Amt. for Each Sector Million ₦	Total %	
1973	A Agric. Forestry & F	2.0	10.1	11.9	7.0	30.5	6.9	10.5	5.5	5.0	5.5	5.1	10.0	100	100	
	B Mining & Quarrying	7.0	2.1	-	3.5	1.0	1.6	0.9	14.0	14.1	34.6	18.0	3.2	100	100	
	C Manufacturing	4.3	6.1	7.0	3.7	49.2	8.4	5.5	5.0	2.9	4.0	2.0	2.7	100	100	
	D Real Estate & Constn.	9.9	3.2	12.0	7.9	18.0	8.5	3.0	3.5	3.1	2.5	10.2	17.8	100	100	
	E Public Utilities	7.0	8.5	6.6	8.5	17.5	2.6	2.5	8.2	11.0	5.5	12.1	10.0	100	100	
	F General Commerce	11.0	10.5	12.5	8.2	21.4	2.4	8.8	6.2	5.0	5.0	4.5	2.3	8.0	100	100
	G Transport & Commun. & F.	8.1	6.4	7.5	4.1	40.5	3.0	2.5	2.8	2.5	2.5	2.5	8.1	13.0	100	100
	H Credit & F. Institns.	3.0	2.6	4.0	14.5	26.2	12.6	2.6	2.9	2.9	1.0	5.9	14.0	10.7	100	100
	I Personal & Professional	6.1	8.1	3.9	14.0	24.9	6.9	4.1	4.1	2.5	7.0	3.3	9.0	10.2	100	100
	J. Miscellaneous	6.6	6.2	10.5	7.6	17.0	8.0	8.2	8.2	7.5	6.8	4.9	8.0	8.7	100	100
	1974	A as above	5.5	4.2	12.0	4.1	42.0	3.1	2.1	2.5	4.4	5.2	7.0	9.4	100	100
B "		3.0	3.0	6.2	1.0	-	3.0	-	0.9	-	25.0	28.9	9.0	100	100	
C "		2.0	2.1	6.2	0.9	60.0	0.5	2.5	2.0	1.0	5.8	6.1	8.9	100	100	
D "		2.8	10.0	3.1	1.0	39.0	6.2	3.8	2.5	2.0	8.8	9.1	20.1	100	100	
E "		0.6	8.0	12.6	0.6	2.9	20.1	5.0	4.0	1.0	10.8	15.9	18.5	100	100	
F "		4.5	10.0	10.0	3.7	30.0	10.0	1.0	8.0	5.6	4.0	5.0	5.0	5.2	100	100
G "		1.5	4.1	2.2	0.8	60.1	3.0	5.0	3.9	1.0	5.0	6.2	6.2	6.2	100	100
H "		3.0	3.1	3.5	0.6	10.1	5.6	4.5	4.5	2.5	2.5	10.5	10.5	11.6	100	100
I "		3.0	2.0	12.1	1.7	20.5	16.5	0.9	12.1	0.9	0.9	8.5	7.5	10.5	100	100
J "		4.0	6.0	14.9	12.1	22.5	7.5	8.9	5.4	5.4	2.8	6.5	4.0	5.4	100	100
1975		A "	6.0	5.1	6.0	1.0	10.0	5.2	10.5	2.3	1.9	5.2	1.8	8.9	100	100
	B "	3.1	13.5	0.1	2.0	-	2.5	-	20.5	-	21.5	16.9	19.9	100	100	
	C "	3.5	12.0	9.2	1.5	50.2	3.7	3.0	2.1	1.0	4.1	7.0	14.4	100	100	
	D "	5.5	11.0	6.0	1.5	36.2	9.0	6.1	2.6	2.1	5.3	5.1	9.9	100	100	
	E "	0.2	8.1	1.8	-	9.7	12.0	18.4	3.0	3.0	12.8	5.6	5.7	100	100	
	F "	4.0	14.0	4.0	4.1	32.1	2.0	1.5	8.9	5.1	3.2	7.5	10.8	100	100	
	G "	2.1	4.2	4.0	1.2	51.8	4.5	4.8	3.4	1.2	1.5	7.7	15.7	100	100	
	H "	3.0	2.2	3.1	0.9	15.1	3.6	3.1	4.4	2.1	8.1	7.1	15.4	100	100	
	I "	3.5	10.5	2.5	0.5	18.5	5.0	5.0	0.9	11.0	10.5	15.1	15.4	100	100	
	J "	4.5	16.0	12.9	0.9	22.9	2.0	16.5	12.5	0.9	0.9	2.0	3.5	5.4	100	100

Period	Sectors	Benue Plateau State %	East Central State %	Kano State %	Kwara State %	Lagos State %	Mid-West State %	North Central State %	North East State %	North West State %	Rivers State %	South East State %	Western State %	Amt. for each Sector In Million ₦	Total %
1976	A Agric. Forestry & F	7.0	5.9	7.9	2.5	37.5	8.0	10.5	3.0	4.5	4.2	3.0	6.0		100
	B Mining & Quarrying	2.0	12.5	0.2	12.1	-	22.1	0.9	-	-	25.0	10.5	13.7		100
	C Manufacturing	4.0	2.2	8.5	4.0	55.1	3.2	2.2	3.1	1.5	3.0	2.0	4.2		100
	D Real Estate	6.0	13.0	5.0	1.9	40.1	5.9	8.4	4.0	2.2	3.0	2.9	7.5		100
	E Public Utilities	1.0	9.0	9.2	0.9	9.9	7.1	4.3	5.1	1.2	3.1	12.0	5.8		100
	F General Commerce	5.1	10.0	14.0	3.4	25.1	8.0	10.0	4.9	1.8	4.5	0.9	5.7		100
	G Transport & Communication	3.2	8.5	8.1	1.2	41.2	3.1	4.5	2.5	2.0	5.0	5.4	15.5		100
	H Credit & F. Institutions	3.1	13.0	21.1	0.8	22.2	3.7	5.0	1.9	1.2	1.5	1.4	25.1		100
	I Personal & Professional	4.9	4.5	8.4	8.0	24.4	10.9	10.5	2.0	8.9	3.1	4.2	10.2		100
	J Miscellaneous	4.0	8.0	9.1	1.0	5.0	11.0	12.5	2.4	19.0	5.5	6.0	16.5		100

Source. Compiled from Central Bank of Nigeria Annual Report and Statement of Accounts of various years

only Ilorin which is the capital city of the state, had all the infrastructural facilities which could lure banks to locate office at that time. But as the economic development is extending to rural areas in terms of the development of necessary infrastructural facilities, such as education, social health services, good road networks, and good communication system, more industries would develop which would eventually create the needs for improved financial services and hence greater loan benefits to the state. This supports the view expressed by Robinson (1952)<sup>1</sup>, p. 86 that "By and large, it seems to be the case that where enterprise leads finance follows" in his attempt to explain causation between real and financial growth. Even Rostow (1960), pp. 48, 49) in spite of his conclusion that "As a precondition, it appears necessary that institutions be developed which provide cheap and adequate working capital," believes that "the demand side of the investment process, rather than the supply of loanable funds, may be the decisive element in the take-off". Thus in Kwara state of Nigeria, the on-going federal Government Iron and Steel Project is an investment process which is a clear indicator of future financial potentialities of that state.

From Table 7.8 it is easy to deduce the types of industries or economic sectors for which states enjoy clear **hedge** over the others in terms of the sectorial allocation of credits in each state. Lagos State again is in the lead in the areas of agriculture, manufacturing, real estate, general commerce transport and communications and credit institution loans. Talking in terms of the percentages of the total **bank** loans to each sector of the economy as enumerated in the table, on the average, between 1968 and 1976, Lagos State shared 30.9 per cent of the agricultural loans, 57.9 per cent of the manufacturing loans, 30.1 per cent of real estate loans, 38.3 per cent of bank loans to transport and communication and 36.8 per cent of bank loans to Credit and Financial Institutions. In contrast, most of the states had a share of less than 2 per cent of bank loans to manufacturing sector in 1968 but by 1976, each state had a share of more than 3 per cent at the expense

1. See J. Robinson, (1952), "The Generalization of the General Theory" in the Rate of Interest and other Essays, London, Macmillan. P. 86

2. See W.W. Rostow (1960) The Stages of Economic Growth pp 48 - 49 Cambridge University Press.

of Lagos state, although very marginal.

The reason why Lagos had the lion share of the bank loans to agricultural sector is that agriculture such as poultry farming is highly essential in Lagos State with its enlightened population mostly engaged in service industries. Thus firms like Oke-Afra and Metew farms and firms dealing with fishing are very sound economic enterprises in Lagos. In 1976, fishing alone accounted for more than 45 per cent of the agricultural credit in Lagos State. One other important reason is the fact that most big companies in Nigeria with their headquarters in Lagos often obtain loans in Lagos to be spent in other parts of the country for agricultural purposes. For example, firms like B.P. and Texaco which are oil prospecting companies located in Lagos and Lever Brothers which produces beverages and minerals with its office in Lagos, are now actively engaged in mechanized agriculture in various parts of Nigeria specifically designed as a base for food industry. Texaco is now profitably producing local foods such as 'Geri' (a local food made from cassava) for sale to the public.

With respect to other sectors such as mining and quarrying, personal loans and miscellaneous, Lagos State did not always top the list in the share of bank loans to those sectors. Rivers, South Eastern and Western States were all prominent in the share of bank loans to mining and quarrying sector. In 1968, Western State had a share of 36.5 per cent of bank loans to mining sector but by 1973, its share declined to a record low of 3.2 per cent. However, it picked up again and reached 19.9 per cent level in 1975. In 1974, the lion share of bank loans to mining sector went to South East but fell down again from 38.9 per cent to 10.5 per cent in 1976. Kwara State is now becoming increasingly important in this sector because of the iron and steel industry which is fast developing in it. Thus in 1976, it accounted for 12.1 per cent of the bank credit to mining sector.

### c. Factors that Determine the State Distribution of Bank Credit

The major determinant of demand for bank loans is the level of economic activities measured by the Gross Domestic Products. However, the existence of

1. See also the Report on Fishery of the Federal Ministry of Agriculture, Fishery Dept. 1976.

financial institutions to finance the economic activities is crucial. For financial institutions to develop, there must be present the basic infrastructural facilities such as good transport and communication system in addition to the high level of economic activities. Once financial institutions start operating in any economy, their indirect contribution to economic growth through the provision of credit becomes manifest and as the economy is growing the financial institutions will develop and the size and complexity of the financial system as a whole will increase further and further. This is to say that the relationship between the real and financial variables is real than apparent and this view has been long supported by economists from Adam Smith onwards who said in his book:

"I have heard it ascertained, that the trade of the city of Glasgow, doubled in about fifteen years after the first erection of the banks there; and that the trade of Scotland has more than quadrupled since the first erection of the two public banks in Edingburgh ... that the banks have contributed a good deal to this increase, cannot be doubted" (Smith (1937), p.281).<sup>1</sup> "

It has been argued in support of this view that even almost two centuries later after Adam Smith, many economists were still referring to the early stage of Scottish banking system. Thus what is applicable to the whole country is also application to the component states of the country. In those states which have shown signs of economic development, bank offices are established and consequently credits are granted for economic purposes. The pattern of bank branch distribution among the various states clearly reflects the bank policies and the level of demand for bank services. The commercial banks, like other business firms are profit-oriented concerns, and hence the desire to open a branch is often governed by the profitability potentials of such area or state. Since banks make almost no direct positive impact on the national output because their products are of low priority to population of low income level, those states of Nigeria which are relatively poor have very little attraction to banks. Profitability potentials for banks are a functions of many variables which include the nature and density of population, i.e. whether the population

1. See A. Smith, (1937) Wealth of Nations (Modern Library Edition)

is concentrated or scattered and whether the greater proportion of such population is literate. Others include the nature of competition among banks and non-bank financial institutions and the level of economic activities in the state. All these factors help to explain the nature of distribution of bank offices among the various states of Nigeria, as can be seen from Table 7.6 for the period 1968 to 1976 and Table 7.10 for the period 1977 to 1984.

As can be seen from the table, it is clear that those states which enjoy large shares of bank credit are those with greater number of bank offices. Thus in 1968, Lagos alone had 33.2 per cent of all the bank offices in the economy, but as other states were developing resulting in increased profitability potentials, the share of bank offices for Lagos declined, not in absolute term but in percentage. Thus by 1976, its share of bank office had declined to 25.4 per cent. In absolute term, it had increased its share from 102 in 1968 to 115 in 1976. Western, Mid-Western, Anambra, Kano, Ogun, Rivers and Imo State had bank branches which were more than 50 each and the magnitude of loans to each of these states corresponded with their share of bank branches. However, there is one main exception. Looking at the average distribution of loans in each state between 1968 and 1976, Kano State was in the first place in spite of the fact that it ranked ninth in terms of share of bank offices. The reason for this might well be due to density of population in Kano township in which most of the bank offices are located. The city per se is the second largest town in Nigeria. Moreover, it is the capital city of Kano State and also an international airport. Because of all these, Kano city provided potential profitability opportunities not only to banking industry but also to other industries.

Since banks depend very much on the level of their deposits in their loan operation, the amount of deposits collected in each state may sometimes explain the variations in bank loans distribution among the 12 states of Nigeria during this period. The quantity of bank deposits per se depends on several factors one of which is the availability of accessible savings facilities

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Table 7.9

DISTRIBUTION OF COMMERCIAL BANK BRANCHES UNDER THE FORMER 12-STATE STRUCTURE  
OF NIGERIA (IN NUMBER AND PERCENTAGES)  
1968 - 1976

States	1968		1969		1970		1971		1972		1973		1974		1975		1976	
	Number	% of Total	No.	% of Total														
Benue-Plateau	10	3.2	10	3.2	12	3.3	12	3.2	15	4.0	14	3.6	16	3.9	17	3.9	18	4.0
East Central	-	-	-	-	41	11.2	42	11.3	43	11.5	41	10.6	46	11.1	50	11.5	52	11.5
Kano	9	2.9	10	3.3	12	3.3	12	3.2	13	3.5	14	3.6	16	3.9	18	4.2	20	4.4
Kwara	9	2.6	12	4.0	10	2.7	11	3.0	12	3.2	14	3.6	14	3.4	15	3.4	16	3.5
Lagos	102	33.2	104	34.4	110	30.0	111	30.0	112	29.3	112	29.4	115	27.8	114	26.2	115	25.4
Mid-West	36	11.7	30	9.9	31	8.4	31	8.4	32	8.5	32	8.6	35	8.5	38	8.8	40	8.8
North Central	20	6.5	15	5.0	16	4.4	16	4.3	15	4.0	16	4.2	20	4.8	22	5.1	25	5.5
N. Eastern	11	3.6	12	4.0	13	3.5	11	3.0	11	2.9	12	3.2	15	3.6	18	4.2	20	4.4
N. Western	12	3.9	11	3.6	12	3.3	12	3.3	12	3.2	13	3.4	14	3.4	15	3.5	16	3.5
Rivers	-	-	-	-	10	2.7	10	2.7	10	2.7	11	2.8	15	3.6	16	3.7	17	3.8
South Eastern	10	3.2	8	2.6	6	1.6	8	2.2	9	2.1	10	2.6	12	2.9	13	3.0	15	3.3
Western	90	29.2	90	29.9	94	25.6	94	25.5	94	25.1	94	24.4	95	23.0	97	22.4	98	21.7
Total for each year	308	100	302	100	317	100	370	100	375	100	385	100	412	100	433	100	452	100

Sources: Computed from (a) Annual Statistical Abstracts  
(b) Banks' Annual Reports and Accounts for various years  
(c) CBN Annual Reports and Statement of Accounts for various years.

Table 7.10

19-STATE STRUCTURE OF NIGERIA AND DISTRIBUTION OF BANK OFFICES AND POPULATION PER BANK OFFICE  
IN EACH STATE USING 1963 UN POPULATION FIGURES

States	1977		1978		1979		1980		1981		1982		1983		1984		Popula- tion as per 1963 Census	sh- are	Populatio per bank Office as per 1978 Estimates
	No. of Branch	% share																	
Anambra	36	7.5	36	7.5	49	8.2	51	7.1	52	6.5	54	6.2	60	6.0	68	6.1	3596618	6.46	81763
Bauchi	9	1.9	9	1.9	15	2.5	18	2.5	25	3.1	26	3.0	30	3.0	38	3.4	2431296	4.37	243741
Bendel	48	10.1	48	10.0	52	8.6	58	8.0	60	7.5	61	7.6	65	6.6	70	6.1	2525640	4.53	50746
Benue	10	2.1	10	2.1	15	2.5	25	3.5	30	3.7	38	4.4	42	4.3	45	4.1	2427013	4.36	704119
Borno	13	2.7	13	2.7	18	3.1	24	3.3	30	3.7	37	4.2	45	4.5	50	4.5	2997497	5.38	230040
Cross River	17	3.6	17	3.5	25	4.2	30	4.2	32	4.0	38	4.4	46	4.6	50	4.5	3515589	6.32	211764
Gongola	6	1.2	6	1.3	15	2.5	25	3.5	30	3.7	37	4.2	40	4.0	45	4.1	2605263	4.68	300668
Imo	31	6.5	31	6.5	35	5.8	40	5.5	45	5.6	50	5.1	52	5.2	55	5.0	3695263	6.64	103494
Kaduna	27	5.7	27	5.6	30	5.0	41	5.7	44	5.5	50	5.7	53	5.3	55	5.0	4098306	7.36	151789
Kano	22	4.6	22	4.6	30	5.0	40	5.6	45	5.6	49	5.6	61	6.1	66	6.1	5774840	10.37	262492
Kwara	15	3.1	15	3.1	20	3.3	25	3.5	30	3.7	35	4.0	39	3.9	45	4.1	1714485	3.08	153955
Lagos	100	21.0	98	20.5	110	18.3	118	16.4	120	15.0	122	14.0	128	13.9	142	12.8	1443568	2.59	14730
Ogun	15	3.1	15	3.1	20	3.3	30	4.2	34	4.2	38	4.4	50	5.1	60	5.4	1550966	2.79	103463
Ondo	24	5.0	24	5.0	30	5.0	31	4.3	40	5.0	42	4.8	42	4.3	56	5.0	2727676	4.9	113653
Oyo	48	10.1	50	10.5	58	9.6	60	8.3	63	7.9	65	7.5	70	7.1	79	7.1	5208884	9.36	103177
Plateau	12	2.5	12	2.5	15	2.5	20	2.8	21	2.6	25	2.9	28	2.8	35	3.2	2026657	3.64	168888
Rivers	23	4.8	24	5.0	30	5.0	33	4.5	44	5.6	43	4.9	56	5.6	64	5.8	1601742	2.82	75600
Sokoto	14	2.9	14	2.9	29	2.0	31	4.3	32	4.0	29	3.1	39	3.9	45	4.1	4528787	8.15	324200
Total	477	100	478	100	601	100	721	100	801	100	869	100	991	100	1108	100	55670055	100	

Sources:

Nigerian Population Census for 1963 & 1978 by U.N.  
Central Bank of Nigeria Annual Report and Statement of Accounts for various years.

to the majority of depositors or savers. This view is in support of the widespread belief among economists that saving is often induced by the financial institutions or to use the phrase of Marquez (1963)<sup>1</sup>, savings is "institution-elastic".

This also represents the view expressed by Lewis (1955) that

"Experience shows that the amount of savings depends partly on how widespread these facilities (i.e., savings institutions) are; if they are pushed right under the individual's nose, ... people save more than if the nearest savings institution is some distance away."<sup>2</sup>

Thus the magnitude of bank deposits in each state of Nigeria is partly explained by the number of bank offices in each state. Table 7.11 shows the growth in quantity of bank deposits in each State between 1976 and 1984 in accordance with the present 19 State structure of Nigeria.

As can be seen from the table, there seems to be a direct positive relationship (though not empirically tested) between the growth in loans allocated to each state and the growth in bank deposits. As one would expect, Lagos State which has more bank offices than any other state of Nigeria had a lion share of aggregate bank deposits during the review period. In 1976, it accounted for 40 per cent of the total bank deposits in the country which stood at ₦1665.6 million in absolute terms. Its average share during the period was 35.8 per cent. Oyo State which also follows Lagos in the number of bank offices was also easily in the second place after Lagos with bank deposits ranging from 9.2 per cent to 10 per cent of the total bank deposits representing an average of 9.8 per cent for the period. Anambra State occupied the third place with deposits percentage share ranging from 7.8 to 8.3 with an average for the period of 8.1 percent.

Four states, namely, Niger, Kwara, Benue, and Plateau States had the average shares of bank deposits of less than 2 per cent each. Their shares were 1.5, 1.6, 1.5 and 1.7 per cent respectively of the total bank deposits for the economy.

The creation of more States in Nigeria was from the 4 major regions, namely Western Region, now Oyo State; Eastern Region, now Anambra State,

1. See Marquez, (1963)

2. See Lewis (1955)

Table 7.11

PERCENTAGE DISTRIBUTION OF BANK DEPOSIT AMONG THE 19 STATES OF NIGERIA 1976 - 1984  
(In Million Naira & Percentages)

States	1976		1977		1978		1979		1980		1981		1982		1983		1984		Percentage Average
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	
Anambra	333.1	8.0	408.3	7.8	391	7.9	541	8	776.2	8.1	836.1	8.2	961.4	8.3	1111.2	8.3	1101.5	8.2	8.1
Bauchi	83.3	2.0	104.7	2.0	103.9	2.1	148.8	2.2	220.4	2.3	214.1	2.1	243.2	2.1	294.5	2.2	308.9	2.3	2.1
Bendel	312.3	7.5	387.4	7.4	371.2	7.5	473.4	7.0	690.1	2.2	744.3	7.3	822.4	7.1	963.9	7.2	953.7	7.1	7.2
Benue	50.0	1.2	68.0	1.3	59.4	1.2	101.4	1.5	152.1	1.6	173.3	1.7	185.3	1.6	241.0	1.8	228.4	1.7	1.5
Borno	83.3	2.0	109.9	2.1	108.9	2.2	135.3	2.0	201.3	2.1	203.9	2.0	231.6	2.0	281.1	2.1	258.7	2.0	2.1
Cross River	87.4	2.1	115.2	2.2	108.9	2.2	142.0	2.1	191.7	2.0	214.1	2.1	254.8	2.2	267.8	2.0	282.1	2.1	2.1
Gongola	70.8	1.7	94.2	1.8	94.0	1.9	135.3	2.0	201.3	2.1	224.3	2.2	247.2	2.1	307.9	2.3	295.5	2.2	2.0
Imo	145.7	3.5	188.5	3.6	183.1	3.7	236.7	3.5	345.1	3.6	356.8	3.5	417.0	3.6	495.2	3.7	510.4	3.8	3.6
Kaduna	145.7	3.5	188.5	3.6	183.1	3.7	257.0	3.8	373.8	3.9	407.8	4.0	463.3	4.6	548.9	4.1	537.3	4.0	3.8
Kano	166.6	4.0	204.2	3.9	198.0	4.0	270.5	4.0	335.5	3.5	297.6	3.9	453.3	4.0	562.3	4.2	550.7	4.1	3.8
Kwara	62.5	1.5	78.5	1.5	89.1	1.8	108.2	1.6	143.8	1.5	173.3	1.7	185.3	1.6	200.8	1.5	214.9	1.6	1.6
Lagos	1665.6	40	1989.3	38	1831.5	37	2441.4	36.1	3450.6	36.0	3538.0	34.7	3961.1	34.1	4418.0	33.0	4500	33.5	35.8
Niger	11.6	1.0	57.6	1.1	69.3	1.4	101.4	1.5	154.4	1.6	152.9	1.5	196.9	1.7	241.0	1.8	245.8	1.8	1.8
Ogun	120.7	2.9	151.8	2.9	148.5	3.0	216.4	3.2	335.5	3.5	336.5	3.3	440.1	3.8	535.5	4.0	550.7	4.1	1.5
Ondo	174.9	4.2	240.8	4.6	217.8	4.4	304.3	4.5	450.5	4.7	458.8	4.5	498.1	4.3	548.9	4.1	537.3	4.0	1.5
Oyo	112.2	2.9	151.8	2.9	148.5	3.0	216.4	3.2	335.5	3.5	336.5	3.3	440.1	3.8	535.5	4.0	550.7	4.1	1.5
Plateau	62.5	1.5	99.5	1.9	84.1	1.7	121.7	1.8	172.5	1.8	193.7	1.9	231.7	2.0	280.1	2.1	268.7	2.0	1.7
Rivers	83.3	2.0	120.4	2.3	103.9	2.1	169.1	2.5	230.0	2.4	265.1	2.6	289.6	2.5	401.6	3.0	389.6	2.9	2.5
Sokoto	62.5	1.5	104.7	2.0	119.2	2.4	181.8	2.7	277.1	2.9	306.2	3.0	359.9	3.1	398.6	2.9	376.9	2.8	2.6
Total	4164	100	5235	100	4950	100	6763	100	9585	100	10196	100	11583	100	13388.0	100	13423	100	

Sources: Compiled from the CBN Annual Report and Statement of Accounts as well as CBN Economic and Financial Review of various years

Northern Region, now called Kaduna State, and Lagos and Environs now called Lagos State. These four states are now the major political states of the country which might be termed the leading states since they possessed relatively all the indices of development such as good economic infrastructure. They might even be called the core states of Nigeria since all the newer states were the former rural areas surrounding those four states. Their average percentage shares of total bank deposits for the economy were 9.8, 8.1, 3.8 and 35.8 respectively. It is important to note that the Northern Nigeria, represented by Kaduna State had the lowest percentage share of bank deposits out of the four states. This is not surprising since when Nigeria was divided into only three regions, the Northern regions had always been less developed than the rest. In fact most of the newer states were created from the former Northern Region of Nigeria and hence most of them had very low percentage share of total bank deposits and low number of bank offices.

The table 7.12 below reveals that most states with higher average growth rates are the newer states. Sokoto State, for instance, had the highest average growth rate of bank deposits which stood at 27.3 per cent followed by Niger State with 26.1 per cent. The River State came third with 24 per cent. One significant point to note from the table is that while Lagos State has always been in the lead in all the banking ratios discussed in the tables so far, its position according to the table under reference, was the lowest with just an average growth rate of 14.2 per cent, although in absolute terms, the rate represents the largest among all states of Nigeria. This should be expected to happen as far as the newer states are concerned since the creation of states had resulted in the opening up of many job opportunities created by the Federal Government Development projects mostly in all the new states. In addition, the CBN Rural Banking Programme which has so far encouraged banks to establish offices in remote parts of the country helped greatly to develop the banking habits of the people of each state, the impact of which manifested in the growth in bank deposits in those new states.

1. See W. W. Rostow (1960)

2. See Nigeria 3rd National Development Plan, 1975-80 and the 4th National Development Plan, 1980 - 85 Government Printers, Lagos.

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GROWTH IN LEVEL OF BANK DEPOSITS IN NIGERIA ON STATE BASIS  
1977 - 1984 In Percentages

States	1977	1978	1979	1980	1981	1982	1983	1984	Average % Growth Rate
Anambra	22.6	-1.2	38.4	43.5	7.7	15.0	15.6	-8.7	16.2
Bauchi	25.9	-0.09	43.2	48.1	-2.8	13.6	21.1	4.9	19.2
Bendel	24.0	-4.2	27.5	45.8	7.8	10.5	17.2	-1.1	15.9
Benue	36.0	-12.6	70.7	51.3	13.0	6.9	30.0	-5.2	23.8
Borno	31.2	-0.09	24.4	48.8	1.3	13.6	21.4	-4.4	17.0
✓ Cross River	31.8	-5.5	30.4	35.0	11.7	19.0	5.1	5.3	16.6
Gongola	33.0	-0.02	43.9	48.8	11.4	8.4	26.6	-4.0	21.0
Imo	29.4	-2.8	29.3	45.8	3.8	16.8	15.8	3.0	17.6
Kaduna	29.4	-2.8	40.4	61.1	9.1	13.6	18.5	-2.1	20.9
Kano	22.4	-3.0	36.6	24.0	18.5	14.2	21.4	-2.1	15.5
Kwara	25.6	13.5	21.4	32.9	20.5	6.9	8.4	7.0	17.0
Lagos	19.4	-7.9	33.3	41.3	2.5	12.0	11.5	1.8	14.2
Niger	38.5	20.3	46.3	52.3	-0.09	28.8	22.4	0.03	26.1
Ogun	25.8	-2.2	45.7	55.0	0.02	30.8	21.7	2.8	22.4
✓ Ondo	37.7	-9.5	39.7	48.0	1.8	8.5	10.2	2.1	16.8
Oyo	27.0	-7.3	39.4	30.4	13.3	13.6	14.4	1.4	16.5
Plateau	59.2	-15.5	44.7	41.7	12.3	19.6	21.4	-4.4	22.3
Rivers	44.5	13.7	62.7	36.0	15.3	9.2	38.7	-1.0	24.0
Sokoto	67.0	13.8	53.3	51.5	10.5	17.2	9.0	-7.0	27.3

Source: Computed from the Central Bank of Nigeria Economic and Financial Review of various years.

Table 7.12a

THE BANK DEPOSIT GROWTH RATES OF LAGOS STATE IN COMPARISON WITH THOSE OF NEW STATES - SOKOTO, AND CROSS RIVER STATES 1977 - 1984 In Percentages

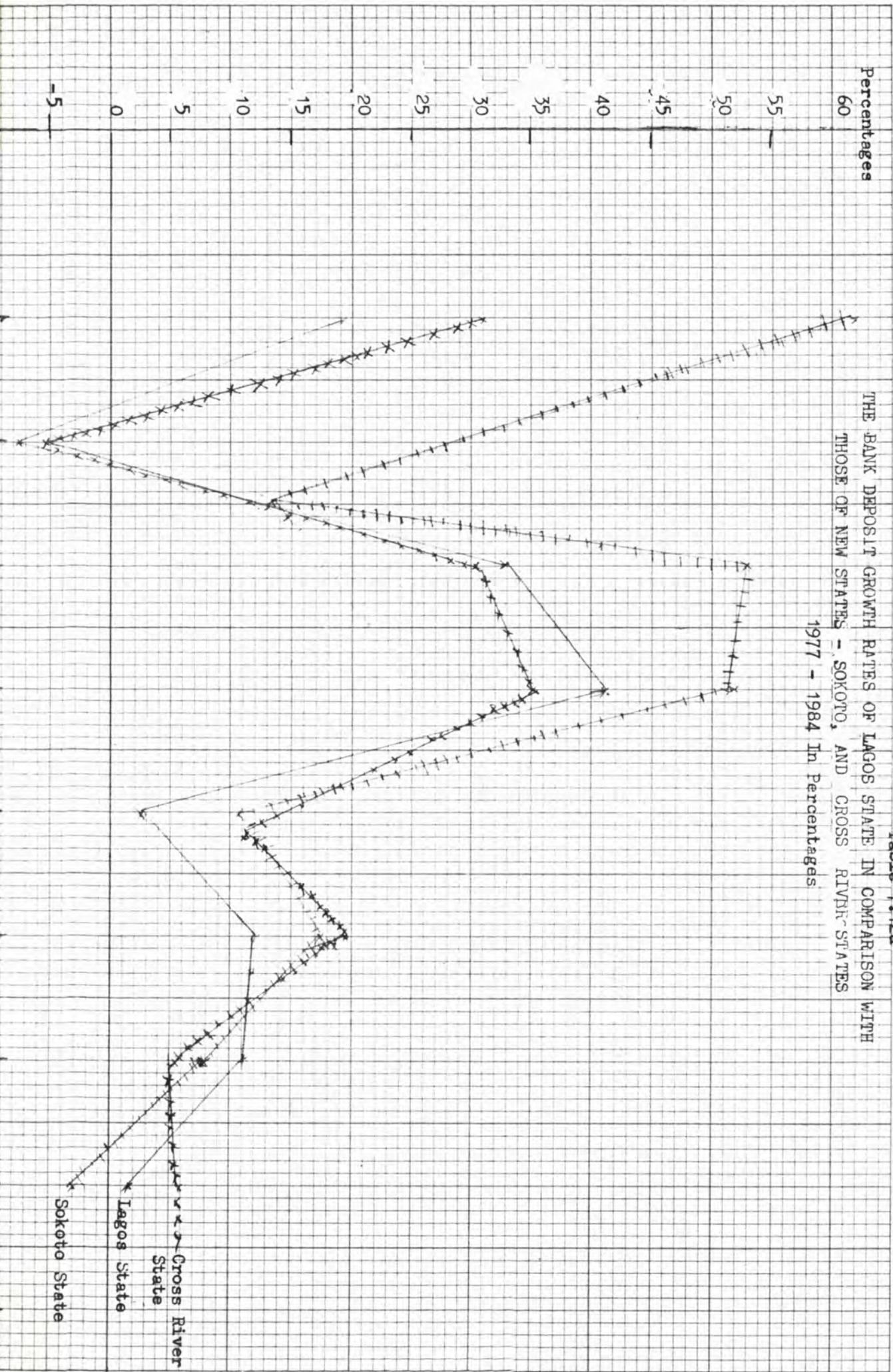


Table 7.13 shows loan deposit ratio in respect of every state in Nigeria. The highest loan to deposit ratio was recorded for Kano State with an annual average of 1.75. In the second and third place were Cross River State and Kaduna State with annual average of 1.34 and 1.33 respectively. Anambra had the lowest loan deposit ratio which was 0.45 while Lagos, too had just 0.5. The most interesting thing to observe here is that both Lagos and Anambra had very high level of deposits relative to loans allocated to them by commercial banks. What this implies is that commercial banks are now allocating more loans to the newer States probably in order to assist the investors from the older states in their efforts to establish new businesses in the newer states. For example, many insurance companies and industries dealing with food processing have extended their operations to many states in the northern part of Nigeria in recent years. Moreover, many contractors who succeeded in winning contracts from the governments of those new States borrowed largely from the commercial banks operating in those states without any difficulty since they were well known to bankers in the older states from where they came. Thus Kano and Cross River States are relatively new states to which the banks gave loans far in excess of total deposits collected from them. The magnitude of bank loans to each state is shown in Table 7.14

Another reason for the higher loan deposit ratio in those states with low deposit levels may be attributed to the Agricultural Credit Guarantee Scheme Fund established by Decree No. 20 of 1977 under which loans and advances granted by commercial and merchant banks for agricultural production are guaranteed up to 75 per cent of the amount in default net of any amount collected by the lending bank from the security pledged by the borrower. Under this scheme, in 1983 alone a total of number of 1,333 loans valued at ₦36.3 million were guaranteed, representing 21.9 per cent of all the loans guaranteed since the inception of the scheme.

In nearly all other states, the loan deposit ratio was more than 0.6 except in Bauchi State which had just 0.58. In Benue and Borno States, the annual loan deposit average were 0.99 and 0.78 respectively. Bendel State and

1. See The Nigerian Military Government Decree No. 20 of 1977, Government Printers, Lagos.

## LOAN DEPOSIT RATIO IN EACH STATE OF NIGERIA, 1976 - 1984

States	1976	1977	1978	1979	1980	1981	1982	1983	1984	Average Loan/Deposit Ratio
Anambra	0.30	0.38	0.51	0.44	0.40	0.51	0.52	0.45	0.57	0.45
Bauchi	0.38	0.48	0.68	0.51	0.48	0.69	0.73	0.59	0.72	0.58
Bendel	0.63	0.74	0.99	0.81	0.83	0.99	1.1	0.96	1.2	0.92
Benue	0.85	0.92	1.3	0.93	0.88	1.09	1.2	0.92	0.85	0.99
Borno	0.48	0.57	0.91	0.83	0.74	0.89	0.89	0.80	0.92	0.78
Gross River	0.89	0.93	1.42	1.2	1.25	1.53	1.55	1.57	1.75	1.34
Gongola	0.48	0.60	0.83	0.7	0.67	0.77	0.89	0.68	0.88	0.72
Imo	0.58	0.65	0.86	0.80	0.73	0.95	0.94	0.85	0.96	0.81
Kaduna	1.0	1.2	1.6	1.35	1.27	1.51	0.89	1.42	1.72	1.22
Kano	1.01	1.2	1.64	1.2	2.0	1.65	1.68	1.73	1.79	1.75
Kwara	0.41	0.53	0.67	0.66	0.64	0.81	0.85	0.87	1.03	0.72
Lagos	0.32	0.37	0.54	0.45	0.44	0.51	0.61	0.56	0.67	0.5
Niger	0.51	0.57	0.68	0.58	0.52	0.75	0.75	0.68	0.76	0.64
Ogun	0.68	0.78	1.1	0.83	0.75	1.02	0.92	0.76	0.89	0.55
Oyo	0.62	0.58	0.85	0.73	0.77	0.89	0.94	0.86	1.0	0.80
Plateau	0.54	0.57	0.94	0.74	0.75	0.85	0.93	0.83	0.92	0.78
Rivers	0.76	0.86	1.1	0.63	0.69	0.93	1.02	0.66	0.95	0.84
Sokoto	0.84	0.74	0.7	0.49	0.44	0.56	0.54	0.63	0.95	0.65

Source: Compiled from the CBN Economic and Financial Reviews of various years.

DISTRIBUTION OF BANK CREDIT IN NIGERIA IN ACCORDANCE WITH 19-STATE STRUCTURE OF NIGERIA 1976-84  
(In Million Naira)

States	1976		1977		1978		1979		1980		1981		1982		1983		1984		Average for State	
	Amount N	%																		
Anambra	108.3	5.1	155.6	5.2	202.5	5.1	238.8	5.3	308.9	5.0	428.3	5.2	504.2	5.1	514.1	5.0	630.8	5.1	343.5	5.1
Bauchi	31.8	1.5	50.9	1.7	71.5	1.8	76.6	1.7	105.0	1.7	148.8	1.8	177.9	1.8	174.8	1.7	222.6	1.8	117.7	1.7
Bendel	199.6	9.4	287.3	9.6	377.2	9.5	414.6	9.2	574.6	9.3	741.2	9.0	899.4	9.1	925.5	9.0	1125.5	9.1	616.1	9.2
Benue	42.5	2.0	62.1	2.1	79.4	2.0	94.6	2.1	135.9	2.2	189.4	2.3	239.3	2.4	226.2	2.2	247.4	2.0	146.2	2.1
Borno	40.3	1.9	62.8	2.1	99.3	2.5	112.6	2.5	148.3	2.4	182.4	2.3	207.6	2.1	226.2	2.2	247.4	2.0	147.4	2.2
Cross River	74.3	3.5	107.7	3.6	154.9	3.9	171.2	3.8	240.9	3.9	329.4	4.0	395.4	4.0	421.6	4.1	494.7	4.0	265.6	3.9
Gongola	34.0	1.6	56.9	1.9	79.4	2.0	94.6	2.1	135.9	2.2	173.0	2.1	217.5	2.2	205.7	2.0	259.7	2.1	139.6	2.0
Imo	84.9	4.0	122.7	4.1	158.8	4.0	189.3	4.2	253.3	3.0	329.4	4.0	395.4	4.0	421.6	4.1	494.7	4.0	272.2	4.1
Kaduna	159.2	7.5	227.5	7.6	297.8	7.5	347.0	7.7	475.7	7.7	617.7	7.5	741.4	7.5	781.5	7.6	927.5	7.5	548.4	7.6
Kano	169.8	8.0	242.4	8.1	325.6	8.2	360.5	8.0	500.4	8.1	658.9	8.0	781.0	7.9	822.6	8.0	989.4	8.0	538.9	8.0
Kwara	25.5	1.2	41.9	1.4	59.6	1.5	72.2	1.6	92.7	1.5	140.0	1.7	158.2	1.6	174.8	1.7	222.6	1.8	109.7	1.5
Lagos	547.7	25.8	748.2	25.0	996.7	25.1	1126.5	25.0	1532.0	24.8	2017.0	24.5	2432.0	24.6	2509.0	24.4	3030.2	24.5	1660.0	24.8
Niger	21.2	1.0	32.9	1.1	47.6	1.0	58.6	1.3	80.2	1.3	115.3	1.4	148.3	1.5	164.5	1.6	185.5	1.5	94.9	1.3
Ogun	82.8	3.9	119.7	4.0	162.8	4.1	180.2	4.0	253.3	4.1	345.0	4.2	405.3	4.1	411.3	4.0	494.7	4.0	272.9	4.0
Ondo	91.3	4.3	128.7	4.3	158.8	4.0	184.7	4.1	247.1	4.0	337.7	4.1	395.4	4.0	431.9	4.2	494.7	4.0	274.5	4.1
Oyo	219.0	12.2	305.3	10.2	416.9	10.5	495.7	11.0	679.6	11.0	897.7	10.9	1077.6	10.8	1120.8	10.9	1323.4	10.7	730.7	10.9
Plateau	34.0	1.6	56.9	1.9	79.4	2.0	90.1	2.0	129.7	2.1	164.7	2.0	217.5	2.2	236.5	2.3	247.4	2.0	139.6	2.0
Rivers	63.7	3.0	104.7	3.5	119.1	3.0	108.1	2.4	160.6	2.6	247.1	3.0	296.6	3.0	267.4	2.6	371.0	3.0	193.1	2.9
Sokoto	53.1	2.5	78.1	2.6	84.5	2.1	90.1	2.0	123.7	2.0	171.9	2.9	197.8	2.9	247.0	2.4	358.7	2.9	156.1	2.2
Total	2123.0	100	2993	100	3971	100	4506	100	5977.9	100	8236	100	9886	100	10283	100	12368	100	6727.1	100

Sources: Computed from various statistical sources - CBN Annual Report & Statements of Accounts, The Statistical Digests, The Statistical Review of Various Years and the CBN Financial and Economic Reviews of Various Years.

Oyo State which are older and more advanced economically relative to other states, had 0.92 and 0.8 loan deposit-ratio respectively. It is important to note that, although Lagos State, the most economically advanced state in Nigeria, had the lowest loan-deposit ratio, in absolute terms, loans and advances allocated to Lagos State continued to be the highest just like the bank deposits.

Looking at table 7.10, it is easy to see that Lagos is still relatively well banked than any other states in the Federation despite the CBN Rural Banking Programme. Sokoto state with its very large population remains by far the least banked area of Nigeria. Although the number of bank offices had increased in that state from 14 in 1977 to 45 by 1984, yet more still have to be done if the gap between those states with more credit facilities and those with less has to be meaningfully closed. The average bank offices to population in Nigeria stood at 116<sup>3</sup>60 in 1977 and by 1984 it has fallen down to 50198.6. Thanks to the Rural Banking Programme as well as the banks which responded positively.

From the foregoing analysis so far, there is no doubt that there have been considerable disparities in the distribution of loans and advances in Nigeria among the component States. Most of the disparities are caused by most of the factors already mentioned such as the State's level of economic or infrastructural development, which can influence bank's decision to open offices in each area. Thus the more industrialized or commercial a state is, the less the number engaged in agriculture, the greater will be the level of bank credit, bank offices and bank deposits. However, there is an exogenous variable which should be mentioned and this is the Federal Government Policy towards banking usually expressed through the Central Bank. For example, the adoption of selective credit policies to supplement the quantitative control of distribution of credit in the economy by the Central Bank premised on the belief that it is the best way to ensure efficient allocation of resources for economic development purposes. This is because the financial markets are not efficient in allocation of credit in the economy (Patel (1954), Johnson (1974)). The

1. See G.W. Nwankwo, (1980.)

2. This view is clearly supported by all the bank ratio tables in this chapter.

3. See Patel, (1954) and Johnson (1974).

rural banking programme initiated by the Central Bank of Nigeria designed to promote banking habit and economic development in Nigeria is another example of exogenous variable which can impact on the pattern of credit distribution in Nigeria. This policy of inducing banks to expand through the opening of branches is general to all developing countries as noted by Jucker-Fleetwood (1964), p.129<sup>1</sup> who remarked that there was "marked" expansion of banks in Africa. Also, the system of loan guarantee might affect the volume of loans in each state rather than the number of bank offices and hence the level of deposits.

Finally, Table 7.15 combines all the banking ratios mentioned so far and relate them to the banking clearing in each state. It shows that the lower the level of deposits, the lower the level of loans and the lower the number of bank offices, the lower will be the value of cheques cleared in each state. Thus columns 20 and 21 summarize the distribution of loans, deposits and amount of cheques cleared under the former twelve-state structure of Nigeria rather than 19-state structure, since the Central Bank Clearing is still based on the former. As can be seen from the table, the highest average loan-deposit ratio for the period 1968 to 1984 occurred in Kano State with 1.54, followed by Kaduna State with 1.34 and in the third place was Cross River State with 1.3. The lowest loan-deposit ratio occurred in Anambra as should be expected because of the Civil War which caused considerable economic dislocations in that state. Column 21 shows the average loan clearing ratio, which may be an approximate measure of money supply in each state. The highest loan clearing ratio occurred in Kano, although this was based on 7-year period from 1979 to 1984 when the Clearing House was in operation. The percentage of loans to the aggregate amount of money cleared in that state was 22, implying that more than one fifth of the total cheque cleared represents bank credit to that state.

Oyo State came second with the loan clearing ratio of 0.21 implying that more than one-fifth of the total bank cheques in the state on the average represents loans from banks. There is a high magnitude of bank loans relative to

1. See Jucker-Fleetwood, E.E. (1964) Money and Finance in Africa p. 129.

Table 7. 45

AGGREGATE ANALYSIS OF COMMERCIAL BANKS' LOANS AND ADVANCES, DEPOSITS AND BANK BRANCHES  
IN TWELVE STATES OF NIGERIA WHERE THE CENTRAL BANK'S CLEARING  
HOUSES ARE LOCATED 1968 - 1984: (AMOUNT  
IN MILLION NAIRA)

States and Variables	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	
<u>Bendel</u>	Branches No.	36	30	31	31	32	33	35	38	40	48	48	52	58	60
	Deposits ₦	28.4	38.2	67.0	55.2	67.5	86.1	144.2	280.2	312.3	387.4	371.2	473.4	690.1	744.3
	Loans ₦	8.1	12.4	18.3	25.1	32.8	41.4	52.5	70.4	199.6	287.3	377.2	414.6	574.6	741.2
	Clearing ₦	44.5	69.6	90.0	145.7	164.9	223.2	372.6	880.6	683.0	820.5	903.3	848.1	1552.3	11967.7
<u>Cross River</u>	Branches No.	10	8	6	8	8	10	12	13	15	17	17	25	30	32
	Deposits ₦	8.9	10.2	13.0	14.2	16.9	26.1	49.4	95.9	87.4	115.2	108.9	142.0	191.7	214.1
	Loans ₦	2.9	4.8	7.4	11.0	6.8	9.0	16.9	27.3	74.3	107.7	154.9	171.2	240.9	329.4
	Clearing ₦	n.a.	-	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.e.	613.7	859.9	970.2	
<u>Imambra</u>	Branches No.	n.a.	n.a.	n.a.	41	42	43	41	43	52	36	36	49	51	52
	Deposits ₦	n.a.	n.a.	n.a.	73.0	24.8	112.3	52.5	317.1	333.1	408.3	391.0	541.0	776.2	836.1
	Loans ₦	n.a.	n.a.	n.a.	17.6	88.6	30.9	168.9	84.8	103.3	155.6	202.5	238.8	308.9	428.3
	Clearing ₦	"	"	"	65.2	178.8	267.9	319.9	569.8	910.7	1235.0	1112.4	1068	1594.9	1984.4
<u>Oyo</u>	Branches No.	90	90	94	94	94	95	97	98	98	48*	50	58	60	63
	Deposits ₦	105.3	114.5	203.2	167.4	198.4	248.0	399.7	431.1	412.2	523.5	485.1	676.3	881.8	999.2
	Loans ₦	23.5	36.2	46.4	70.8	83.6	92.7	112.6	175.4	259.0	305.3	416.9	495.7	679.6	897.7
	Clearing ₦	179.3	226.0	332.8	353.6	446.0	527.5	763.9	1167.0	1678.0	2144.6	2396.4	2350.4	2797.7	3652.2
<u>Kwara</u>	Branches No.	8	12	10	11	12	14	14	15	16	15	15	20	25	30
	Deposits ₦	14.1	15.2	21.6	19.6	25.3	36.5	57.7	110.6	62.5	78.5	89.1	108.2	143.3	173.3
	Loans ₦	0.3	1.0	2.4	2.5	2.6	6.2	10.5	8.4	25.5	41.9	59.6	72.2	92.7	140.0
	Clearing ₦	n.a.	n.a.	n.a.	n.a.	n.e.	n.a.	n.a.	n.e.	n.a.	n.a.	431.7	682.6	851.4	
<u>Plateau</u>	Branches No.	10	10	12	12	15	14	17	18	18	12	12	15	20	21
	Deposits ₦	11.5	12.7	25.9	21.4	31.7	36.5	70.0	132.7	62.5	99.5	84.1	121.7	172.5	193.7
	Loans ₦	3.1	4.8	7.4	11.0	14.2	15.8	22.5	44.6	34.0	56.9	79.4	90.1	129.7	164.7
	Clearing ₦	n.a.	n.a.	n.a.	n.a.	n.a.	175.2	213.6	566.7	1203.4	604.1	751.3	992.7	1449.6	
<u>Kaduna</u>	Branches No.	20	15	16	16	15	16	20	22	25	27	27	30	41	50
	Deposits ₦	15.9	19.1	34.6	28.5	31.7	41.8	82.4	162.2	145.7	188.5	183.1	257	313.8	407.8
	Loans ₦	3.3	5.3	8.1	11.5	16.1	24.1	31.0	43.1	159.2	227.5	297.8	347.0	475.7	617.7
	Clearing ₦	n.a.	51.4	202.8	135.7	1813.5	93.6	482.2	755.0	1312.2	1272.3	1228.7	1879.5	2214.2	



States and Variables	1981	1982	1983	1984	Averages	Average Loan/Deposit Ratio	Average Loan/Clearing Ratio	Remarks	
<b>Bendel</b>	Branches Deposits Loans Clearing No. N N N	60 744.3 741.2 11867.7	61 822.4 899.6 11967.7	65 963.9 925.5 12968.1	70 953.7 1125.5 13060.1	45 381.5 341.5 3350.7	0.89	0.1	
<b>Cross River</b>	Branches Deposits Loans Clearing No. N N N	32 214.1 329.4 970.2	38 254.8 395.4 1207.4	46 267.8 421.6 1112.0	50 282.1 494.7 1227.1	20 111.7 145.0 998.2	1.3	0.14	Average of 7 year.
<b>Anambra</b>	Branches Deposits Loans Clearing No. N N N	52 836.1 428.3 1984.4	54 961.4 504.2 1991.0	60 1111.2 514.1 1925.8	68 1101.4 630.8 2001.5	48 419.0 206.0 1087.5	0.49	0.19	14-year average
<b>Oyo</b>	Branches Deposits Loans Clearing: No. N N N	63 999.2 897.7 3652.2	65 1135.1 1077.6 4203.2	70 1298.6 1120.8 4314.4	79 1316.4 1323.4 4960.2	79 564.4 395.4 1911.5	0.70	0.21	
<b>Kwara</b>	Branches Deposits Loans Clearing No. N N N	30 173.3 140.0 851.4	35 185.3 158.1 950.1	39 200.8 174.8 1050.2	45 214.9 222.6 1171.3	20 91.5 60.1 856.2	0.66	0.22	On 7-year average
<b>Plateau</b>	Branches Deposits Loans Clearing No. N N N	21 193.7 164.7 1449.6	25 231.7 217.5 1550.7	28 281.1 236.5 1651.2	35 268.7 247.4 1691.0	17 109.3 81.1 651.2	0.74	0.17	On 12-year average
<b>Kaduna</b>	Branches Deposits Loans Clearing No. N N N	44 407.8 617.7 2214.2	50 463.3 741.4 2374.0	53 548.9 781.5 2409.2	55 537.3 927.6 2575.1	29 207.1 277.5 1198.9	1.34	0.18	On 16-year average
<b>Kano</b>	Branches Deposits Loans Clearing No. N N N	45 377.6 658.9 2658.4	49 463.3 781.0 4227.6	61 548.9 822.6 4390.1	66 537.3 939.4 4482.3	27 202 311.7 1857.8	1.54	0.18	

States and Variables		1981	1982	1983	1984	Averages	Averages Loan/Deposit Ratio	Average Loan/Clearing Ratio	Remarks
Rivers	Branches	44	43	56	64	27	0.78	0.15	Based on 15 years
	Deposits	265.1	289.6	401.6	789.6	138.2			
	Loans	247.1	296.6	267.4	371.0	108.4			
	Clearing	1615.5	785.4	1345.9	1636.1	810.2			
Borno	Branches	30	37	45	50	21	0.74	0.17	Based on 8 years
	Deposits	203.9	231.3	281.1	268.1	114.6			
	Loans	182.4	207.6	226.2	247.4	84.5			
	Clearing	339.4	601.5	621.0	840.1	917.7			
Lagos	Branches	120	122	138	142	114	0.62	0.13	
	Deposits	3538.0	3961.4	4418.0	4500.0	1676.5			
	Loans	2017.8	2432.0	2509.0	3030.2	1038.4			
	Clearing	9025.5	11590.0	11609.0	11952.5	7847.9			
Sokoto	Branches	32	39	39	45	20	0.58	0.43	Based on 7 years
	Deposits	306.2	359.9	388.6	376.9	145.8			
	Loans	171.9	197.8	241.0	368.7	84.0			
	Clearing	338.6	601.4	621.2	670.1	424.3			

the aggregate ratio of cheques cleared in Oyo and Kwara States. The lowest average loan clearing ratio was recorded for Bendel State with just 10 per cent of the aggregate cheque cleared **representing** the bank loans. Lagos, too, with 13 per cent **was** also one of the lowest loan clearing ratios. In terms of the absolute amount of cheques cleared in each state, however, Lagos state once again was in the lead with an average of ₦7847.9 million. Bendel and Oyo States were in the second and third place respectively. This implies that the three states, all from the south of the country, made use of banks in their business transactions far more than any other states in the federation and hence have higher banking habit than the rest of the states. For instance, out of the yearly average of total cheques cleared for the whole economy, which stood at ₦19136.6 million during the reviewing period, Lagos had a share of ₦7847.9 million representing per cent of the total. Oyo State shared just 9.98 while Bendel State had a share of 17.5 per cent. With an average clearing of ₦424.3 million, Sokoto State was in the last position vis a vis its counterparts.

It is hoped that with the continued efforts of the monetary authorities to **urge bank** to establish bank offices, more and more people will be making use of cheques as means of payment rather than carrying raw and barren cash about with all the **inconvenience and** economic costs involved.

d. Other Indices of Growth of Commercial Banks in Nigeria:

The growth of per capita bank deposits as well as the growth of bank deposits may be used as an index of commercial bank development in any country. Table 7.2 shows some of the indices of bank growth and expansion. Thus from 6 commercial banks in 1948 with a total of 7 branches, the number of commercial banks in Nigeria stood at 27 with 1,200 branches in 1984. The total bank deposits as a percentage of GDP in 1952 was only 4.73 but by the end of 1984, it had grown to 35.6. The cause of rapid increase in commercial bank deposits in Nigeria may be attributed to many factors which will be discussed in the next section dealing with the commercial banks investment behaviour equations.

•. The Growth of Per Capital Bank Deposits in Nigeria and Bank Development

Table 7.16 depicts the growth of per capital bank deposits in Nigeria.

The average annual rate of growth of bank deposits stands at 20 per cent in nominal and 19.3 per cent in real term while the highest growth rate of 62.7 per cent was between 1974 and 1975 before it started to fall as can be seen from Figure 7.16. The fall in per capital bank deposits coincided with the fall in oil revenues and the growth in importance of other financial institutions as will be seen in chapter 10.

Since a model of Nigerian Financial Sector will be developed in chapter 10, it will be more productive to examine the total bank assets as a ratio of GDP at market price as set up in Table 7.17 in comparison with some selected countries as a measure of bank development rather than using the ratio of the total assets of all financial institutions as an indicator of financial development and maturity as used by some economists<sup>1</sup>.

As can be seen from the table, there has been a tremendous increase in the expansion of commercial banking sector in all our selected countries in general during the period 1960 and 1983, although the rates are different from one country to the other. From the table, it is quite obvious that there is a wide gap in banking development and maturity between the developed and less developed countries. For instance, in 1960, the ratio of bank assets to the GDP was 3.02 for Nigeria as against 6.8 for Ghana, which are developing countries in comparison with 33.5 for United States and 23.1 for West Germany representing developed countries. The ratio for Nigeria was increasing until 1964 when it took a downward trend and stood at 3.16 while the ratios in respect of countries like Ghana, United States and West Germany continued to increase. The ratio for Germany in particular declined only in 1969 when it stood at 50.02 from 53.35 while that of Nigeria only increased marginally during the corresponding period. Comparison of Nigerian Bank Development Index with some Oil Exporting Countries shows that Nigeria was at the top with a bank ratio to GDP of 6.8 in 1970 as against 1.7 for Saudi Arabia, 4.62 for Libya and 6.38 for Venezuela. This is not surprising because Saudi Arabia to a great extent and Libya to a smaller extent are countries where religion is against the interest payment on loans.<sup>2</sup>

1. See E.T. Holfdmity (1955), Financial Structure and Economic Growth in Advanced Countries, Princeton University Press. 2. See G.M. Meier (1976).

Table 7.16

THE GROWTH OF PER CAPITA BANK DEPOSITS IN NIGERIA IN NOMINAL AND REAL  
1960-84 (In Million Naira)

Year	Population	Adjusted Population	Total Bank Deposit	Nominal Per Capita Deposits	Percentage Growth Rate	Real per capita deposit	% Growth Rate
1960	51.6	50.6	137	2.71	-	2.71	-
1961	52.9	51.8	154	2.97	9.6	2.65	-2.2
1962	54.3	53.2	171	3.21	8.1	3.21	21.1
1963	55.7	54.6	191	3.49	8.7	3.45	7.5
1964	54.1	53.02	229	4.32	23.7	4.30	24.6
1965	58.5	57.33	265	4.62	6.9	4.56	6.0
1966	59.9	58.7	298	5.8	25.5	5.6	22.8
1967	61.4	60.2	241	4.0	-31.0	3.8	-32.1
1968	63.0	61.74	331	5.36	34.0	3.5	-7.8
1969	64.6	63.3	401	6.33	18.1	4.39	25.4
1970	66.2	64.9	626	9.64	52.3	6.9	57.2
1971	68.2	66.84	657	9.82	1.9	8.5	23.2
1972	70.2	68.8	794	11.54	17.5	9.56	12.5
1973	72.3	70.85	1013	14.3	23.9	13.1	37.0
1974	74.5	73.0	1694	23.2	62.2	22.0	67.9
1975	76.7	75.2	2839	37.75	62.7	30.5	38.6
1976	76.8	75.3	4164	55.3	46.4	49.1	60.9
1977	78.7	77.1	5235	67.9	22.8	66.0	34.4
1978	80.7	79.0	4950	62.6	-7.8	58.1	-11.9
1979	83.5	81.8	6793	81.3	29.8	79.0	35.9
1980	85.0	83.3	9585	115.1	40.2	105.1	33.0
1981	87.5	85.75	10196	118.9	3.2	96.9	-4.7
1982	89.0	87.22	11583	132.8	11.7	120.6	25.4
1983	91.2	89.4	13388	146.8	19.5	131.8	9.3
1984	93.5	91.63	13433	163.0	11.0	159.0	20.6
Averages: for the period	70.76	69.38	3574	43.7	20.0	39.4	19.3

Sources: Computed from the IMF Financial Statistics of various years

The highest growth rate in bank deposits was experienced in 1974 because of oil boom. However, there has been sharp fall in the rate of growth, both real and nominal which can be adduced to the development of other financial institutions as well as the decline in the oil industry, and hence oil revenues.

Figure 7.16

THE GROWTH RATE OF COMMERCIAL BANK DEPOSITS IN NIGERIA IN BOTH NOMINAL AND REAL TERMS. 1960 - 1984

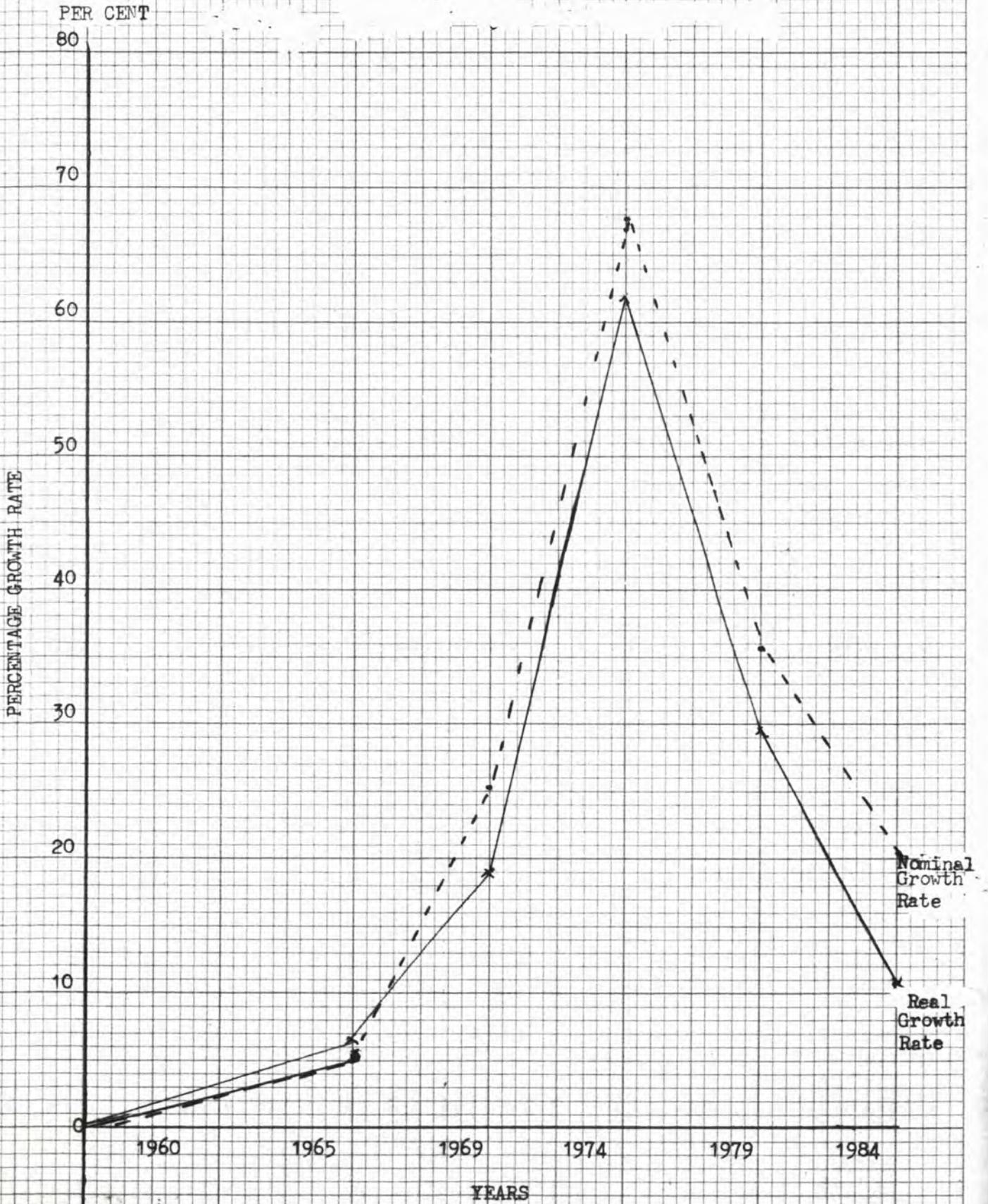


Table 7.

RATIO OF BANK ASSETS TO GDP IN NIGERIA AND SOME SELECTED COUNTRIES  
IN MILLION DOLLARS FOR DEVELOPING COUNTRIES AND  
IN BILLION DOLLARS FOR THE DEVELOPED COUNTRIES  
1960 - 1983

Year	DEVELOPED COUNTRIES		U. S. A.		DEVELOPING INCLUDING THE OIL EXPORTING COUNTRIES		Nigeria		Ibama		S. Arabia		Libya		Venezuela	
	Bank Assets to GDP %	Ratio to GDP	Bank Assets to GDP %	Ratio to GDP	Bank Assets to GDP %	Ratio to GDP	Bank Assets to GDP %	Ratio to GDP	Bank Assets to GDP %	Ratio to GDP	Bank Assets to GDP %	Ratio to GDP	Bank Assets to GDP %	Ratio to GDP	Bank Assets to GDP %	Ratio to GDP
1960	166.3	23.1	441.6	33.5	310	3.02	181	6.8	0.72	n.a.	17.8	4.6	5111	5.4		
1961	191.4	25.3	476.3	35.3	407	3.8	251	8.8	0.74	n.a.	21.5	5.1	5464	5.5		
1962	240.4	30.5	517.9	36.3	456	4.1	246	7.9	0.96	n.a.	23.6	4.2	5379	4.9		
1963	269.7	33.2	552.6	37.2	508	4.2	271	8.5	1.1	n.a.	29.4	3.9	5945	5.1		
1964	303.6	35	599.7	38.3	484	3.7	382	12.2	1.06	n.a.	30.1	4	6494	5.1		
1965	42.3	37.4	656.9	39.6	662	5	440	14.2	1.41	n.a.	44.1	5.2	7487	5.4		
1966	373.5	49.7	693.5	49.5	764	7.7	503	16.5	1.63	n.a.	43.1	3.7	7364	5.5		
1967	409.6	43.7	771.5	42.7	664	6.5	554	16.7	1.46	n.a.	64.5	6.1	8148	5.7		
1968	531.0	53.3	853.8	45.2	904	5.4	531	16.2	1.79	n.a.	77.6	3.9	9147	6.1		
1969	535.3	50	882.3	45.4	1238	5.8	669	19.2	2.2	n.a.	86.3	3.2	10139	6.5		
1970	600.1	51.6	1070.7	50.1	1865	6.4	116	21.0	2.4	4.7	130.5	4.6	10885	6.4		
1971	679.2	58.5	1089.1	54.4	1760	5.4	912	20.3	2.99	1.9	200.7	9.2	12683	7.2		
1972	732.2	64.7	1233.8	58.3	2183	6.2	1037	20.7	3.6	2.0	78.3	10.2	15189	8.4		
1973	869.2	68.8	1405.7	62.8	2580	6.7	1268	21.6	4.96	2.3	410.0	13.8	19191	12.0		
1974	929.4	74	1545.6	70.3	4198	10.4	1581	21.4	7.67	2.1	641.6	17.6	25589	12.5		
1975	1047.8	81.8	1242.7	67.9	6567	16.2	3086	20.2	15.9	6.1	746.6	19.7	36949	17.1		
1976	1163.7	88.2	1248.1	74.7	9474	21.1	3445	17.9	25.3	9.3	892	18.8	4948	14.4		
1977	1274.9	94.0	1491.7	61	12417	29.6	4080	10.7	34.9	11.3	1161.5	22.3	61044	24.4		
1978	1416.4	101.2	1676.9	65.3	12830	31.6	4596	15.1	48.1	14.6	1243.3	29.0	72077	28.2		
1979	1575.8	108.1	1679.9	63.6	16396	36.5	7730	18.8	58.5	16.7	1491.0	30.0	7633.2	29.4		
1980	1714.2	119.6	1902.4	72.2	22277	51.5	9467	22.8	77.7	19.9	2344.2	30.5	8609.6	34.8		
1981	1864.6	125.8	2146.1	81.9	24461	57.7	14534	36.1	104.8	19.7	3026	31.5	10177.8	40.2		
1982	1978.2	135.1	2386.8	90.9	27138	59.1	17529	48.1	121.9	20.8	3264	35.5	115641.7	41.7		
1983	2100.7	141.6	2356.2	86.0	28149	60.1	18590	48.0	163.1	27.8	n.a.	n.a.	12000.0	47.1		

\*n.a. Figures for GDP not available  
\*\*n.a. Figures for both GDP and bank assets not available

Source: Calculated from the IMF Financial Statistics of various years.

By 1983, the ratio of bank assets to the GDP had reached a record high of 60.1 as against that of Ghana of 48.0. We can now examine the banking equations.

### Section III

#### SPECIFICATION AND ESTIMATION OF NIGERIAN COMMERCIAL BANK INVESTMENT BEHAVIOUR

There have been many writers on the portfolio behaviour of commercial banks and it is considered unnecessary to repeat the well-known regulations on bank investment portfolios, their relationship with the Central Bank as well as the banks' profit maximization; they are all well documented in many literature (See Goldfeld (1966), R. Roland, (1962), and American Bankers Association, (1962). Of course, in chapter 9 of this study, we shall discuss about Central Bank control of the financial institutions through the formulation of monetary policies.

The objective of estimating commercial bank investment behaviour is to examine the degree to which different bank assets are substitutes for each other. Another objective is to examine the 'reluctant' aspect of borrowing in the manner suggested by Polakoff (1963). This study is to some extent influenced by the work of Goldfeld (1966), especially chapter II of his book in terms of behavioural assumptions as they relate to banks' investment behaviour. However many modifications are effected in the model in order to reflect the developing nature of Nigerian financial markets and institutions. We also acknowledge the benefit derived from the reading of the econometric model by De Leeuw (1965) on U.S. financial sector and also a number of econometric models with emphasis on financial sector.

In Nigeria, the commercial banks invested large sum of their funds in Government Treasury Bills of 90 days maturity and also in Treasury Certificates which are medium term investments since they mature only in a year or more. In 1970 alone, 80.9 per cent of the total investment funds of banks was in Treasury bills and Treasury certificates. Since the introduction of the Treasury Certificates in 1968, the commercial banks have always been the largest subscribers as will be seen in chapter 10. Of the total issue of Treasury bills in 1981, the commercial banks subscribed 45.4 per cent and in Treasury Certificates, they subscribed 54.3 per cent of the total issues. This is the reason why we estimate the demand equations for both the Treasury Bills and Treasury

1. See Goldfeld (1966); R. Roland, (1962), and American Bankers Association (1962)
2. See Polakoff (1963)
3. See also De Leeuw (1965) The CBN report of 1970 gives the magnitude of bank investment in Nigeria.

Certificates together with the Federal Government Stocks. The reason for merging the investment in Treasury Certificates and Government Stocks together is the fact that commercial banks' subscription to the latter is very minimal since it is a form of long-term investment, maturing between 5 and 10 years and since the Treasury Certificates are also fairly long from over one year, it is considered rational, for convenience sake to merge them together.

A number of constraint variables enter into our asset demand equations of commercial banks. One of these is the bank deposits. The deposit variable was broken into two, namely demand deposits (Dd) and time deposits (Td). Our attempt to break this variable into three groups, namely demand deposits of the private sector (Ddp), time deposits of the private sector (Tdp) and total deposits of the Federal and State Governments (Gd), did not yield good results because they turned out to be very insignificant with very low DW value. We, therefore, dropped the idea in the final versions of our asset demand equations.

Another important constraint variable which enters into our demand for assets equations is the flow of commercial banks' loans and advances. The use of this variable as a constraint rather than a decision variable is to highlight the importance of "customer-relationship" variable which in many cases has often forced many a bank to accept loan requests at least in the short run even at the expense of losing important investment opportunities. The "customer-relationship" is often a logical explanation for the insignificance of interest rate variable in some equations.

We begin our commercial bank investment equations with the demand for government securities. The primary security-holdings of commercial banks are the Government Treasury bills, the Treasury Certificates and the Federal Government Development Stocks. Since 1970, the commercial banks in Nigeria have become more interested in the mortgage investment. They also hold excess reserves and borrow large sums of funds from the Central Bank of Nigeria. For all the above, commercial bank investment equation will be estimated. In addition, equation for the total assets will also be estimated in order to

highlight the major determinants of the commercial banks' total assets.

The following are the notations used in the equations:

TB = Treasury Bills	UBR = Unborrowed Reserves of commercial banks
TC = Treasury Certificates	
BL = Bank loans	
CBB = Commercial Bank Borrowing from the Central Bank of Nigeria	
BER = Commercial Bank Excess Reserves	
Dd = Demand Deposits	
Td = Time Deposits	
TBr = Treasury Bill Interest rates	
BLr = Bank Loan rates	
Mgt = Mortgage	
Mgtr = Mortgage rate	
CBR = Central Bank Rediscount rate	
BA = Total Bank Assets	

It is important to state that since domestic savings will be investigated in chapter 9, it is no longer necessary to examine the major determinants of the bank deposits here. Since there has been an earlier study of the determinants of the supply and demand for commercial bank loans by this writer, it is considered not necessary to estimate loan equations again in this model. Moreover, since in chapter 8 we shall examine the hypothesis on the existence of credit rationing in the commercial bank loans in Nigeria, it is reasonable to omit the estimation of demand and supply of commercial bank loans in this chapter.

Using the stock adjustment mechanism, the commercial bank assets demand equations in estimated form are as follows. In most of the equations the standard least squares method was used while in some, in order to correct the autocorrelation, 2-stage least squares was used.

Equation 7.1 C	<u>Estimated Equations and Results</u>				<u>OLS Method</u>
	Td	BL	TBr	BA <sub>t-1</sub>	
BA <sub>t</sub> = 0.70307 (1.8239)	0.35251 (2.1596)	-0.11232 (-2.4331)	0.23495 (1.7267)	0.8214 (5.2241)	

$R^2$   
0.99

 $F$ -Statistics  
698.159
Equation 7.2

	C	Td	Dd	BL	TB <sub>t-1</sub>	$R^2 = 0.91$
TB <sub>t</sub> =	1.07632	0.85039	0.02591	-0.88391	0.83281	F-St. = 65.75
	(2.2341)	(4.9530)	(1.2003)	(-2.3715)	(5.3567)	(OLS)

Equation 7.3

	C	TBr	TGr	TC <sub>t-1</sub>	$R^2 = 0.94$
TC =	1.07632	0.0673	-0.0123	0.8123	F-St. = 342.174
	(2.2341)	(2.1008)	(0.8466)	(4.5192)	(2-SLS)

Equation 7.4

	C	Td	Dd	BL	Mgt <sub>t-1</sub>	$R^2 = 0.96$
Mgt <sub>t</sub> =	4.3950	1.5605	0.50775	-0.34399	0.72949	F-St. = 182.511
	(4.2899)	(3.0466)	(1.9679)	(-2.5949)	(4.8324)	(2-SLS)

Equation 7.5

	C	TBr	UR	BER <sub>t-1</sub>	$R^2 = 0.92$
BER <sub>t</sub> =	0.64009	-1.1336	0.20750	0.9340	F-St. = 15.21
	(1.5149)	(-2.2775)	(0.4458)	(9.2063)	(2-SLS)

Equation 7.6

	C	(TBr - CBr)	UR	CBB <sub>t-1</sub>	$R^2 = 0.94$
CBB <sub>t</sub> =	0.54690	0.48671	0.3579	0.8850	F-St. = 128.0
	(2.2349)	(1.8945)	(3.9456)	(7.2349)	(2-SLS)

As can be seen from the above, the co-efficient of each variable tested is written with its T-statistics underneath in parentheses). Equation 7.1 is an expression of the factors which influence the aggregate demand for assets by the commercial banks in Nigeria. In Nigeria, very few people, more especially businessmen and government workers of high salary brackets open demand deposits apart from the government parastatals and the Federal and State Governments as well as big business firms like UAC and others. Majority of bank users prefer to open savings account or time deposit accounts since this requires no rigid procedures as entailed with the demand deposits where the would-be bank user is expected to have a guarantor. Demand deposit is a means of payments in the hands of users, and hence, it is considered appropriate to

use time deposits (Td) as an explanatory variable in the demand for aggregate asset equation of commercial banks. As can be seen, from the results, the bank loan variable is very significant and carries the expected sign while the interest rate on Government securities (TBr) is only significant at 5 per cent level using a one-tailed test. The speed of adjustment of this equation is very rapid which implies that in the short run, only 18 per cent of adjustment occurs and in the long run over 82 per cent of adjustment occurs.

Equation 7.2 explains the determinants of demand for Treasury Bills by the commercial banks. As can be seen from the equation, the bank deposits was broken into two, demand deposits and time deposits. In our preliminary investigation of this demand for Treasury Bills, the own rate and various combinations of rates on alternative bank assets were included but they all turned out to be insignificant, and most ended up with wrong signs. Because of this we did not include them in this equation, but instead the commercial bank loan variable was added as a constraint. The loan variable is significant but negative which implies that increased loan demand is financed at least in the short-run by selling Treasury Bills. It will also be noticed in equation 7.2 that the time deposit variable is significant while the demand deposit variable is not. This clearly shows the importance of segmenting bank deposits into two especially in developing countries where very few people use current account deposits. The speed of adjustment in this equation is slower than that of equation 7.1.

Equation 7.3 is in respect of demand for fairly long-term government securities (Treasury Certificates and Federal Government Stocks all combined as an approximation). As can be seen in the equation, we try to test if there is element of substitutability between demand for short-term government securities and long-term by entering the interest rate variable on Treasury Bills, Treasury Certificates and mortgage. The negative insignificant co-efficient of Treasury Certificate rates clearly suggests that there is some

1. See O. Olakanpo (1966), "Monetary and Banking Problems in Nigeria", Bankers' magazine.

element of substitutability between the short-term and long-term government securities.

Equation 7.4 is an expression of demand for mortgage by the Nigerian commercial banks and, as can be seen, no interest rate variable is entered, suggesting that there is zero substitutability between mortgage and other assets. In our preliminary investigation, the relevant rates were tried but proved insignificant. Deposit mix, i.e. (Td and Dd), which enters into equation 7.4 can be explained in terms of reasonable behavioural patterns of the commercial banks in Nigeria. Since mortgage is very illiquid in an economy where majority of transactions are often consummated in cash, one should expect that a switch of funds from cash to Dd may not have any effect on mortgages. However, a switch of funds from Dd to Td may increase the mortgage demand. This, perhaps, explains why the co-efficient of Dd variable in equation 7.4 is not significant. The speed of adjustment of this equation is also very quick with 27 per cent occurring in the short-run, as against 72 per cent in the long run.

Equation 7.5 is an expression of the determinants of banks' demand for Excess Reserves in Nigeria. As can be seen from this equation, an open market variable is added in addition to the Treasury Bills rate, which is designed to reflect the direct influence of changes in reserves available to banks on holdings of excess reserves. Since any increase in unborrowed reserves is first held by the banks partly in cash (excess reserves) and is then converted into liquid assets (or used to reduce borrowings), it can be regarded as a short-term reaction on the part of the banks. This explains the rationale for entering the unborrowed reserves (UR) as an explanatory variable. In this equation, only the Treasury Rate variable has a negative sign, although very significant which only indicates the effect of increase in the opportunity cost of funds on demand for excess reserves. The positive sign of the co-efficient of UR merely suggests that any increase in reserves is held partially as excess reserves before it is used to purchase securities or loaned out. Even then, this variable is not significant in the equation and all attempts to improve upon this result proved unsuccessful. However, since this

1. See G.W. Nwankwo (1980).

is the first attempt in the study of this kind using Nigerian data, the result can be regarded as tentative. The speed of adjustment for bank excess reserves in Nigeria is very slow, being merely 7 per cent in the short run and more than 90 per cent in the long run, which is attributed to the few investment outlets in Nigerian financial system.

Commercial banks' borrowing from the Central Bank of Nigeria is expressed and explained by equation 7.6. The positive co-efficient of  $(TBr - Dr)$  although less significant (5 per cent level of significance by a one-tailed test), clearly confirms the profit theory of borrowing. Thus, according to this result, as the Treasury Bill rate increases relative to the discount rate, banks are encouraged to borrow more from the Central Bank. That the insignificant co-efficient of this variable  $(TBr - Dr)$  suggests is that there are other variables much stronger than profit motive in the determinants of bank borrowing. The significant but negative co-efficient of  $URB$  suggests that increases in reserves make it less and less likely for banks to borrow more funds from the Central bank. The speed of adjustment of the CBB is fairly quick at 12 per cent in the short run and more than 90 per cent in the long run.

Looking through the whole model, one can say that the overall performance of the behavioural equations for commercial banks' assets demand is quite good. The high  $R^2$ s, the low standard error measured by the T-statistics and the lack of significant serial correlation all clearly suggest that the estimated equations are close approximations to reality of Nigerian banking sector. The sensitivity of Treasury Bills and Excess Reserves to interest rate changes is expected to be very important for the impact of monetary policy on the entire model. Finally, as can be seen from all the equations, the quick speed of adjustment in the regressions is another reason to believe that our estimates are, although can be regarded as tentative, very close to approximation.

1. See S.M. Goldfeld (1966).

#### 7.4a Some Comments about the Study:

Owing to the lack of quarterly data on commercial banks' economic variables, the data used are annual from 1960 to 1984. All the flow variables are in million Naira and in current prices while interest rate variables are in percentages. The estimates as already indicated were obtained by the use of both O.L.S. and 2-SLS methods. We also used standard criteria:  $R^2$  for goodness of fit, 'F' testing significance of the whole regression, T-statistics, testing the significance of partial regression co-efficients, and a priori signs to evaluate our results. Since the Durbin-Watson 'D' statistics has no meaning in lagged variables, we find it unnecessary to report.

#### 7.4b Some Limitations of the Study

While it should be stated that in an econometric approach to economic research which pertains to the financial fields of less developed countries like Nigeria in particular and in any country in general, one should exercise some reservations, it is necessary to state here that the econometric approach adopted here was designed to supplement other approaches. It should also be stressed that the study is subject to the assumptions made such as linearity. Also there is data limitation as already explained. In the light of all these, therefore, caution needs to be exercised if any policy recommendations are to follow from the estimates. In addition, one should also appreciate the fact that in real life, many social and political pressures may have to be accommodated and hence our parameters should be taken in terms of broad orders of magnitude and our conclusion tentative.

#### 7.4c Conclusions:

Most economists believe in aggregating the bank deposits in their estimation of commercial bank demand for assets. In this study, it is found that, for the developing countries where current accounts are of limited use, time and savings deposits with the commercial banks have greater influence on the demand for assets. The inclusion of loan variable in the equation of demand for treasury bills by commercial banks clearly shows that variation

in the quantity of loans may be in response to the variation in loan rate. Thus, when the loan rate is high, treasury bills are sold in the short run, at least in order to increase the loan supply and when loan rate falls, commercial banks increase their holdings of government securities. This finding is in line with the conclusion of King (1984) that bank loan supply is responsive to loan rate. It is also discovered by the results of this estimate that there are other variables much stronger than profit motives in the determinants of bank borrowing, one of which may be customer relationship. This suggests that the monetary authorities must not rely on variation in discount rate and treasury bill rate in their effort to control money supply in Nigeria. Variations in the quantity of loans through reserve changes might explain the real impacts on monetary policy in Nigeria, as shown by the result of the estimate of equation 7.6.

In the earlier sections, it is discovered that commercial banks are the most important institutions for the effective mobilisation of domestic savings in Nigeria. However, as new financial institutions are developing, the share of commercial banks in the total domestic savings is falling slowly in percentages, but increasing nominally. The reason for the lion's share of commercial banks in total domestic savings is found in the number of their branches, the location of which follows very closely the theory of economic growth and development.

Relating the distribution of bank credit among the component states of Nigeria, to the volume of bank deposits in each state, it is found that the higher the bank deposits in most of the states, the greater the volume of bank credit. However, in some states which are relatively new, more credit are granted than the amount of deposits actually derived which can be explained in terms of government's credit policy regulations which are directed at furthering even development in Nigeria.

The computed banking ratios in all the tables are related to the volume of bank clearing in each state and it is discovered that the lower the level of

1. R.G. King and C.I. Plosser (1984), "Money, Credit and Prices in a real business cycle, American Economic Review 74, 363 - 380

bank deposits, the lower the level of loans and the lower the number of bank offices, the lower will be the value of cheques cleared in each state of Nigeria.

The Nigerian Commercial banks' policy of locating offices in urban and commercial centres of the country is partially responsible for the low deposit levels of most of the states, especially those created in 1967 and 1976, and hence the rural banking policy of the Nigerian Central Bank is clearly justified, although sometimes uneconomic to some banks as **already** explained.

NIGERIAN COMMERCIAL BANK LOAN EQUATIONS: A TEST FOR THE EXISTENCE OF  
CREDIT RATIONING IN THE COMMERCIAL BANK LOAN MARKETS.

INTRODUCTION:

In the last chapter, the growth and the structure of commercial banks in Nigeria have been discussed and an attempt has been made to specify and estimate commercial bank equations, but which excludes loan equation deliberately deferred for this chapter. In this chapter, therefore, the existence of credit rationing in the commercial bank loan market will be tested.

While many writers have written papers on credit rationing in commercial loan market in some major industrialized countries, some of whose work have influenced this particular chapter to some extent, there has never been any attempt at either testing for or measuring the existence of credit rationing in the loan market of any developing country to the best of our knowledge. Since market for money and credit in any developing country is not a single, homogenous unit as obtained in the developed countries, it is very tempting to argue that there is an element of credit rationing in the loan markets of less developed countries characterized by heavy market intervention by the monetary authorities coupled with the market fragmentation.

Since the relevance of monetary policy is accepted for the less developed countries where the interest rate policy is less effective as a rationing device in the loan market like in Nigeria,<sup>1</sup> it is instructive to examine the possibility of the existence and magnitude of credit rationing phenomenon if the government as well as economists are to understand the basic mechanism by which monetary policies are transmitted to the real sector. The objective of this chapter, therefore, is to show empirically that there is an element of credit rationing in the Nigerian commercial bank loan market

1. See T. Adewumi (1982)

in view of the imposition of credit ceilings and guidelines by the monetary authorities.

For the purpose of clear analysis, this chapter is divided into three sections. Section I deals with the theoretical underpinings while section II discusses the specification of our disequilibrium model of commercial bank loan market in Nigeria. Finally section III is devoted to the estimation of the model and the results.

### Section I.

#### 8.2a Theoretical Underpinning:

Many writers have devoted their attention to the element of credit rationing in the commercial loan market in recent years. However, before the present attention on this issue by many writers, the traditional Keynesians<sup>1</sup> who gave key role to interest rates in the formulation of monetary policy have shown how changes in interest rate can affect the banks' willingness to borrow. In their view, changes in interest rates have two effects on lenders, or in our analysis, on commercial banks. Firstly, they affect the relative profitability of their different earning assets and secondly, they affect the banks' portfolios since their capital values are changed. For the clear analysis of the Keynesians proposition on this score, it is necessary to put the issue of interest rate in the context of supply and demand for loanable funds.

Let us assume that the commercial banks in Nigeria are the lending institution in the economy, whose asset portfolio is made up of some reserve asset,  $RR$ , and government securities like Treasury bills, Treasury Certificates and government development stocks,  $GS$  and loans,  $BL$ . Let us assume that the latter two earn interest at rates  $GSr$  and  $BLr$  respectively. In such a situation, the willingness to supply loans will depend on the relative rates of return and on bank reserves, given the overall size of the banks' portfolio in aggregate:

1. See Ackley, G. (1961), Macro-Economics, Macmillan, London.

$$SL = F(BR, GSr, Lr), \quad \frac{SL}{BR} > 0, \frac{SL}{GSr} < 0, \frac{SL}{Lr} > 0$$

The demand for loans by private will depend on  $Lr$  and expected profits  $\bar{\pi}^e$ :

$$DL = fd(Lr, \bar{\pi}^e), \quad \frac{DL}{Lr} < 0, \frac{DL}{\bar{\pi}^e} > 0.$$

Thus a rise in  $GSr$  will lead to negative effect on  $SL$  for two reasons, namely, the usual substitution effect and wealth effect. An increase in the rate of return on  $GS$  will increase their attractiveness to banks relatively to loans. Furthermore, since the  $GS$  already held by the banks now carries a lower market value, the size of the bank balance sheets, or bank liquidity is reduced. Because of this reduction, there will be a negative effect on the  $SL$  since it increases the cost of obtaining additional reserves. For clear analysis, it is instructive to draw a diagram. Thus in terms of diagram 8.1 below, showing the demand and supply of loans as functions of  $Lr$ , the effect of an increase in  $GSr$  will result in a shift of  $SL$  to the left. The conventional Keynesian analysis would predict that  $Lr$  would also increase in response to excess demand for loans, but if the demand for loans is insensitive to interest rate, the volume of loan would not fall significantly. Lending will fall only slightly, from  $L_0$  to  $L_1$ .

This line of reasoning is not supported by Radcliffe (1959) who held that lending rates did not adjust rapidly and hence a shift in the supply curve of loanable funds would lead to credit rationing. In the period before adjustment in rates takes place, new lending will fall to  $L_2$ . At the old rate  $Lr_0$ ,  $L_2$  will be the level of loans which banks will now prepare to lend. Thus there is an excess demand for loans, and hence funds must be "rationed" among the people who want to borrow.

From this analysis, it can be seen that the credit rationing assumption seems to have restored much of the potential power of monetary policy since a credit squeeze can make banks to ration credit in response rather than raising loan rates. Low interest sensitivity of demand for

1. See Radcliffe Report (1959) "Committee on the Working of the Monetary System" Cmnd. 837, London, HMSO.

CREDIT RATIONING

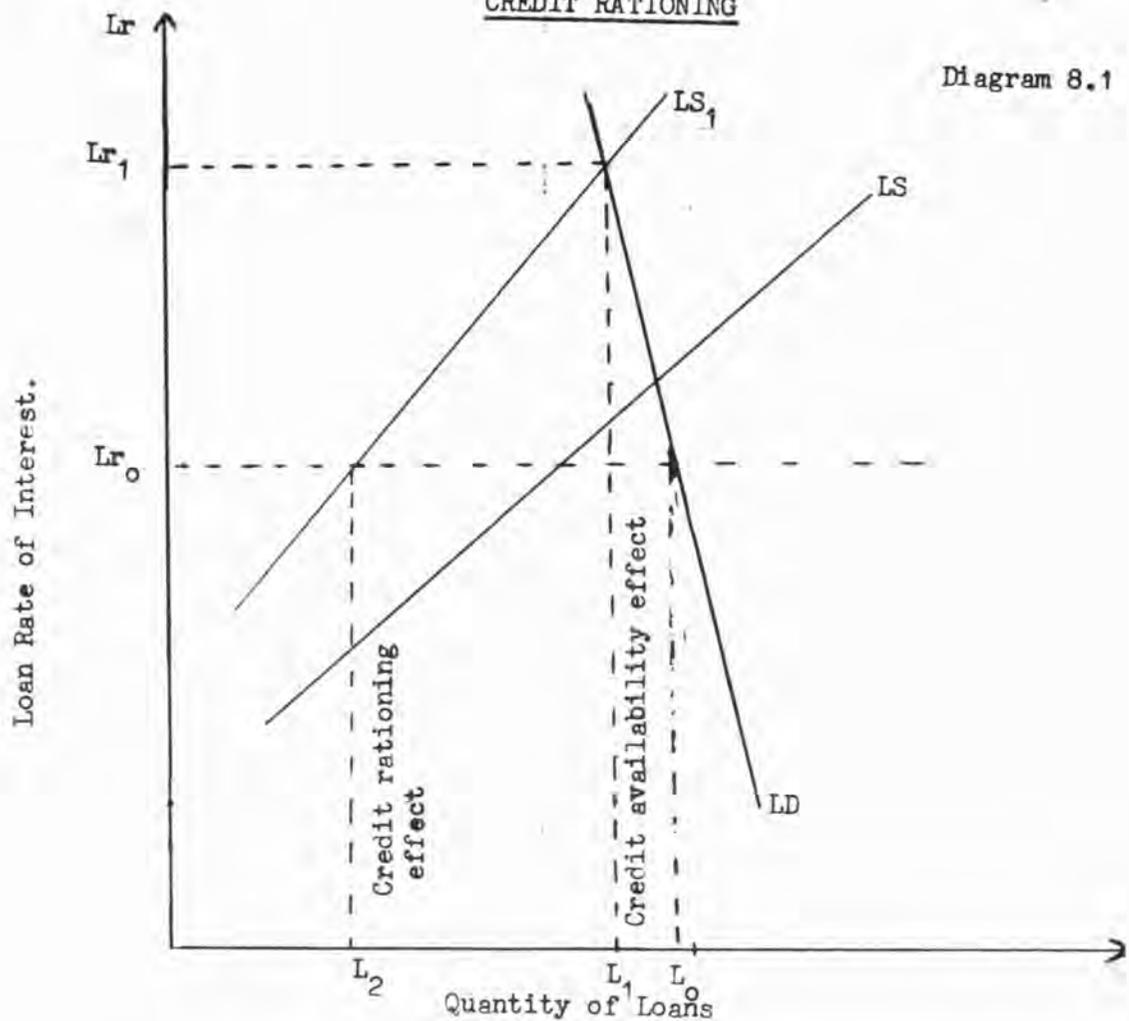


Diagram 8.2 CREDIT RATIONING: DEMAND EXPANSION

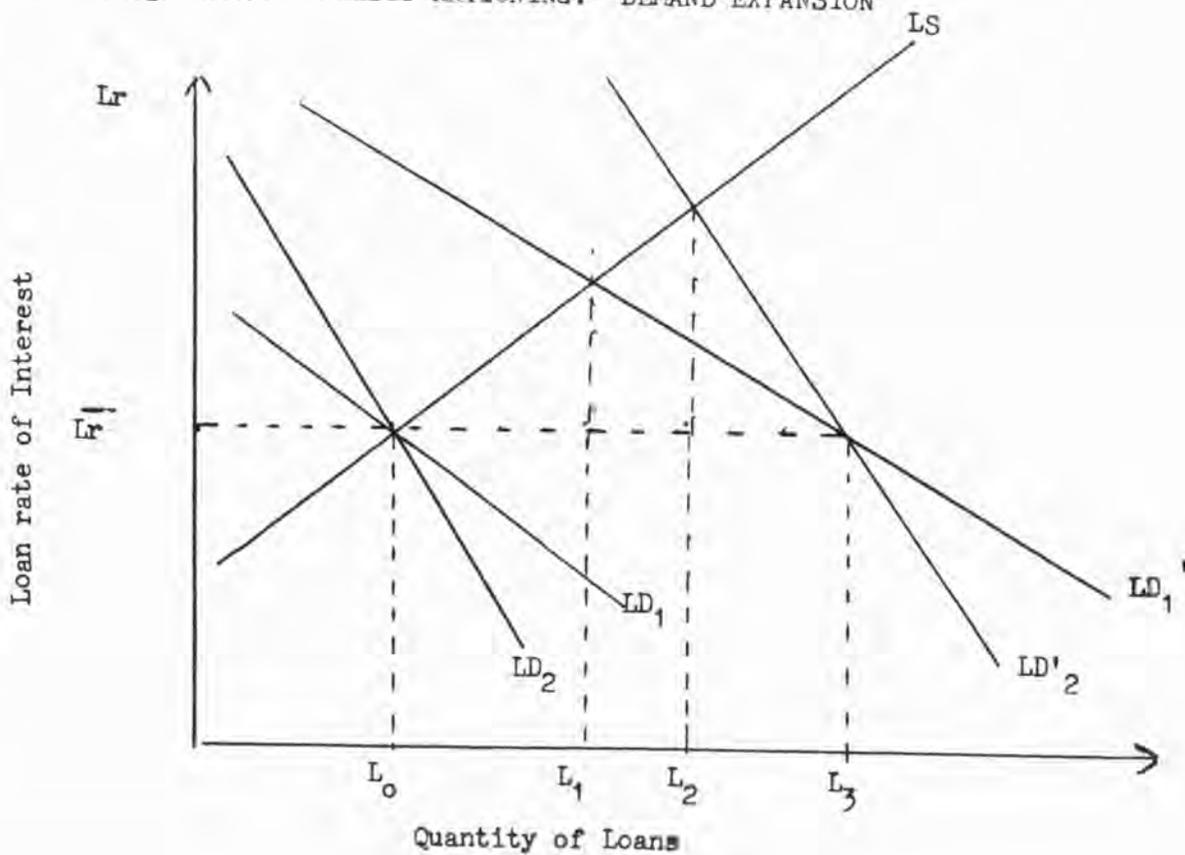
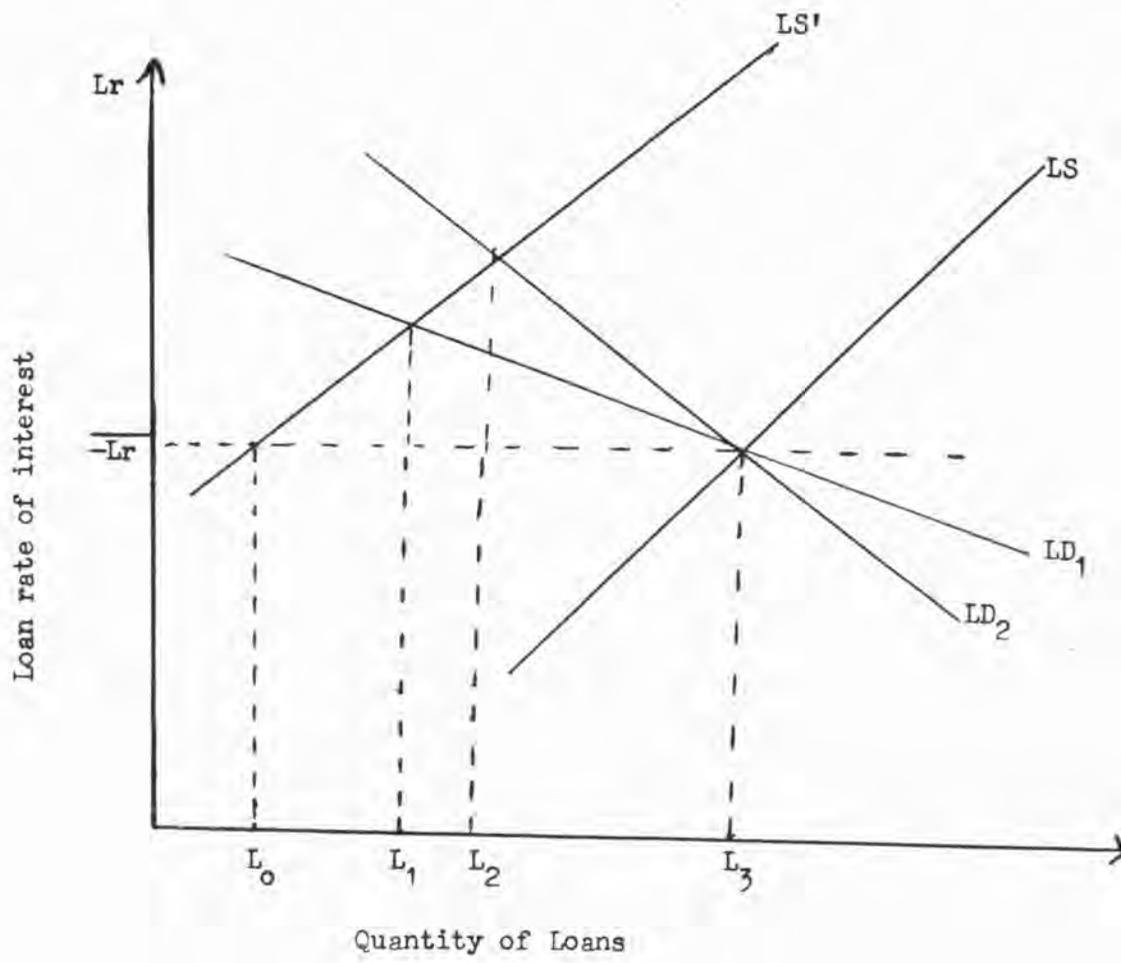


Diagram 8.3 CREDIT RATIONING: REDUCTION OF SUPPLY



credit cannot, therefore, weaken any monetary policy since what matters is whether money is easy or tight, not whether it is cheap or dear. Radcliffe wrote:

"While the cost of borrowing money can only affect total demand in (a) limited manner ... the monetary authorities may bring to bear another influence which is altogether more peremptory. This is the availability of funds to borrow . . . (If) the money for financing the project cannot be got on any tolerable terms at all, that is the end of the matter." (1959, p. 387<sup>1</sup>).

The cost of borrowing explanation of the interest rate's influence on spending by the traditional "Keynesian" is premised on the implicit assumption that the availability of credit is unaffected by variation in lending rates. To be sure, lending rates may rise because of two reasons: either because the banks' willingness to supply has declined for some reason or the demand for loans has risen. In either case, relatively to demand, loanable funds may now be less available. According to simple microeconomic theory, one should expect that when lending rates rise, the borrowers who cannot afford to pay the higher borrowing costs will voluntarily drop out of the market, so that if the rate adjusts rapidly, there will be no excess demand for credit. However, it will be a mistake to concentrate on the cost of credit effect alone, as if, when the new rate clears the market, the quantity of loan extended will not affect expenditure except through the cost. As can be seen from diagram 8.1 above, when the loan market is cleared, any restrictive policy will result in increasing simultaneously the loan rates and decreasing the availability of funds from  $L_0$  to  $L_1$ . The ultimate effect of credit rationing is to increase the quantitative effect of restrictive policy, implying an additional impact on the flow of credit of  $L_2 - L_1$ .

Some economists have tried to define the quantitative change in the volume of credit as a result of change in loan rates in terms of availability effect and credit rationing effect and this may be analysed by the use of the same

1. See Radcliffe Report (1959 p. 387).

diagram. Thus by calling the equilibrium change in the volume of lending the availability effect, and defining the credit rationing effect as the difference between the equilibrium outcome and the credit rationing outcome, one can come out with the useful but paradoxical result that credit rationing has two effects - a credit rationing effect  $(L_1 - L_2)$  and an availability of funds effect  $(L_1 - L_0)$ . The last effect would result even if the market would clear. This shows that restrictive monetary policy can always make money tight, even if sometimes it cannot make it dear.

The importance of credit rationing to monetary authorities lies in the fact that it always has a greater effect on lending, and hence on expenditure, than the availability of funds, and the cost-of-borrowing mechanism. However, this depends on the nature or shape of the schedules of demand for and supply of loanable funds and on how long the disequilibrium of a credit rationing condition is maintained. Thus an equal expansion of demand at the going rate of  $L_r$  (See diagram 8.2) or a reduction in supply of funds as in diagram 8.3, will yield a greater effect of credit rationing on credit the less the elasticity of demand for loans over the relevant range:

$(L_1 - L_0) > (L_2 - L_0)$ , where  $L_0$  is the credit-rationing effect and  $L_1$  and  $L_2$  the equilibrium results given  $LD_1$  and  $LD_2$  respectively. Conversely, the more elastic is the demand, the lesser the effect of credit rationing and the greater is the effect of the availability or cost of borrowing:  $(L_3 - L_2) < (L_3 - L_1)$ .

Radcliffe (1959) had actually made argument in respect of credit rationing because of its policy importance, and it is a disequilibrium argument (V. Chick (1979)). The Keynesian lending rate argument represents the price aspect of an equilibrium argument in which one can only speak about money being cheap or dear rather than being tight or easy. It is the disequilibrium argument of credit rationing that has now occupied the mind of many economists in recent years.

### B.2b Some Recent Empirical Work on Credit Rationing:

In recent years, many writers have devoted their attention to the empirical studies of credit rationing in the commercial loan market. For example, Jaffee's (1969) study on credit rationing<sup>1</sup> has been very illuminating, but the work of Hugman,<sup>2</sup> (1969) is apparently the first significant advance on the theory of non-price credit rationing. As a matter of fact, however, it is his comment on the paper written by Kareden and his (Kareden's) subsequent reply that have really helped to build the theory of credit rationing at the initial stage. Many other writers have helped immensely to develop the theory further.

Of most important and which is of interest to our present study is the work of Jaffee and Modigliani<sup>3</sup> (1969) which seems to represent one of the most illuminating theoretical discussions on credit rationing. The two writers rightly recognized that rational profit-maximizing banks are largely disposed to credit rationing. This view is also shared by Harris and Lockett who also held a positive view on the use of nonprice term as a method of rationing credit. Harris<sup>4</sup> (1974) devoted a considerable attention to the examination of the changes in the bank lending practices with the use of survey techniques and thereby came out with the most comprehensive analysis of empirical study of credit rationing. Although in his analysis, he was able to show that there exists credit rationing in the commercial loan market, he was, however, not able to provide a direct measure of its magnitude which was due largely to the nature of survey data he used as rightly observed by many researchers.

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1. See Jaffee and Russell (1976) and Hellwig (1984) on what meant by credit rationing. See also the work of Stiglitz and Weiss (1981) for what they called 'true' rationing. Also see the recent work on credit rationing in equilibrium by Williamson, (1986).
  2. See Hugman, (1969); 3. Jaffee and Modigliani (1969); and 4. Harris, (1974)

In an attempt to avoid the pitfall associated with Harris'<sup>1</sup>(1973) work Jaffee employed proxy measure in examining the existence as well as the extent of credit rationing. Having fully specified the commercial bank loan market model, Jaffee came out with the structural estimates of commercial loan market, thereby presenting the most comprehensive study of credit rationing model. However, since he uses the proxy method approach, it follows that his result can only be useful to the extent to which the proxy employed actually reflects the degree of credit rationing. In spite of good result obtained with the use of proxy measure, Jaffee found that credit rationing proxy is not significantly related to loan demand. Many writers have attributed the use of recursive model which does not allow the demand for and supply of loans to interact in order to simultaneously set the loan rates and the quantity of loans transacted in the loan markets to the weakness in Jaffee's work. Thus the work of Melitz and Pardue<sup>2</sup>(1973) and that of Kramer<sup>3</sup>(1969) have both shown the consistency of using simultaneous equation model in the examination of the commercial loan market with the observed data.

The direct measurement and estimate of the degree of credit rationing is embodied in the work of Sealey (1979), in which credit rationing is conceived in terms of the difference between demand and the supply of loans to the rationed customers at the prevailing interest rate on loan. However, since it is difficult to know the quantity of loan demanded and supplied at the prevailing price of loan, the only option is to use an indirect approach or a proxy. As a way of side tracking this problem, Sealey adopted the technique of modelling and estimating the markets in disequilibrium which has enabled him to estimate directly a structural model of the commercial bank loan market in a manner consistent with the theory of credit rationing. The same technique is being applied in this study with necessary modifications to reflect the developing nature of Nigerian commercial bank loan market.

1. See Harris (1973); Melitz and Pardue (1973); Kramer (1969)

## SECTION II

## 8.3 SPECIFICATION OF THE COMMERCIAL BANK LOAN MARKET UNDER DISEQUILIBRIUM

The model for commercial bank loan market disequilibrium model is presented here in line with the one developed by Fair and Kalejian (1974) but which was further modified by Maddala and Nelson.<sup>2</sup> The model for Nigerian commercial bank loan market is thus formalized as follows:

$$L_t^D = a_0 + a_1 L_t^r + a_2 X_t + U_{t_1} \quad (1)$$

$$L_t^S = b_0 + b_1 L_t^r + b_2 Z_t + U_{t_2} \quad (2)$$

$$Q L_t = \min. (L_t^D, L_t^S) \quad (3)$$

$$L_t^r = w(L_t^D - L_t^S) + U_{t_3} \quad (4)$$

$$0 \quad w$$

Where:

$t$  = time

$L_t^D$  = quantity of loan demanded at time  $t$

$L_t^S$  = quantity of loan supplied or actual loan extended in the market at time  $t$

$X_t$  = Vector of exogenous variable (1)

$Z_t$  = Vector of exogenous variable (2)

$a_1$  = Vector of parameter variables in equation 1

$b_1$  = Vector of parameter variables in equation 2

$U_{t_1}$ ,  $U_{t_2}$  and  $U_{t_3}$  = disturbances terms.

The market clearing conditions are arrived at directly from equations 1 - 4 as follows:

$$L_t^D = L_t^S = Q L_t$$

Thus equations 1 and 2 is being estimated with the appropriate technique, while 3 and 4 are left alone. Since under the condition of credit rationing, cost variable is not so important in the estimation of supply and demand, the market clearing condition cannot be used. The fundamental

1. See the work of Kalejian and Fair (1974)

2. See Maddala and Nelson, (1974), on Maximum Likelihood Methods for Models of Markets in Disequilibrium, in Econometrica VIII (November).

assumption underlying equations 3 and 4 is that the quantity of loan and advances exchanged in the loan market will be either on the demand side or on the supply side whichever is less. This assumption is in line with the one presented by Nelson and Maddala in their work. As an example, if the supply exceeds the demand side, it is expected that the observed quantities will be on the demand schedule and hence market will be characterised by the conditions of excess supply, and if otherwise, by the conditions of excess demand. This assumption is similar to assumptions made on the conditions of perfect competition one of which is that the first short side must prevail.

The change in the excess demand or supply situation in the market is depicted in equation (4) in terms of the changes in the price of loan. The rationale of this assumption, therefore, is that any change in price has a direct relation to the amount of excess demand in the loan market. It is necessary to note, however, that change in loan rate ( $L_t^r$ ) is stochastic and hence not all changes in loan rate should be attributed to excess demand or supply. In a continuous time model, the co-efficient  $w$  will be equal to zero in an extreme case where no adjustment occurs, but will approach infinity where there is possibility of instantaneous adjustment. If it is the other side of the coin, i.e. if it is a discrete time model, the actual of  $w$  will depend on the length of time unit. In which case, the actual of  $w$  measures the average adjustment to excess demand during the period between observations.

In the Nigerian Commercial Bank loan market being estimated in this study, the quantity of commercial bank loan and advances demanded and the quantity supplied as well as the rate of interest on commercial bank loan which is the weighted average of all kinds of loan rates in Nigeria are presented as endogenous variables. Any difference that may occur between the supply and the demand quantity is regarded as disequilibrium which is associated with the lack of complete price adjustment. It is now generally recognized in both developed and less developed countries that loan rates are always sticky and hence change very slowly. This is one of the rationale for the study of commercial loan market from the disequilibrium point of view like the one embodied in

equations 1 - 4 above. The earlier<sup>1</sup> work on credit rationing by Tucker (1968) is a direct response to the lack of complete loan rate adjustment.

Another assumption underlying the model being presented here is that nonprice terms of credit change in the same direction as the loan rate. This assumption is supported by Harris' (Jan. 1974) work which showed that the price and nonprice terms are closely together. This means that as loan rates rise, nonprice credit requirements also become tighter. Hence excess demand for loan is more likely to occur at the going loan rates while the opposite will occur if the loan rates are declining. The model here is concerned only with the measurement of the dynamic effects of rationing in the Nigerian commercial bank loan market. To be sure, it measures the effect of rationing during the process of adjustment rather than the amount of rationing when the loan market is in equilibrium. The basic rationale for this disequilibrium model is based on the premise that in terms of the implications for speed and impact of monetary policy it is the dynamic rationing which is of prime importance.

8.3a How the Estimating Equations are Derived:

As already pointed out, equations 1 - 4 may be estimated in line with the suggestion by Maddala and Nelson that "appropriate formulated full-information likelihood technique" is appropriate for this kind of model. Since equations 1, 2, and 4 represents a three-equation model with three endogenous variables, it is expedient to denote the joint of the endogenous variables  $L_t^D$ ,  $L_t^S$  and  $L_t^R$  by the following expression:

$$f_t (L_t^D, L_t^S, L_t^R) \text{ where } X_t \text{ is a vector of the } X_t$$

endogenous variables in the model.  $f_t$  which stands for joint-density function can be derived from the joint density of the structural disturbances  $U_{t_1}$ ,  $U_{t_2}$ , and  $U_{t_3}$ . Assumption of normality in the distribution of these disturbances yields the following expression for the density  $f_t$ :

$$f_t = \frac{1/J}{(2\pi)^{3/2} |A|^{1/2}} \exp. \left( -\frac{1}{2} (U_t)' A^{-1} U_t \right) \quad 8.6$$

1. See Tucker (1968), "Credit Rationing, Interest Rate Lags and Monetary Policy Speed", in Quarterly Journal of Economics, LXXXII of February,

where  $J$  is the Jacobian determinant of the transformation from the disturbances to  $(L_t^D, L_t^S, \text{ and } L_t^R)$  stands for covariance matrix of the structural disturbances represented by vector  $(U_{t_1}, U_{t_2}, U_{t_3})$ . Completion of this joint density entails the substitution of equation 8.5 for equation 8.1, 8.2 and 8.4 which are solved for the structural disturbances.

Since the disequilibrium situation of the market does not permit  $L_t^D$  and  $L_t^S$  to be simultaneously observed, there is apparently no other option than to state the model in terms of observable endogenous variables. Thus the following expression of the joint density of the observable variables is similar to the one used by Maddala and Nelson in their work.

$$Q_t \left( Q_t, \frac{L_t^R}{X_t} \right)$$

This means that in line with Maddala and Nelson's suggestion, density  $\&_t$  may be expressed in terms of the following:

$$\begin{aligned} \&_t \left( Q_t, \frac{L_t^R}{X_t} \right) &= \int_{Q_t}^{\infty} \&_t \left( Q_t, S L_t^S, \frac{L_t^R}{X_t} \right) dL_t^S + \\ &\int_{Q_t}^{\infty} \&_t \left( L_t^D, Q_t, \frac{L_t^R}{X_t} \right) dL_t^D \end{aligned} \quad (8.6)$$

where for the first term in the right hand side of the above equation, it is assumed that  $L_t^D = Q_t$  while  $L_t^S = Q_t$  in the second term of the equation. Equation 8.7 below is derived from the log likelihood function of the above equation:

$$TL = \left\{ \begin{array}{l} n \\ t = 1 \end{array} \right. \log Q_t \left( Q_t, \frac{L_t^R}{X_t} \right) \quad (8.7)$$

If equation 8.7 above is maximized, it will yield the maximum likelihood estimates for the parameters in the model.

**b. The Specification of Supply and Demand Functions for Nigerian Commercial Bank Loans and Advances.**

In an unpublished MA dissertation by the writer, structural model was developed for commercial bank loan supply and demand in terms of equilibrium and disequilibrium with cost variable playing an important role. A number of investigators in other countries have also developed some structural disequilibrium

models in which cost played an important role, but which often proved to be insignificant in the estimate, representing the main reason for this study. A number of investigators in other countries have also developed some structural models to study commercial loan market for the purpose predicting the supply and demand for loan. However, as rightly observed by Melitz and Pardue (1973), many of these models are not suitable for testing the disequilibrium market for commercial bank loans simply because they all include quantity constraints explanatory variables which may also be subject to rationing. For example, one of the important variables in the model for demand for loan is changes in the level of business activities as proxied by GDP or changes in business inventories. The fact that either of these variables are partly financed by bank loans, the observed changes in either of them are likely to be a reflection of the rationing effects. Because of this it is important that those kinds of variables in the model for demand for and the supply of bank loans are related to the desired loan demand and supply rather than the actual quantity. The model developed here, therefore is premised on the points discussed above and is a bit similar to those developed by Melitz and Pardue and Laffent and Garcia.<sup>2</sup>

Equation 8.1 and 8.2 in this model stand for demand and supply functions for commercial bank loans and advances in Nigeria. Each of the equations is stated as a function of bank own rate and other exogenous variables.

### 8.3c. Specification of Demand Function:

In the demand for loan function of this model, it is assumed that the ultimate borrower such as any business enterprise considers the bank loan rate of interest, the rate on alternative sources of external financing like the moneylender in the traditional credit institutions and also the general state of economic activities when taking decisions on desired quantity of loan demand from the banks. All of these variables are very illuminating on the possible outcome of decision taken by the ultimate borrower with respect

1. See Melitz and Pardue, 1973

2. See Laffent and Garcia (1977) "Disequilibrium Econometrics for Business Loans" in Econometrica, VI (July).

to the level of production, working and fixed capital requirements, and these in turn impact on the desired quantity of loan from banks. Bearing in mind all those factors enumerated, the demand for commercial bank loans in Nigeria under the disequilibrium model can be expressed as follows:-

$$L_t^D = a_0 + a_1(L_t^R - Tr_t) + a_2Y_{t-1} + a_3UP_t + a_4L_{t-1}^D + a_5W + et \quad (8.8)$$

where  $Tr_t$  = is the weighted average of all lending rates at the various specialized financial institutions and this is used as a proxy for the rate of interest on external financing.

$Y_t$  = the Gross National Income at factor cost which measures the firm's expectations about future economic activities

$UP_t$  is the unremitted profits used here as a measure of the magnitude of internal finance. The rationale for the use of this variable

lies in the fact that since the Nigerian Independence in 1960 and before independence until Nigerian indigenisation of business enterprises in 1977, almost all the business enterprises in Nigeria were foreign-owned. Even in spite of the indigenization of business enterprises, foreign investors still have greater shares in most of the Nigerian business enterprises either by collusion with the indigenes or by direct partnership with the indigenes and the State or Federal Government. Another important reason for the use of this proxy is the lack of reliable data on individual business enterprises in Nigeria. However, data on unremitted profits are available in aggregate in respect of all firms in the country. Since these profits still remains in the country, it is reasonable to assume that this would be an important source of internal finance for the enterprises concerned.

The  $(L_t^R - Tr_t)$  represents the interest rate differentials between the bank loan rate and the loan of specialized institutions in Nigeria. A dummy

'W' is included to take care of the period of civil war in Nigeria.

In order to take care of seasonal adjustment with respect to bank loans, yearly averages are used in the calculation. In fact, we are left with no

other option since the **unremitted** profits are available on annual basis.

The prior expectation of this model is that  $a_1$  should be negative,  $a_2$  positive while  $a_3$  and  $a_4$  may be either positive or negative.

Specification of Supply of Bank Loan Function:

The supply of commercial bank loans is rooted in portfolio theory. It can, therefore, be hypothesised that the most determining variables for the supply of bank loans are the bank rate, the rate on the alternative assets such as bonds or treasury bill rates, the bank assets, the liquidity ratio and bank's expectations in the economy as measured by the level of business activities proxied by the GDP and the bank costs. Again the interest rate differential is used as the proper interest rate variable. The commercial bank loan supply function can be formally expressed as follows:

$$L_t^S = b_0 + b_1(L_t^r - Tr_t) + b_2TD + BA_t + CD_t + B_5Y_{t-1} + L_{t-1}^S \quad (8.9)$$

where

$L_t^S$  = Commercial Bank loan supply

$L_t^r$  = Bank loan rate

$Tr_t$  = Treasury bill rate

TD = Bank total deposits which is the scale variable

CD = the cost per naira of deposits to the bank

$Y_{t-1}$  = National Income used as a proxy for economic activity level in the economy.

The variables  $Tr$  and  $TD$  are used as measures of an alternative rate of interest and scale variable respectively. Thus it is expected that the higher the total deposits, the greater, other things remaining equal, will be the capacity of commercial banks to extend credit. The cost variable  $CD$ , following Meltz and Parris, shows the cost per Naira cost of deposit and is measured by the ceiling rate on time deposits multiplied by the ratio of time deposits to demand deposits as formally expressed below:

$$\text{Gr} \cdot \text{TD} \quad \times \quad \frac{\text{TD}}{\text{DD}}$$

The prior expectation is that parameters  $b_1$ ,  $b_2$ ,  $b_3$  and  $b_5$  should carry positive signs while parameters  $b_4$  should carry either positive or negative sign. By solving equations (8.8), (8.9) and (8.4) for the structural disturbances and substituting the result obtained into equation (8.7), the process of estimation is completed.

Other specifications of the demand for and the supply of commercial bank loans were tried in the initial experimentation but the specifications in use here provide the best results.

The data used in this study are derived from the various issues of Central Bank of Nigeria Economic and Financial Review, Central Bank of Nigeria Annual Reports and Statement of Accounts, the Nigerian Digest of Statistics and the United Nations Statistical Year Books. Some data were also derived from the Statistical Abstracts of the various years published by the Federal Office of Statistics, Lagos, as well as the recently published Nigerian Macro-Aggregates also published by the Federal Office of Statistics. The reason behind the use of so many data sources lies in the fact that figures for 1960s in respect of the variables in the model being tested are all scattered about in the Nigerian publications.

The estimates are assumed to be asymptotically normal since the asymptotic properties of disequilibrium model have already been fully investigated for a more restrictive version of the disequilibrium model like the one being tested. One of the major studies which represent a more restrictive version of disequilibrium model is that of Hartley and Mallela (1977).

The results of the estimates are presented in Table 8.1 below:

1. See Hartley and Mallela (1977) "The Asymptotic Properties of a Maximum Likelihood Estimator for a model of Markets in Disequilibrium" Econometrica, VL (July).

c.

THE RESULTS

The equilibrium and disequilibrium models were estimated with respect to commercial bank loans demand and supply using the annual averages of the variables for the period 1960 to 1984. Applying two-stage least squares method the following represent the best results we can obtain: In table A, the equilibrium model result is presented while the disequilibrium is in table B. In both tables are shown the values of the estimated coefficients to their respective T-statistics in parentheses under each estimate and the co-efficient of determination  $R^2$  as well as the D.W. statistics which indicates the presence or absence of autocorrelation are also calculated.

Table 8.1A

STRUCTURAL EQUATION ESTIMATES: EQUILIBRIUM MODEL  
NIGERIA COMMERCIAL BANK LOAN MARKET 1960 - 1984

(i) DEMAND EQUATION

$$\text{Log } L_t^D = -1.8748 - 1.14266 \text{LogLRDF} + 0.3778 \text{Log } Y_t + 0.6541 \text{LogUP}_t \quad (8.8)$$

(-6.676)
(-0.99364)
(3.2375)
(2.5858)

$$R^2 = 0.98$$

$$DW = 1.1658$$

(ii) SUPPLY EQUATION

$$\text{Log } L_t^S = 1.9969 + 0.69218 \text{LogLRDF} + 0.39266 \text{LogTD} - 0.17173 \text{LogCD} +$$

(2.0129)
(1.9129)
(2.6972)
(-1.9898)

$$1.1542 \text{Log } \pi_t + 0.24001 \text{LogBA} \quad (8.9)$$

(1.5043)
(0.1201)

$$R^2 = 0.71$$

$$DW = 1.7625$$

Table 8.1B

STRUCTURAL EQUATION ESTIMATES: DISEQUILIBRIUM

(i) DEMAND EQUATION

$$\begin{aligned} \text{Log } L_t^D = & 0.13874 - 0.70263 \text{LogLRDF} + 0.36990 \text{LogY}_t + 1.1320 \text{LogUP}_t \\ & (0.26323) \quad (-0.10497) \quad (0.529) \quad (7.4885) \\ & - 2.604 \text{LogL}_{t-1}^D \\ & \quad (-1.0753) \end{aligned} \quad (8.8a)$$

$$R^2 = 0.96$$

(ii) SUPPLY EQUATION

$$\begin{aligned} \text{Log } L_t^S = & -10.594 - 1.0983 \text{LogRDIF} + 0.68087 \text{LogTD} + 0.2213 \text{LogCD} \\ & (-0.1096) \quad (-0.14266) \quad (-4.0808) \quad (0.84749) \\ & 28.920 \text{Log } Q_t + 0.3553 \text{Log } BA_t + 1.2627 \text{Log } S_{t-1}^L \\ & (1.8930) \quad (1.1334) \quad (21.565) \end{aligned} \quad (8.9a)$$

$$R^2 = 0.99$$

According to the estimates presented in Table 8.1A and 8.2A above, there is no doubt that there is an element of dynamic credit rationing in the Nigerian Commercial banks loan markets and this has significant implications for the speed and effectiveness of monetary policy. This is evidenced by the fact that the interest rate variable in all the equations turned out to be insignificant, even though it carried the right sign.

In equation 9.9, the scale variable (BA) was significant only at 5 per cent level of confidence using the one-tailed test, although it carried the right sign. Also, the cost variable (CD) in the equation was not significant and carried the wrong sign. The implication of this is that to commercial banks in Nigeria, the cost per naira of deposits has no significant effect on the quantity of loans supplied and this should be expected since the monetary authorities for

many years have been imposing ceiling on commercial banks' credit to the economy as will be seen in chapter 9. The same reason may be given to the bank asset variable which was less significant than expected.

A comparison of the estimates in both tables indicates important differences between the two models. For example, there are substantial differences in the magnitude of interest rate parameters. The estimated interest rate parameter for the supply equation in the disequilibrium model was approximately 40 per cent greater than the same parameter for the equilibrium model. Also the interest rate coefficient for the demand equation was approximately 44 per cent smaller for the disequilibrium model. Thus the disequilibrium model indicates greater responsiveness to interest rate differentials on the supply side and less responsiveness on the demand side than the equilibrium model.

The substantial difference exhibited between the interest rate coefficients of the two models is not surprising. This is because if prices are assumed to adjust sufficiently to bring equilibrium to the market, but in fact did not as evidenced by the estimates, there would be serious biases in the interest rate coefficients. This appears to be the case in our commercial bank loan market.

There are other differences among many of the remaining parameter estimates, which of course, can be explained in terms of the strong disequilibrium character of the loan market.

In general, our estimates can be regarded as close to reality in view of the high co-efficient of correlation, the DW statistics and the magnitude of the t-statistics as indicated in our results. Although this represents the first study of this kind on Nigeria commercial bank loan market, our result seems to support the view expressed on the disequilibrium effects of dynamic rationing by Tucker (1968). For example, Tucker, in his comprehensive discussion of the influence of

credit rationing on the effectiveness of monetary policy came out with the following conclusions:

" .. .. . interest rate adjustment lag may speed up the response of an economic system monetary contraction providing (a) rationing of credit accompanies the lag in interest rate adjustment, and (b) this rationing of credit has a sufficiently strong effect on investment demand."

Thus given the estimates presented in this paper, dynamic rationing can be seen to have important implications for the speed and effectiveness of monetary policy in Nigeria just as obtained in the developed countries.

### 8.3f CONCLUSIONS:

From the results of our estimates above, a number of important conclusions can be drawn. First the estimates indicate that significant disequilibrium exists in the Nigerian commercial banks loan market, the magnitude of which can be quite large at times. Second, the results show that during the periods of tight money, credit rationing may speed up the effect of monetary policy, which, therefore, supports the Tucker's qualitative conclusions. The results also suggest that models of the commercial bank loan market which do not explicitly include the effects of market disequilibrium are likely to be inconsistent parameter estimate. Our model also shows that the specification and estimation of disequilibrium models is equally practical in developing countries and hence would provide a powerful tool in analysing the behaviour of not only the commercial bank loan markets, but also all other financial institutions in general since such markets are likely to be prone to nonprice adjustments.

NIGERIAN CENTRAL BANK CONTROL OF COMMERCIAL BANKS THROUGH THE MONETARY POLICIES  
ON NATIONAL SAVINGS, TOTAL DOMESTIC CREDIT AND PRIVATE CAPITAL  
INFLOWS

Introduction:

In all market-oriented economies, the Central Banks stand as the apex of all financial institutions. In essence they stand as an alternative regulatory system for the economy in general and the financial system in particular. This role was assumed by the central banks naturally when it became obvious that the received theory of Adam Smith's 'invisible hand' could not prevent any financial crises. The existence of any central bank in any economy, therefore, is a direct result of the need for exercising discretionary control over the financial system in particular and the economy in general. The central bank, therefore, can be regarded as the vehicle through which economic prudence is brought into the financial system, a form of steering wheel of financial operation in any economy.

Established in 1959, the Central Bank of Nigeria is still very young when compared with the Bank of England and the Reserve Bank of USA which have been in existence since 17th and 18th Century respectively. There are many books on the central banking operations in general and in particular, many Nigerian writers have written on the history of Central Bank of Nigeria. For example, P. Okigbo and G. Nwankwo have both written in great detail on the history of Central Bank of Nigeria (CBN), and hence it is of no use to write on that aspect in this study. Rather, the attention here is devoted to the review of the Nigerian monetary policies since 1960 and their effects on monetary aggregates on which, to the best of my knowledge, there has been no attempt by any writer to deal with.

Given a certain amount of growth in base money, the growth of financial assets and liabilities are jointly determined by the behaviour of the financial and non-financial private sector of the economy. Since on theoretical grounds, it is difficult to make out any case for paying attention on any side of the balance sheets of the financial institutions (or to a part of it)

1. See A. Smith, (1937)

2. See P. Okigbo, (1979) and G. Nwankwo, (1980) all on Nigerian Financial System.

it is then obvious that any choice between alternative intermediate targets of monetary policy cannot be made on purely theoretical considerations, but has to be justified on empirical grounds. For this reason, this chapter also attempts empirical investigations of the relationship between the total domestic credit (TDC) and the final targets of monetary policy. (See Friedman(1981)).

#### The Plan of This Chapter:

The whole chapter is divided into four sections. Section I deals with the literature on monetary policy while section II concentrates on the overview of Nigerian monetary policies since 1960 and their effects on monetary aggregates. Section III deals with the interest rate structure and the role of interest rate on the mobilisation of national savings in Nigeria. For this important issue a model is developed in the context of financial repression hypothesis. In Section IV, empirical investigations are carried out on the relationship between the total domestic credit and the final targets of monetary policy and also between the capital inflows and monetary policy in Nigeria. The final part of Section IV deals with the results and their interpretations.

### SECTION I

#### 9.2 REVIEW OF LITERATURE ON MONETARY POLICY IN LESS DEVELOPED COUNTRIES

Immediately after the 2nd World War, economists have tried to look at the problems confronting the developing countries in their economic development aspirations. Many view these problems and their solution in terms of money and monetary policy. Many writers believe that the kind of monetary policy being in use in the developed economies may be applied to the developing countries while others hold the view that such imposition entails a lot of constraints since there is a general lack of institutional features in most of these developing countries. For example, it is held that in many developing countries, the money and capital markets are not yet well developed, there is generally low banking habits as evidenced by a high currency/money ratio <sup>1</sup>. See a brilliant discussion on this in the work of B.M Friedman, 1981.

and only very few financial institutions based on only a limited number of financial instruments. The principal exponents of this view are Sayers<sup>1</sup> (1957), pg. 108 - 133; Sen (1952); Horowitz<sup>2</sup> (1958, pg. 99 - 105), Sethi (1961), and Bloomfield (1956) as evidenced in their various work.

The new argument, however, which soon gains currency among the development economists relates to the passivity of monetary policy in the context of economic development. Because of this view, the question is no longer on the relevance of monetary policy, but on the question of what should be the direction and the shape of any monetary policy designed to solve the economic development problems of developing countries. In fact the question that remains is on what policy, its shape and its direction will speed up the development process. This has created a big gap between those who emphasize the shape and those who emphasize the direction of monetary policy. Of great paramount is the interest rate policy as a monetary policy instrument in the context of developing countries, the more so because of the imperfect and fragmentary nature of the economies of developing countries which, therefore, calls for strong interventionist approach to credit markets. In the Keynesian tradition, the credit market is very important in so far as it affects critical variables such as saving and investment in the economy.

While all economists seem to agree on the importance of the interest rate policy, the direction in which the rates of interest should move is still largely a bone of contention among economists, for it has aroused some element of confusion and controversy as evidenced in the work of Myrdal (1968), Chandavarkar (1971), Brown (1971) and Kharthate<sup>3</sup> (1972b). The view that appears to be predominant is that interest rate should be such that reflects the price of capital. Because this view is based on the premise that in less developed countries, capital is scarce, the argument is usually in favour of higher level of interest rates in developing countries than the developed. The higher interest rates, according to some economists,

1. See the work of Sayers (1957); Sen (1952); Horowitz (1958); Sethi (1961) and Bloomfield (1956).
2. See Myrdal on interest rate policy (1968); Chandavarkar (1971); Brown (1971) and Kharthate (1972b).

would remove the inadequacy of domestic savings, since a high interest rate policy would encourage more people to save and hence a greater volume of domestic savings. They also argue that since money is no substitute for real savings, creation of credit for the purpose of investment should be effectively controlled. This view is based on the experience of China and Korea in early 1950s and late in the 1960s, as evidence in the work of Irvine and Emery (1966), Kanesa Thasan (1969) and Chandavarkar (1971). A more analytical exposition in support of this view is given in the work of Whittlesey (1960), Chandler (1962) and that of McCracken and Ellis (1956). So far for the positive view of interest rate policy as a means of stimulating greater savings and hence new investment finance.

Another important view, but which has been recently weakened, lays emphasis on the interest rate as the cost of investment. This view is rooted on the classical work of Schumpeter (1934) and found support in the work of Raj (1948). The exponents of this view argue that since investment is very crucial to the development process of less developed countries, it is quite essential to promote the policy of reduction of interest rate.

Standing in the middle of the two views stated above are those economists who are in favour of positive real interest rate, but who cleverly avoid the use of such words as "high" or "low". This last group of economists is championed by the work of McKinnon (1973) and Khathate (1978).

There is no doubt there has been a lot of confusion among economists on the ways the interest rate issue has been posed for the developing countries and so also are the perspectives which are offered very misleading. In order to be able to offer any suggestions, it is necessary to look more closely at the rationale underlying the different arguments so far presented by the exponents of the three different views.

Those exponents in favour of high interest rate and hence greater savings for investment grounded their view on classical or neoclassical economic theory which postulated that prior savings is the most necessary condition for

1. See the work of Irvine and Emery (1966); Kanesa Thasan (1969); Chandavarkar, 1971. 2. See also Whittlesey, (1960) and Chandler (1962) for a more analytical exposition on this issue. 3. See McKinnon 1973 and Khathate (1978).

investment. Clearly, this is a capital scarcity argument indirectly in the context of the role of savings as being the source of increase in the capital stock or investment. It is argued that if saving is to increase in order to reduce the capital scarcity, the policy to be adopted should be the one that would guarantee a fairly high level of interest rate. Even then, many economists have cast doubt on the theoretical and empirical validity of the high or positive interest rate elasticity of saving. The impact of interest rates has been shown to be negligible in some studies as evidenced by the work of Mikesell and Zinser (1972), Williamson (1968), Houthakker (1965) and Khathate (1972b). The work of Gupta (1970b) showed a confusing conclusion on the interest rate elasticity of saving. However, one should exercise caution about the conclusions reached by different writers since some of these studies cannot really solve the problems of separating income effects from the substitution effects in any meaningful way. However, a study by Diewart (1974) is an example of an attempt at empirical separation of these two effects. Moreover, most of the studies cannot identify saving as distinct from investment since ex post saving and investment are necessarily equal. However, in spite of all the problems involved in the empirical investigation many writers have clearly demonstrated that interest rates have a predictable and much more important impact on the form in which savings are held. This is clearly evidenced in the work of McKinnon (1973), Brown (1973) and Chandavarkar (1971).

Those exponents in favour of low rate of interest policy but large money creation based their view on Keynesian and neo-Keynesian paradigm. This is looking at the role of interest as the cost of investment. Thus to induce investment, interest rates have to be reduced. However, such policy of lowering the interest rates may result in a self-defeating exercise at a certain point. It has been argued that the monetary authorities may reduce the rate of interest with the associated increase in the quantity of money in a situation of scarcity of funds for investment. But this kind of policy

1. For empirical evidence on interest rates see the work of Mikesell and Zinser, 1972 Williamson, 1968, Houthakker (1965, Khathate 1972b and that of Gupta (1970). Also see the work of McKinnon 1973), and Brown, 1973.

might only help up to a certain point at which the latent savings are generated through investment, after which inflationary pressures might set in, which eventually would result in increased nominal rates of interest in the whole economy concerned. This is clearly a cheap money policy which could lead to monetary expansion with consequent rise in prices. However, the rise in prices would not lead to a fall in the cost of credit in the unorganized credit market but a rise, especially in a situation where output is inelastic in the present of rise in prices. The resultant decline in the purchasing power of money would tend to make the rural areas to increase their lending rate and after a lag, the negative effects of a low interest policy, according to Khatkhate (1972b) and Bottomley (1965),<sup>1</sup> would spill over to the organized market.

Those exponents in favour of an interest rate policy which should result in a positive real yield present a distinctive argument from that of those in support of high interest rate policy based on the idea of scarcity of capital. Those in favour of high interest rate argue for a high real interest rate which is comparable to those in the developed countries which have a higher per capital stock. On the contrary, without making any comparison, the exponents of the positive real interest rate policy grounded their argument on asset-portfolio theory, which in many respects, is an outgrowth of the popular Keynesian liquidity preference paradigm. One of the exponents of this real positive yield policy,<sup>2</sup> Khathate (1978), has argued that in order to analyse the institutional features in less developed countries much more clearly, the problem of interest rate determination can best be solved in terms of choice of assets and their associated yields. Such approach to interest rate determination in less developed countries makes it possible to reconcile a high real return on money balances with the effects of cost on investment demand. It also helps to explain more logically the interest rate determination in unorganized credit markets in developing countries (Khatkhate (1978)).

According to McKinnon (1973), owing to the fact that interest rates in most

1. See Bottomley, (1965) and Khatkhate (1972b)

2. See also McKinnon (1973) and Khathate (1978).

developing countries, a situation of unsatisfied excess demand to invest at such rates started to emerge. Thus an interest rate policy resulting in a higher real yield on money balances, which will generate an increased amount of real resources for investment provides a recipe for narrowing the excess demand through the resultant increase in the rate of investment. In support of this view, both Khatkhate (1978) and Fry (1978)<sup>1</sup> agreed that in so far as the level of increased real interest rates is below the rate of return on capital, the realized investment would not be negatively affected.

Still on interest rate policy in developing countries, some economists are concerned with the determination of interest rates in unorganized money markets, but opinions have been divergent as to whether to use the demand factors or supply factors as evidenced in the work of Bottomley (1963a, b), (1964a, b, c),<sup>2</sup> Tun Wai (1957), (1977),<sup>3</sup> Long (1968) or by the use of the economic characteristics of agrarian credit markets as shown in the work of Bhaduri<sup>4</sup> (1977). Those in favour of supply and demand factors in the determination of interest rates appeared to justify the high interest rates in unorganized markets in terms of high administrative costs, default risks and often lack of suitable collateral on the part of the borrowers. Hence rates are high to include the possible loss of principal into interest rate calculations as well as the loss of possible loss of income due to the seasonality in credit demand.

Some economists, however, do not share the view that it is the supply and demand factors that cause high interest rates in the unorganized credit markets. For example, Bhaduri (1977)<sup>4</sup> views high interest rates in the unorganized markets as being caused by certain institutional features of agrarian credit markets. Some of these features are personal valuation of collateral assets contrary to market valuation, access to the unorganized credit markets by both lenders and borrowers is not equal and the fact that the organized credit markets are relatively separated from the unorganized. Looking critically at all the explanations, however, one is left in no doubt that the differences in these various explanations are certainly more

1. See Fry (1978) and also Khatkhate (1978) on their view on interest rates.

2. See also the work of Tun Wai (1957) and the more recent one (1977) and also

3. Long (1968) and 4. Bhaduri (1977).

apparent than real since they are all largely related to the low rate of return on capital in rural areas. For example, where the borrowers cannot provide adequate credit-worthiness, administrative costs may be high and hence push up the interest rates (Coats and Khatkhate <sup>1</sup> (1978)). Inadequate credit-worthiness per se is caused by the low profitability of investment in the rural sector which makes it difficult for many borrowers to repay their loans on schedule as already discussed in chapter V. The difference in the valuation of collateral between the lenders and the borrowers is largely caused by the conservative estimates of what the rate of return to investment undertaken by the borrowers would be on the part of the lenders.

In view of the continuing debates on the interest rate policy in less developed countries, and since the main argument borders on the role of interest rate on savings and indirectly on the return on capital, one can suggest viewing interest rate in terms of rate of return on capital. This would help to reconcile a high real rate of return on money balances with the effects of interest rates on the demand for investment. It will also help to explain in a logical manner the interest rate determination in the unorganized credit markets which are so many in developing countries.

The use of selective credit controls is now very common in most developing countries. These have been used largely to supplement quantitative control of credit and many economists have tried to explain the use of these controls. For example, Patel <sup>2</sup> (1954) and Johnson <sup>3</sup> (1974) have both argued that it is because of the belief on the part of the policymakers of developing countries that their financial markets, for one reason or the other, are not efficient allocators of resources.

Those economists in favour of selective credit controls based their argument on the socially optimum use of resources. They believe that the financial intermediation process per se, cannot ensure the optimum use of resources. They try to answer the question whether the financial institutions are in favour of those borrowers who are socially most productive in particular.

1. See Coats and Khatkhate (1978)

2. See Patel (1954)

3. See Johnson (1974) for discussion on the reason for imposition of selective credit policy in developing countries.

But since financial institutions are in business like any firm, the tendency for them is to seek profitable investment outlets for the funds they have attracted and in particular those outlets which would ensure the highest possible rate of return, the smallest risk of nonrepayment and lowest cost where productive projects are involved. In an economy where there are marked market imperfections or externalities, current prices do not usually reflect the social productivity of projects, and as such money allocated to those projects in accordance with such prices would not always go to the socially most efficient sectors as shown in the work of Patel (1954) Johnson (1974), with empirical support from the work of Bhatia and Khatkhate (1975).

Some economists consider selective credit control as an adjunct to a well-balanced economic development program which involves the reconciliation of planned investment with the planned savings. For example, Patel (1954) has argued that credit controls can be used to match the allocation of planned savings with planned investment. Thus in recent years, many countries have utilized the idea of financial planning to strengthen their development planning which some economists regard as equivalent to real resources planning (Bhatt (1971)), M. Narasimham (1972). Financial planning per se implies that the real resource requirement of planned investment needs to be consistent with the financial flows through which claims on resources are transferred as evidenced in the work of Bhatt (1971). In order, therefore, to attain a given investment plan, the monetary authorities need to formulate financial and monetary policy measures designed to match savings in financial institutions with the volume of credit demanded by the investors in such a way that no disequilibrium occurs in the economy if inflationary pressures are to be avoided. The authorities might adopt such policies that can stimulate the flow of financial savings, for example such policy that varies the rate of return on financial assets, in order to ensure equilibrium between supply and demand for credit. However, where this is not possible, the policy should be such that

1. See Bhatt, (1971) and M. Narasimham (1972)

matches investment plans with the available financial resources. Knowledge of total investment plans can help the authorities to determine the volume of credit required in the economy and the likely inflationary consequence of the plan. This objective can be achieved as suggested by the work of Bhatt (1971) by making estimates of the flow of funds as already been used by Narasimham (1972) in his study of India.

Some economists have argued strongly against the selective credit controls on the grounds of imperfections in the credit markets as well as other forms of obstacles to the entrepreneurial growth which are very common with many developing countries. Such imperfections in credit markets, according to these economists are likely to worsen the objectives of selective credit controls. Khatkhate and Villanueva (1978)<sup>1</sup> have suggested liberalization of credit policy under which special subsidies and taxes are removed especially in a situation where free flow of information among production and consumption units is impeded by market imperfections. Since the purpose of selective credit controls is to influence the end use of credit, their effectiveness can easily be judged by the extent to which such objective is achieved. The central bank can easily request any bank to allocate credit to certain sectors of the economy or instruct bank to give loans to certain categories of borrowers in a given sector, but it cannot ensure that such credit is productively use. If, therefore, such credit is not used productively by the borrowers, it will flow to those sectors or borrowers not intended by the monetary authorities. For this reason, it has been argued, (Silber (1973))<sup>2</sup>, that it is necessary to know where the selective credit controls are applied since the conditions governing the effectiveness of such credit controls vary according to where the controls are imposed.

In essence, the degree of substitutability between financial market instruments by the borrowers and lenders can determine the effectiveness of selective credit policies. There are certain conditions that are necessary but not sufficient to ensure the desired real resource redistribution.

1. See Khatkhate and Villanueva (1978).

2. See Silber(1973)

Some of these conditions are that different categories of financial securities should be seen as poor substitutes for those being held by the borrowers or the lenders so that restriction on one type of assets of some institutions does not lead to an increase in the holding of the same asset by other financial institutions; that the responsiveness to interest rate changes of different categories of asset purchases should be different and that it is difficult for borrowers to switch credit from the purpose for which it is taken to other uses. This last condition can be made possible by the Central Bank if it strict supervision on the allocation of credit and its uses. According to Khatkhate and Villanueva (1978), the second condition is characteristically institutional since certain kinds of investment have higher elasticity than the others.

While it is necessary for the monetary authorities to exercise a measure of selective controls on borrowers, it is equally necessary to ensure its effectiveness. For example, the direct lending-borrowing operations between the surplus and deficit-spending units can easily offset the effects of selective credit controls especially if the substitutability among different securities in the lenders' portfolios is not high (Silber (1973)).

For a high degree of substitutability between different securities in lenders' portfolios to exist, the supply of credit must be elastic. Thus in such a situation, an increase in credit demand, perhaps as a result of an interest subsidy given on loans to certain borrowers will lead to a higher flow of credit. Unfortunately, the credit markets of most less developed countries are characterized by a less elastic credit structure than those of developed countries as evidenced in the work of Khatkhate and Villanueva (1978).

There seems to be a common agreement amongst economists that monetary policy is desirable in developing countries just as it is in developed countries. However, there has not been an overwhelming agreement on its effectiveness. At least there has not been a conclusive agreement on the

1. See Khatkhate and Villanueva, 1978.

form the intervention in the credit markets should take. Some economists prefer the intervention to be in the form of selective credit policy while others favour a selective fiscal policy of tax-cum-subsidy on producers, i.e., borrowers, if it is assumed that it is inevitable to intervene in the economic activities in order to regulate the composition of expenditures (Johnson (1974)). Those in favour of selective fiscal policies rather than credit policies have argued that direct tax subsidy policies have a way of lowering welfare administrative and evasion costs. Although this argument is good, but it is not strong enough to counter the case for selective credit policies. For one thing, just as it is possible to quantify the costs of selective fiscal policies, it is also possible to quantify the costs of selective credit policies (Khatkhate and Villanueva<sup>1</sup> (1978)). In fact Khatkhate and Villanueva (1978) have argued brilliantly that under the selective credit policies, the administrative and welfare costs can be lower than under a similarly motivated fiscal policy. One should hasten to say that in view of the fact that most less developed countries' markets for both credit and output are characterized by imperfection, it will be misleading to suggest a choice between fiscal and credit policy in "either-or" terms since both selective credit and fiscal policies are needed to ensure effectiveness. Thus while the former is necessary to eliminate any distortions in the credit market, the latter is equally necessary to remove any distortions in the output market.

One can conclude, therefore, that in most less developed countries, the use of both selective credit and fiscal policies are necessary so long as markets for output and credit are simultaneously imperfect.

## SECTION II

### 9.3 AN OVERVIEW OF NIGERIAN MONETARY POLICIES SINCE 1960 TO 1985

In chapter VI, mention was made on how the Central Bank of Nigeria was established in 1959. In this section the attention is focused on

1. See Khatkhate and Villanueva (1978).

the examination of Nigerian Monetary Policies.

The conventional approach to examine the monetary policies of any country is to adopt either the "ex ante" approach or "ex post" perspective. The ex ante approach takes the form of identifying the monetary policies over time in terms of the examination of the statements made by the monetary authorities, in this case, the Central Bank of Nigeria in conjunction with the Federal Commissioner for Finance. This approach was employed by Poole (1970) in examining the US monetary policies. The OECD - Organization for Economic Cooperation and Development followed this approach in the study of United States' monetary policies; Lewis and Wallace also employed the similar method in their work on Australia. This study, therefore, attempts to use this approach with some modifications on account of the developing nature of Nigerian economy. The following simple classifications are employed.

- (i) Monetary Stability denoted by (MS)
- (ii) Monetary Expansion (ME)
- (iii) Monetary Restraint (MR)
- (iv) Monetary Accommodation (MA)
- (v) Cycle Peak (CP)

and (vi) Cycle Trough (CT).

In order to appreciate the nature of monetary policies in Nigeria since 1960, it is instructive to mention in passing some of the instruments of policy at the disposal of the Nigerian Central Bank. As a matter of convention, economists often classify tools of monetary policies into two - quantitative and selective. However, in terms of their operation or concentration, these instruments or techniques of control may be classified under three main headings for the purpose of analysis. Of course, all techniques of control, whether quantitative or qualitative or directional, do have eventual impacts on the availability, cost as well as direction of loans.

Having said so, the techniques of control at the disposal of Central Bank of Nigeria (CBN) are (i) quantitative tools which include open market operations, special deposits, stabilization securities, cash reserves requirement and variable liquidity ratio ; (ii) the Cost Tools such as discount rate and other rates changes; and (iii) the Directional Tools such as the credit guidelines and moral suasion. In the context of Nigerian economy, only the open market operations and special deposits requirement seem to have greater influence on the Nigerian monetary base as will be seen later.

### 9.3a Indicators of Monetary Policy:

Before setting out to examine the Nigerian monetary policies, it is necessary to define some of the indicators of policy employed in this study. These indicators may be divided into two broad categories, namely price and quantity indicators. The quantity indicators are usually classified into two, namely the Net Banking Base (NBB) and the Net Liquidity Base (NLB). The Rate on Treasury Bills (NTB) and the Rate on Government Stocks (RGS) are the two price indicators being employed in this study.

The NBB may be defined as Monetary Base (MB) minus Outside Bank Money (OBM), i.e.

$$\text{NBB} = \text{MB} - \text{OBM} \quad (9.1)$$

The NLB is defined as the Net Banking Base (NBB) plus Government Securities held by the commercial banks plus Securities held by non-bank public, i.e.

$$\text{NLB} = \text{NBB} + \text{GSB} + \text{GSP} \quad (9.2)$$

These two indicators - NBB and NLB - relate to the assets side of the Nigerian Central Bank. The MB in the assets side of CBN consists of currency with banks plus currency outside banks plus commercial banks' free deposits at the CBN. The concept 'Free deposits' is defined in this study as the Nigerian commercial bank deposits minus statutory reserve requirements, and can be expressed as follows:

$$\text{FBD} = \text{CBD} - \text{SRRS} \quad (9.3)$$

The selection of all these indicators of policy is based on the assumption that they are under the control of the CBN and the Treasury, and hence are

expected to reflect changes in the Nigerian monetary policies. It should be, however, emphasized that the use of NBB and NLB as indicators of policy needs some caution since both aggregates include variables that reflect decisions over which the authorities cannot exert direct control other than forecasting. In view of this fact, one can conclude that both the NBB and NLB, like any endogenous variables, are poor indicators of policy. Bearing this in mind, one can now proceed with the examination of monetary policy in Nigeria since 1960.

### 9.3b Period of Monetary Stability (MS) 1959 - 1960:

The Nigerian monetary policy has always been jointly executed by both the Ministry of Finance and the CBN. Thus most of the monetary policies in 1960s can easily be elicited from the Budget Speeches made by the Federal Minister or Commissioner for Finance, from successive development plans and from the CBN Annual Reports rather than from one single document. For example in 1960 Budget Speech, the policies were explicit as can be seen from this quotations

"the achievement and maintenance of the highest possible increase in the standards of living and the creation of necessary conditions for this.".....

In 1982 budget speech, the policy was stated to be a "reduction of aggregate demand in the economy with a view to dampening the pressures on the balance of payments" .

At the time of its establishment, the CBN was charged with the responsibility of maintaining strong currency as recommended by Loynes Committee , a body appointed by the Nigerian Government to look into the possibility of establishing a Central Bank for Nigeria. Since Nigeria was at that time in dire need of foreign investment, the policy of currency stability was necessarily adopted in order to maintain investors confidence in the economy. Thus until 1962, the CBN maintained 100 per cent foreign exchange reserves against currency issues while at the same time made the external value of the Nigerian pound (£N) at parity with the British pound sterling.

1. See Central Bank of Nigeria Annual Report 1960 and 1982

### 9.3c Period of Mild Monetary Stability (MMS) 1961 - 1964:

In 1960, the CBN operated in much the same manner as the defunct West African Currency Board it replaced since it maintained 100 per cent parity with the pound sterling. However, in 1961, this policy of 100 per cent parity was relaxed by the Nigerian Acts of Parliament of 1961, thereby leaving the Nigerian economic circumstances in relation to the rest of the world to determine the value of Nigerian currency in the foreign exchange markets.

For the purpose of attracting foreign capital into the country to finance the Nigerian National Development Plan of 1962 - 1968, the monetary authorities introduced a fiduciary element fixed at 40 per cent, while at the same time, the CBN was charged with the responsibility of providing cheap money for government paradoxically in addition to the responsibility of stabilising the value of Nigerian pound (£N) in the foreign exchange markets. This was really a difficult task, but through the process of centralisation and mobilization of external resources, the CBN succeeded in getting stable parity for the Nigerian pound in 1962, and this parity remained unchanged until 1973.

Thus the period 1961 to 1964 was called the period of mild monetary stability because of the two huge tasks given the CBN as explained above. To provide cheap money for the government, the policy of monetary expansion was carried out by the application of cost tools such as lowering of interest rates. However, as should be expected, this policy of low interest rate only discouraged the inflow of private foreign capital and hence the First National Plan could not attract enough foreign capital, even in the face of inadequate private savings. The estimated cost of the plan was fixed at ₦1.6 billion with the expectation that 49.2 per cent of this amount would come from domestic savings while the balance would come from external sources.

The continued application of cost tools necessitated by the government deficit

\*. See the First National Development Plan, 1962 - 1968, (Lagos, Government Printer).

financing implies continued reliance on banks. The low interest rates imposed by the monetary authorities coupled with the outbreak of Nigerian Civil War resulted in a very sharp fall in the external capital inflow. For example, the inflow of private foreign investment was ₦80 million in 1965 compared with just ₦26.2 million in 1966. The direct consequence of this cheap money policy was a sharp rise by more than 100 per cent in the domestic money supply in 1967 and high rate of inflation.

### 9.3d Cycle Peak or Monetary Expansion Period 1967 - 1970:

With the civil war still going on, and the government's determination to pool all its resources together to end the war as soon as possible, the Central Bank of Nigeria considered it necessary to adopt an expansionary monetary policy. In pursuance of this policy, fiduciary element in the domestic currency issues was raised from 40 per cent limit of 1958 to 75 per cent in 1968 and finally to 100 per cent in 1969. In order to make it possible to borrow more from the banking system, the Federal Government through the Treasury issued a new form of credit instrument known as 'Treasury Certificate' in 1968. And since the banking system was highly liquid at that time, all the ₦48 million Treasury Certificate issued were fully subscribed by the end of 1969. Moreover, in order to encourage business enterprises in the economy, there was a cut of 5 percentage point from the loan rates as well as from the bank rate. Thus the bank rate fell to 4.5 per cent while the loan rate to 7.0 per cent. Other rates such as interest rate on rediscount facilities, rates on direct loans and advances made by the CBN to marketing Boards for crop finance and rates on bill refinances were also axed down. The overall effects of all these policies resulted in a big rise in money supply  $M_1$  by more than 33 per cent in 1969 and by 1970, to 43 per cent (See Table 9.1 and figure 9.1) on Money Supply in Nigeria in comparison with other OPEC countries) with its associated high rate of inflation at 16.1 per cent. (See Table 9.3).

1. See "The Recent inflationary trends in Nigeria and proposals for policy", A memorandum submitted by the Central bank of Nigeria to the Anti-Inflation Task force (October, 1975).
2. Central Bank Report, 1970

Table 9.1

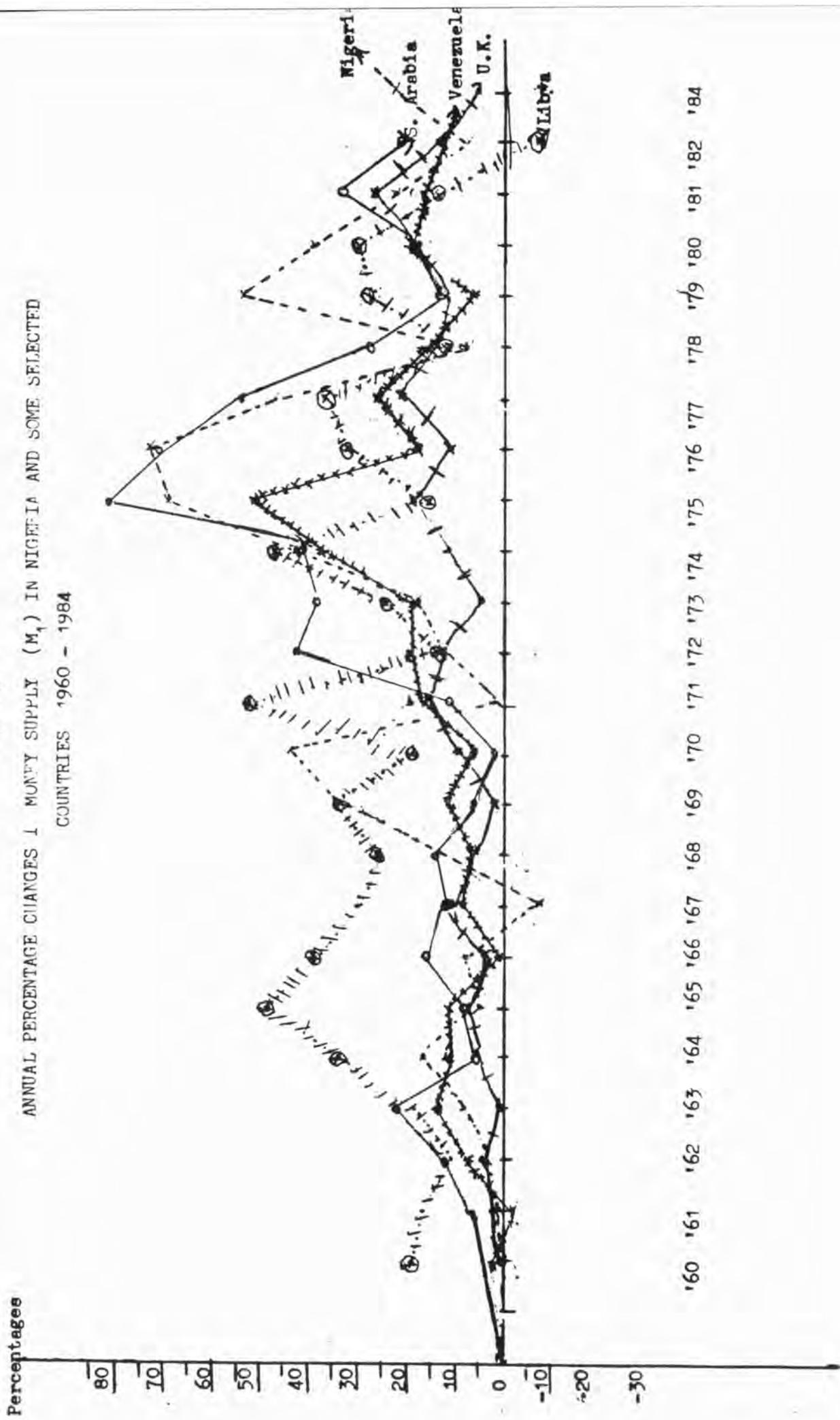
ANNUAL CHANGES IN MONEY SUPPLY (M<sub>1</sub>) IN NIGERIA AND SOME SELECTED COUNTRIES 1960 - 1984 (IN PERCENTAGES)

Period	Countries									
	Nigeria	S. Arabia	Venezuela	Libya	U.K.	U.S.A.	France	India	Ghana	S. Lanka
1960	-	-	3.1	19.8	1.9	-	13.5	6.5	18.8	1.8
1961	0.8	5.2	-2.1	17.4	3.7	3.0	15.9	4.4	5.7	6.3
1962	3.1	11.7	7.5	10.4	3.6	1.9	18.5	10.1	21.1	5.0
1963	7.6	20.9	14.0	17.6	0.9	3.8	4.4	13.7	7.3	12.0
1964	15.9	5.0	11.0	33.0	5.1	4.6	8.1	10.1	48.9	7.8
1965	3.9	8.9	11.4	48.9	7.3	4.4	9.3	9.7	-0.7	5.9
1966	8.8	15.2	1.6	39.9	4.4	2.7	7.6	9.1	2.9	-3.5
1967	-9.7	11.4	9.3	30.0	11.0	8.0	4.7	9.1	-2.8	9.1
1968	4.7	14.7	8.4	28.5	6.9	5.7	9.0	5.6	7.4	5.8
1969	33.6	5.5	10.9	34.4	2.8	3.8	0.7	11.8	12.4	-1.6
1970	43.6	3.4	5.4	19.4	9.0	3.7	7.5	12.9	5.5	4.0
1971	3.4	10.2	16.7	51.2	15.3	6.2	11.9	13.0	5.0	9.2
1972	11.3	42.6	19.9	13.3	13.9	7.6	14.9	12.7	44.1	15.7
1973	18.1	38.9	19.2	24.5	5.1	7.3	9.8	17.3	15.4	11.9
1974	42.5	41.4	37.7	46.7	10.8	2.8	15.2	9.3	23.7	4.6
1975	69.1	80.9	50.4	15.1	18.6	5.4	12.7	33.6	44.6	4.9
1976	73.5	71.2	17.6	31.3	11.4	5.6	7.9	24.7	41.7	34.9
1977	45.6	54.0	26.5	37.1	21.5	8.2	11.4	13.7	67.4	29.0
1978	7.3	27.4	15.2	11.5	14.6	5.7	21.1	21.1	68.5	na
1979	52.9	13.7	6.04	25.8	12.5	7.1	17.7	17.2	15.8	"
1980	39.3	17.4	18.9	28.2	18.1	8.1	15.8	15.9	33.8	"
1981	20.9	33.0	16.4	13.2	21.7	7.1	17.4	16.8	51.3	"
1982	6.4	20.2	12.4	-7.3	12.6	15.1	10.5	12.8	23.3	"
1983	16.6	4.1	20.7	na	8.2	6.8	6.9	na	40.2	"
1984	20.8	na	na	na	na	na	na	na	na	"

Source: IMF International financial statistics &amp; other national sources

Figure 9.1

ANNUAL PERCENTAGE CHANGES IN MONEY SUPPLY ( $M_1$ ) IN NIGERIA AND SOME SELECTED COUNTRIES 1960 - 1984



### 9.3e The Period of Mild Expansion:

The mounting inflationary pressures ushered in in the 1970s consequent upon the cheap money policy coupled with the high government revenues which followed the exorbitant rise in the price of oil in the world market in 1973. The inflationary trend in Nigeria became more complex because of the deteriorating balance of payments position as can be seen from Table 9.2. With the exception of 1974, 1975, 1979 and 1980, Nigeria balance of payments was always in deficit throughout 1960 to 1985. In comparison with some OPEC countries, Nigeria balance of payments position remained the worst.

Since all efforts to combat the rising price inflation in Nigeria were not successful, the monetary authorities felt strongly the need for redirection of policy from monetary expansion to mild expansion in order to at least reduce the inflationary pressures in the domestic economy, relieve the pressures on the external balance of payments position, and reduce government's continued reliance on the domestic banking system to finance its deficit. This was rather a very hard task to perform by the monetary authorities in a complex economic situation of the country. For political reasons, the policy of outright monetary restraint could not just be suddenly adopted since the civil war had just ended and an urgent need for reconstruction had emerged. The tackling of the nation's economic problems of inflation and the continued government deficit financing had to be done by way of direct fiscal measures, while the monetary policy only played a supportive role. The authorities also adopted some policies towards the conservation of external reserves in order to relieve the balance of payments pressures. Thus as a temporary measure, the CBN was statutorily required to provide payments for current transactions only from current foreign exchange earnings.

In pursuance of its policy of mild monetary expansion, the CBN imposed selective credit controls in form of guidelines on all the commercial banks in the country. This was to ensure that credit was channelled to the productive

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Table 9.2

NIGERIA BALANCE OF PAYMENTS IN COMPARISON WITH SOME SELECTED COUNTRIES  
1960 - 1983 (In Million U.S. Dollars)

Period	Countries					
	Nigeria \$	Iran \$	Libya \$	S. Arabia \$	Venezuela \$	W. Germany billions\$
1960	-194	- 92	na	na	394	1.11
1961	-177	- 6	"	"	473	.74
1962	-148	54	"	"	385	- 44.0
1963	-156	94	"	"	476	0.17
1964	-255	44	"	"	193	-0.2
1965	-251	- 96	"	"	35	1.7
1966	-258	- 120	"	"	26	0.02
1967	-201	- 127	44	- 98	147	2.5
1968	-223	- 458	46	- 88	-194	2.5
1969	-316	- 439	376	- 86	-220	1.9
1970	-368	- 507	645	71	-104	0.85
1971	-406	- 118	783	972	-11	0.78
1972	-342	- 388	238	2089	-101	0.81
1973	- 8	154	66	2520	877	4.67
1974	4897	12267	2700	23025	5760	10.35
1975	142	4707	392	14385	2171	4.08
1976	-357	4717	2844	14360	254	3.94
1977	-1018	5081	2762	11991	-3179	4.12
1978	-3785	na	1498	- 2212	-5735	9.23
1979	1664	"	4023	11167	350	-6.2
1980	4247	"	8240	41401	4728	-15.96
1981	-5772	"	-2978	38350	4000	5.72
1982	-7321	"	na	na	-4246	3.11
1983	-3904	"	"	"	na	3.93

Sources: Compiled from IMF International financial statistics of various issues as well as national sources for each country.

ESTIMATED REAL RATES OF INTEREST ON ONE-YEAR TIME DEPOSITS IN NIGERIA AND SOME SELECTED COUNTRIES 1960 - 1984

Year End	Nigeria			United Kingdom			U. S.			Indonesia			Korea			Tanzania	
	% Change in CPI	Rate of Interest Nominal	Real	% Change in CPI	Rate of Interest Nominal	Real	% Change in CPI	Rate of Interest Nominal	Real	% Change in CPI	Rate of Interest Nominal	Real	% Change in CPI	Rate of Interest Nominal	Real	% Change in CPI	Rate of Interest Nominal
1960	1.1	5.6	4.5	1.0	5.0	4.0	1.8	4.0	2.2	5.1	3.5	-1.6	10.2	10.2	-	1.5	3.5
1961	2.5	5.5	3.0	2.8	6.0	3.2	1.8	3.2	1.8	5.6	3.5	-2.1	8.3	10.2	1.9	2.9	3.5
1962	5.0	4.5	-0.5	3.9	4.5	0.6	2.5	4.5	0.5	4.9	3.5	-1.4	6.1	10.2	3.9	2.0	3.5
1963	-2.6	4.0	6.6	1.9	4.0	2.1	2.6	3.0	0.4	5.9	6.0	0.1	19.7	10.5	-2.2	2.5	4.0
1964	0.8	5.0	4.2	3.3	7.0	3.7	2.4	3.5	1.1	6.0	6.5	0.5	27.9	15.0	-12.9	1.7	4.0
1965	4.2	5.0	0.8	4.7	6.0	1.3	3.0	4.0	1.0	6.1	6.5	0.4	13.6	18.8	5.2	6.6	4.0
1966	3.2	5.0	1.8	3.9	7.0	3.1	3.4	4.5	1.1	6.2	6.5	0.3	12.0	30.0	18.0	4.6	4.0
1967	-5.0	4.0	9.0	4.7	8.0	2.3	3.9	4.5	0.6	6.4	6.5	0.1	10.8	30.0	19.2	2.3	4.5
1968	6.2	4.5	-1.7	5.4	7.0	1.6	4.7	5.5	0.8	10.5	11.0	0.5	11.2	27.2	16.0	3.6	4.5
1969	13.8	4.5	-9.3	6.4	8.0	1.6	5.6	6.0	0.4	15.5	16.5	1.0	10.1	24.0	13.9	1.3	4.5
1970	16.1	4.5	-11.6	9.4	7.0	-2.4	5.2	5.5	0.3	12.3	15.5	3.2	12.7	22.8	10.1	2.8	4.5
1971	12.5	4.5	-8.0	7.1	5.0	-2.1	4.6	4.5	-0.1	4.6	8.5	3.9	12.4	20.4	8.0	4.1	4.5
1972	5.7	4.5	-1.2	9.1	9.0	-0.1	7.6	4.5	-3.1	6.3	8.0	1.7	11.8	12.0	0.2	8.6	4.5
1973	12.5	4.0	-8.5	16.0	13.0	-3.0	12.3	7.5	-5.8	31.1	18.0	-13.1	3.0	11.0	8.0	9.2	4.5
1974	33.4	5.5	-27.9	24.2	11.5	-12.7	11.1	7.75	-3.35	40.5	12.5	-28.0	27.7	11.0	-16.7	19.2	4.5
1975	10.2	5.5	-4.7	16.5	11.25	-5.25	8.3	6.0	-2.3	19.1	14.0	-5.1	5.6	14.0	8.4	26.5	5.0
1976	18.5	6.0	-12.5	15.9	14.25	-1.65	8.5	8.25	-0.25	19.8	15.0	-4.8	-7.8	14.0	21.8	6.9	8.5
1977	10.5	7.0	-2.5	8.3	7.0	-1.0	7.2	6.0	-1.2	11.1	12.5	-1.4	8.5	14.0	5.5	11.6	8.5
1978	18.6	7.0	-11.6	13.4	12.5	-0.4	9.1	9.5	-0.4	18.1	12.5	-5.6	2.5	15.0	12.5	11.4	6.0
1979	11.1	8.0	-3.1	18.0	14.0	-4.0	11.9	12.0	-0.1	21.9	15.0	-6.9	6.4	15.0	8.6	13.8	6.0
1980	11.3	10.0	-1.3	11.9	14.0	2.1	9.9	11.5	1.6	18.5	15.0	-3.5	11.4	16.0	4.6	30.3	8.5
1981	20.9	10.0	-9.1	8.6	14.7	6.1	7.5	14.4	6.9	12.2	14.0	1.8	13.0	11.0	-2.0	25.6	10.0
1982	7.5	10.0	-2.5	6.2	12.8	6.6	6.7	12.5	5.2	9.5	12.0	2.5	7.9	5.0	-2.9	20.0	12.0
1983	16.0	12.0	-4.0	5.1	12.0	6.9	5.0	10.5	5.5	9.2	10.5	1.3	7.5	5.0	-2.5	16.1	12.0
1984	9.5	12.0	2.5	4.8	12.0	7.2	2.2	10.5	7.2	8.4	10.5	2.1	7.0	3.0	1.0	12.8	12.0

sector of the economy. For example, the CBN specifically directed that the increase in credit should not be more than 20 per cent of the previous level outstanding in December 1969 and that such increase should be channelled to productive sector. (See Table 9.4 on Credit Guidelines and the extent of commercial banks' compliance).

A number of measures was adopted to tackle the external monetary problems. For example, in August 15, 1971, dollar-gold convertibility was suspended in favour of a new system of exchange rates which became effective as from 23rd August, 1971.

On the whole, the policy measures adopted in 1970 through 1972 resulted in a spectacular rise in money supply.  $M_3$  rose from an increase of 8.5 per cent in 1969 to 39.3 per cent in 1970, but later fell drastically to 3.3 per cent in 1972 and only to rise up again by 11.4 percentage increase (See Table 9.6). As should be expected, the NLB also fell drastically from 21.3 percentage increase in 1971 to -34.3 at the end of 1972. However, the NBB rose from 23 percentage increase in 1970 to 37.5 in 1971 and later fell in rate of increase to just 6.3 per cent by the end of 1972.

### 9.3f Monetary Restraint In the Face of Growing Money Supply:

The inflationary pressures which have persisted since 1969 continued almost unabated through 1973 and in fact considerable improvement in foreign exchange earnings between 1973 and 1974 appeared to have compounded the problem. The seriousness of this high inflationary trend was well marked from the then Head of State in 1974, in his budget speech where he referred to inflation as the "public enemy No. 1"<sup>280</sup>. The period 1973 to 1974 witnessed the continued rise in oil revenue which soon created a false illusion of hope in a bouyant economy. The direct result of oil boom was reflected on the balance of payments position which turned from deficit to surplus. For example in 1972, there was a deficit of ₦40.8 million but with the dramatic increase in the level of foreign reserves there was a drastic reduction in

1. See Central Bank Report, 1971

2. See the Federation of Nigeria, Annual Budget Speech 1974

NIGERIAN COMMERCIAL BANK LOANS AND ADVANCES CLASSIFIED BY PURPOSE  
PERCENTAGE DISTRIBUTION 1970-1980

Category of Borrowers	Prescribed										Actual Average Performance												
	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	
<b>A</b>																							
<b>PRODUCTION</b>																							
Agriculture	-	-	45.0	45.0	45.0	60.0	60.0	48.0	50.0	53.0	56.0	32.9	34.1	35.9	38.3	43.6	35.0	62.3	53.4	55.6	59.3	60.8	
Mining	-	-	4.0	4.0	4.0	6.0	6.0	6.0	6.0	6.0	8.0	1.9	1.8	3.1	3.1	3.1	1.0	1.7	3.9	4.9	6.5	6.8	
Manufacturing	-	-	4.0	4.0	4.0	2.0	2.0	2.0	2.0	2.0	2.0	1.8	1.0	1.6	1.6	1.2	1.6	2.3	1.1	0.9	1.0	0.9	
Construction	-	-	30.0	30.0	30.0	36.0	36.0	30.0	32.0	36.0	36.0	21.7	23.8	23.2	24.0	28.4	21.3	30.9	27.8	27.6	29.0	30.8	
Residential	-	-	7.0	7.0	7.0	16.0	16.0	10.0	10.0	9.0	10.0	7.3	7.4	7.9	9.6	10.9	11.8	27.4	20.6	22.2	22.8	22.8	
<b>SERVICES</b>																							
Public Utilities	-	-	21.0	11.0	21.0	15.0	15.0	16.0	10.0	11.0	12.0	25.3	25.3	22.6	19.4	15.7	6.5	4.5	12.3	8.2	8.2	8.5	
Transport & Communication	-	-	11.0	3.0	3.0	2.0	2.0	2.0	2.0	2.0	3.0	1.9	0.7	0.2	0.4	0.8	1.9	0.2	1.2	1.5	1.1	1.6	
Exports	-	-	3.0	8.0	8.0	8.0	8.0	8.0	8.0	9.0	9.0	5.4	6.3	7.1	7.7	6.7	3.9	3.6	8.0	6.7	7.1	7.0	
<b>TOTAL A</b>	-	**	66.0	66.0	66.0	75.0	75.0	64.0	60.0	70.0	75.0	58.2	59.4	58.5	56.7	59.3	41.5	66.8	65.7	63.8	69.2	70.8	
<b>B</b>																							
<b>GENERAL COMMERCE</b>	-	-	22.0	22.0	22.0	18.0	18.0	24.0	22.0	18.0	17.0	27.9	25.8	21.3	21.2	21.8	47.3	23.6	20.4	19.6	17.5	17.3	
Imports	-	-	10.0	10.0	10.0	11.0	11.0	10.0	8.0	5.0	6.0	17.0	12.6	8.1	11.5	8.5	38.9	17.5	9.2	8.9	6.6	6.4	
Domestic Trade	-	-	10.0	10.0	10.0	5.0	5.0	12.0	12.0	11.0	11.0	9.2	11.2	11.8	12.2	11.4	3.3	2.2	10.3	9.8	10.3	10.3	
Bills Discounted	-	-	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.7	2.0	1.3	1.5	1.9	5.1	3.9	0.9	0.9	0.6	0.5	
<b>OTHERS</b>	-	-	12.0	12.0	12.0	7.0	7.0	12.0	12.0	12.0	8.0	13.9	13.4	20.2	18.2	18.9	10.5	9.6	13.9	14.6	13.3	11.9	
Credit & Financial Institutions	-	-	1.0	1.0	1.0	3.0	3.0	3.0	3.0	3.0	1.0	7.8	1.8	2.3	1.6	1.9	5.4	3.7	3.0	3.5	2.6	2.5	
Governments	-	-	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	3.7	2.0	1.4	2.3	2.4	1.2	2.4	3.1	3.5	3.5	2.2	
Personal & Professional	-	-	6.0	6.0	6.0	-	-	4.0	4.0	4.0	3.0	6.6	6.6	9.9	5.7	6.5	-	-	4.8	4.7	4.2	4.0	
Miscellaneous	-	-	3.0	3.0	3.0	2.0	2.0	3.0	3.0	3.0	2.0	5.9	4.9	6.4	8.6	8.1	3.9	3.5	3.0	2.9	3.0	3.1	
<b>TOTAL B</b>	-	-	34.0	34.0	34.0	25.0	25.0	36.0	40.0	30.0	25.0	41.8	40.6	41.5	43.3	30.7	59.5	33.2	34.3	36.2	30.8	29.2	
<b>TOTAL A &amp; B</b>	-	-	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	

\*\* Until 1979/80 Policy guidelines, Exports was still part of less preferred sectors.

foreign trade deficit to just \$8 million in 1973 (See Table 9.2) and overall balance of payments surplus by the end of 1974 to a tune of \$4897 million.

Other monetary measures which were at work before the oil boom to combat inflation included a 10 per cent devaluation of Naira on 15<sup>th</sup> February 1973.<sup>1</sup> The implication of this measure was that import bills were put under control, thereby safeguarding the local currency value of exports from falling. In addition volume of exports not only of crude oil but also of agricultural products increased considerably since the devaluation made Nigerian traded goods cheaper to the country's trading partners like Britain, France and West Germany. The measure also protected the local industries from foreign competition and discouraged the increase in outflow of capital. The hallmarks of the monetary policy adopted during this period was the maintenance of monetary stability in the economy and ensuring adequate credit flow to the productive sectors.

#### 9.3g Monetary Restraint In the Face of Growing Oil Revenues 1974/1975:

The growing oil revenues and the monetization of same by the Nigerian government created a vacuum of shortage of essential commodities which the people could buy with their money. The CBN combined the use of moral suasion with the selective credit controls in order to ensure that commercial banks gave adequate loans to the more productive sector of the economy. In order to tackle the apparent effect of imported inflation as a result of high price of oil, the monetary authorities raised the external value of Nigerian currency. This was followed by a major relaxation in the exchange control restrictions designed to cut down the costs of imports. However, since the Nigerian economy was already suffering from high liquidity with financial institutions holding large amount of money for lack of adequate investment outlets, all the measures so far adopted to stop imported inflation did not have immediate effects. Thus in 1974, the inflation rate in Nigeria stood at around 35 per cent compared with that of

1. See Central Bank Report, 1974.

Indonesia with 40.5 per cent. This is not surprising since the rates of inflation were generally high in most countries of the world because of very high price of oil.

The failures of the anti-inflationary measures adopted were largely due to time lag in the monetary policy as well as the apparent prevalence of oligopolistic market structure over a wide segment of the Nigerian economy. Thus in a situation of the co-existence of both competitive and non-competitive market conditions, it is always difficult to expect consumers in general to be benefited much from any measures that government may adopt to reduce price inflation

The policy of monetary restraint which was adopted was weakened by the increasing monetization of the revenues from oil by the government which had positive impacts on all the major monetary aggregates. Thus instead of a fall in the rate of increase in money supply  $M_1$ , the rate actually rose from 4.1 per cent in 1962 to 11.5 per cent in 1973 and by 1974, it actually increased by 23.8 per cent (See Table 9.5 and Fig. 9.5). The NBB (See Table 9.6 and Fig. 9.6) also rose by more than 91 per cent in 1974 as against a rise of 14.8 per cent in 1973. The Net Liquidity Base rose from the negative rate of change in 1973 to 82.8 percentage change in 1974 while the monetary base percentage increase rose from 9.5 in 1973 to 72.2 in 1974. Thus with these phenomenal increases in the rates of change of all these monetary variables, one should not expect too much from the results of all the anti-inflationary measures adopted.

### 9.3h Period of Monetary Expansion 1975 - 1976

During this period, the effects of various monetary policies adopted during the previous period were still more elusive because of the economic situation both in the domestic and world markets. The high prices of oil resulted in high inflation in most oil-importing countries while the oil-exporting countries were confronted with the problems of managing their increasing oil revenues.

1. See T. Adewumi, 1980 Price Policies of OPEC and Their Economic consequences for both developed and underdeveloped countries Unpublished Mimeograph, University of Maiduguri.  
See also Douglas Evens, 1978 Western Energy Policy. The Case for Competition

Table 9.5

TREND IN MONEY SUPPLY IN NIGERIA 1960 - 1984

( in Million Naira ).

Year end	M <sub>1</sub> = Money in circulation plus Demand Deposits	% Change	M <sub>2</sub> = M <sub>1</sub> plus Time Deposits	% change	M <sub>3</sub> = Cash plus total credit	% change
1960	214	-	296	-	142	-
1961	241	12.6	314	6.1	209	44.4
1962	243	0.02	333	6.0	251	20.1
1963	253	4.1	36.2	6.7	309	23.1
1964	269	6.3	431	19.1	525	69.9
1965	318	18.2	469	8.8	533	1.5
1966	328	3.1	520	10.9	535	0.03
1967	357	8.8	454	12.7	1093	104.3
1968	323	-9.5	532	12.2	726	-33.6
1969	338	4.6	663	27.0	788	8.5
1970	447	32.2	979	47.7	1098	39.3
1971	643	43.8	1042	6.4	1524	38.8
1972	670	4.1	1204	15.5	1535	3.3
1973	747	11.5	1508	25.2	1710	11.4
1974	925	23.8	2730	81.0	1921	12.3
1975	1757	89.9	4178	33.0	2770	44.2
1976	2605	48.3	5843	39.8	5300	91.3
1977	3864	48.3	7813	33.7	8588	62.0
1978	5558	43.8	7521	-3.7	10276	20.4
1979	5101	-8.2	9849	30.9	11748	14.3
1980	6147	20.5	14390	46.1	20657	75.8
1981	9227	50.1	15239	5.9	36332	75.9
1982	9745	5.6	16694	9.5	26521	-27.0
1983	10049	3.1	19049	14.1	33277	25.5
1984	11298	12.4	20569	8.0	33690	1.2

Source: Computed from the CBN Economic and Financial Reviews of various years as well as CBN Annual Report and Statements of Accounts.

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Figure 9.5

PERCENTAGE CHANGES IN MONEY SUPPLY,  $M_1$ ,  $M_2$  AND  $M_3$  IN NIGERIA  
1961 - 1984

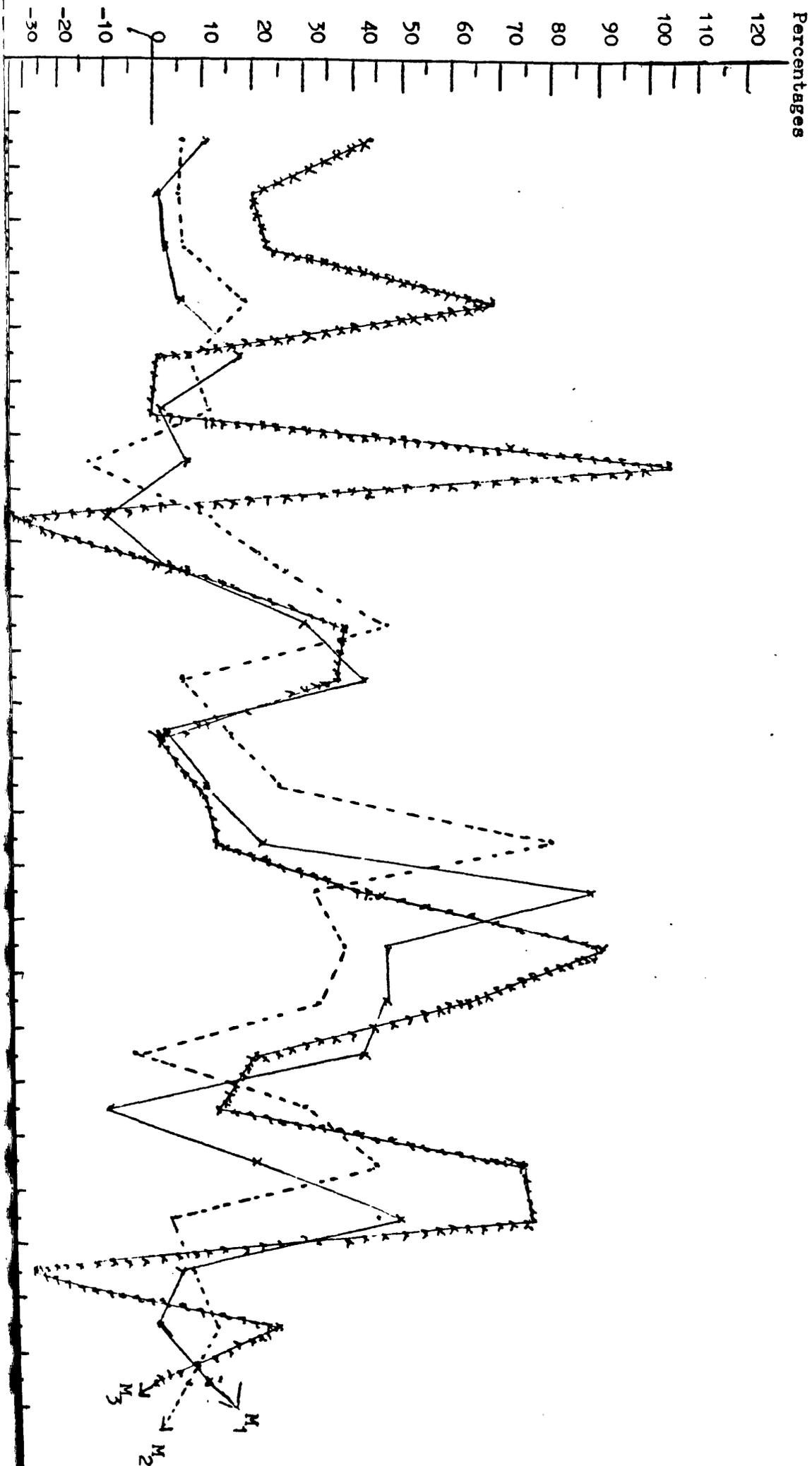


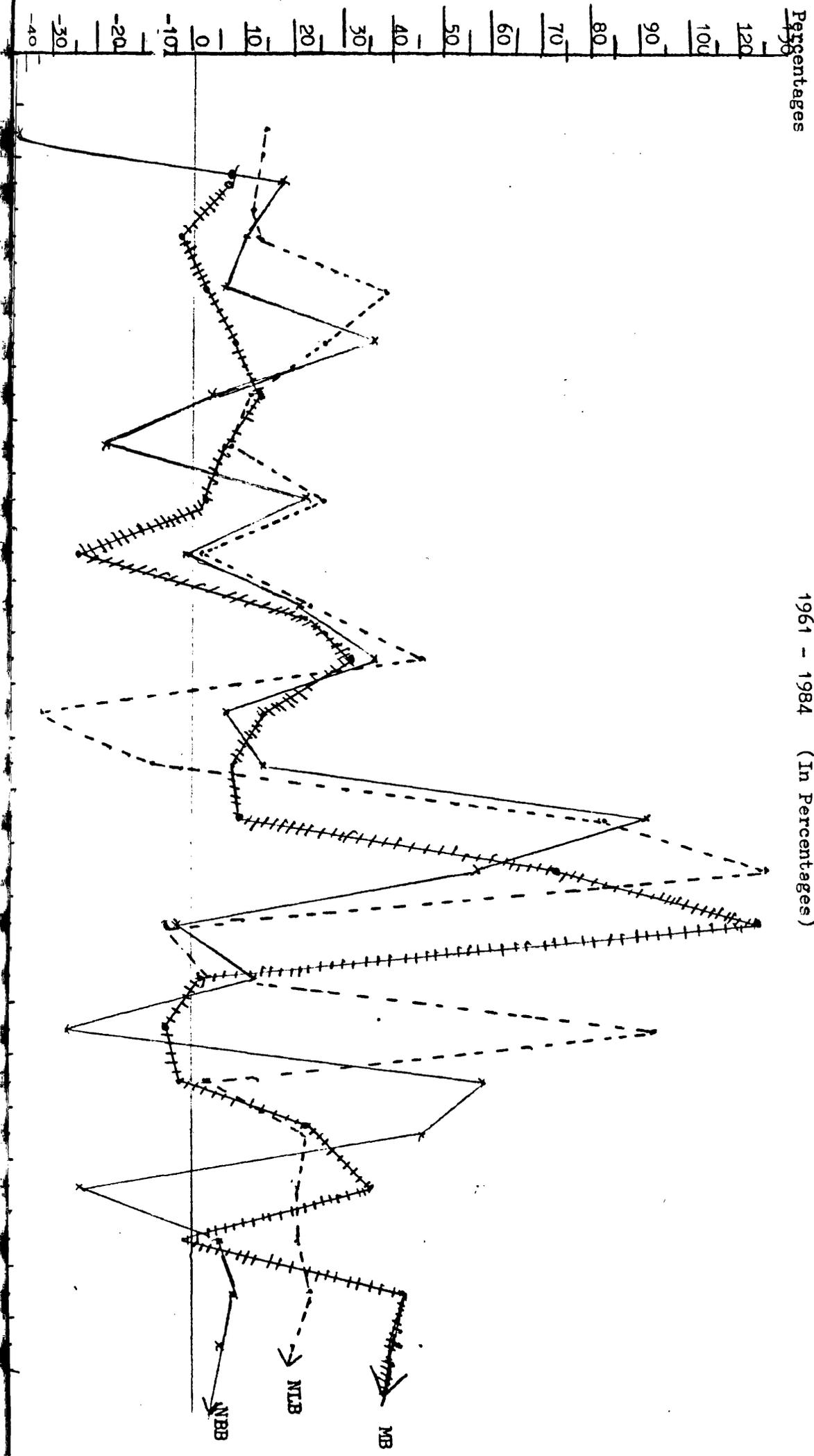
Table 9.6

ANNUAL RATE OF CHANGE IN THE INDICATORS OF MONETARY POLICY  
1960 - 1984 (In Percentages)

Year	% Change in Net Banking base	% Change in Net Liquidity Base	% Change in Monetary Base	% Change Treasury Bill Rates	% Change in Treasury Certificate Rates
	NBB	NLB	MB		
1960	-	-	-	-	-
1961	-40.7	14.4	8.6	-	-
1962	19.6	12.1	-2.1	0.5	0.5
1963	10.1	12.6	3.2	-	-
1964	6.4	39.7	8.9	-	-
1965	37.4	25.5	13.5	0.5	-0.5
1966	4.3	10.1	7.4	-	0.5
1967	-18.1	8.3	3.2	0.5	-
1968	23.3	25.7	-23.7	-	-
1969	-0.09	1.9	22.0	-	0.5
1970	23.0	21.3	31.1	-0.5	-0.5
1971	37.5	46.6	13.0	-	-
1972	6.3	-34.3	9.4	-0.25	-
1973	14.8	-9.6	9.5	-0.25	0.5
1974	91.6	82.8	72.2	0.25	1.0
1975	58.2	139.1	124.3	-0.25	-0.5
1976	-3.5	-5.4	2.0	-	-
1977	12.1	10.3	-5.4	0.5	0.5
1978	-26.5	92.8	-3.1	-	-
1979	59.2	3.0	23.3	1.0	1.0
1980	47.1	22.2	36.4	-	-
1981	-23.4	21.6	-1.2	-	-
1982	5.7	21.4	42.4	1.0	1.0
1983	7.8	23.6	46.1	0.25	1.0
1984	5.4	20.1	42.2	2.0	3.0

Source: Computed from the CBN Annual Report and Statements of Accounts of various years.

Figure 9.6  
ANNUAL RATE OF CHANGE IN THE INDICATORS OF MONETARY POLICY IN NIGERIA  
1961 - 1984 (In Percentages)



of the economically advanced countries who are major importers of oil. This is because these industrial countries were passing on the increase in the cost of production to less developed importing countries (T. Adewumi (1980)).<sup>1</sup> Since most developing countries depended largely on imports, they could not avoid element of imported inflation which coupled with the monetary policy adopted can explain why inflation rates in LDC were higher than those of the developed countries. Thus even the oil-exporting less developed countries like Nigeria and Indonesia also experienced very high rate of inflation which stood at 33.4 and 40.5 per cent respectively in 1974 (See Table 9.3).

The increasing government revenues from oil stimulated a high increase in government spending and hence increase in money supply in Nigeria in 1975 and 1976. The rate of increase in money supply stood at 69.1 and 73.5 per cent respectively in 1975 and 1976. (See Table 9.1) With such increase in money supply in the face of inadequate supply of essential commodities, Nigerian authorities had to liberalize the importation of goods and hence inflation as well. There is no wonder, therefore, that Nigeria experienced very high rate of inflation when compared with of any developed countries.

The high government monetization of oil revenues resulted in high banking system liquidity as can be seen from table 9.7. Thus in 1974, the banking system liquidity stood at 70.8 per cent compared with 50.5 per cent in 1973. However, by 1975 and 1976, it has fallen down to 50.4 and 47.7 per cent respectively. In 1984, it stood at 64.8.

The high banking liquidity in Nigeria during this period can be explained in terms of inadequate short-term investment outlets. Thus while the cash resources of commercial banks were fast growing, the volume of short-term money market investment instrument remained largely static. For

1. See Adewumi, T (1980), Price Policies of OPEC and Their Economic Consequences for Developed and Developing Countries. Unpublished Paper for B.Sc. Economics, University of Maiduguri, Nigeria.

Table 9.7

NIGERIAN COMMERCIAL BANKS' INVESTMENT IN TREASURY BILLS AND TREASURY  
CERTIFICATES, LIQUIDITY RATIOS AND BANK NETWORTH, 1970 - 1984  
(In Million Naira and Percentages)

Year	Treasury Bill and Certificate Holdings Amount Nm.	Liquidity Ratios %	Bank Networth Amount in Nm.		Loan/Deposit Ratio %
			Nominal Nm.	Real Nm.	
1970	534.0	51.6	58	57.6	51.6
1971	299.6	59.3	72.5	70.0	59.3
1972	793.7	56.8	85	79.1	72.3
1973	790.8	50.5	90	89.3	69.1
1974	753.6	70.8	100	98.9	70.4
1975	728.0	50.4	127	126.5	49.5
1976	1054.7	47.7	158	157.9	65.2
1977	1153.8	50.8	209	209.0	60.8
1978	953.0	36.2	267	266.8	58.0
1979	2144.0	29.9	390	389.7	34.0
1980	2434.3	47.6	408	408.0	55.8
1981	1773.9	51.0	497	496.8	76.2
1982	2466.4	46.4	668	667.8	63.9
1983	3671.1	61.3	1237	1236.5	77.1
1984	3345.6	64.8	2059	2058.9	55.4

Source: Computed from the CBN Economic and Financial Review as well as the CBN Annual Report and Statements of Accounts of various years.

example, while commercial banks' total liquid assets stood at ₦77.9 million in 1973 and by 1974, it was ₦354.4 million (Table 9.8). The Treasury bills and certificates holdings stood at ₦790.8 million in 1973 and ₦790 and ₦790.1 million in 1971 and 1972 respectively. The decision of the Nigerian authorities to retire all the outstanding treasury bills and certificate was very untimely and only helped to increase the liquidity problems, the solution of which was thrown back to the monetary authorities. Thus the CBN had to introduce two money market instruments, namely the Bankers' Unit Fund (BUF) and the Certificate of Deposit (CD) as a way of reducing the banking system liquidity. The BUF could be regarded as a monetary reservoir for the participating banks since they could, through this fund, invest on government stocks whenever these are available at nominal rate of between  $2\frac{1}{2}$  and 4 per cent. The CD, on the other hand, was more or less an inter-bank debt instrument for the purposes of providing credit to merchant banks which in turn could with this credit embark on any long-term investment projects.

Apart from the high increase in money supply and the resultant high rate of inflation, there was the problem of inadequate infrastructural facilities and poor state of roadnetworks available for the distribution of goods and services. The Lagos port congestion of 1975 is a clear evidence of inadequate infrastructural facilities.<sup>1</sup> Coupled with these various problems as already mentioned was the shortage of competent personnel resulting in apparent negligence of the Nigerian authorities to manage aggregate demand rather than augmenting aggregate supply. Thus the policy package which contained promises of lower inflation could not be effected. Instead of trying to combat inflation, therefore, the monetary authorities concentrated on policy aimed at reducing the rate of increase in overall spending in the economy. To achieve this, the authorities adopted the selective credit controls in form of credit guidelines aimed at channelling credit to the productive sectors of the economy, and the imposition of credit ceilings to limit the amount of credit commercial banks could give.

1. See The Federal Republic of Nigeria, First Report of the Anti-Inflation Task Force, October 1975; The Federal Ministry of Information, Lagos Dec. 1975.

NIGERIAN COMMERCIAL BANKS' TOTAL  
LIQUID ASSETS , 1960 - 1984 In  
(Million Naira)

Year	Total Liquid Assets	Total Investments in Treasury Bills and Treasury Cert- ificate	Yearly Average Liquidity Ratios
	N m.	N m.	%
1960	51.4	5.7	35
1961	77.8	8.6	32
1962	55.2	10.0	36
1963	53.0	11.5	38
1964	63.8	23.7	40
1965	88.4	22.0	35
1966	115.3	35.4	37
1967	93.5	35.8	42
1968	95.6	206.2	41
1969	59.9	349.0	39
1970	57.4	534.0	51.6
1971	49.8	790.0	59.3
1972	58.4	790.1	56.8
1973	77.9	790.8	50.5
1974	354.4	755.6	70.8
1975	890.4	728.0	72.4
1976	1144.4	1054.7	47.7
1977	931.6	1153.8	50.8
1978	886.3	953.0	31.4
1979	900.9	2144.0	53.1
1980	1291.2	2434.3	47.6
1981	1245.1	1773.9	51.0
1982	1159.2	2466.4	46.4
1983	1178.2	3671.1	61.3
1984	2360.0	3345.6	64.8

Source: Computed from the CBN Annual Report and Statements of Accounts, the CBN Economic and Financial Reviews and the Statistical Reviews of various years.

In addition to the adoption of selective credit controls, the CBN also made use of the cost tools in form of interest rate variations. Thus in order to stimulate domestic savings, the minimum nominal rate of interest on personal account of up to ₦20,000 was fixed at 4 per cent per annum from the former rate of 3.5 per cent while at the same time allowing the commercial banks to fix rate on deposits themselves as a way of making them more competitive. However, there was a reduction in the rate of interest on Treasury Bills and Certificates from 4 to 3 per cent designed to ensure that banks give more loans to the productive sector of the economy rather than investing only on government securities. (See Table 9.8a)

Further measure adopted to solve the banking sector liquidity involved the introduction for the first time, of request for cash deposits. The cash deposits was expressed as a ratio of each bank's total demand deposits plus time deposits and the amount of cash deposit ratio requested depended on the size of the individual bank's deposit liabilities and this ranged from 5 to 12.5 per cent. Realising that the deposits against letters of credit is one of the major causes of banks' excess cash balances in Nigeria, the CBN also requested the banks to keep such deposits in a separate account apart from the eligible assets for satisfying cash reserve and liquidity ratio requirements. The effects of all these measures to reduce the bank liquidity position was quite obvious; the average liquidity ratio which stood at 72.4 per cent in 1975 was reduced to 47.7 per cent in 1976. (See Table 9.8).

The policies so far adopted have resulted in the lowering of inflation rate from 28 per cent in 1975 to 18.6 per cent by the end of 1976, even though this rate was still high when compared with those of the developed countries. However, the import liberalization policy adopted to combat the shortage of essential commodities in the country had resulted in drastic reduction of foreign exchange reserves. Since revenues from oil exports have fallen because of falling prices of oil, the Nigerian authorities decided to change the import policy in favour of policies towards the encouragement of foreign private and domestic

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Table 9.8a

INTEREST RATE STRUCTURE IN NIGERIA: TIME AND SAVINGS DEPOSITS -  
BANK LENDING RATES AND ESTIMATED REAL  
RATES OF INTEREST  
1960 - 1984

Year	% Nominal Rates of Interest, Yearly averages					% Change of Living Index	% Real Rates of Interest				
	Time Dep. Rate over 12 months	Savings Rate	Post Office Savings Rates	Treasury Bills Rates	Lending Rates		Time Dep.	Saving	Post Office	Treasury Bills	Lending
1960	5.6	5.6	5.6	2.5	6.0	1.1	4.5	4.5	4.5	1.4	4.9
1961	5.5	5.5	5.5	2.5	6.5	2.5	3.0	3.0	3.0	-	4.0
1962	4.5	4.5	4.5	3.0	6.5	5.0	-0.5	-0.5	-0.5	-2.0	1.5
1963	4.0	4.0	4.0	3.5	6.5	-2.6	6.6	6.6	6.6	6.1	9.1
1964	5.0	5.0	5.0	3.5	7.0	0.8	4.2	4.2	4.2	2.7	6.8
1965	5.0	5.0	5.0	3.0	7.5	4.2	0.8	0.8	0.8	-1.2	3.3
1966	5.0	5.0	5.0	3.0	7.0	3.2	1.8	1.8	1.8	-0.2	3.8
1967	4.0	4.0	4.0	2.5	7.0	-5.0	9.0	9.0	9.0	7.5	12.0
1968	4.5	4.5	4.5	2.5	7.0	6.2	-1.7	-1.7	-1.7	-8.7	0.8
1969	4.5	4.5	4.5	3.0	7.0	13.8	-9.3	-9.3	-9.3	-10.8	-6.8
1970	4.5	4.5	4.5	3.0	7.5	16.1	-11.6	-11.6	-11.6	-13.1	-8.6
1971	4.5	4.5	4.5	3.0	7.0	12.5	-8.0	-8.0	-8.0	-9.5	-5.5
1972	4.5	4.5	4.5	4.0	7.5	5.7	-1.2	-1.2	-1.2	-1.7	1.8
1973	4.0	4.0	4.0	3.5	7.5	12.5	-8.5	-8.5	-8.5	-9.0	-5.0
1974	5.5	5.5	5.5	4.0	8.5	33.4	-27.9	-27.9	-27.9	-29.4	-24.9
1975	5.5	5.5	5.5	3.0	6.0	10.2	-4.7	-4.7	-4.7	-7.2	-4.2
1976	6.0	6.0	6.0	5.0	6.0	18.5	-12.5	-12.5	-12.5	-13.5	-12.5
1977	4.0	4.0	5.0	6.0	7.5	10.5	-6.5	-6.5	-5.5	-4.5	-3.0
1978	7.0	7.0	7.0	6.0	12.5	18.6	-11.6	-11.6	-11.6	-12.6	-6.1
1979	8.0	8.0	8.0	6.5	12.0	11.1	-3.1	-3.1	-3.1	-4.6	-4.1
1980	10.0	10.0	10.0	8.0	10.0	11.3	-1.3	-1.3	-1.3	-3.3	-1.3
1981	10.0	10.0	10.0	8.0	13.0	20.9	-10.9	-10.9	-10.9	-12.9	-7.9
1982	10.0	10.0	10.0	7.5	12.5	7.5	2.5	2.5	2.5	-	5.0
1983	12.0	12.0	12.0	8.0	13.0	16.0	-4.0	-4.0	-4.0	-8.0	-3.0
1984	12.0	12.0	12.0	8.0	13.0	9.5	2.5	2.5	2.5	-1.5	3.5

Source: Computed from the CBN Annual Report and Statement of Accounts as well as CBN Economic and Financial Review of various years.

investment.

### 9.31 The Period of Monetary Restraint 1977 - 1979<sup>1</sup>:

Because the inflation rate in Nigeria was still very high at 18.6 per cent in 1976, the policy of monetary restraint was adopted by the monetary authorities. Because of the considerable increase in the domestic (Table 9.7) credit expansion in 1976 as evidenced by the loan/deposit ratio which increased from 49.5% in 1975 to 65.2% in 1976, the CBN issued out stabilization securities in 1977. The use of selective credit controls continued to be the favourable instruments of controlling volume of credit and its direction in the economy. The success of the policy adopted is measured by the fact that the loan/deposit ratio fell from 60.8 per cent in 1977 to 53.6 per cent by the end of 1978. There was also a fall in the rate of increase in monetary base from 2 percentage increase in 1976 to a decrease of 5.4 in 1977. There was also a fall in the rate of inflation to 10.5 per cent. (See Table 9.3).

In spite of all the measures adopted, however, the economy did not show marked improvement and because of this, the CBN had to relax some of its policies. For example, there was a relaxation of cash reserve requirement on commercial banks by 50 per cent irrespective of their sizes of scale, while the statutory minimum liquidity ratio was to remain at 25 per cent.

Realising that credit expansion was the core element of inflation in Nigeria, and the fact that the banks did not comply adequately to credit guidelines, the monetary authorities decided to adopt other measures in order to tighten up credit. Some of these measures include the reduction of list of qualifying assets such as the advance deposits for imports and cash balances with the CBN. All these were completely removed from the numerator of the ratio. These measures resulted in a considerable fall in the rate of credit expansion as evidenced by a fall in loan/deposit ratio from 58% in 1978 to just 34% in 1979. The banking system liquidity, however, continued to be

1. See Central Bank Report, 1976

a problem as evidenced by the drastic change in liquidity ratio from 31.4 per cent in 1978 to 53.1 per cent in 1979 (See Table 9.8).

In the foreign sector, the foreign exchange control measures adopted had helped partially to reverse the deficits in the balance of payments to a considerable surplus of \$1,664 million in 1979 as can be seen from Table 9.2. However, the greater part of this surplus must be ascribed to the favourable export market of oil in 1979.

### 9.3j The Period of Credit Expansion 1980 - 1985:

The unstable oil market and hence unstable government revenues from oil means that Nigerian authorities had to do something to reduce government reliance on oil revenues to finance its budget. In 1980, therefore, the Nigerian government decided to encourage establishments of indigenous business enterprises. To this end, the CBN relaxed most of the instruments capable of curtailing the credit-giving capacity of commercial banks, but, however, retain the statutory minimum liquidity ratio of 25 per cent. In addition, the minimum cash reserve ratios which were stipulated for different categories of commercial banks were further reduced while the lending rates was raised from 7 to 10.5 per cent. (See Table 9.8a).

The result of **all** the measures adopted was a remendous rise in the rate of increase in money supply which stood at an average of 30 per cent in 1980. In the month of December alone, money supply increased by 48.6 per cent, which is not surprising for that period of the year when consumer spending is always high not only in Nigeria but in many other parts of the world becasue of Christmas time (Kaldor 1970).

In the external sector, there was a surplus of \$4247 million resulting in an adequate external reserves position. (See Table 9.2). This surplus in the balance of payments was as a result of favourable oil market in 1979 which spilled over to 1980. However, by the end of 1981, the surplus in balance of payments turned into a deficit of \$5772 million. (See Table 9.2).

1. N. Kaldor (1970), "Monetarism" Lloyds Bank Review, 1970.

This deficit was caused by the running down on reserves in payments for imports of commodities. Since the policy adopted was to encourage indigenous business enterprises, the authorities had to relax import and exchange controls to enable firms to import their various input products. Unfortunately many other non-essential commodities were also imported as evidenced in the CBN Annual Statement of 1981.

The economic situations in 1981 formed the background of the monetary and credit policies adopted in 1982. Thus the glut in the international oil market of 1981 resulted in the drastic fall in production and export of crude oil by 30.6 per cent and 34.7 per cent respectively, from their levels in 1980. The non-oil export also fell to just 35 per cent of its level in 1980. The rate of inflation which the authorities have been trying to combat also got worse, rising from 9.9 per cent in 1980 to 20.8 per cent in 1981. Since the manufacturing production as well as agricultural output had just moderate increases (5.7 per cent from 5.3 per cent of the previous year and 3.4 from 2.5 per cent respectively), in the face of such monetary and credit expansion as witnessed in 1980, there was a strong pressure on demand in the economy. The fundamental objectives of all the measures adopted in 1982, therefore, were designed to correct the balance of payments and domestic price movement, while at the same time accelerating the expansion of domestic production.

In order to increase employment and maintain social stability in the economy, the CBN adopted a policy designed to stimulate the flow of bank credit to the indigenous borrowers and small scale enterprises. Thus the commercial and merchant banks were allowed to expand loans and advances by more than 30 per cent but were given specific instruction to grant 80 per cent of their total loans and advances to indigenous borrowers.

The interest rates on savings were raised from 5 to 7 per cent as a way of stimulating increased domestic savings to facilitate increased domestic

1. See Central Bank Report, 1982

capital formation. As a way of regulating banking system liquidity, the 25 per cent minimum liquidity ratio was retained and a cash ratio of between 3 and 5 per cent was imposed on commercial banks, with big banks observing the highest. The lending rates were increased by one percentage point with the exception of those applied to the favoured sectors of agriculture and housing. However, the maximum lending rate was fixed at 12 per cent.

With respect to the foreign sector, in order to stem further the excessive drain on the nation's foreign exchange reserves the interest rates were raised by two percentage point across the board but only to be brought down by one percentage point in November, 1982. In addition, fiscal and other measures were applied in order to reduce further the level of importation so as to minimize drains on the nation's external reserves, generate increased revenue and protect domestic industries. Many of the measures were also designed to promote even development by encouraging rural industrialization and the dispersal of industries throughout the Federation as evidenced in the Budget Speech of 1982.

All the monetary policies adopted in 1982 were designed to encourage the inflow of foreign capital and restrict commercial banks' ability to expand credit. The monetary authorities succeeded in reducing the rate of expansion of credit through the adoption of the various measures against the commercial banks as evidenced by the fact that the actual rate of credit expansion was just 13.6 per cent instead of over 30 per cent imposed by the CBN. The impact of this reduction in credit expansion rate was reflected on the rate of increase in money supply which stood at just 5.6 per cent in 1982. However, in 1983, the money supply rose up again by 2.5 per cent and in 1984, to 12.4 per cent. In 1985, owing to continued reliance on banking system to finance budget deficit, money supply also increased by 25 per cent.

The continued increase in money supply in Nigeria was attributed to deficit financing of the government by the monetary authorities. For example,

1. See Central Bank Report, 1983

the rate of expansion of credit to the private sector was very short of the ceiling of 30 per cent imposed by the CBN. In 1983 and 1984, the rate of credit expansion was just 14.7 per cent on the average, while the rest credit expansion went to the public sector. The CBN has always been concerned with the failure of military rulers as well as politicians to take a grip on public expenditure and the sector's voracious and growing appetite for borrowed funds especially at a time when there was considerable reduction in oil revenues to the government imposed by oil glut.

The world oil glut also resulted in considerable reduction in foreign exchange earnings and consequently deficit on the balance of payments. This means that industries could not import all the things they needed because of shortage of foreign exchange and as such, domestic demand for credits for new investments also fell. The monetary authorities, have succeeded in bringing down the rate of change in money supply through various means such as credit guidelines and ceilings on the rate of credit expansion as well as interest rate policy.

On the foreign sector, Nigeria's balance of payments has continued to be in deficit despite the imposition of foreign exchange controls. In general, there are several options open to any country to finance deficit brought about by monetary measures at home. It can run down foreign exchange reserves, if there is any; it may borrow either from the international money market, or from the international development banks such as World Bank or IMF, or it can seek foreign aid either in the form of 'free' imports or foreign exchange and it may attract private capital from abroad (Thirlwall (1974)). All the above options enumerated except foreign aid have been tried by the Nigerian authorities. Attempt at borrowing money from the IMF generated heated arguments in the Nigerian academic circle on the likely advantages and disadvantages of taking the IMF loans. Although the government seemed to have abandoned the idea of taking the loans, but most of the conditions laid down by the IMF for taking the loans have already 1. See Thirlwall (1974)

1  
 been fulfilled. Thus since Nigeria could not finance the deficit in the balance of payments through any of the above measures, the monetary authorities have started to adopt the policy of internal price and income adjustments. In 1984, for instance, the Federal Government has directed that all workers on higher salaries should have their salaries cut by between 10 and 15 per cent. In addition, the Nigerian authorities imposed, using fiscal policies, physical controls on all imports while at the same time used monetary policy to devalue the currency. Finally in the middle of 1986, the Federal Government revealed its Structural Adjustment Programme (SAP) in order to reduce the money supply in the economy and to switch demand to home produced goods. As part of this programme, the Second-tier Foreign Exchange Market was officially opened on 29th September, 1986 selling Nigerian currency at a marginal rate of ₦4.6174 to U.S. dollar.<sup>2</sup> Putting up \$50 million for sale by the CBN, an estimated ₦230.87 million was pulled out from circulation. The effects of this exercise have resulted in the withdrawal of deposits from the commercial banks at a considerable level.

In spite of all the measures adopted so far, commercial bank credit has continued to be the target of monetary policy in Nigeria. Thus in 1986, the CBN issued another Monetary policy circular (NO. 20) in which it was stipulated that on the basis of each commercial bank's aggregate loans and advances outstanding as at 31st December, 1986, each bank's loans and advances should not rise by more than 10 per cent in 1987. Furthermore, the circular stipulated that with effect from 29th September, 1986, the permissible rate of credit expansion should be reduced to eight per cent and this remained in force till the end of 1986. In addition, the lending rate was raised to the maximum of 15 per cent from 13 per cent while at the same time fixing the minimum time and savings deposits rates at 8.5 and 9.5 per cent respectively.

There is no doubt that the monetary authorities have succeeded in bringing

1. See West Africa Magazine, 14th October, 1985 p. 2141.

2. See This Week Magazine of December, 1986 pp. 14 - 26

down the rate of change in money supply through various instruments of monetary policy in its effort to combat high price inflation in the economy. In section IV, the hypothesis that "The total domestic credit is an intermediate target of monetary policy in Nigeria" will be tested and also the influence of interest rate policy as well as other monetary policies on domestic savings and private capital inflow in Nigeria will be empirically examined. In the next section, however, the interest rate policy of the Nigerian monetary authorities and the national savings will be examined.

### SECTION III

#### 9.4 INTEREST RATE POLICIES AND THE MOBILISATION OF DOMESTIC SAVINGS IN NIGERIA

##### 9.4a Some Empirical Studies:

Scarcity of capital relative to the size of investment required to achieve high and self-sustaining rates of growth of national income and per capita real income has long been recognized by economists as one of the fundamental obstacles to development of many less developed countries. The important role attached to the accumulation of capital in the development process of any nation has made the price of capital as measured by the level and structure of interest rates an object of economic policies of many developing countries.<sup>1</sup> The interest rate has been treated as a means of regulating the cost of capital by most of these countries in line with the Keynesian paradigm. Most of these countries, however, are either ignorant or unwilling to use interest rate policy as a way of ensuring effective mobilization of savings by offering realistic rates on monetary savings such as time and savings deposits as well as government securities. Many of them also ignored the fact that interest rates can be used to determine the optimum allocation of savings between consumption and investment. Interest rates can also be used as instrument for efficient allocation of alternative forms of savings and investments. Although considerable importance is attached to interest rate policy by most of the developing countries, but the form it takes always centres around the structure, behaviour and determinants of interest rates in many cases. While the interest

1. See A.G. Chandavarkar (1971).

rate policy must be such that encourages the investors to borrow capital they need, it must also be designed to encourage the mobilization of domestic savings to ensure that investors get enough money to borrow. Thus the interest rate policy has a reconciling role to play between the conflicting desirable rate to ensure that investors borrow at lower cost and the rate that can stimulate ultimate savers to save.

Since the voluntary domestic or national savings have a considerable bearing on the economic development and growth of most of the developing countries, the role of interest rates as one of the determinants of mobilization of national savings needs to be examined in view of the general skepticism with respect to the efficacy of these rates in the mobilization of national savings. For example, since Marshall's time, economists have expressed doubt on the influence of interest rates on savings. Shackle (1965) expressed doubt about the interest rates' influence on savings notwithstanding the form of algebraic sign they might have. Houthakker (1965) tried to examine the effect of interest rate changes on personal savings and discovered that some other factors like the level, distribution and rate of growth of disposable income, wealth, price levels, industrialization and urbanization are much more influential than the rate of interest in the observed variations in the ratio of savings to income.<sup>1</sup> Earlier study by Simon Kuznet (1960) has shown a positive association between rates of domestic savings and per capita income and the degree of industrialization.<sup>2</sup>

It has also been argued by many economists that export earnings have a very strong influence on domestic savings. Thus a country with higher rates of export growth may not suffer much in terms of foreign exchange constraint on investment since domestic saving is encouraged. This is because the rise in export earnings causes other sectors of the economy to save more in order to take advantage of the profitable investment opportunities. There is no doubt that this is one of the fundamental reasons why many researchers have discovered a strong correlation

1. See Shackle (1965); Houthakker (1965)

2. Also see Simon Kuznet (1960).

between the growth of export earnings and the growth of output in the developing countries. For example, Maizels (1968) made a study of savings function for eleven countries and found that export earnings contributed very significantly to saving in eight of the countries. Extending Maizels' analysis by taking twenty-eight countries for a longer period of time, Lee (1971) found export earnings to be a significant determinant of domestic savings. Other writers like Chenery and Eckstein (1970), Papanek (1973) and Landau (1973) have also come out with similar results for different samples and different period of time. Thus the hypothesis that the value of export is an important determinant of domestic savings have so far been empirically grounded. A number of oil exporting countries in less developed countries as well as some non-oil exporting countries have been studied with respect to domestic savings and our regression results also support the view that the value of exports is one of the major determinant of savings.

Other determinants of domestic savings have been tested by many writers. Some further evidence revealed that consumption is sensitive to interest rate changes in the United States. This is notable in the work of Hamburger (1967)<sup>2</sup> which showed that monetary variables have significant influence on the consumer purchases of durable goods. Also the work of Leeuw and Gramlich (1969) seemed to support Hamburger's findings when they argued that interest rates have significant influence on consumption as well as purchases of consumer durable goods at least for a few years until the attainment of a desired level of durable goods.

The hypothesis that potentialities of an active interest rate policy depend on the extent to which the voluntary financial savings of the household sector are responsive to variations in the level and structure suggests the importance attached to the household's savings in any economy. For example, the available data on the savings pattern of some selected countries in Asia show the sizeable share of the household sector in gross

1. For empirical work on savings, see Maizels (1968); Lee (1971); Papanek (1973) and Landau (1973)

2. Also see Hamburger (1967) and Gramlich (1969).

savings (Chandavarkar<sup>1</sup> (1971)), the relatively small proportion of financial assets of between 35 and 45 per cent of the total savings except for Japan and Ceylon which stood at 82 and nearly 66 per cent respectively, and the predominance of the voluntary savings of household sector which stood at 70 per cent of the total. However, the magnitude of compulsory and contractual saving components are shown to be negligible. It is, therefore, argued that in this kind of saving pattern, where the compulsory and contractual saving components are still negligible in most less developed countries, there is a wider potential scope for interest-sensitive savings by the households. This has, therefore, shifted emphasis on the investigation of interest rate elasticity of household savings in developing countries. In particular, work on interest rate elasticity of personal savings in Asia has so far yielded inconclusive and sometimes conflicting results.

The work of Williamson<sup>2</sup> (1968) and that of Gupta (1970) seem to contradict each other in their conclusions. Williamson evaluates some of the major determinants of personal savings in Asia by combining both temporal analysis of each country in Asia and intertemporal cross-section analysis of a large group of selected Asian countries and discovers that higher interest rates are associated with lower real saving in Asia. This might imply that in many of the Asian countries, savings and investment decisions are highly interdependent in the household sector. Williamson also finds that interest rates have influence on the short-run savings decision far more powerfully than on the long-run. He also finds that for Asia the net impact of real interest rate movements on personal saving are either negative or insignificant.

The work of Gupta (1970), however, yields contradictory results. In carrying out his regression analysis, he uses the same variables as Williamson's but a different and more reliable set of primary data on savings for India. The data used are the estimates produced by the Reserve Bank of India instead of the National Council of Applied Economic Research

1. See Chandavarkar (1971), IMF Staff Papers, vol. xviii no. 1, pp. 48-112.

2. See Williamson (1968) on "Personal Saving in Developing Nations", Economic Record vol. 44 and also the work of Gupta (1970) on the same topic in Economic Record, vol. 46.

used by Williamson. The results of the estimates by Gupta show that the real rate of interest is more influential in determining personal savings, but not significant at the aggregate level. Gupta's findings seem to be much more reliable than those of Williamson not only because he uses much more reliable primary data, but also because five rates of return are considered in his analysis, unlike Williamson's which uses only a single rate of interest as the index of return on financial assets. The rates used by Gupta include interest rates on short-term treasury bills, long-term government bonds, private securities, commercial bank time deposits and nonbank savings deposits. The results of Gupta's regression analysis clearly show that in all the equations, the coefficient has a positive sign, implying that higher real interest rates lead to higher real savings in India. This clearly suggests that interest rate variations have a greater influence on personal savings in India.

In most of the findings, there has been illustration of the complex problems involved in the examination of the determinants of voluntary savings especially with regards to the factors underlying the savings behaviour of individuals as well as households. People save for various reasons; some save in order to buy certain kind of merchandise in future such as television, video recorder or car, some for unknown future contingencies, and some for inheritance. The reasons underlying savings are many and varied. In spite of what might be the motives underlying savings, it is generally recognized that domestic savings can affect the rate of growth of any economy. Thus many economists seem to agree that interest rate variations have a role in influencing domestic savings. Many writers in their analysis seem to suggest that the choice is now not so much between particular levels or structures of interest rates as between rigid and flexible policies. Many have argued that since there is no universally valid a priori criteria, the determination of interest rate policies has to be based on a judicious

empiricism in the context of an overall savings and development strategy. In particular emphasis should be placed on the role of interest rates as a savings incentive than ever before (Chandavarkar, (1971)).

In view of the importance of savings in the overall development strategy, therefore, it is essential to examine the role of interest rate in the mobilization of domestic savings in Nigeria in the context of financial repression hypothesis. The rationale is to examine whether this famous hypothesis is relevant to Nigeria, since Nigeria is an oil-exporting countries with great potential for foreign exchange earnings as long as oil market is favourable.

#### 9.4b The Financial Repression Hypothesis and Interest Rate Policy in Nigeria:

Amongst the recent work on the interest rate policies in less developed countries are those of Mckinnon (1973) and Shaw (1973), both of whom dealt with the financial instruments and institutions in general.

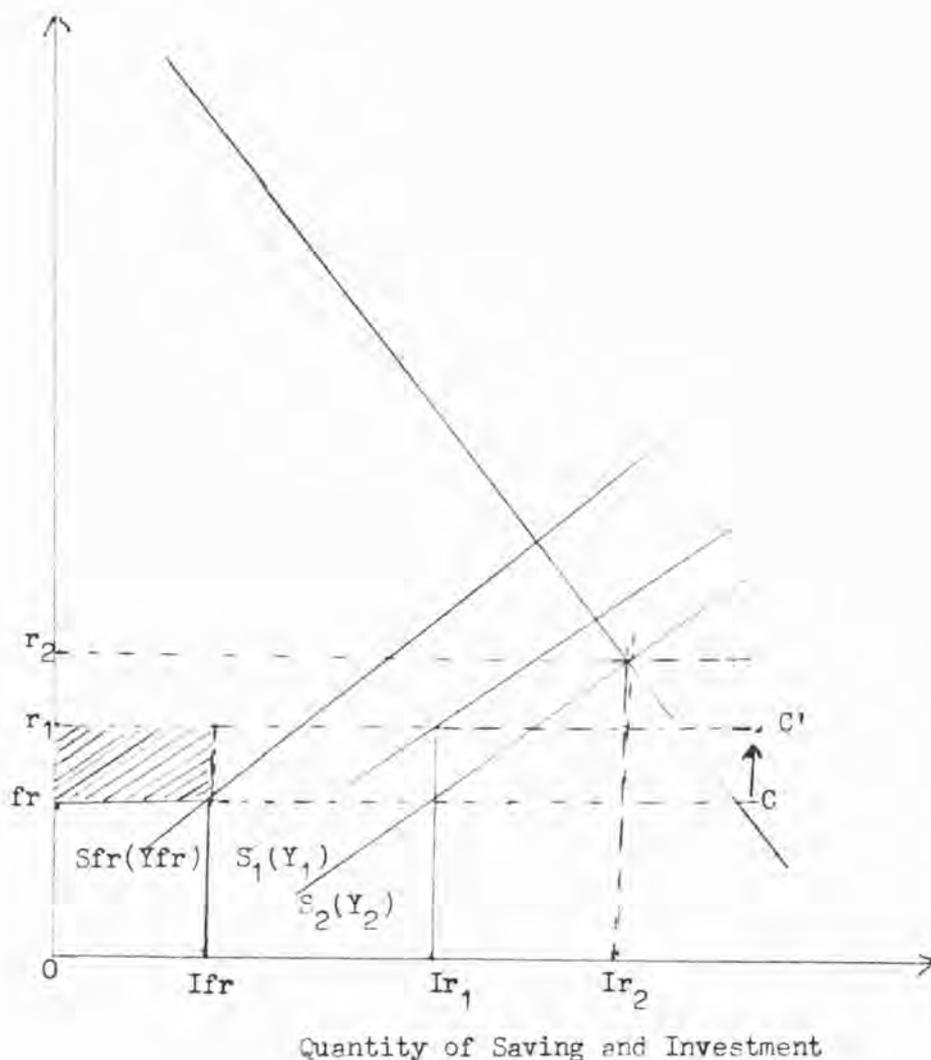
The fundamental elements in the Mckinnon-Shaw model can be embodied in a diagram as shown in figure 9.1. The level of savings when income is  $Y_0$  depends on the real rate of interest (Mckinnon (1973)); Shaw (1973). There is a financial constraint in the economy deliberately created by the administratively determined institutional nominal rate of interest which results in the holding of the real rate ( $r$ ) below its equilibrium level (Mckinnon (1973), pp. 71-77; Shaw (1973), pp. 81 - 87). Consequently,  $I_0$  which is actual investment is limited only to the amount of saving created by the fixed real interest rate ( $r_0$ ). Thus there will be rationing of credit in the economy which can take several forms such as political pressures, availability and quality of collateral, the size of loan, personality of the ultimate borrower and even bribing the bank manager concerned. In most cases, the financial institutions will show strong preference for traditional low-yielding investments since these are safest and very easy to finance. The imposition of interest rate ceilings makes it difficult for financial

1. See Chandavarkar (1971).

2. See the work of Mckinnon (1973) and that of Shaw (1973).

Diagram 9.1.

McKinnon-Shaw Financial Repression Hypothesis  
 Saving and Investment Under Interest Rate Ceiling



In the above, the vertical axis depicts the level of real interest rate, while the horizontal measures the quantity of savings and hence the level of investment. Imposition of interest rate ceiling at  $fr$  (fixed rate) implies that the actual investment ( $Ifr$ ) is limited only to the amount of saving created by the  $fr$ . When the real interest rate is raised to  $r_1$ , saving investment increased since financial constraint is thus relaxed, from  $C$  to  $C'$  in the above. Real interest rate  $r_1$  increased investment by  $OIr_1 - OIfr$  while  $r_2$  increased it by  $OIr_2 - OIfr$ .

institutions to charge risk premia since the ceilings are binding and hence risk-taking is discouraged. Thus interest rate ceilings also ration out large proportion of potential investors.

Raising the real interest rate to  $r_1$  implies relaxing the financial constraint in the economy. Thus savings will increase as well as investment. However, the low-yielding investment will also be rationed out as depicted by letter LI in the shaded area. Consequently there will be increase in the efficiency of investment on the average. As the income rises in the process, there will be a shift in the saving function from  $S(Y_0)$  to  $S(Y_1)$ . Therefore, the real interest rate stimulates savings and hence a key to higher level of investment as well as the rationing device to increased efficient allocation of resources, and greater impacts on economic growth. For this reason, the policy prescription is to raise the level of institutional interest rates and/or reduce the rate of inflation in the economy. If such policy is effected, there will be many investment opportunities in such economy (McKinnon (1973), pp. 59 - 61; Shaw (1973), p. 81. The complete abolition of interest rate ceilings will maximize investment through the optimum allocation of resources it produces. This is depicted by the point of equilibrium between investment  $I_2$  and interest rate  $r_2$  and between level of income  $Y_2$  and saving  $S_2$ . To McKinnon, the real interest rate ( $r$ ) is the money yield on money which is the real deposit rate of interest, which is measured by subtracting the expected rate of inflation ' $P^e$ ' from the one-year time deposit rate of interest ' $dr$ '. For Shaw's saving function, the interest rates are the real rates on all financial claims, such as the real yield on government bonds (or a short-term real rate in the absence of real yield on government bonds) ' $GB - P^e$ ' is used as a proxy.

In his explanation of how the real deposit rate of interest affects saving, investment and growth, McKinnon makes a number of assumptions.

1. See Shaw (1973) p. 81 and McKinnon (1973) pp. 59 - 61

First, it is assumed that all economic units are confined to self-finance, and second, that indivisibilities in investment are of considerable importance, and hence potential investors must accumulate money balances prior to their investment. This last assumption is based on Keynes's finance motive (Keynes, <sup>1</sup>1937, pp 246-247; J. Tobin, 1965) To Mckinnon, therefore, the higher the real deposit rate of interest, the greater will be the incentive to invest. Since the investment expenditures are characterized by relative indivisibility or lumpiness, aggregate demand for money will be greater in such a situation, the larger the proportion of investment in total expenditures. Thus the complementarity hypothesis of Mckinnon emerges - 'the basic complementarity between money and physical capital' (McKinnon, 1973 p.59), which he tests in his studies of semi-industrial less developed countries.

Shaw in his own analysis argues that higher real institutional interest rate increases incentives to save and invest while at the same time raises the average efficiency of investment. Higher institutional interest rates will lead to the raising of real returns to savers by the financial institutions and at the same time, the lowering of real costs to investors through the accommodation of liquidity preference. The financial institutions, will thus reduce risk through diversification and reap economies of scale in lending, increase the operational efficiency and lower costs to both savers and investors through specialization and division of labour. When interest rates are fixed administratively below their equilibrium levels, financial intermediation is repressed and suboptimal. However, if interest rates are allowed to find their equilibrium levels, financial institutions will be able to make use of their expertise to allocate efficiently the larger volume of investible funds which are collected in form of deposits.

Shaw's 'debt intermediation view' (Shaw 1973, p. 62) results in the formulation of his demand for money function. The real yields not only on all forms of wealth but also money are expected to have positive effect

1. See Keynes (1937) and also Tobin, (1965).

on the national savings ratio (Shaw, 1973, p. 73). Thus in Shaw's model, complementarity has no place since investors are not constrained to self-finance. When institutional loans are not available, the noninstitutional credit markets usually emerge.

So far, some economists have applied the model developed by each of the two writers, Shaw and McKinnon and came out with the conclusions that gave support to their (Shaw and McKinnon's) findings. For example, Fry, (1978) in his studies of ten Asian countries has concluded that the real rate of interest has a positive effect on domestic saving and economic growth in the less developed countries of Asia. He, however, did not support McKinnon's complementarity hypothesis on the ground that the Asians less developed countries used in his analysis have achieved stages of financial development well beyond the phase in which the complementarity assumptions might hold. Thus complementarity hypothesis of McKinnon was rejected in favour of Shaw's debt-intermediation view.

In order to ascertain the relevance or otherwise of the "Financial Repression Hypothesis it is necessary to examine the interest rates experience in Nigeria since 1960 and to compare same with those of other less developed countries, and later test a model on savings function in Nigeria.

#### 9.4c Interest Rates Experience in Nigeria 1960 - 1984:

Before 1960, the structure of interest rate in Nigeria was largely influenced by the rediscount rate imposed by the Bank of England. Thus until the Nigerian independence, the structure of interest rates was dictated from abroad and hence bore no reflection on the Nigerian credit needs and monetary circumstances. It was only in 1970 that the Central Bank decided on the policy of interest rate. It started off by fixing interest rate on the first Treasury Bills ever issued in Nigeria and even then, this was linked with those operating in London Money Market.

In order to facilitate the introduction of monetary policy whenever it possibly can, the Nigerian government invested the power to regulate interest rates on commercial bank deposits under the Banking Amendment Act of 1962.

See Fry, (1978)

For the effective control of commercial banks' credit in the economy, the Central Bank of Nigeria was invested with the power to regulate interest rates on commercial bank deposits by the Banking Amendment Act of 1962. This was later extended to all other financial institutions by the Banking Decree of 1969 (Section 14). With this power, the CBN can prescribe the minimum and maximum rates on savings and time deposits of commercial banks and other deposit taking institutions; it can also fix the rates on loans and advances of all types of financial institutions.

In spite of the enormous power of control of interest rates structure possessed by the CBN, the effective use of it remained elusive for considerable period of time owing to the ownership and control of the Nigerian banking system at that time. The commercial banks which dominate the banking system, were for many years extensions of giant overseas commercial banks and hence owed their allegiance to their headoffices. Thus any policy instrument employed in such a situation by the CBN was mainly in form of moral suasion. All that the CBN could do, therefore, between 1962 and 1969 was to plead with the commercial banks in the country to design their interests in the best interest of the economy.

In 1964, the CBN linked the commercial bank lending rates with the CBN rediscount rate (which of course was itself linked with the rediscount rate of the Bank of England) and this has been maintained ever since. So the Central Bank was not able to directly control the lending rates until 1973 when the CBN rediscount rate ceased to be linked with that of the Bank of England.

In terms of the 'Financial Repression Hypothesis', it can be argued that this might have relevance to Nigerian economy since the interest rates in Nigeria were tied to the rediscount rate of the Bank of England indirectly until 1964. Thus the interest rates operating in banks in England might not be at the level which could stimulate savings in Nigeria and yet these same rates were in operation in Nigeria, which is not surprising since

See Nigerian Banking Decree of 1969, Government Printer, Lagos

most banks in Nigeria were branches of most big banks in Britain.

In fact commercial banks operated the same structure of interest rates on deposits as obtained in Britain until 1970 when the Central Bank of Nigeria started fixing interest rates on all types of financial assets.

In 1970, the CBN fixed the maximum rate on loan for the first time<sup>1</sup> at  $7\frac{1}{2}$  per cent when the rate of inflation was running at 16.1 according to table 9.8a, which is not surprising because the Civil War in Nigeria had just ended by then, having caused serious economic dislocations and shortages of essential commodities in the economy. The CBN rediscount rate was set at 3.5 per cent while the minimum rates on deposits were set at 1.5 per cent below the rediscount rate and 1.5 above it. Thus to the extent that the rediscount rate was lower than the rate of inflation in Nigeria, the interest rate on deposits might not induce ultimate savers to save and hence the 'financial repression' hypothesis might still be relevant to Nigeria since all banks depend on customers' deposits from which they lend to ultimate borrowers. It is necessary to state, however, that so far that there has never been any proper supervision of commercial banks and other financial institutions with respect to their compliance with the interest rate ceilings, and as long as intense competition continued to exist in the Nigerian banking system, it is difficult to assess the relevance of the hypothesis to Nigeria between 1970 and 1976 when there was no state ownership of banks.

#### 9.4d The Trend in Interest Rate Structure in Nigeria:

As already stated above, interest rate on loans and advances remained at 7 per cent level since 1966 and was only raised by .5 per cent to 7.5 per cent in 1970. In 1975, the CBN cut the rate on loan down to 6 per cent and this remained in force until 1977 when it was raised again to 7.5 per cent. With inflation running at the rate of 10.2 per cent in 1975, the rate on time and savings deposits at commercial banks and Post Office Savings bank

1. See Central Bank of Nigeria Annual Report, 1970

were fixed at 4 and 5 per cent respectively thus resulting in a negative real rate of interest (See Table 9.8a). In 1978, the lending rate was raised tremendously from 7.5 to 12.5 per cent. In 1979, 1980, 1981, 1982, 1983 and 1984, the rate was fixed at 12, 10, 13, 12.5, 13 and 13 per cent respectively. By the end of 1985, the rate stood at 13 per cent and remained at that level till the end of 1986.

The rates on government securities such as Treasury Bills and Treasury Certificates have always been very low. For example, in 1960 the Treasury Bill rate was just 2.5 per cent and remained unchanged until 1968 when it was raised to 3.5 per cent. Between 1969 and 1974, the rate stood at 4 per cent only to fall again in 1975 to 2.5 per cent. This is not surprising since the high price of crude oil has resulted in huge revenues to the government, thereby reducing the reliance on banking system by the government for loans. However, after 1976, the rate started to rise again and reached the record high of 9 per cent in 1984 where it remained unchanged throughout 1985 and 1986, owing largely to the renewed reliance on banking system by the government to finance its budget deficit. The fall in government revenues from oil due to fall in oil prices means that government has to borrow from the banking system through the issuance of treasury bills with high interest rate attached in order to attract foreign capital into the country in addition.

In general, treasury bill rate has always been sticky, since it is the device used by the government to borrow money from the public to finance its projects. Moreover all over the world, government obligations are virtually riskless and hence the yields on government securities like treasury bills or bonds are generally low and uniform since there is no element of risk premium.

#### 9.4e Nigerian Interest Rates Structure in Comparison with Those of other Selected Countries:

The low interest rate policy witnessed in most developing countries of the world relates to the organized sector of those economies. For example,

1. See C.J. Wright, "The US External Problem" In Barclays Review Vol. LX No. 4 November, 1985

Wai (1957) estimated the world-wide weighted average of interest rates in the unorganized developing countries at a range of about 24 - 50 per cent. The reasons for the high interest rates in unorganized financial institutions have already been discussed in chapter V and hence there is no need to go into them again. The rate of interest in the organized sector of Nigerian economy has been one of the lowest in the world when compared with other countries. For example, the rate of interest paid on time deposit in Indonesia in 1973 were 18 per cent, 12 per cent and 9 per cent for deposit of 12-month, 6-month, and 3-month respectively, compared with those of Nigeria which were 4 per cent, 3.8 per cent and 3 per cent for the corresponding types of deposits respectively. Interest rate policy in Indonesia, of course, has always been an exception among the developing countries. Comparing the interest rate structure of developing countries with those of developed countries, Chandavarkar (1971), found that Indonesia, among other developing countries like China, and Korea, had interest rates that were far above those in the developed countries or other developing countries. The low interest rate on deposit in Nigeria, however, is quite similar to those of Tanzania. For example, between 1967 and 1973, Tanzania commercial banks paid 5 per cent interest on 3 to 6 months deposits, 4.25 on 3 - 9 months and 4.5 per cent on one year, compared with the structure mentioned above for Nigeria. (See Table 9.3)

The policy of low interest rate has always been preferred by the Nigerian monetary authorities since the demise of the West African Currency Board in order to enable investors to obtain loans at considerably low cost. The ceiling on lending rates imposed by the monetary authorities is, perhaps, one of the reasons why the expatriate banks in Nigeria found it difficult to give loans to indigenes who were credit risk. The consequence of this policy was to create a situation of excess demand for credit in the economy especially between 1960 and 1975. Thus the major concern of the ultimate borrowers during that period was not how much it would cost, but the availability of credit.

1. See P. Okigbo (1979).

Although many studies have shown a positive association between high interest rate and domestic savings, (Kwang Suk Kim (1968), and Chandavarkar, (1971)), yet there are some countries which experienced high and rising levels of monetary savings with their policy of low and stable nominal rate of interest. For example, Chandavarkar (1971) in his studies of interest rate policies in some less developed economies, revealed that Malaysia and Singapore had records of high and rising levels of monetary savings even though their rates of interest were artificially low but stable. In contrast to those of China and Korea, the structure and level of deposit and loan rates of interest in Malaysia and Singapore as well as the nominal rates on government securities were comparatively low and stable between 1959 and 1969 for the former and between 1966 and 1970 for the later country. Thus the low rates of interest on deposit, loan and government securities in Nigeria, Tanzania, Malaysia and Singapore can be regarded as representing a more conventional pattern of interest rates often witnessed in the economies that have not experienced violent economic fluctuations (Chandavarkar (1971)). Like Nigeria, in Malaysia and Singapore, the variations in the treasury bill rate were found to be fairly frequent while other rates were also remarkably stable over long period of time.

The logical explanation for the increasing volume of monetary savings in Nigeria as well as those of Malaysia and Singapore inspite of low but relatively stable interest rates may be found largely in terms of the confidence of the average investor in the stability of the value of monetary assets which he built up from his experience with prolonged stability of consumer prices . For example in Nigeria consumer prices were relatively stable between 1960 and 1967 before the outbreak of Civil War. Other factors which seem to have contributed to this increasing volume of monetary savings in the face of low rates of interest are the openness of those economies and the appropriateness of monetary policies

1. See Kwang Suk Kim (1968).

being operated which made for the relative stability in prices in those economies. Thus because of the relative stability in prices, depositor has been able to earn a real rate of interest which at least might equal to the money rate and in some years even higher than that whenever the prices fell. In Nigeria, as shall be seen in chapter 10, commercial bank deposits have maintained their rise even in the years when the real rate was negative.

In general, interest rate policy is a broad concept which can be briefly defined as any kind of official action aimed at influencing the level and the structure monetary rates of interest through fiscal or statutory means, intervention in money market, the use of moral suasion to achieve certain objectives of credit policy and to facilitate the mobilization of saving through financial media. Thus actions such as statutory ceilings, regulation of moneylending and pawnbroking, statutory or voluntary inter-bank agreements on deposit and loan rates, open market operations and bank rate changes, subsidization or regulation of specific rates (for instance, on housing finance, rural credit or on small savings) or the use of fiscal incentives to promote savings in time and savings deposits. This broad definition means that those countries which find it difficult to operate an overt high interest rate policy may do so covertly through other means as enumerated above. For example, Indonesia adopted the use of fiscal incentives to promote savings in time and savings deposits between 1968 and 1970. This took the form of imposition of tax exemptions for interest received by residents while at the same time allowing banks to maintain confidentiality about the origin of funds invested with them.

The use of fiscal incentives like the one mentioned above is often subject to ceilings in order to achieve equity between holders of financial securities and other forms of income and among different groups of income earners.

1. See S. Afiff, W.P. Falcon, and G.P. Timmer (1980).

Although many developing countries have adopted this kind of saving creating incentives with ceilings being placed on individual holdings of tax-exempt instruments, Nigeria has not yet practised it. Instead, the Nigerian monetary authorities favour the promotion of national savings by freeing interest income from taxes. This is the situation in Austria where the secret bank account system is being operated such that an account is only identified by a code name and number. And since neither interest payments nor withdrawal are disclosed to anyone, all this interest is effectively untaxed. Also, because the bankbook and code word can be passed on to heirs, all such savings escape estate tax as well. This system is so important that it has enabled Austria to save around 25 per cent of its Gross Domestic Products in recent years which is the second highest saving rate (after Japan) among industrial countries.

#### 9.4f The Real Interest Rate Structure in Nigeria 1960 - 1984

It should be mentioned that there have not been any meaningful a priori criteria of ascertaining what can be regarded as a realistic and appropriate level and structure of interest rates for any economy. Thus policy on interest rate is necessarily usually based on the kind of objectives the monetary authorities are aiming to achieve through regulation of interest rates. Thus according to A. G. Chandavarkar (1971), interest rates can be regarded as "multivalued instruments" instead of calling them "targets" of economic policy. There are many aspects of interest rates with their different weight assigned to them in relation to the policy objectives being pursued by any country. For example interest rates may play the role of an incentive to monetary savings (income factor) or as an instrument of credit policy (cost factor). Even then, the monetary authorities have to balance their policy in the context of the delicate balancing of the multiple role of interest rates. However, later in this chapter, we shall be concerned with the potentialities of interest rate in mobilizing financial savings in the Nigerian economy.

The real interest rate is derived by deflating the nominal level of interest rate for changes in the purchasing power of money as measured by some appropriate index. For example, the cost of living index is more relevant to savings decisions than are variations in wholesale price index and hence more satisfactory index for deflating the nominal level of interest rate. Table 9.3 shows the rough approximation of real rate of interest on one-year time and savings deposits of some countries. Since the rate of interest in Nigeria often remains rigid throughout the year, it is considered unnecessary to compute the table on quarterly basis. Hence Table 9.3 is computed using the cost of living index on yearly basis spanning 1960 through 1984.

One needs to be cautious about the idea of positive real rate of interest. For example, the method used to ensure a positive real rate of interest, which is exceptionally significant during the period of high inflation needs not be used for all kinds of economic condition uncritically (Chandavarkar (1971)), since a great amount of monetary savings often takes place notwithstanding whether real rate of return is positive or negative. The reason for this is that there is a variety of factors such as the money illusion, the minimum demand for cash balances, and the captive market for government or state securities which may influence the volume of savings other than positive real interest rate.

The real rate of interest is said to be positive when the deflated nominal level of interest rate (as explained above), is greater than the rate of inflation in the economy concerned. In the case of Nigeria, we can say that according to the Table 9.3, the real rate of interest on savings remained positive until 1968. However, as the Civil War started in 1966, the real rate became negative as the cost of living was rising as a result of economic dislocations and shortage of commodities caused by the war. Thus in 1970, the rate of inflation in Nigeria stood at 16.1 per cent resulting in negative returns on all categories of savings in the country.

However, inspite of negative returns on savings, the amount of national savings continued to increase as can be seen in Table 10.12. The highest rate of inflation ever recorded during the review period stood at 33.4 per cent in 1974 and hence the highest negative real returns on each category of savings and lending. The negative real rate of interest regime has continued to prevail in Nigeria for a long time partly because the monetary authorities did not believe in a rigid adherence to the yardstick of positive real rates of interest since it might necessitate the need to manipulate money rates every time the rate of price change altered. Obviously, such frequent changes in money rates seem neither desirable nor feasible because such action may create unsettling effects on the propensity to save in financial media, even if the frequency of change in money rates could be reduced by the use of a moving average of current and recent rates of inflation. The negative real rates did not have pronounced effects on the volume of national savings in Nigeria because of the ignorance of large majority of savers as to what is the actual rate of inflation and also because of money illusion. The low rate of interest is favoured by the monetary authorities since it makes the cost of capital low and also because the government has become a large borrower from the banking system ever since the price of crude oil has plumated in the world market. The low lending rates may not be fully observed by both the financial institutions and the borrowers especially in a situation of excess demand for credit. Thus in the absence of strict supervision of the commercial banks' lending operation, one should expect that banks are likely to be tempted to charge their customers higher rates than official rate allowed by the central banks. According to Shaw (1973)<sup>1</sup>, the ceiling on interest rates cannot make for efficient allocation of resources, and this has been the situation in the Nigerian organized credit markets.

The evidence of negative real rate of interest in operation in Nigeria presented in this study seems to confirm the relevance of the 'financial

1. See Shaw (1973).

repression hypothesis and hence there is a strong case for a rational interest rate policy which should be predicated on the basis of fairly stable expectations for reasonable periods of time.

9.4g Comparison Between the Real Rate of Interest in Nigeria and Some Selected Developed, Oil-Exporting and Non-Oil-Exporting Developing On One-year Time Deposits 1960 - 1985:

In the light of Myrdal's generalization that in less developed countries the level of interest rates is generally lower in the organized sector or even lower than similar rates in the developed countries where savings are much higher, it is instructive to compare the real rates between developed and less developed countries to test the validity of this generalization. To illustrate this, the prevailing nominal rates one year time deposits in Nigeria, United Kingdom, United States, Indonesia, Saudi Arabia, Korea and Tanzania are deflated by the annual percentage change in consumer prices in the respective countries, using data from the Fund's publication - International Financial Statistics (1959 = 100 for all the countries).

As can be seen from Table 9.3, Nigeria experienced negative real rates throughout the period except in 1960 to 1967, compared with the United Kingdom, whose negative real rate experience started in 1965 and continued until 1980 when it turned positive. For US, the negative real rates started in 1971 until 1980 when it also turned positive.

Comparing Nigeria's real rate experience with one of the developing oil-exporting countries, Indonesia seems to have a better experience during the review period. Although the real interest rates were negative during the first three years, the real interest rates continued to be positive from 1963 to 1972. It is interesting to note that South Korea experienced negative real rates only in 1963 and 1964 during the review period because of the policy of high interest rate being pursued by that country. Tanzania, a non-oil exporting developing country, experienced negative real rates in 1965, 1966, and 1972 to 1984.

1. See G. Myrdal, (1968) Asian Drama: "An Enquiry into the Poverty of Nations, New York: Pantheon

Although one cannot draw any clear-cut inferences from these data, there is enough evidence to show that the gap between the real rates in the developed and less developed countries is apparently not greater than in the nominal rates, especially during 1960s. It is interesting to note that nearly all the countries of the world experienced negative real rate of interest on savings in 1974 as a result of the exorbitant rise in the price of crude oil. The real interest rate for Britain in that year was -12.7, U.S.A., -3.3, Indonesia, -28, South Korea, -16.7 and Tanzania -14.7 per cent. The oil-exporting countries experienced some elements of imported inflation since most of them depended very much on imports from the industrial countries like Britain, Japan, U.S.A. and West Germany which passed on the high cost of energy as a result of oil price increases to their customers. Thus there was a considerable imported inflation in most of the developing countries in 1970s, the vestiges of which are still much in evidence in most of these countries today.

#### 9.4h Interest Rate and Mobilization of Household Savings in Nigeria:

As already indicated, interest rates in Nigeria have generally been low inspite of high rates of inflation which has continued to plague the economy since 1970s. The high rate of inflation is generally apparent in most developing countries as evidenced by the negative real rates of interest in those countries including Nigeria.

The generally high rates of inflation in most of the developing countries in the 1970s has been one of the fundamental reasons for the call by many development economists for the adoption of positive real rate of interest policy by developing countries. This call is based on the premise that in most of the developing countries generally, there are constraints to economic development as a result of low level of monetary savings and the inefficient allocation of same for investment purposes. The proponents of the financial repression hypothesis emphasized very strongly the reason for low level of new capital formation in less developed countries, but played down on

other economic constraints such as foreign exchange and entrepreneurial limitations. For even when investment capital is available, it will become useless if there is no entrepreneur to carry out investments. Those in favour of positive interest rate policy believed strongly that such policy would remove completely the capital scarcity constraint in those countries where it is practised, through an increase in the level of domestic savings in the economy.

As already shown in sub-section 9.15, the empirical work on the effect of positive real rate of interest on personal savings by Williamson (1968) and Gupta (1970)<sup>1</sup> yielded opposite conclusions. Thus while Williamson argues that for Asia the net impact of real interest rate movements on personal saving are either negative or insignificant, Gupta, on his work on India reveals that higher real rates of interest lead to higher real savings. Since the work of Gupta is much more reliable than that of Williamson as already explained in sub-section 9.4a, it is reasonable to accept the suggestion that interest rate variations have a greater influence on personal savings in India and try to find out whether the same suggestion holds for other developing countries. It is also reasonable however, to argue that, while interest rate variations may have influence on personal savings, government and business savings are generally insensitive to interest rate. Thus in a country where government and business enterprises are major savers, it might be difficult to assess the effects of any interest rate changes on the level of savings. The only way to assess the possible effects, therefore, is to disaggregate savings into different components, or sectors of the economy. Because of the insensitivity of business and government savings to interest rate variations, the effects of interest rate changes might best be measured by the magnitude of changes in household savings. In this chapter, therefore, interest rate variations and the household savings in Nigeria had been empirically examined and the results will be discussed later.

1. See Williamson (1968) and Gupta (1970).

9.41 Theoretical Specification of Determinants of Household Savings and National Savings in Nigeria:

Economic theory would suggest several factors apart from interest rate variations determining the level of domestic savings in any country. For example, Gupta (1970) examines the influence of disposable or personal income and five different types of interest rate as the index of return on financial assets on the volume of personal savings. Treadgold<sup>1</sup> (1970) examines the influence of the rate of inflation, and real wages on the rate of savings. Also Shaw and McKinnon (1973) also respectively try to examine the determinants of domestic savings in some developing countries using the growth in income, the level of real per capita income, and foreign saving in addition to real interest rates as explanatory variables in their models. Thus there is no a priori criterion for estimating the savings function. Our specification of the determinants of household savings and national savings in Nigeria, though reflects the influence of earlier writers on savings, also reflects our own thinking on the subject as a graduate student. Also because of the developing nature of Nigerian economy, we introduce some new variables in our model of Household savings.

The rationale for estimating the determinants of household savings in Nigeria lies in the fact that throughout the period covered by this study, the household sector is responsible for more than 55 per cent of the aggregate resources, though its capital formation was just under 30 per cent of the total (Table 9.9). Hence it represents the only surplus sector responsible for the net lending to all the other sectors of the economy. The pattern of saving of the household determines the transfer of resources from it to other sectors, being the major surplus sector. According to Table 9.10 showing the pattern of saving of the households, savings in the form of financial assets (gross) stood at 58.6 per cent in 1976-77 and 64.1 per cent in 1982/83. Most of the household savings were in the form of claims on the banking sector which represented

See Treadgold (1970), "Inflation, Real Wages and the Rate of Saving in the Philippines", in the Developing Economies (September)

Table 9.9

PATTERN OF SAVING OF HOUSEHOLD SECTOR IN NIGERIA  
IN PERCENTAGES.

	1972-973 %	1976-1977 %	1982-1983 %
I <u>Change in Financial Assets</u>	70.1	63.1	75.9
(i) claims on private corporate sector	4.3	3.9	4.5
(ii) claims on government sector	9.2	4.1	4.0
(iii) Claims on Central Bank of Nigeria	20.1	10.2	9.1
(iv) Claims on Commercial Banks	24.3	20.2	35.5
(v) Claims on credit co-operatives	2.0	10.5	10.8
(vi) Claims on Insurance Companies	3.1	5.8	2.0
(vii) Claims on provident funds	7.1	8.4	10.0
II <u>Change in Financial Liabilities</u>	29.9	36.9	24.1
(i) Borrowings from government Sector	5.2	4.8	2.8
(ii) Borrowing from Commercial Banks	12.8	18.1	14.2
(iii) Borrowing from Credit Co-operatives	10.9	12.0	5.0
(iv) Borrowing from Insurance Companies	1.0	2.0	2.1
III <u>Net Capital Formation</u>	40.9	26.2	51.8
Total Household Saving (I - II + III)	100.0	100.0	100.0

Computed from the CBN publications and other sources such as Nigerian Statistics Digests of various years.

Table 9. 10

PATTERN OF SAVING AND NET CAPITAL FORMATION IN NIGERIA  
1976/77 & 1982/83

Sector	1976/77		1982/83	
	Aggregate Resources %	Net Capital Formation %	Aggregate Resources %	Net Capital Formation.
Household	58.6	26.0	64.1	51.8
Private Corporate	1.0	14.0	4.2	6.5
Government	22.0	60.0	20.0	42.7
Central Bank of Nigeria	0.9	-	1.1	-
Commercial Banks	0.5	--	1.0	-
Credit Co-operatives	0.3	-	0.5	-
Insurance companies	-	-	-	-
Provident funds	0.1	-	-	-
Total domestic resources	83.4	100.0	90.9	100.0
External (Net Capital inflow from abroad)	16.6	--	9.1	-
Aggregate resources/Capital formation	100	100.0	100.0	100.0

Computed from the CBN publications and other sources such as Nigerian Statistics Digests of various years.

more than one-third of the total claims on the financial sector in 1982/83. The actual claims on the other nonfinancial sectors was less than one-eighth of the total claims.

Two versions of the basic model of determinants of household savings are considered. The first model which may be referred to as the 'equilibrium' or short-run is based on the simplifying assumptions that there are no lags in the system so that adjustment of the quantity of savings demanded by households and the quantity supplied by the various financial institutions change in all the variables to their respective equilibrium values are instantaneous. The second model which may be termed 'disequilibrium' or long run, admits the possibility that adjustment of the actual to equilibrium values may take place with some delay. The derivation of the two models is based on the stock-adjustment model used by import studies investigators, built on the hypothesis that it takes time for importers to adjust imports to the desired level.

Since two major components of the source of income to households in Nigeria are the agriculture and manufacturing, we include in the model the agricultural and manufacturing income differential as an explanatory variable in order to measure the extent to which the gap between the two sources of income can affect household savings. To be sure, we want to test the hypothesis, based on our a priori knowledge of the Nigerian economy, that the wider the gap between manufacturing and agricultural incomes (where the agricultural income is the lower), the greater will be the volume of household savings. Thus the agricultural and manufacturing income differential, YMAD, is expected to carry positive sign. Unlike numerous studies of savings behaviour (e.g. Chaudry<sup>1</sup> (1973), Leff (1969), Papanek (1973), and Singh (1972)), which used the level of real per capita income Y as an independent variable in the savings function, in this study, the real national income Y is used as an explanatory variable because of the unreliability of Nigerian census figures as already explained in

1. See the work of Chaudry (1973), Leff, (1969), Papanek (1973) and Singh (1972) on determinants of savings.

chapter IV. The real national income  $Y$  is derived by deflating the nominal national income by the annual percentage change in consumer prices in Nigeria, using data from the International Financial Statistics (December 1980 = 100).  $Y$  is an indicator of the level of economic activities and hence, it is postulated that as the level of economic activities increases in the country, the demand for savings assets by the households will also increase.

Because of a widespread, though not empirically well-established, belief<sup>1</sup> that saving is "institution-elastic (Marquez (1963)), we include a variable to take care of the banksread in the economy. This action is supported by the view expressed by Lewis (1955, p. 229) that

"Experience shows that the amount of savings depends partly on how widespread these facilities (i.e., savings institutions) are; if they are pushed right under the individual's nose ..... people save more than if the nearest savings institution is some distance away."

Thus the inclusion of this variable  $BN_t$  is to establish empirically the influence of banksread on the household savings and this makes our model somehow unique. Another reason for the inclusion of this variable is to incorporate into the model the dynamic nature of banking development in Nigeria. Many writers on savings function in developing countries have not included this fact of the developing nature of financial institutions in most of the countries they studied. The variable is expected to carry a positive sign to confirm our hypothesis that the greater the number of financial institutions or offices, the greater will be the increase in the volume of domestic savings.

Two rates of interest are used as indices of return on monetary savings namely, the rate of interest on bank time deposits ( $r_t$ ) and the rate of interest on nonbank savings deposits ( $r_s$ ). However, only the rate on bank deposits yielded reasonable result as will be discussed below. One other variable

1. See Marquez, (1963) 2. See Lewis, (1955, p.229)

included in the model is in respect of the level of education or the literacy level. It is believed, based on our a priori knowledge of Nigerian economy, that there is a positive association between the literacy level and the volume of domestic savings. Where greater number of people can read and write, it is likely that they will also be able to operate bank accounts successfully if incentives for this are adequate enough to them. In Nigeria, greater number of people could not read and write before the country's independence in 1960 and about a decade after independence. However, in 1970s, growing number of people were becoming literate, even among the rural dwellers. The rationale for the inclusion of literacy level variable (Ed) is, therefore, to confirm our hypothesis of positive association between this variable and the volume of domestic savings. The literacy level in Nigeria is measured by the number of people who have had at least first school leaving certificate and those who have passed out of the various adult education classes. Since the data on this variable are derived from more than one source for some years, the result of the estimate must be treated with caution.

#### 9.4] Some General Comments:

The data are annual (1960 to 1984). The choice of the period was dictated by the availability of data and the need to analyse the problems of financial savings in the context of the interest rate policy in Nigeria. All the flow variables are in million naira and in current prices while interest rate variable is in percentages. The lagged value refers to an annual period. The estimates were obtained by the use of both O.L.S and 2SLS methods. The rationale for the use of 2SLS method lies in the fact that it has been generally accepted as the most important of the single-equation techniques to be adopted in estimating overidentified models (Koutsoyiannis (1981)). Thus its use is designed to take care of any possible overidentification in our model and to obtain a unique estimate for each structural parameter. We used standard criteria:  $R^2$  for goodness of fit, 'F' testing significance of the whole regression, 't' testing significance of partial regression coefficients, Durbin-Watson 'D' statistic testing the randomness of the

1. See A. Koutsoyiannis (1981), The Theory of Econometrics, Macmillan Press

residuals, a priori sign and magnitude of the coefficients to evaluate our results. Availability of data dictated the simplicity of our model.

9.4k Household demand for Savings Model in Estimation Form:

$$HS_t = Z_0 + Z_1 Y_t + Z_2 BN_t + Z_3 r_t + Z_4 WD \quad (1)$$

$$HS_t = W_0 + W_1 YMAD_t + W_2 BN_t + W_3 r_t + W_4 WD \quad (2)$$

where  $HS_t$  = Household savings at time t

$Y_t$  = National Income at factor cost at time t

$BN_t$  = Number of savings institution offices and branches at time t

$r_t$  = Bank deposit rate of interest

$WD$  = Dummy variable to take care of the period of Nigeria Civil War with zero value in peace times.

$YMAD_t$  = Agricultural income and manufacturing income differentials as already explained. Since all the variables have been specified and explained above, the results of the estimates are as presented below in Table A. The above two equations were estimated in log form in order to obtain the elasticities for the variables since the variables were measured not in the same units. The t-statistics are in parentheses under each estimate.

Table A

STRUCTURAL EQUATION ESTIMATES: DETERMINANTS OF HOUSEHOLD SAVINGS ASSET DEMAND 1960 - 1984 IN BOTH LONG AND SHORT-RUN

(a) Long-run or Equilibrium:

$$\text{Log } HS_t = 1.695 + 0.107 \text{Log } Y_t + .608 \text{Log } BN_t + 0.23 \text{Log } r_t + .273 \text{Log } ED \quad (1)$$

(4.2532) (1.4458) (2.1806) (1.5653) (2.2255)

$$R^2 = 0.64$$

$$D.W. = 1.72$$

$$F = 154.4$$

$$\text{Log } HS_t = 2.308 - 0.4548 \text{Log } YMAD_t + 0.696 \text{Log } BN_t + 0.177 \text{Log } r_t \quad (2)$$

(5.2518) (-3.6900) (5.6452) (1.2735)

$$R^2 = 0.91$$

$$D.W. = 1.6878$$

$$F = 84.1$$

(b) Long-run Equilibrium:

$$\begin{aligned} \text{Log HS}_t = & -0.131 + 0.267\text{Log } Y_t + 0.638\text{Log } \text{BN}_t + 0.0139\text{Log } r_t \\ & (-0.3455) (2.3728) (2.1950) (0.11077) \\ & 0.305\text{Log } \text{ED}_t + 0.940\text{Log } \text{HS}_{t-1} \\ & (2.25804) (8.8029) \end{aligned} \quad (3)$$

$$R^2 = 0.99$$

$$\text{D.W.} = 2.1$$

$$F = 279.1$$

$$\begin{aligned} \text{Log HS}_t = & 1.055 - 0.167\text{Log } \text{YMAD}_t + 0.352\text{Log } \text{BN}_t + 0.105\text{Log } r_t \\ & (2.1820) (2.3555) (2.7078) (0.8596) \\ & + 0.549\text{Log } \text{HS}_{t-1} \\ & (3.6440) \end{aligned} \quad (4)$$

$$R^2 = 0.98$$

$$\text{D.W.} = 1.8726$$

$$F = 247.2$$

---

The above results seem to support our hypothesis about the determinants of demand for saving assets by household in Nigeria as evidenced by the significance of variables  $\text{BN}_t$ ,  $\text{YMAD}_t$  in equation 2 and  $\text{ED}_t$  in equation 1 in the short run. In equation 1, all the variables carry the correct sign but not equally significant. The real rate of interest variable is positive and significant at the 10 per cent level and so also is the income variable  $Y_t$ . The value of DW statistics is also very high enough which implies the absence of autocorrelation and correct specification of the model. However, the correlation coefficient of just 0.64 indicates that the good fit is less than expected. However, the high and positive F statistics implies the significance of the correlation coefficient.

In equation 2, the variable in respect of Civil war period in Nigeria is omitted since it turned out to be very insignificant and rendered our result quite unacceptable. The negative but significant coefficient of  $\text{YMAD}$  clearly implies that as the level of income in agricultural sector is closing to the

level of income in manufacturing sector of the economy, the volume of savings is increasing, and consequently may lead to the reduction in the influx of people into the urban centres in search of better paid jobs. However, this result can best be regarded as an approximation since the data are aggregative. The use of per capita agricultural income resulting in this kind of result is likely to validate our thinking as stated above.

The long-run equilibrium results of equations 3 and 4 show that the real rate of interest variable, although with positive sign, is not significant. However, all other variables in the two equations are significant with correct signs as expected. Also as expected the elasticity coefficients on lagged dependent variable in the two equations are significantly different from zero, implying a degree of dynamic adjustment in all the equations.

#### 9.41 Conclusions:

Some economists have studied the effect of interest rate variations on personal savings as evidenced in the work of Gupta (1970) and Williamson (1968). The results of the findings by Gupta and Williamson seem to contradict each other which can be explained in terms of the nature of the economy each of them studied as well as the type of interest rate used as index of returns on financial savings in their respective study. Although our analysis is based on household savings in Nigeria, rather than personal savings, the results of our estimates seem to support Gupta's findings on the effect of interest rate variations on personal savings. Moreover, it has been empirically tested that banks spread variable is likely to have positive effect on household savings. Also, it has been shown by the results above that the policy of improving agricultural incomes designed to make them equal or nearly equal to those in industries, would not only have significant effects on household savings in Nigeria, but also reduce the influx of people into the cities in search of better paid jobs in industries.

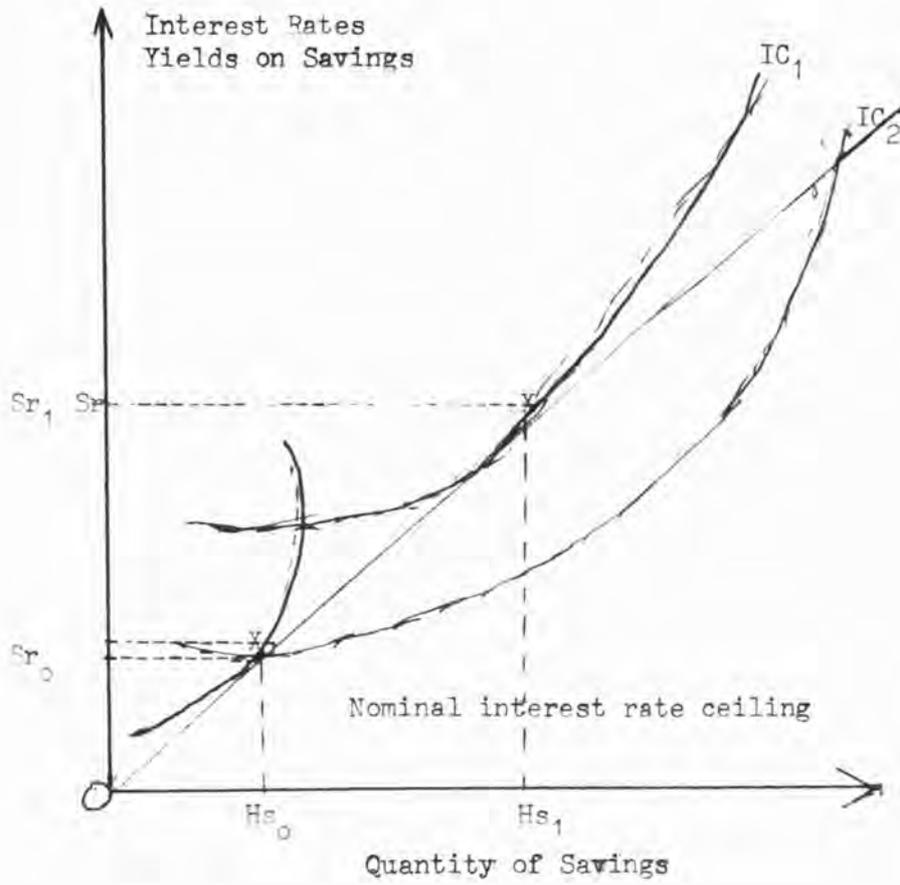
#### 9.4m A Diagrammatic Application of Financial Repression Hypothesis to Household Savings in Nigeria:

Based on the findings above, the financial repression hypothesis

seems to be relevant to Nigeria and this can be illustrated with the use of a diagram. Thus in figure 9.1 below, let the vertical line represent the yield on savings by the households and the horizontal axis the quantity of savings. Now in the absence of any rate ceilings on bank deposits, households are in general encouraged to save as much as  $OHS_1$  in order to enjoy the future yields of  $OSr_1$ . However, when the ceiling is imposed at point  $OSr_0$ , ultimate savers decide to keep their money either in form of cash or any durable good or even spend it since there is little or no incentives for them to save. Therefore, only a very small minority is attracted to save just  $OHS_0$ , thereby resulting in financial repression magnitude of  $OHS_1 - OHS_0$ .

While the financial repression hypothesis might be relevant to Nigeria as illustrated above, it should be stated that interest rate is not the only major determinants of growth of household savings in Nigeria as already demonstrated by the results of our estimates. However, it appears that the proponents of financial repression hypothesis have made a sweeping generalization across all the developing countries inspite of different social and economic characteristics as well as ideological differences which can affect the inflow of capital and relative standards of their financial institutional developments. The proponents based their conclusions on a very limited number of cases; some of the countries studied such as Taiwan, Korea and some three Asian countries which have similar experiences can certainly not be the basis of generalization for all the developing countries. To be sure, any policy measure adopted by any monetary authorities has certain goal in view. Thus interest rate policy adopted by the three Asian countries studied by the proponents was designed to stabilize those economies as a solution to high rates of inflation primarily, while the secondary aim was to mobilize domestic savings and allocation of same efficiently. For example, Taiwan has been regarded by many economists as a pioneer and leading exponent of a high but flexible interest rate strategy because of her adoption of interest rates as one of the major anti-inflationary instruments (Reed

FINANCIAL REPRESSION HYPOTHESIS : INTEREST RATES ON SAVINGS IN NIGERIA. — DIAGRAMATIC EXPOSITION



J. Irvine and Robert F. Emery (1966)). The success achieved by Taiwan in the use of interest rates as an anti-inflationary weapon enticed the monetary authorities in Korea to adopt similar measures as part of a wider stabilization program for the Korean economy to combat the persistent inflation which plagued that country since 1945 consequent upon political division of the country which created economic dislocation in the wake of the civil war. Any interest rate policy adopted for deposits cannot be diverged from policies on lending rates. You cannot increase one and leave the other. The monetary authorities in Taiwan were quick to recognize this in their policies, by making sure that the rise in the deposit rates was not communicated to loan rates so that it might not affect the working capital requirements of trade and industry. The strategy adopted was, therefore, designed to ensure a ceiling on loan rates as well as a 'floor' for deposit rates.

It should also be emphasized that the adoption of any level of real interest rate policy as a stimulant for financial savings depends on the distribution of savings among the savings components. For example, the success achieved by Taiwan was largely because in Taiwan, government and semigovernment institutions account for a substantial part of commercial banking which made it easier for the implementation of interest rate policies. Ghana adopted high interest rate strategy in 1960 which was designed to liberalize credit in the economy and this resulted in considerable increase in monetary savings. However, this increase in savings was not translated in credit expansion to the indigenous enterprises and this forced the hands of monetary authorities to impose selective credit ceilings to channel funds to the indigenous enterprises and productive sectors of the economy.

It is equally instructive to state that as we have evidence of countries who adopted high interest rate policy, there are also evidence of those who relied on conventionally low and stable nominal rates of interest and yet enjoyed rising levels of monetary savings. The very common examples

1. R.J. Irvine and R.F. Emery (1966), "Interest Rates as an Anti-Inflationary Instrument in Taiwan," The National Banking Review, Vol. 4

are Malaysia and Singapore whose structure and level of deposit as well as loan rates of interest and the nominal rates on government securities were comparatively lower and stable than those of Taiwan and Korea (Chandavarkar (1971)).

Finally, interest rate policy represents only one of the policies to ensure adequate domestic savings for the purpose of domestic capital formation. In fact both Taiwan and Korea interest rate policies were only one of the elements in the stabilization program, since there were other and probably more significant contributory factors, such as exchange rate reforms, appropriate monetary and fiscal policies, and foreign aid. Even then, there is no doubt that the policy of high interest rates has contributed immensely to the success of the programme inspite of the limitations of the evidence and the fact that the use of extremely high money rates of interest in both countries adopted under very special circumstances of high and rising inflation which necessitated the implementation of interest rate policy with eventual success. The experience of Taiwan and Korea will continue to be lessons for many developing countries, the more so because the two countries rank high in the 'growth league' and also in terms of export performance. The economic circumstances of any country have to be adequately considered in the determination of an appropriate overall interest rate policy, which itself must be based on what the monetary authorities considered to be realistic rates enough to encourage saving, but not so high as to discourage investment in the desired channels.

Before closing this chapter, it is instructive to examine export earnings, interest rates and other variables' influence on domestic or national savings. This is to show that other variables such as export earnings, national incomes government expenditures and price level other than interest rates also have significant influence on the volume of domestic savings of some developing countries as borne out by the results of our empirical investigations.

Specification of the Model for Determinants of Domestic Savings:

Four equations of the model were estimated for each of the eleven countries studied but only the best results are reported. The four equations are as follows:

$$DS = a_0 + a_1Y + a_2Sr - PL \quad (1)$$

$$DS = b_0 + b_1Y + b_2Sr + b_3GE \quad (2)$$

$$DS = c_0 + c_1Exp + c_2GE + c_3Sr \quad (3)$$

$$DS = d_0 + d_1OE + d_2Sr - d_3PL + d_4GE \quad (4)$$

where:

DS = Domestic Savings

GE = Government Expenditure

Y = National Income at 1981 price level

Sr = Saving rate of interest

PL = Consumer price index

Exp = Exports

and OE = Oil Exports.

In most developing countries of the world, government is the largest employer of labour. The number of people employed in economic activities assuming they have preference for future consumption, is likely to affect the volume of national savings. Hence employment figures can be used as a proxy for the measurement of economic activities where these are available. Since data are not available on the level of employment in most of the countries being studied, it is considered a good attempt to use the recurrent government expenditure as a proxy for the number of people employed, the more so because our studies of the countries in our analysis reveal that on the average, about 80 per cent of the labour force in each country are in the public sector. In the model above, therefore, government expenditure is used as a variable to test whether there is a relationship between it and the level of domestic savings. Our a priori belief is that the sign of this variable is indeterminate since the newly employed by government

are free to choose between consumption now or saving for the future consumption. The price index employed in this analysis is the consumer price index and is used as an explanatory variable because of the fact that in most of the countries in this study as well as in many other developing countries, inflation rates are still largely high and hence more likely to affect the level of domestic savings. When prices are rising, the value of money continues to fall and the tendency is for people to lose interest in holding money or financial instruments and switch over to holding durable goods. Thus this variable is expected to carry negative sign since as the price falls, the value of money rises and hence an increase in the holdings of financial assets by the people. The GNP at 1981 factor cost is used as a measure of level of economic activities and so also the value of exports which is being used as an alternative to GNP. For the oil-exporting countries in our study, the value of oil exports is used since for most of them, crude oil still remains largely the mainstay of their economy. Thus variables Y, EXP and OE are all expected to carry positive signs.

#### 9.4.0 Some General Comments:

The data employed for this study are derived from the IMF publication - IMF International Financial Statistics - as well as the national sources for each country such as the Central bank publications. As a standard procedure all equations were estimated by OLS. We used standard criteria:  $R^2$  for goodness of fit, 'F' testing significance of the whole regression, 't' testing the significance of partial regression coefficients, Durbin-Watson 'D' statistic testing the randomness of the residuals, a priori sign and magnitude of the coefficient to evaluate our results. The results of the estimates of the equations are as follows:-

Table B

Results of the Estimates of the Determinants of  
Domestic Savings in Nigeria and some Selected  
Developing Countries

Country	Dependent Variable	Estimated Coefficients and t-ratios (in parenthesis)	R <sup>2</sup> DW F	Period
Egypt	DS	-1.038 + 0.279Sr + 0.972Y - 0.173PL (-1.343) (2.09) (2.857) (-0.458)	0.84 1.84 27.5	1960- 1984
Ghana	DS	-0.530 + 0.692Sr + 0.243Exp + 0.497GE (-2.228) (3.238) (2.198) (3.590)	0.98 1.94 599.1	1960- 1984
S. Arabia	DS	0.969 + 1.135Sr + 0.870 OE - 0.140 PL (2.273) (8.813) (2.120) (1.231)	0.98 1.73 353.2	1965 1984
S. Leone	DS	-0.328 + 0.225Sr + 0.870Y - 0.140PL (0.932) (3.423) (2.194) (1.113)	0.86 1.81 33.27	1960- 1984
Venezuela	DS	-18.385 + 0.145Sr + 7.842Y - 0.197PL (-7.411) (0.646) (7.535) (-1.920)	0.90 1.89 49.92	1960- 1984
Iran	DS	-4.967 + 0.107Sr + 0.447Y - 0.223PL (-8.896) (0.601) (2.463) (10.617)	0.99 1.99 654.8	1960- 1981
Iraq	DS	0.406 + 0.977Sr + 0.217OE + 0.681GE (1.677) (3.760) (1.639) (3.860)	0.96 1.67 42.1	1960- 1984
Nigeria	DS	-23.977 + 8.371Sr + 0.257GE + 0.578OE (-4.853) (3.539) (1.833) (4.322)  22.6PL (1.743)	0.90 1.57 36.97	1960- 1984
Sri Lanka	DS	1.002 + 0.174Sr + 0.492GE + 0.450Exp (1.972) (3.453) (2.063) (2.309)	0.73 2.06 18.1	1960- 1984
Kuwait	DS	-1.934 + 2.60SR + 3.770 OE - 0.234PL (-1.273) (3.325) (4.209) (1.8127)	0.93 1.57 106.8	1960- 1984
Senegal	DS	-34.67 + 16.64Sr + 2.900Y - 11.683PL (-2.512) (7.518) (2.482) (-2.575)	0.91 1.6 43.5	1968- 1982

In our preliminary investigations, each of the four equations was applied to each country but only the best result for each country is reported here. The fact that not all the equations tried on each country yielded good results clearly shows the economic and social diversities of the developing countries. For example in some oil exporting countries, the government expenditure variable turned out to be insignificant whereas in countries like Ghana and Sri Lanka, the variable was significant with the a positive sign.

The purpose of our exercise is to examine the validity or otherwise of the financial repression hypothesis with respect to domestic savings and hence in all the equations applied to each country, the real rate of interest which is the mean of the averages of all types of saving rates in each country, is included, since we are concerned with the total volume of savings, and there are several kinds of saving institutions other than commercial banks in most of these countries.

As can be seen in the results table, real interest rate variable carries the right sign in all the equations but insignificant in only two of the countries, namely Venezuela and Iran. The insignificance of the variable in the two countries can be explained in terms of relative stability observed in the interest rate structures of those countries in the presence of unstable price levels, more especially in Iran because of war. Thus the price level variable is very significant in both countries. It is quite surprising that variable OE which stands for oil export, although with the correct sign is less significant than the government expenditures. This might be due to reduction in oil production caused largely by the on-going war between that country and Iran. The variable, when applied to Iran, turned out to be very insignificant with wrong sign, hence our inclusion of national income variable instead.

The values of DW Statistics in most of the estimates indicate absence of autocorrelation and that all the equations are correctly specified.

The values of the correlation coefficients in all the estimates are indication of good fit. The values of F statistics in all the equations are significantly different from zero and hence confirm the significance of the correlation coefficients in our model and the significance of most of our explanatory variables is confirmed by the values of t-statistics in parentheses under each coefficient.

#### Concluding Remarks:

The empirical results reported above show that the mean of the real rates of interest on all financial claims, unlike that of McKinnon who used only real deposit rate of interest, has a positive effect on domestic saving in most developing countries, including the oil-exporting countries. Hence, McKinnon and Shaw's view on the importance of real interest rate on domestic saving is fully justified. However, our results also indicate the importance of other variables such as the government purchases or expenditures and export as determinants of the volume of domestic saving of some developing countries. The use of the variable government expenditure is mainly exploratory. There is still need for further research on this variable and hence the result can be regarded as tentative.

#### SECTION IV

##### 9.5 An Empirical Investigation on the Intermediate Variables of Monetary Policy and Capital Inflows and Monetary Control In Developing Country Nigeria:

In the previous section, we tried to examine the efficacy of interest rate policy in Nigeria with respect to its effects on household saving on the one hand and the national or domestic saving on the other along with ten other selected developing countries. Since this chapter is concerned with the monetary policies in Nigeria, it is considered instructive to examine the potentialities for Nigeria of using total domestic credit as an intermediate target of monetary policy.

##### 9.5a Theoretical Consideration of Total Domestic Credit as an Intermediate Target of Monetary Policy

As mentioned earlier in this chapter, inflation has been the major

focus of attention not only in Nigeria but in many other countries of the world for many years. In their various efforts to put inflation under control, attentions have always been focused on the financial aggregates which are more easily affected by the policy instruments at the monetary authorities' disposal because of the belief that these aggregates have more predictable relations to the final targets, otherwise known in the economic literature as intermediate targets.<sup>1</sup> However, the effectiveness of a particular financial aggregate as an intermediate target in any economy largely depends on the significance of the relation between that aggregate and final targets which is the pre-requisite for measuring its predictability and stability.

The problems of inflation throughout the world have turned the attention of many economists to embark on a rigorous research on the money supply process and its impact on real economic aggregates in various contexts such as open and closed economies, each operating under either flexible or fixed exchange rates, and developed and less developed economies. Many economists have come out, based on their research, with several meaningful conclusions which have helped highlight monetary policy options and their techniques. For many years, the developed countries attached very little importance to selective or qualitative credit policies in the pursuance of their monetary policy goals (Khatkhate and Villanueva (1978)). In monetary policy, attention was focused on the pursuit of stable economic growth, control of inflationary forces, stable interest rates and stable composition of aggregate spending in the economy. According to Gurley and Shaw (1955), in addition to the above, the advanced countries also focused attention on accelerating the process of financial intermediation based on the assumption that it constitutes both necessary and sufficient condition for economic growth. The reason why little or no importance was attached to credit policies is because many economists were sceptical about their efficacy and practicability. Many believed that it is only possible to regulate the channel of credit and not its ultimate use (Maisel (1971)). In spite of the findings of some

1. See R.G. Davis, "Monetary Aggregates and the Use of 'Intermediate Targets in Monetary Policy", Federal Reserves System, New Monetary Control Procedure, 1981. 2. Also see Parkin (1978), Savage (1979), and Lewis (1980) on their views on control of Money Supply.

recent surveys of credit policies which were designed to investigate their theoretical framework and the extent of their empirical relevance as evidenced in the work of Brimmer (1971), Cotula and Padoa-Schioppa (1971), Hodgman (1972), Silber (1973) and Solomon (1973), no uniform interpretation of their meaning and neither were there any uniform assessment of their significance.

In recent years, however, increasing attention has been focused in the economic literature on the total domestic credit (TDC) as an intermediate target of monetary policy because of the problems of inflation. The TDC per se in the context of this analysis may be defined as the total loans to the private sector made by the banks and other financial institutions including bonds or shares issued by the business enterprises in Nigeria. It also includes government borrowing from the banks as well as from the public.

Before going further in the investigation of the relationship of the TDC with the final policy targets such as the level of nominal income, and the current account balance in the balance of payments, it is instructive to review the properties of the TDC as an intermediate target of monetary policy by testing the following hypotheses:

- (a) "That TDC has a significant relationship with the final targets of and monetary policy".
- (b) "That the growth of financial institutions, measured by the number of institutions and offices has significant influence on the volume of TDC than the interest rates on loans."

Our a priori belief in this exercise is that if the monetary authorities choose TDC as an intermediate target, they may face great difficulties in the conduct of monetary policy than when they choose a monetary target. In 1960s, the Nigerian monetary authorities did not lay emphasis on TDC as a variable target. The concern by then was how to encourage the banks and other financial institutions to give more loans to business enterprises, especially the indigenous borrowers. However, in 1970s, there was a swift switch to TDC in their long drawn battle to combat inflations in the country. Since the

1. See the work of Brimmer (1971); Cotula and Padoa-Schioppa (1971)<sup>m</sup>  
 2. Hodgman (1972)

interest rate variations have no effect on the volume of TDC, attention has been directed on the use of other instruments of control such as credit ceiling and credit guidelines. The justification of the use of these instruments is given by the estimates of the model developed which explains the determinant of the volume of total domestic credit in Nigeria which will be taken up later.

#### 9.5b The TDC Model

One can adopt two equilibrium conditions in presenting the model, namely the goods market equilibrium condition and the financial assets market equilibrium. If the equilibrium in the two markets is to hold, then the discrepancy between private sector savings and overall investments should be equal to the public sector dissavings. Savings is, therefore, expressed as follows:

$$\text{PrS} - \text{PI} = (\text{E}^* - \text{M}) + \text{G}^* \quad (\text{B.1})$$

where PrS stands for private savings, PI for private and public investments, E for exports and M for imports while G stands for government expenditures or dissavings. The asterisks above variables E and G indicate exogeneity in the model. It is assumed that exports are exogeneously determined while imports are a function of national income. Thus  $\text{M} = m(\text{Y})$ . (B.2)

Any discrepancy between PrS and PI may be regarded as the decrease or increase in net financial assets of the private sector and this argument can be expressed as:

$$\text{PrS} - \text{PI} = \Delta \text{PrFA} - \Delta \text{PrFL} - \Delta \text{CIF}^* \quad (\text{B.3})$$

where  $\Delta \text{PrFA}$  is the change in financial claims or assets held by the private sector while PrFL denotes the change in the private sector's financial liabilities vis-a-vis domestic residents and non-residents. It is assumed that the capital inflows ( $\Delta \text{CIF}$ ) that are not intermediated by the banking system are controlled by the monetary authorities and hence are regarded as exogenous in the model. Equations B.1 and B.3 imply that the goods market reaches a state of equilibrium only when the market for

financial assets attains its stock and flow equilibrium position. However, one might just regard the goods market as redundant since the knowledge of what happens in the financial market is enough to give clear picture about the good market.

Through its control over the supply of money or financial assets, the monetary authorities exercise great impact on the output level in the economy, although after a period of considerable time lag (Friedman (1958), B.V.W. Sprinkel (1959), F. de Leeuw and E. Gramlich (1969) and de Leeuw and J. Kalchbrenner (1969)). Some economists, of course, have argued based on a body of evidence without theoretical justification that monetary policy is quick-acting, and hence no time lag (Anderson and Jordan (1968), and Kareken and Solow (1963)). Any equilibrium condition in the financial market with respect to the stock and flow implies that the variables which determine the volume of financial assets demanded by the private sector is at the level which makes the private sector willing to hold the financial assets supplied. Thus an action by the monetary authorities leading to a sudden change in the volume of financial assets supplied would cause the private sector demand to adjust to the new supply conditions. Consequently, there would be new equilibrium values in the real sector. The model for the supply of and demand for financial assets may be formalized as follows:

Substituting equation B.3 for equation 1 and rearranging the terms yields

$$\Delta \text{PrFA}^s = (\Delta \text{PrFL} + G^*) + (X^* - M(Y)) + \Delta \text{CIF}^* \quad (\text{B.4})$$

Hence TDC =  $(\Delta \text{PrFL} + G^*)$  and this represents a substantial part of the supply of financial assets.

For the demand model, the hypothesis is that the flow and demand for financial assets is a stable function of both income and rate of interest. Hence the demand flow equilibrium always exists in the financial markets; and this can be expressed as follows:-

$$\begin{aligned} \Delta \text{PrFA}^d &= G(Y, r) \quad \text{where } (G_1, G_2 > 0) \\ \Delta \text{PrFA}^s &= \Delta \text{PrFA}^d \end{aligned} \quad (\text{B.5})$$

1. Anderson and Jordan (1968), "Monetary and Fiscal Actions: A Test of their Relative Importance in 'Economic' Stabilization" Reserve Bank of St. Louis.

Equation B.4 above may be combined together to yield B.5 as above in which there are only two endogenous variables - income (Y) and interest rate (r). Since interest rate movements do not bring about equilibrium in the financial markets, income has become the main adjusting variable in the TDC model. Consequently, r can be dropped from the expression for demand for financial assets so that equation B.5 becomes:

$$\text{PrFA}^d = G'(Y) \quad \text{B.6}$$

The TDC model can be expressed in another form by collecting all the variables dependent on income on the left hand side as follows:

$$W(Y) = G'(Y) + m(Y) = \text{TDC} + E^* + \Delta \text{CIF}^* \quad \text{B.7}$$

One can invert function W into one-to-one relationship between the GDP and the level of TDC for any given level of exports and international capital flow as follows:

$$Y = \frac{1}{W} (\text{TDC} + E^* + \Delta \text{CIF}^*) \quad \text{B.8}$$

One can also express the model as:

$$(E - M(Y)) = G'(Y) - \text{TDC} - \Delta \text{CIF}^* \quad \text{B.9}$$

If one assumes that there is a stable flow of demand for financial assets, then equation B.8 and B.9 imply stable relationship between the GDP, the current account and the level of TDC. In order to control the rate of growth of nominal GDP, the monetary authorities might impose credit controls which could take several forms. For example, the controls might be in form of portfolio-ceiling devices which involve the setting of ceilings on loans to be made for specific purposes or to certain specified sectors (Patel 1954)). Should the controls result in reduction of credit to private sector of the economy in this analysis, then there would be a situation of excess demand for financial assets in so far as there is no change at all initially on the level of interest rate and nominal income. If new equilibrium is to be attained, more financial assets will have to come from abroad to augment the amount of financial assets supplied domestically. The manner in which this equilibrium is achieved is often referred to as transmission mechanism in

3. See Patel (1954).

the TDC model.

There has been a long debate on the probable relevant adjusting variable in the demand for financial assets in the context of TDC model. For example, the works of Vainago (1975)<sup>1</sup>, Fazio (1976), Cotula and Miscossi (1977), and Sarcenelli, (1978) all attempted to present the adjustment mechanism in the model. The common argument among these writers was that adjustment can occur if rate of interest is so high that it cannot clear the market for credit or if investment decisions are interest-rate-inelastic thereby resulting in a one-to-one relationship between the financial and the goods markets. Since the budget deficit (G) is largely outside the control of the monetary authorities, the reduction which ensued in the TDC reduces the volume of domestic credit to private enterprises, which are thus forced to lower their inventories and investments with consequent adverse repercussions on the level of economic activity and hence nominal income, assuming that there is little or no substitutability between domestic and external borrowing, i.e.  $\Delta CIF^*$  is under the control of the monetary authorities. The fall in nominal income needed to reduce the demand for financial assets, is greater than when the interest rate remains stable since the income effect on the demand for financial assets must be greater than the interest rate effect which pulls in opposite direction. Because of this, interest rate variable cannot produce equilibrium in the TDC model. This explains why the econometric model of the Bank of Italy produced by Fazio and Sitzia (1979)<sup>2</sup> does not have an interest rate variable in the investment and consumption functions.

With respect to unanticipated external disturbance, assuming it adversely affects the actual current account balance, it is argued that this will result in excess demand for assets. Assuming that income is the equilibrating variable, a fall in income will remove the excess demand for assets while at the same time improve the current account balance by moving it back to the initial target. This automatic mechanism, which removes the external disturbances cannot work in the TDC where interest rate variation is adopted to clear the

1. See A. Fazio, (1976) Vainago (1975), Cotula and Miscossi, (1977)

2. See also the work of Fazio and Sitzia (1979).

financial market. Although a decline in interest rate would eliminate excess demand for assets, which is caused by the external disturbance, it would also triggered of an increase in income, thereby making the current account to deteriorate further. Because of this, it is concluded that interest rate variations in the TDC model cannot bring about equilibrium in the system (Fazio and Sitzia (1979)). In what follows, therefore, we shall examine the interest rate variations in the context of total domestic credit in Nigeria, before considering the TDC and the final targets of monetary policy.

#### 9.5c Specification of the Determinants of Total Domestic Credit in Nigeria

There is considerable literature on the importance of credit to the any economy and in fact, the whole issues on the control of credit are more or less the translation of its importance. Without bordering ourselves by going through it, it is instructive to address ourselves to the model for the determinants of total domestic credit in Nigeria. In fact we have discussed at length on credit controls in the earlier part of this chapter.

In order to determine the forces which influence the volume of total domestic credit in Nigeria, we specify the TDC as a behaviour-1 function of level of economic activity ( $Y$ ) measured by the GDP at factor cost, loan rate variations, ( $Br$ ) which represents the weighted average of all interest rates on long-term loans in the various financial and specialized institutions of credit in Nigeria and the numeric growth in credit institutions measured by the number of organized credit institutions and their offices ( $BN_t$ ). This can be expressed explicitly as follows:-

$$TDC_t = a_0 + a_1 Y_t - a_2 Br_t + a_3 BN_t \quad (C.1)$$

$$\text{or } TDC_{t-1} = b_0 + b_1 Y_{t-1} - b_2 Br_{t-1} + b_3 BN_{t-1} \quad (C.2)$$

where  $TDC_t$  = total domestic credit at time  $t$

$Y_t$  = Gross Domestic Products at 1981 factor cost.

$Br_t$  = Bank loan rates at time  $t$  which is measured as indicated above.

The data used in this study are time series which are derived from the Central Bank of Nigeria publications of various years. It is assumed in this model that as the level of economic activities in the country is increasing, the volume of total domestic credit will continue to increase and hence the a priori sign is expected to be positive. In line with Keynesian paradigm, as the interest rate on loan falls, the investors will find it more attractive to invest since the cost of borrowing has gone down. Hence the interest rate variable should have a negative sign in relation to the volume of the total domestic credit. The inclusion of  $BN_t$  in the model is designed to incorporate the effect of financial development in Nigeria on the volume of credit. It is assumed that as more and more financial institutions and offices are being established and evenly spread so that they are more accessible to people, the greater will be the volume of total domestic credit. The variable is, therefore, expected to have a positive sign.

The results of the estimated equation are as stated below. As a standard procedure, the equation was estimated by OLS. The standard criteria used are  $R^2$  for goodness of fit, 'F' testing significance of the whole regression, 't' testing the significance of partial regression coefficients, Durbin-Watson 'D' statistics testing the randomness of the residuals, and the a priori signs and magnitude of the coefficient to evaluate the result.

Table C

9.5d Result of the Equation Explaining the Determinant of Volume of Total Domestic Credit in Nigeria  
1960 - 1984

Dependent Variable $TDC_t$	Constant	Independent Variables			$R^2$	DW	F
		$Y_t$	$Br_t$	$BN_t$			
$TDC_t$	-8.3029 (-16.710)	1.2178 (4.7522)	-0.1513 (0.3644)	1.0335 (6.8738)	0.99	1.83	34.6

In the result table above, the value of T-Statistic is typed underneath each estimate in parentheses. The rate of interest variable is not only insignificant but also carries the wrong sign. The effect of the financial institutions development in Nigeria is clearly borne out as evidenced by the result. As is expected, the bank spread or the growth in number of financial institutions and offices ( $BN_t$ ) which is used as measure of the effect of financial development in Nigeria is highly significant. The level of economic activity in the country as measured by the GDP ( $Y_t$ ) is also very significant. The high co-efficient of correlation as well as the D.W. statistic and the value of F statistic, all seem to suggest that this result is approximate to reality with respect to the determinants of the volume of total domestic credit in Nigeria.

One can conclude that in Nigeria, loan rate variation has no effect on the total domestic credit which can be explained in terms of selective credit policy of the monetary authorities which usually results in excess demand for loanable funds. This result seems to support the view expressed by Okigbo (1979) that in Nigeria, ultimate borrowers are only concerned with the availability of credit and not the cost. The interest rate variable is, therefore, not relevant in the TDC model and hence its exclusion in this model. We can now proceed with the examination of TDC and other final targets of monetary policy.

#### 9.5e TOTAL DOMESTIC CREDIT AND THE FINAL TARGETS OF MONETARY POLICY IN NIGERIA

For any amount of increase in the level of base money, the increase in financial assets and liabilities will be jointly determined by the behaviour of the financial and nonfinancial private sector of the economy. In theory, however, it is somehow difficult to make out the case for focusing attention on the asset or liability side of the financial institutions. Consequently, the choice between alternative intermediate targets of monetary policy cannot rely uniquely on theory alone, but must also be justified by empirical investigation. Thus, the task before us here is to investigate empirically the relationship between the TDC and the final targets of monetary policy in Nigeria

1. See P. Okigbo (1979). The Nigeria Financial System, Longman Press Ltd., London.

For this experiment, the stock of money, defined as  $M_1$  and  $M_2$  as well as the monetary base are chosen as alternative intermediate targets. The  $M_1$  is defined as the currency held by the public plus commercial bank demand deposits while the  $M_2$  is defined as  $M_1$  plus commercial bank savings and time deposits.

The relationship between the GDP and the intermediate targets of monetary policy is examined with reduced form equation. Although this approach has been criticized on many grounds, it still dominates in the applied economics and especially when it comes to the comparison of alternative financial aggregates as intermediate targets. In fact, Shaw (1979)<sup>1</sup> has argued that the comparison of the error forecast of an econometric model and that of a single equation or reduced form equation have shown that as the former is able to see twice as far ahead into the future, so also the reduced form equation can with the same degree of clarity and precision. The recent example of the use of reduced form equation for this kind of model can be found in the work of Davis (1979)<sup>2</sup> on Broad Credit Measures as targets for Monetary Policy and also in Federal Reserve Bulletin of January 1979 issue. Moreover, the use of reduced form in this work is necessitated by the lack of knowledge of the structural model of the developing economy like Nigeria and this limits available option.

The logarithm of GDP at current market price was regressed alternatively on the lag of the logarithm of TDC, the  $M_1$  and  $M_2$  and Monetary Base (MB). The sample period was 1960 - 1984. The monetary aggregates,  $M_1$ ,  $M_2$  and the MB were the yearly averages while the TDC was the flow of credit during each year. All the targets were regressed on the GDP in form of single equation to test how significant each of the variables was when put together before they were individually regressed on GDP. In search of a better result, the annual growth rate of GDP at current market price was also alternatively regressed by the two-stage least squares and ordinary least squares respectively but the method that gives better results is the former which is stated below.

The estimated model can be stated explicitly as follows:

1. See Pierce and Shaw (1979), "Monetary Economics: Theories, Evidence and Policy", Butterworths, London.
2. See also R.G. Davis, (1979). "Broad Credit Measures as Target for Monetary Policy" Federal Reserves Bank of New York Quarterly Review, Summer

$$\text{Log } Y_t = c_0 + c_1 \text{Log TDC}_t + c_2 \text{Log } M_{1t} + c_3 \text{Log } M_{2t} + c_4 \text{Log MB}_t + c_5 \text{Log CAB}_t \quad (\text{E.1})$$

where  $Y_t = \text{GDP}$

TDC = Total domestic credit

$M_1$  = Currency outside bank held by the public plus commercial bank deposits

$M_2$  =  $M_1$  plus commercial banks' time and savings deposits and

MB = Monetary base defined as currency with banks plus currency outside banks plus commercial banks' free deposits at Nigeria Central Bank. The free deposits in this context is defined as commercial bank deposits minus statutory reserve requirements (SRRs).

Attempt was also made to estimate the relationship between the TDC and external targets of monetary policy. As the common argument has it, the current account of the balance of payments represents the appropriate external target of monetary policy in the TDC model. Thus, the current account of the balance of payments was regressed on TDC. In order to eliminate the effects of the unprecedented high price of oil of 1970s, the net balance of petroleum products was subtracted from the current account. We also employed the use of the ratio of current account to GDP and the ratio of TDC to GDP in order to eliminate the heteroskedasticity of the residuals. However, the results of this exercise proved very statistically bad as will be seen from the table E.3. The results of our regressions are presented as follows with their interpretations.

Table E.1

Intermediate Targets of Monetary Policy and the Nominal GDP

1960 - 1984

Dependent Variable : GDP

Intermediate Targets	Constant	$R^2$	DW	F
$\ln M_1 = 0.49303$ (2.981)	4.2596 (3.8166)	0.35	1.278	28.2

Intermediate Targets	Constant	R <sup>2</sup>	DW	F
lnM <sub>2</sub> = 1.99 (10.444)	<b>1.32</b> (3.8913)	0.81	0.31	33.8
lnMB = 2.129 (14.175)	-0.65509 (-1.6668)	0.86	1.93	41.3
lnTDC = 0.74519 (15.158)	3.0307 (20.542)	0.88	1.85	30.9

All the intermediate targets in the above results have the correct sign and very statistically significant except for the stock of money variable M<sub>1</sub> which carries low co-efficient of correlation and sign of autocorrelation as evidenced in the DW statistics. The high co-efficient of correlation for M<sub>2</sub> more than compensates for the low DW statistics. Attempt to remove the presence of autocorrelation from M<sub>2</sub> was unsuccessful and it is therefore, decided to leave it like that since the R<sup>2</sup> and F statistics are high enough to indicate that the model is well specified and in line with the economic theory, the variable carries the correct sign. 209

Table E.2 presents the results of the regression in one single equation estimated by the method of OLS, while 2SLS Method is applied to the lagged form of variables in Table E.1.

Table E.2

Intermediate Targets of Monetary Policy and the Nominal GDP  
1960 - 1984

Dependent Variable GDP

Constant	Intermediate target	R <sup>2</sup>	DW	F	Remarks
1.8156 (3.348)	lnM <sub>1</sub> -0.5297 (-1.6162)				
	lnM <sub>2</sub> 0.5128 (1.1535)				

Constant	Intermediate Target	R <sup>2</sup>	DW	F	Remarks
	lnMB 0.6906 (2.3475) lnTDC 0.5464 (5.3564)	0.98	1.7	18.5	Ordinar Least Squares Estimates.
1.6977 (3.5905)	lnM <sub>1</sub> 1.609 (6.447)	0.65	0.19	38.1	2SLS Method
1.3906 (3.9923)	lnM <sub>2</sub> 1.9448 (9.6964)	0.81	0.308		Lagged variables
-0.69464	lnMB 2.1474 (13.662)	0.87	1.85		
3.0279 (21.021)	lnTDC 0.7410 (14.882)	0.89	1.83		

As can be seen from the table above, there seems to be no marked difference between the results of lagged and unlagged target variables, except perhaps that in lagged variables, the the value of DW statistics is meaningless. The T-statistic values under each estimate in parentheses measure the significance of each variable target. All the variables are shown to be significant and in terms of co-efficient of correlation, they also show evidence of good fit while the F statistics indicate absence of misspecification.

With the above results, there is no doubt that our hypothesis that the TDC has a significant relationship with the final targets of monetary policy is validated. The results of the single equation estimates also support our hypothesis. One interesting point in the single equation results and the other results is the fact that in both variable targets M<sub>1</sub> and M<sub>2</sub> are less significant than MB and TDC. These findings bring to the limelight the importance of credit in Nigerian economy and its effects on the final targets of monetary policy. The use of selective credit controls in form of issuance of credit guidelines and ceilings, inspite of the distortions it causes in the credit

market, seems to be inevitable in Nigeria where interest rate variations have no significant effect on the demand for loans (Adewumi, 1982).

Our experiment on the relationship between the TDC and the external targets of monetary policy did not yield good results as can be seen in Table E.3 below.

Table E.3  
External Targets of Monetary Policy  
1960 - 1984

Dependent Variables	Independent Variables	Constants	R	DW	Remarks
CBY	2.0863CY (7.5911)	-0.67848 (-2.7429)	0.71	0.32	OLS method
Y	0.08696TB (0.19907)	4.9182 (2.8999)	0.71	1.1	"
ER	1.3036M <sub>1</sub> (11.285) <sup>1</sup>	-2.0237 (-9.1096)	0.84	0.25	"
TB	0.0169 (5.7752)	6.5374 (9.9031)	0.59	0.35	

In the above table, TB stands for trade balance, ER is the logarithm of the exchange rate, while M<sub>1</sub> is the logarithm of the money stock as usual. All the variables are seasonally adjusted since they are yearly averages and the figures in parentheses are the t-statistics. DW and R<sup>2</sup> are the measures of autocorrelation and coefficient of correlation respectively.

The results above give support to the monetary approach to balance of payments which holds that there is a significant relationship between the trade balance and total domestic credit on the one hand and on the other, domestic credit and exchange rate variations (which in this analysis is proxied by the price of Nigerian bank notes in London in terms of the British pound sterling) and domestic money supply (M<sub>1</sub>). In our results, however, while the co-efficient of correlation are quite high for the first three estimates, the low DW

1. See T. Adewumi (1982)

statistic figures are clear indication of the presence of autocorrelation in the models. Our attempts at correcting this autocorrelation only rendered all the estimated relationships quite insignificant. Although the models are statistically validated by the high  $R^2$  and T-statistics, the evidence of likely serial correlation means that the results should be used as an approximation. It is interesting, however, to compare the good performance of  $M_1$  as an intermediate variable, when the exchange rate is the target, with its bad performance relative to both the  $M_2$  and the MB when the target is the GDP. What this finding suggests is that the most appropriate intermediate targets of monetary policy for internal and external purposes must not necessarily be the same.

#### 9.5f Shortcomings of the TDC Model:

To the best of our knowledge, this exercise represents the first time ever at empirically investigating the total domestic credit as a target of monetary policy in Nigeria and also in any developing economy, whereas this model has been severally tested in many developed countries like Britain, France, U.S.A. and Italy. Many writers have criticized the model on several grounds. One of the most important criticisms of the model relates to its neglect of stocks. The argument advanced by the critics is that firms' investment decisions also depend on the stock of financial assets held in their asset portfolio just like the flow of credit available. It is reasonably argued that any monetary policy resulting in the reduction of TDC is likely to fail in producing the desired effects on the level of investments and income, since there is a high tendency for enterprises to offset the small amount of credit available by running down their stock of financial assets. Some of these critics, however, are of the opinion that the effect of stocks on firms' behaviour is not likely to affect the stability of the relationship between the TDC and the national income (Y).

Fazio (1976), who is one of the critics pointed out that the TDC model fails to stress the role of wealth on consumption. This criticism

seems quite reasonable when one takes into account the weight of evidence in the economic literature that showed that inflation and inflationary expectations can exert strong influence on household consumption decisions through their impact on household stocks of wealth. This is particularly evidenced in Nigeria during the period of high inflation following the Nigerian Civil War (1966 - 1970) and the effects of high increase in price of crude oil of 1973/74. During that time, most Nigerians showed greater preference for holding their stock of wealth in form of durable goods rather than in money or financial assets in order to avert the risks of capital losses which might be brought about by the high rates of inflation plaguing the country.

Since it is possible to expect that market participants would form their own expectations about the future inflation rate by looking at the actual and anticipated rate of growth of monetary aggregates and the budget deficits, the silence of the TDC model over this issue seems to be a serious weakness of the model because this amounts to a neglect of a channel through which monetary policy has a powerful effect on the level of output and the general price level.

#### 9.5g The Monetary Policy and Capital Inflow in Nigeria 1960 - 1984:

The development economists have long recognized the importance of the foreign capital inflow in the development process of any nation and especially the developing countries. Even the developed countries too are much in favour of foreign capital inflow into their countries since it helps considerably to create new jobs. In many cases, the foreign capital is treated both as an additional factor of production and as a supplement to the national saving effort of the country concerned. The work of Chenery and Strout (1966)<sup>1</sup> on the two-gap analysis of development is premised on the view that foreign investment will provide the means of relaxing both the foreign exchange and the saving constraints on the rate of growth of output in the country into which foreign capital goes. However, not all economists share this view. For example Haavelmo<sup>2</sup> (1965), raised the suggestion that there is

1. See Chenery and Strout (1966), "Foreign Assistance and Economic Development" American Economic Review.

2. See T. Haavelmo (1965).

a possibility of adverse effects on national saving efforts as a result of foreign capital inflow on national saving efforts, but rather with the relationship between foreign capital inflow and monetary variables.

An empirical investigation of the determinants of private capital inflow in Nigeria is considered to be important in the context of monetary policy. This is another area of monetary policy which has not been dealt with in any rigorous study by any Nigerian writer. The significance of this study lies in the fact that it would have influence on the objectives for which monetary policy should be deployed. The hypothesis to be tested is that:

"There is a relationship between the private capital inflow and the monetary policy in Nigeria".

Since this apparent relationship between capital inflow and monetary policy has never been empirically investigated before by any writer on Nigerian monetary policy, this study can be regarded as exploratory.

#### 9.5h Some Economic Implications of Capital inflow and Monetary Policy in Nigeria

Let us assume that the capital inflow is exogenous, the implication of this is that any discretionary monetary control will have to be technically flexible at least in the short run through various devices such as administrative technicalities designed to regulate capital inflows or outflows and rigid exchange control which is being operated in Nigeria since 1979. On the other hand if our assumption of exogeneity of the capital inflow is relaxed, the theoretical implication is that the exchange controls become unnecessary. Now that it is assumed that the private capital movements are responsive to relative interest rate variations, it is possible to separate in part domestic market rate from international exchange market rate either by the imposition of variable deposit requirements (VDR) following USA experience, or by interest equalisation taxes. Any of these two devices can be very effective in so far as the capital movements are responsive to differentials in nominal interest rates.

The discussion above takes no account of the expected changes in the

exchange rate at least in the short term period. However, if the rate is expected to change in the near future, one should expect the future holding period yields on Nigerian and overseas assets as identified by the nominal interest rates to include the expected capital gain or loss resulting from exchange rate changes. This analysis incorporates some elements of speculation which can be difficult to reduce or remove, the more so because any correctly anticipated changes in the exchange rates by typical transactors may result in considerable percentage short-term capital gains to them. One important area of research is on how to take care of speculation. One suggestion is the imposition of exchange controls in order to limit the scope of capital movements. Another is that the monetary authorities can take any action designed to modify the expectations concerning the movements of exchange rate. Whether the two suggestions can solve the problem of speculation largely depends on empirical analysis.

#### 9.51 Model of Monetary Policy and Private Capital Movements in Nigeria

Traditionally, economists rely on making some assumptions in the building of economic model. Thus, in the model of Monetary Policy and Private Capital, we make a number of assumptions as follows:-

- (i) That the economy of Nigeria consists of two markets in the context of a general-equilibrium model. One market is for base money and the other for Treasury Bills and Treasury Certificates. In this case, the static demand functions for base money and Treasury Bills and Treasury Certificates may be formalized in terms of domestic wealth restriction ( $DW^F$ ) as follows:-

$$DW^F = MB + DT - FB \quad (E.2.1)$$

where  $DW^F$  = Domestic Wealth Restriction

MB = Base Money

DT = Domestic Treasury Bills and Certificates

FB = Foreign bonds.

- (ii) That the demand for the Nigerian Treasury bills and certificates

1. See Pindyck & D.L. Rubinfeld "Econometric Models and Economic Forecasts", McGraw-Hill Kogakusha Ltd., Tokyo, London

by foreigners is static. Hence the supply of base money may be expressed as

$$MB^S = NFA + NDA \quad (E.2.2)$$

where NFA = Net Foreign Assets

NDA = Net Domestic Assets.

Then the net capital inflow may be expressed as

$$NCI = DT^F - DD^F \quad (E.2.3.)$$

where  $DT^F$  = Demand for domestic Treasury bills and Certificates by foreigners

$DD^F$  = Demand for foreign bonds by the Nigerian nationals.

From this model, the following estimated equations emerge:

$$Rd_t = a_0 + a_1 Fr_t + a_2 Y_t + a_3 DW^F + a_4 CAB + a_5 NDA_t \quad (E.2.4)$$

$$NCI_t = b_0 + b_1 Fr_t + b_2 Y_t + b_3 DW^F + b_4 CAB_t + b_5 NDA_t \quad (E.2.5)$$

$$Fr_t = c_0 + c_1 Rd_t + c_2 Y_t + c_3 DW^F + c_4 CAB_t + c_5 NDA_t \quad (E.2.6)$$

$$NCI_t = d_0 + d_1 Rd_t + d_2 Y_t + d_3 DW^F + d_4 CAB_t + d_5 NDA_t \quad (E.2.7)$$

where  $a_1$  and  $b_1$  are functions of the partial derivatives of the asset demand functions with respect to domestic interest rates, ( $Rd_t$ ) and foreign interest rates ( $Fr_t$ ).  $DW^F$  denotes domestic nominal wealth and  $Y_t$  stands for domestic nominal national income. CAB is the current account balance while the term NDA denotes the net domestic assets of the Central Bank of Nigeria.

In solving this model, it is assumed that the change in the net domestic assets is an exogenous policy variable, while the current account balance is independent of the value of change in the net domestic assets (NDA) of the CBN. Before considering the results of the four reduced form equations it is important we make some comments on the analysis.

#### Some General Comments:

Most of the data used for this study are derived from the IMF publication - IMF International Financial Statistics - as well as the Central Bank of Nigeria publications. In order to obtain better results, all equations were estimated by both OLS and 2LS, but only OLS results are being reported. We used standard criteria:  $R^2$  for goodness of fit, 'F' testing significance of the

whole regression, 't' which are in parentheses under each estimates, testing the significance of partial regression coefficients, Durbin-Watson 'D' statistic testing the randomness of the residuals, a priori signs and magnitude of the coefficient to evaluate our results. The foreign rate of interest employed in the analysis is the weighted average of rates in U.S., U.K., W. Germany and France, all of which are the principal trading partners of Nigeria.

This analysis is too brief owing largely to the fact that it forms only a part of the extensive study of the Nigerian financial institutions which includes the Central Bank of Nigeria, and its operation of monetary policies. Thus our main aim is to establish empirically the relationship between the monetary policy and inflow of capital. As already mentioned, the study on this score is still exploratory since this is the first time ever to estimate the relationship between the monetary policy and capital inflow empirically using the Nigerian data. The results of the estimates of the equations are as follows:-

Table E.4

Regression Results of the Monetary Policy and Inflow of Capital Model  
of Nigeria 1960 - 1984

No. of Equation	Dependent Variables	Constant	Independent Variables						R <sup>2</sup> DW F
			Rd <sub>t</sub>	Y <sub>t</sub>	NW <sub>t</sub>	CAB	NDA	Fr <sub>t</sub>	
E.2.4	Rd <sub>t</sub>	-1.9202 (2.4679)		-0.4813 (-1.1537)	0.20258 (3.6663)	0.1257 (0.7801)	0.024 (0.192)	1.0592 (7.0448)	0.98 1.65 303.6
E.2.5	NCl <sub>t</sub>	4.1060 (2.8333)		0.4365 (4.8076)	-0.2503 (-1.6527)	-0.1147 (-0.1283)	0.387 (2.67)	-0.4336 (-1.0521)	0.98 1.45 240.4
E.2.6	Fr <sub>t</sub>	2.123 (8.6239)	0.7244 (6.9764)	0.1522 (1.5771)	-0.1582 (-3.2837)	-0.118 (-0.683)	0.1179 (0.2426)		0.97 1.86 131.4
E.2.7	NCI <sub>t</sub>	1.0226 (0.9260)	0.51552 (1.9325)	0.2945 (3.116)	-0.1669 (-3.4970)	-0.17602 (-0.8951)	0.2722 (2.1277)		0.91 1.52 42.02

The first equation in table E.4 above is expression of the relationships between the domestic interest rates on Nigerian Treasury Bills and Certificate and each of the independent variables, i.e. national income at 1981 factor cost, domestic nominal wealth, the current account balance, net domestic assets of the Nigeria Central Bank and the foreign rate of interest. According to our a priori expectation, the domestic rate of interest is positively related to foreign rate of interest as can be seen from the above results. Although of a lesser magnitude, the domestic nominal wealth ( $NW_t$ ) is also significantly related to the domestic rate of interest ( $Rd_t$ ) with the right sign. The national income variable carries negative sign but less significantly related to the  $Rd_t$ . The fall in Nigerian GDP for several years, especially in 1980s, might account for this negative sign. The relationship between the current account balance and the domestic interest rate ( $Rd_t$ ) on the one hand and the net domestic assets of CBN and  $Rd_t$  on the other are not significant as evidenced by the low t-statistic in parentheses under each estimate. The high co-efficient of determination  $R^2$  and the F-statistic suggest evidence of good fit of the model while the relatively high DW indicates absence of serial correlation.

Equation E.2.5 is the expression of relationships between the net private capital inflow and the rest of the variables except  $Rd_t$ . According to our a priori expectation,  $Fr_t$  carries the negative sign but insignificantly related to the net private capital inflow ( $NCI_t$ ). However, both the national income ( $Y_t$ ) and the domestic net assets of CBN (NDA) indicate significant influence on the  $NCI_t$ , while both the net domestic wealth and current account balance are insignificant with negative sign as expected. The high  $R^2$ , DW, and F-statistic clearly validate the model.

Equation E.2.6 is a measure of relationships between the foreign rate of interest and the other variables. Our regression results show that  $Rd_t$  is positively related to foreign interest rate and this has an important monetary policy implications. The domestic national income ( $Y_t$ )

also carries positive sign but not significantly related to foreign interest rate  $Fr_t$ . As expected, of the remaining variables, only the domestic nominal wealth ( $NW_t$ ) is significantly related to  $Fr_t$  with the right sign. When the foreign interest rate is higher than the domestic rate, the tendency is for Nigerian nationals with investment capital to seek for higher returns overseas for their investment. Hence the negative relationship between the foreign rate of interest and domestic nominal wealth. The high co-efficient of correlation and the F statistic clearly suggest that the model is valid and the high DW is also an evidence of absence of serial correlation and mis-specification (Pindyck and Rubinfeld (1976)).

Equation E.2.7 shows the relationship between the private capital inflow ( $NCI_t$ ) and other variables. Although with right sign,  $Rd_t$  is less significantly related to  $NCI_t$ , while the  $Y_t$  and NDA are both significantly related with the right signs. The reason why the  $Rd_t$  is positively related to  $Fr_t$  may also account for the less significance of  $Rd_t$  influence on private capital inflow. In order to discourage the capital outflow from Nigeria, one should expect the monetary authorities to adjust the  $Rd_t$  in accordance to the variations in  $Fr_t$ . Thus this result shows that there is not much difference between the  $Fr_t$  and  $Rd_t$  and so, the national income and the net domestic asset variables have predominant influence on inflow of foreign capital in Nigeria.

#### Concluding Remarks:

In the light of the empirical results reported above, there is no doubt that there is a significant relationship between the monetary policy and the private capital inflow in Nigeria. The monetary authorities can, if they chose, use effectively domestic interest rate variations to encourage the inflow of foreign capital and discourage the flight of capital out of the country. However, these results can be regarded as tentative since this is the first work on this aspect of monetary policy to the best of our knowledge using Nigerian monetary data.

1. See Pindyck and Rubinfeld (1976) Econometric Models and Economic Forecasts, McGraw-Hill Kogakusha Ltd.

## CHAPTER 10

THE GROWTH OF NON-BANK FINANCIAL INSTITUTIONS IN NIGERIA  
AND THE SHORT-RUN MODEL OF NIGERIAN FINANCIAL  
SECTOR

## INTRODUCTION:

It has been argued that as the economic development process continues over a long period of time, the tendency is for the establishments of many other kinds of financial institutions, leading to a considerable increase in the number and variety of financial assets (H.T. Patrick (1966), Goldsmith (1955), and (1958) as well as Ott (1961)). This argument is true of Britain and many other developed countries of the world and is also applying to the developing countries as well in recent years.

Many economists have tried to explain the growth of non-bank financial institutions in terms of different aspects of their operation in the economy and some in terms of the economic growth. For example, Polakoff et al (1970) has argued that the financial institutions are generally a precursor of economic growth since, in fulfilling their intermediary function, growth is accelerated and hence growth in national income, leading to a higher level of saving and investment. Some economists concern themselves to the explanation about the growth of non-banking financial institutions. For example, Greenbaum and Haywood (1971) tried to explain the growth of non-bank financial institutions in terms of marketing and organization.

Since this thesis is particularly concerned with the banking institutions rather than non-bank financial institutions, we shall not spend much time on this chapter. Another reason why we shall be very brief on non-bank financial institutions in Nigeria is that one Nigerian writer has written on them and we must also say that these non-bank financial institutions are undergoing considerable changes since their importance only started in 1970s. Thus as more and more data are becoming available about their operations, more and more economists will show interest to write about them. The little we are able to write about them in this chapter is based, therefore, on the only available data.

1. See Patrick (1966) Economic Development and Cultural Change, Vo. 14.
2. R.W. Goldsmith (1958) Financial Intermediaries in the American Economy since 1900. Princeton University Press
3. D. T. Ott (1961) "The Financial Development of Japan, 1878 - 1959" Journal of Political Economy. Vol LXIX. No. 2

In this chapter, therefore, we shall discuss briefly on the non-bank and specialized financial institutions. However, owing to the growing importance of insurance business in Nigeria, a model will be developed to explain the determinants and the nature of insurance companies asset diversification. The chapter is divided into three sections. Section I discusses the growth of main non-bank financial institutions in Nigeria with particular emphasis on the insurance companies while section II concentrates on the specialized financial institutions. In Section III, the major concern of this chapter which is the model of Nigerian financial sector, is treated.

#### SECTION I

The major non-bank financial institutions in Nigeria are the building societies, insurance companies, the Federal Savings Bank, the Nigerian National Provident Funds and Pension Funds.

One very significant element common to all of these non-bank financial institutions is that they all focus on the small savers which are often relatively for long. For example, the funds saved with the Pension Funds are savings put aside by savers only to meet unforeseen future exigencies or retirement from work in their old age. Since these savings are lump-sums of money, they are available to people as well as government who want to use them on interest. The collecting institutions per se, often make use of the money to invest on long or medium term projects.

In general, the importance of the non-bank financial institutions to the Nigerian economy started to emerge shortly after the Nigerian Civil War of 1966 - 1970. Immediately after the war, the Federal Government embarked on rehabilitation and reconstruction projects in the war-torn<sup>1</sup> areas. For this huge task, what the government wanted was medium and long term loans, but which the commercial banks in the country could not adequately provide. The insurance companies the Pensions Funds and the Building Societies were quick to fill the void created by commercial banks in the area of provision of medium and long term loans. For example, the building societies have been committing

1. See the Federal Ministry of Economic Development and Reconstruction, Second National Development Plan, 1970 - 1974. Also for empirical evidence on the role of non-bank financial institutions, see K.W. Wilson (1983) "British Financial Institutions, Chapter 7. Pitman Book Ltd., London and G. Greenbaum and D. Haywood, (1971), "Secular Changes in the Financial Services Industry" Journal of Money, Credit and Banking, (USA), Vol. III, No. 2 Part 2, (May).

between 37 and 48 per cent of their total assets to loans and advances which are largely long term and medium terms to public and private sectors since 1975. For instance, out of the total assets of ₦186.1 million, ₦80.7 million was allocated to loans and advances by the societies. Although in terms of the aggregate credit in the economy at that time, this loan amounted to a very small fraction, but very important because of its relatively long term nature. The non-bank financial institutions are not only important because they provide medium and long term loans in the economy, but also because they help to mobilize savings. It will be productive to examine briefly some of these non-bank financial institutions and the role they play in the Nigerian economy.

#### 1.A The National Provident Fund:

Pension fund institution started very <sup>1</sup>late<sup>2</sup>ly in Nigeria and hence very little was known about it until after 1961 when the Nigerian Parliament Acts of the year created it as a division of the Federal Ministry of Labour. After several amendments the fund was finally consolidated in 1964 and in 1975, a board of management consisting of 12 members started to direct the affairs of the funds in accordance with the Decree No. <sup>3</sup>39 of 1974, which made it obligatory to it to invest in gilt-edged securities and other quoted stocks and shares.

Table 10A reveals the growth and contribution of the Fund to the finance needs of Nigerian economy, while Figure 10.A shows the graphical trend in the percentage increase in the amount of investment undertaken between 1961 and 1984. The total amount invested in gilt-edged securities and stocks stood at ₦50.5 million in 1960 as against ₦820 million in 1984, representing a more than 14 fold increase. As can be seen from the table, the fund had been increasing its contribution to the economy in form of investment since 1961 but there was a sharp decline in 1974 when it stood at ₦61.6 million. The reason for the decline can be attributed to the growing prosperity of the government brought about by oil boom. Thus the government no longer needed the fund's money by that time.

1. See Central Bank of Nigeria Annual Report, 1981; 2. Nigerian Parliament Acts, 1961.; 3. The Central Bank of Nigeria Amendment Decree No. 39 of 1974

From the table, it can be seen that the National Provident fund has been a dependable source of long term investment funds to the Nigerian Government for quite a very long time and will continue to be in the foreseeable future.

#### 1.B. The Federal Mortgage Bank:

The building societies in Nigeria, like the Pension Fund started quite recently in 1955 and its importance only became felt in 1974 when the Federal Government made it one of its policies to provide decent accommodation for Nigerian citizens.<sup>1</sup> Thus until after 1974, the building societies in Nigeria experienced very slow growth.

Tables 10B and 10C summarize the growth and contributions the building societies have made in the economy in the area of provision of finance for housing projects. Their growth can be measured in terms of their total deposits and assets. Thus in 1955, the total deposits stood at just ₦1,500, but by the end of 1968, it had increased to ₦1.8 million while the total assets stood at ₦169.9 million. The total assets of the Federal Mortgage Bank (as the societies are now called after incorporation in 1973), increased by over 69 per cent in 1980, but fell down to 27.8 in 1981 and from 8.9 to 9.9 in 1982 and 1983 respectively. In 1984, the level of deposits increased considerably again from ₦1078.8 million in 1983 to ₦1,398 million in 1984 representing an increase of 29.6 per cent. However, in 1985, it fell down to ₦1,388.8, representing a decrease of 2.2 per cent. As can be seen from the table, average growth rate of this institution between 1968 and 1985 stood at 33.3 per cent. The highest percentage growth rate of deposits was recorded in 1975 while the lowest and in fact a fall was in 1985 with 54.8 and -2.2 respectively.

Financial constraints limit the scope of the contribution of the Federal Mortgage banks to the finance needs of housing projects in Nigeria. Even then, it had managed to increase its total loans and investment to the economy from the meagre sum of ₦0.75 million in 1963 to ₦445.7 million in 1983 according to Table 10D.\* Being a government institution unlike in Britain, it

1. See the CBS Annual Report, 1974 \* Table 10D is in appendix

may be regarded as one of the specialized institutions in Nigeria.

#### 10. The Federal Savings Bank and the Merchant Banks

The Post Office Savings institution in Nigeria came into existence in 1923. The fundamental purpose for which it was established was to mobilize the small savings from the rural communities through the network of post offices. Since its establishment, the Post Office Savings Bank, now known as the Federal Savings Banks (FSB), has been increasing its branches throughout the country. In 1938, it had just 100 offices, but by the end of 1975, this number had gone up to more than 3,000.

Unlike commercial banks and other financial institutions with their limited number of offices, the FSB has not succeeded in attracting more depositors. In 1960, its level of deposit stood at ₦6.4 million representing only 8 per cent of the total institutional savings (See table 10.E)\*. Its level of deposits has been falling and in 1985 it stood at ₦8.1 million representing only 0.07 per cent of the total institutional savings.

As can be seen from the table, only the FSB's level of deposits has continued to be volatile. Many times the level has actually decreased, in spite of its being reconstituted in 1972 and subsequently in 1974 in order to have a better performance. The reason for its lower level of performance is a fertile area of future research. All one can say here is that it has not measured up to the expectations for which it was initially created. Its contribution to the economy in form of provision of credit to the economy is limited to the extent of the level of deposits it is able to get. Moreover, since it is government-owned institution, its investment in short-term government securities is in accordance with Decree 38 of 1974.

Merchant banking is one of the recent developments in Nigeria as well as in most other developing countries. The Pioneers of modern merchant banking in Nigeria were Phillips Hill (Nigeria Ltd.), and the Nigerian Acceptance Houses, both of which were in operation between 1960

See The Federal Military Government Decree No. 38 of 1974, Lagos.

For full discussion about building societies in general, see Sayer (1967).  
\* Table 10E is in appendix

and 1970. However, from only just 3 merchant banks in 1973, and just 6 by the end of 1976, the number of these banks has increased to 14 by the end of 1984 (See table 10.E<sup>1</sup>). The reason for this enormous increase in the number of merchant banks in Nigeria can be easily aduced to the growing oil export sector of the economy, which needed large amount of capital which only the merchant banks could provide. Moreover, the Nigerian economy was growing and economic prospects were promising.

Many of the merchant banks in the country were foreign-owned before 1976. However, inspite of the indigenisation of banking decrees, the merchant banks increased considerably from 6 in 1976 to 14 by the end of 1984 because of the growing economic prospects of Nigeria, as well as the Third National Development Plan 1975 - 1980 with its planned expenditure of ₦30 billion which was ten times the ₦3 billion of the 2nd National Development Plan. The huge cost of Third Plan is a clear reflection of the economic conditions at that time in Nigeria and prospects for the future with booming oil export which rose from mere ₦1.8 million in 1958 to ₦13,523 million in 1980(See table 10.F ).

The Nigerian Merchant banks had just ₦2 million assets in aggregate in 1968, but by 1983, the amount of assets had increased tremendously to ₦2409.2 million with an average growth rate of 0.78 per cent during the period under review, while the deposits increased from ₦7.2 million in 1971 to a record high of ₦631.1 million by the end of 1983. However, inspite of their growth, their investment in the economy is still very small, owing largely to the narrowness of Nigerian capital markets.

The Nigerian 1969 Decree produced an obstacle to the operation of merchant banks by restricting the level to which they could commit themselves in any company to not more than 25 per cent but which was later changed to 33 per cent of their paid-up capital and statutory reserves. Also, there was financial constraint posed by their capital base and operational funds which put a limit to the extent to which they could provide their financial services required in the economy. All these limitations prevented the

1. For a detailed analysis of merchant banks development in Nigeria, read G.W. Nwankwo (1980) and F. Fry (1976).

Table E<sup>1</sup> is in appendix

banks from financing industry effectively. They were forced to commit greater portion of their funds to government securities. For example, more than 55 per cent of their total funds was invested in Treasury Bills and Treasury certificates in 1970. Thus in 1970, the banks had an investment of ₦5.1 million as against ₦2 million granted in form of loans which was largely of short-term duration (See Table 10.G in appendix)

This preference for short-term loans by the merchant banks was harshly **denounced** by the then Commissioner of Finance in his historic address to the inaugural meeting of the Financial System Review Committee in 1976. Since the merchant banks were operating like commercial banks, according to the Commissioner, credit guideline was also imposed on them in 1976 designed to make them grant more long and medium term loans, but both the commercial banks and merchant banks have not been complying fully to the prescriptions.

#### 10.2c. Other Types of Institutions: - Money and Capital Markets and Exchange Commission.

One cannot do justice to all the financial institutions and hence, we are only going to mention these institutions very briefly since there are many literature on them written by the Nigerian writers.

The Nigerian Money and Capital markets were established shortly after the establishment of Central Bank of Nigeria for the purpose of performing, in line with the working of other money and capital markets in most developed countries, functions for the economy, for the commercial banks and for the government.

1

The Nigerian Money Market as well as Stock Exchange, owes their continued growth and existence to the establishment of Central Bank. In 1961, the Central Bank introduced the Bill Market Scheme into the Money Market, as a follow up to the first Treasury bills which were issued in 1960, and in 1968, the first issues of the Treasury Certificates were also introduced. The Treasury Certificate is a medium-term government security maturing after a period of one to two years while the Treasury Bills mature latest within nine months, and both represent a profitable

1. For full account of the operation of Nigerian Money Market, See G.W. Nwankwo (1980)

investment outlet for the financial institutions in Nigeria. For example, Table 10.G summarizes the magnitudes of investment in Treasury Certificates by the major financial institutions in Nigeria. In 1977, the total Treasury Certificates outstanding amounted to more than ₦10.2 million and by 1984, the amount had increased to a record high of ₦5,155.7 million. This tremendous increase can be attributed to the fact that both the financial and private institutions are increasing their investments. The same is true of Treasury Bills (See Table 10.H).

The Nigerian Stock Exchange is a financial institution through which borrowing and lending for long-term purposes are made possible for both public and private enterprises.<sup>1</sup> It started operation very humbly in 1961 when there was very little number of companies, most of which belonged to the expatriates. Using the number of business transactions undertaken by this institution as a measure of its growth and contribution to the economy, Table 10.I in appendix is very useful.<sup>2</sup> In 1961, the total transactions undertaken by this institution stood at 334 and by 1985 it had increased to 23546. The continued growth in the Nigerian economic prospects is largely responsible for the growth of this institution. Other agents of growth of this institutions are the commercial banks which occupy a prominent place, being the largest contributors. Although banks do not invest in industrial securities, the role they play in the Stock Exchange is fundamentally that of agent who brings business to the market. The Government, by way of legislation, also aids the growth of this institution in addition to the specialized institutions created by the government such as the Nigerian Industrial Development Banks, the Nigerian Agricultural Banks, The Securities and Exchange Commission, which is an institution responsible for the fixing of the price at which issues can be made and the determination of the time of issue and its volume, and the Central Bank of Nigeria.

1. For a brilliant discussion about the Nigerian Stock Exchange, its weaknesses and future prospects, see G.W. Nwankwo (1980)
  2. The Transactions in terms of value is stated in table 10J in appendix
- \* Tables 10.G and 10.H are in appendix.

Before we discuss about the insurance business in Nigeria, it is better to consider the specialized institutions since the discussion on the former involves empirical analysis.

## SECTION II

### 10.3 THE GROWTH OF OTHER SPECIALIZED FINANCIAL INSTITUTIONS IN NIGERIA

The failure of banks and other financial institutions to satisfy the credit needs of certain sectors of the economy in most countries of the world often leads to the establishments of specialized institutions. For example, Britain, which represents the cradle of all modern commercial banks also experienced inadequate finance from the financial institutions to the industrial sector of her economy, as evidenced by the famous Macmillan Report of 1931.

In the context of the exigency thesis, specialized institutions are often established as national institutions in order to make it easy for the international institutions to undertake development projects in the country. In Nigeria, the Nigerian Industrial Development Bank and the Nigerian Bank for Commerce and Industry (NBCI) were established to act as the national counterparts of the international finance institutions catering for the financing of specialist projects. These institutions make it possible for the International Bank for Reconstruction and Development (IBRD) to undertake many projects in the country at the grass roots level by standing as sponsors to the would-be borrowers at the individual level as well as the state level.

In the context of the catalyst thesis, specialized institutions are often established in order to speed up a fast rate of economic growth and industrial expansion. This thesis was the view that held currency for many years in many developing countries, bordering on the belief that inadequate access to finance constitutes a major obstacle to the establishment and growth of small independent manufacturing and industrial businesses.<sup>1</sup>

The first specialized institution in Nigeria came into existence

1. See W. Diamond, Development Bank. Washington. Also see also the Command 3897 (London HMSO, June, 1931).

This forms the theoretical grounds on which specialized institutions in Nigeria were established.

The specialized institutions in Nigeria may well be regarded as development banks because of the purpose for which they were established. This is in line with the general belief that the development banks are catalysts for investments in the private sector in so far as they provide injections of capital, enterprise and management, rather than being merely administrative devices to handle governments' investment<sup>1</sup>.

The first specialized institution in Nigeria was established in 1946 with the capital grant of ₦2.9 million and was charged with the responsibility of granting loans and grants to government and parastatals for the purposes of development projects. It was also expected to grant loans to cooperative societies, partnerships and companies<sup>2</sup> which registered in Nigeria. Between 1957 and 1961 another three specialized finance institutions were established by the then Western Northern and Eastern Nigeria Governments for the purposes of providing medium and long term loans for the government development projects to a large extent and to the private industries.

It is not possible for us to assess the extent of the contributions each of the institutions made to the economic development of Nigeria in terms of the magnitude of their loans because of paucity of data. However, with the data available to us, we are able to provide the assessment of their joint contributions to the economy as can be seen in tables 10.L - 10.N which shows the sources of funds, loans and advances granted between 1960 and 1966, and the changes in loans and investments of these institutions respectively.

In 1960, grants from the government formed the largest portion of the specialized institutions' sources of funds, accounting for 62.3 per cent of the total or ₦41.2 million in absolute term (See Table 10. L in appendix). However, by the end of 1966, government grants to the institutions represented only 43.3 per cent, as against the 39.8 per cent

1. For more discussion on this issue, see W. Diamond (1952).  
 2. See the Ten Year Development Plan of Nigeria 1946 - 1955, Govt. Printers. Lagos

specialized institutions and the loan capital were the major sources of finance to these institutions.

As can be seen in Table M, a total of ₦47.7 million was granted to the economy as loans by these institutions for development projects in various regions of Nigeria, and by 1966, this amount had increased to ₦78.7 million. In 1960, only ₦18.2 million was allocated to investment projects, but by 1966, it had increased to ₦39.3 million. This amount was quite small when compared with the contribution made by the commercial banks which was in form of short-term loans. However, the loans from the specialized institutions, small as they were, was very important since they were long term in nature.

As a result of the growing prosperity of the Nigerian economy, the funding of the specialized institutions became a major policy of the Federal Government in 1970s. Through the reorganization of the existing specialized institutions, three major national institutions emerged, namely, the Nigerian Industrial Development Bank, the Nigerian Bank for Commerce and Industry Ltd., and the Nigerian Agricultural and Cooperative Banks. These three institutions, together with the state-owned finance institutions, constitute an important source of long-term finance for industrial and agricultural projects in Nigeria. It is instructive to discuss briefly the contributions made to the Nigerian economy by the three important specialized institutions mentioned above.

### 10.3a The Nigerian Industrial Development Bank and the Economy

This institution started operation with an authorized capital of ₦10 million largely subscribed by foreign institutions with the International Finance Corporation holding 97.4 per cent of the total. The Federal Government reconstituted the institution in 1973 and empowered it to borrow three times its initial resources of ₦8.5 million to enable it fulfill its financial obligations. In addition, the bank also attracted considerable loans from the world bank as well

1. See the Federal Military Government Decree No. 22 of 2nd April, 1973, Federal Ministry of Information, Lagos

as from the Federal Government. Thus by the end of December, 1983, the total resources of this bank amounted to ₦200 million compared with just ₦148 million for December, 1977, which of course included ₦113 million borrowed from the Federal Government.

In terms of its contribution to the finance needs of the economy, Table 10.M shows the magnitude of loans and investments made by the NIDB between 1967 and 1985. According to this table, 96.7 per cent of the total loan sanctioned by the bank represented loans and debenture in 1983. In 1984, the total amount of loans sanctioned declined from ₦39.8 to just ₦19.0 million out of which ₦17.9 million or 94.2 per cent was in form of loans and debentures and the rest in form of equity participation. Looking at Table 10.P, one can see that the bank shows strong preference for loans and debenture as against equity investment. In 1967, investment in equity shares was 30.2 per cent of the total bank investment and by the end of 1984 it had declined to a record low of 2.8 per cent but rose again in 1985 to just 5.8 per cent.

Most of the investment by the bank before the Federal Government acquired 94.2 per cent of its share capital in 1976, was in foreign-owned companies as can be seen in Table 10.Q. Thus in 1968, the percentage of foreign-owned companies in which the bank invested was 96.4, but by the end of 1985, this figure stood at just 0.2 per cent. This preference to foreign-owned companies was one of the major reasons for the taking over of the bank by the government in 1976. The reason for this preference can be attributed to the foreign ownership of the share capital of this bank before 1976. Thus before 1976, bank's support for the small-scale enterprises was very small.<sup>1</sup> However, after 1976, the investment policies of this bank have become tailored to the interest of the Nigerian economy.

All the short-comings of the NIDB have been clearly identified by the Financial System Review Committee of 1976 which has made recommendations<sup>2</sup>

1. See NIDB's Annual Report 1966, p.13.
2. See the Federal Military Government's Views on the 'Report of the Committee on the Nigerian Financial System' p. 19 Government White Paper, 1977.

for improvements in its operation accordingly.

#### 10.3b The Nigerian Bank for Commerce and Industry:

Through the promulgation of Decree No. 22 in May, 1973, the NBCI came into existence with an authorized capital of ₦50 million out of which ₦35 million was fully paid up. By the end of 1985, the assets and liabilities of this bank had risen to ₦311.1 million, which represents an increase of ₦26.8 million or 9.4 per cent over the level at the end of December, 1984.

In 1976, the NBCI approved a total loan of ₦76.68 million on 77 projects and disbursed ₦5 million on projects which cost ₦343.26 million. This represents an improvement on its performance in 1974 when it approved a total loan of ₦17 million in respect of 27 industrial projects out of which 67.1 per cent was in form of loans while the balance was in form of equity shares (See Table 10.P in appendix). The equity investment of NBCI was at its highest in 1980 when it stood at ₦38 million as against ₦1.8 million which was its lowest in 1975. Of course, 1980 was also the year of the highest total investment by the bank which stood at ₦213.6 million. By the end of December, 1985, all told, the bank had approved some more than one thousand industrial projects since it started operation in 1973. In 1985, the cumulative total of the bank's loans and investments to the economy on 379 projects located throughout the 19 states of the federation amounted to ₦399.1 million out of which food and beverages sub-sector alone absorbed ₦294.9 million or 62.6 per cent of the total. The total disbursement by the bank at the end of 1985 stood at ₦161.1 million out of which ₦144.3 or 89.6 was in respect of loans while the remaining 10.4 per cent or ₦16.8 million was for equities.

However, in spite of all the bank was able to do so far, the general feeling in Nigeria and especially the view of the government is that the bank's performances were too short of expectations considering the huge opportunities accorded it by the indigenisation scheme and the nature of its

1. See. G.W. Nwankwo (1980).

ownership. The reason for the poor performance of this bank can be attributed to its management which failed to initiate those important policies necessary for the achievement of the objectives for which it was established. For example, following the indigenization of business enterprises in Nigeria, it was the responsibility of the bank to buy on behalf of the indigenous businessmen, but did not. Moreover, the bank has not been investing on heavy industries which the country needs most for its industrial development.

There is no doubt, however, that the bank has contributed to the finance needs of business enterprises in Nigeria, but there are still rooms for improvement.

### 10.3c The Nigerian Agricultural and Cooperative Bank

March 6, 1973 saw the establishment of the Nigerian Agricultural and Cooperative Bank Ltd. to cater for the finance needs of agricultural sector to which the commercial banks granted little or no loans. For many years, Nigerian Governments have been trying to establish a national institution for agricultural credit as evidenced by the Stoneham Report of 1969. and the earlier Paton Commission of Enquiry of 1948.

Since its inception in 1973, the bank had approved loans amounting to ₦253.5 million for 170 agricultural projects by the end of 1977, according to Table 10.3 in appendix. In 1980, the bank made a total loans and advances amounting to ₦154 million and by the end of September, 1981, this had increased to ₦159.5 million. In 1982 the bank granted loans totalling ₦231.1 million which represented an increase of about 44.9 per cent over the previous year. It also increased its loans and advances to agricultural sector in 1983 to the tune of ₦285.1 million, representing an increase of ₦54 million or 18.9 per cent over the 1983 figures. In 1985, the total loans and investments by the bank stood at ₦312.7 million, which represented an increase of ₦25.1 million over that of 1984

Although the NACB has granted considerable sum of money in form of loans

1. For full discussion about this indigenisation see G.W. Nwankwo (1980).
2. See G.D. Paton, "Report on Banks and Banking in Nigeria 1949 and the Stoneham Report on the Possibility of Establishing an Agricultural Bank in Nigeria," Federal Ministry of Information, Lagos.

to farming communities, it still has to do more through the opening of more offices. This is designed to bring the agricultural credit institution to the threshold of present farmers who are scattered about the rural areas of Nigeria. It is the general belief that if all the recommendations of the Financial Review Committee are carried out, more farmers would greatly benefit from the bank's financial services. The following section discusses our empirical analysis of insurance companies investment behaviour which is considered to be most crucial.

### SECTION III

#### 0.4 SPECIFICATION AND ESTIMATION OF NIGERIAN INSURANCE COMPANIES DEMAND FOR FINANCIAL ASSETS

Most empirical studies on behaviour of financial institutions in the financial markets have used the stock adjustment principle as the basic format for the specification of demand equations for any particular financial asset. The specification of Nigerian insurance companies' demand for asset equations will also be based on this principle. The fundamental assumption is that the yearly flows of each asset (since there are no data available quarterly), depend upon the difference between current and desired levels. It is also posited that the yearly flow only partially adjusts for this discrepancy. In general, the desired holdings of a security in the portfolio of any financial institution should be a function of the relative rates of interest on the various potential assets, a wealth constraint, such as the total assets or deposits if it is a saving-type institution, and certain nonprice factors such as goodwill (customer relation in case of commercial banks) or public interest. In addition, some financial institutions may be subject in addition to certain types of institutional peculiarities and legal constraints might also enter as arguments in specific demand functions.

The stock adjustment mechanism may be formalized as follows:-

$$\Delta A_t = b(A_t^* - A_{t-1}) \quad (1)$$

where  $0 < b < 1$ ,  $\Delta A_t$  stands for the flow (for a particular portfolio) into security A during time period t ( $A_t - A_{t-1}$ ),  $A_t^*$  is the desired holdings of security A, and  $A_{t-1}$  is the amount of security A held in the portfolio of the financial institution concerned at the end of last period. The desired

1. For full discussion about the history of Insurance companies in Nigeria, see G.W. Nwankwo (1980) and F. Fry (1976).

level of financial security  $A$  in the financial institution's portfolio may be expressed, in general, in line with the discussion above as follows:

$$\Delta_t^* = b_1 + b_k(ik) + b_k + nW \quad (2)$$

where  $(ik)$  stands for a set of interest rates that is relevant to the particular financial institution's decision about the choice of its portfolio composition, while  $W$  represents the level of wealth or assets. By substituting equation II into (I) and adding  $A_{t-1}$  to each side, one can arrive at the general form of the demand for financial security  $A$  by a particular financial institution. However, depending on the peculiar characteristics of any particular institution, additional variables may enter the demand for financial security equation.

Before presenting the specification and estimation of demand for financial securities by the insurance companies in Nigeria, it is instructive to explain the data used. Owing to the developing nature of Nigerian economy, it was not possible to get data from only one source. The Central Bank of Nigeria which should have been the most reliable source could not collect returns from all the insurance companies. For example in 1981 only 29 companies out of 84 sent returns.<sup>1</sup> Thus we rely on various sources, including some insurance companies themselves and the Nigerian Statistical Review and Digest of Statistics of various issues in addition to the Central Bank's publications such as the Report and Statement of Accounts and Economic and Financial Review of various years. The interest rate variables are measured in percentages.

It should be pointed out that the financial security categories for which the yearly flows are given in the various sources of our data are not differentiated according to maturity and hence the change in holdings of Federal Government Stocks, and the State Government Stocks are not broken into maturity groups. However, this does not invalidate our results since the objective of this study is to test the substitutability between different groups of securities that are assumed

1. See Central Bank Annual Report and Statement of Account, 1981 - 1984

to be homogenous in terms of maturity. In fact, it is reasonable to argue that the data on these categories of financial securities are published because of the homogenous characteristics of those financial securities. Thus our assumption that different categories of securities of financial institutions are homogenous is a reasonable approximation to reality. Based on this assumption, therefore, we are able to use in our equations rates of interest which are identical to maturity ranges as a proxy for prospective yield on each category of assets.

#### 10.4a Insurance Companies' Equations:

In general, insurance companies are usually categorized into two <sup>1</sup> owing to the nature of their functions which often determines whether they should invest on long or short-term financial securities. The first category consists of life insurance companies while the second, the general insurance. We shall attempt to estimate equations of each of the two categories, beginning with the life companies.

The Nigerian life insurance companies have shown much preference <sup>2</sup> for long-term government securities in their investment portfolio. In 1984 the percentage distribution of funds in their investment portfolio was as follows according to Table 10. Tin appendix: Federal and State Government Securities, 38.1 per cent, Stocks, Shares and bonds, 18.2 percent and Mortgages, 30.5 per cent. In 1985, the distribution stood at 42, 22.1 and 35.2 per cent respectively. We specify the demand equations for these three important financial assets which feature prominently in the investment portfolio of life insurance with the long-term interest rates to serve as explanatory variables.

It should be noted that unlike other insurance companies, the life <sup>3</sup> companies have the advantage of being able to actuarially predict the ratio of their liabilities through the use of forward commitment process in the allocation of funds among the alternative assets. Since the flow

1. The important role the life companies is playing in the saving and investment process has been well noticed in developed countries and hence a lot of consideration in recent years at both theoretical and empirical levels have been given to the study of this institution. See the innovative work of D. Patinkin (1961), American Economic Review pp. 95-116.
2. See G.W. Nwankwo (1974) "Banking and Insurance Business in Nigeria."
3. See Walford, C. "Insurance Cyclopedia. History of Life Assurance", Journal of the Institute of Actuaries, XXV and XXVI, 1889, pp.207-10

of cash available for investment is relatively stable, the life insurance companies are able to form a binding agreement to lend a specified amount of money at a given rate of interest for a certain number of years within a specified period of time. The use of the forward commitment process is generally encouraged by all the life insurance companies by their desire to maintain a fully invested position.

Since the use of forward commitment of funds is limited to investment in Federal Government Securities and mortgages in Nigeria, it is reasonable to include this in the specification of demand for investment equation in terms of the measure of its impact on the holdings of investment assets. Although it is necessary to explain the determinants of the forward commitment of funds to alternative assets, paucity of data made it impossible for us to have an estimated equation on this.

It is considered reasonable to use some measure of stock-price levels in the demand equations for other assets, since the Federal Government Stock allows a feasible investment opportunity. As an alternative to the level of stock prices, we use the GNP deflator. It is believed that either of these price level variables should be useful in explaining the portfolio response to inflation threat. This represents the fundamental difference between the model of commercial bank and other deposit-type financial institutions which do not have such opportunity to hedge against inflation. Hence the price levels did not show up in their demand for investment asset equations, as already noticed in chapter VII. The estimated demand for investment assets equations of life insurance companies are as follows:

Demand for Asset by Life Insurance Companies Equations  
In Estimated Form

$$FGS_t = a_0 + a_1 FGr_t - a_2 \frac{P}{P_t} + a_3 IA_t - FGS_{t-1} \quad 10.1$$

$$SB_t = b_0 + b_1 SBr_t - b_2 FGr_t - b_3 Mgr_t - b_4 \frac{P}{P_t} + b_5 IA_t + b_6 SB_{t-1} \quad 10.2$$

$$Mg_t = c_0 + c_1 (SBr_t - Mgr_t) + c_2 (FGr_t - Mgr_t) - c_3 LVM + c_4 IA_t \\ + c_5 CMg_{t-2} + c_6 Mg_{t-1} \quad 10.3$$

where equations 10.1 through 10.3 stand for Federal Government Stocks, State Government Stocks or bonds and Mortgage demand respectively.

$FGS_t$  = Federal Government Stocks at time  $t$

$SB_t$  = State Government stocks at time  $t$

$Mg_t$  = Mortgage at time  $t$ ,

$SB_r_t$  = rate of interest on state government bonds or stocks

$FG_r_t$  = rate of interest on Federal Government Stocks

$Mg_r_t$  = rate of interest on mortgages

$IA_t$  = Insurance Assets

$\frac{P}{P}$  = Rate of change in the GNP deflator, which is represented in the estimate by CP.

$CMG_t$  = Commitments to mortgages of the life insurance companies

$LVM_t$  = Loan-to-value ratio on mortgages ( of life insurance companies)

#### 10.4b The Results of the Estimates

The empirical results from the regression analysis based on the technique of two-stage Least Squares are summarized in Table 10. X below. Since several regressions were run, the reported results are the ones found to be most acceptable in accordance with the standard statistical criteria.

Table 10. X

Results of the Estimated Equations of Life Insurance Companies' Investment Behaviour in Nigeria

$$10.1 \quad FGS_t = -1.9559 + 0.2707FG_r_t + 0.62172CP_t + 0.45378IA_t + 0.28373FGS_{t-1}$$

(-4.3123) (3.2760) (1.1211) (2.5510) (2.7356)

$$\bar{R}^2 = 0.93$$

$$F_T = 49.0701$$

$$10.2 \quad SB_t = -0.7213 - 0.589FG_r_t - 0.21307Mg_r_t + 0.4585IA_t - 0.3405CP_t + 0.33638SB_{t-1}$$

(-2.0709) (-2.5691) (-2.001) (2.5284) (1.9374) (2.0591)

$$\bar{R}^2 = 0.96$$

$$F_T = 213.844$$

$$10.3 \quad Mg_t = 0.15769 - 0.44788(FG_r_t - Mg_r_t) + 0.23471(SB_r_t - Mg_r_t) + 0.23279CMG_t$$

(-1.3571) (-2.0721) (2.7188) (1.9214)

$$+ 0.5320IA_t + 0.36293Mg_{t-1}$$

(2.2711) (2.1812)

$$\bar{R}^2 = 0.978$$

$$DW = 1.66$$

$$FT = 208.538$$

All the three equations in the above describing the life insurance investment behaviour are quite good. The high  $R^2$ 's, and low standard error as depicted by the T-statistics in parentheses under each estimate. Our preliminary investigation showed the absence of serial correlation as measured by DW statistics but which we cannot report in the final version of this model because of the presence of lagged variables, otherwise, the final equations are close to the reality.

Equation 10.1 is the demand for Federal Government Stocks by the life insurance companies in Nigeria. The only interest rate used is the long term interest rate on Federal Government stocks and it carried the correct sign which was very significant. When other rates were used, some of the signs were not correct and some came out with low t-value. The rate of change in the GNP deflator, represented by CP, has a significant coefficient which implies that the Life Insurance companies in Nigeria have a tendency to adjust their portfolios in response to the threat of inflation. As is expected, the total asset variable ( $A_t$ ) has the correct sign and is very significant which implies that as the total assets of insurance companies increase, they tend to invest more and more in Federal Government stocks. Equation 10.2 results suggest that the State Government Stocks are substitutes for both Federal Government stocks and mortgages in the Nigerian Life Insurance portfolios. Both  $FGr_t$  and  $Mgr_t$  are significant and carry the correct sign. The GNP deflator variable, CP, also carries negative sign but nearly significant. The total asset variable has a positive sign as expected and very significant. The speed of adjustment for the State Government Stocks is about 66 per cent and is quite significant.

Equation 10.3 is the mortgage demand equation which shows that mortgages are substitutes for Federal Government Stocks and complements with

the State Government Stocks as can be seen from the signs of the interest rate differentials, which are also very significant. The mortgage commitment variable ( $CMg_t$ ) comes out with the expected positive sign but only nearly significant. The total assets of the life insurance companies ( $IA_t$ ) which is the relevant constraint variable is very significant and the speed of adjustment is very high during the first year at 23 per cent.

Going through the results, it would be seen that the overall performance of the demand equations for Nigerian Life Insurance Companies suggests that the regressions present an accurate picture of the life insurance companies investment behaviour. The substitute-complement relationships that were revealed were in accordance with a priori expectations that portfolio allocation by the financial institutions does respond to interest rate changes. This is in sharp contrast to demand for savings by households which is not responsive significantly to interest rate changes as shown in chapter 9.

#### Non-Life Insurance Companies:

There is no doubt that this category of insurance companies is also very important to the Nigerian economy in terms of their provision of short-term as well as long-term investment funds. In fact, at ₦494.3 million in 1984, the total investment assets of non-life was far greater than that of life companies (See Table 10.U) which was just ₦189.9 million. Two main investment assets for which we shall specify demand equations are the Federal Government Stocks and the shares of companies. As can be seen from table 10.U more than 36 per cent of the total investment funds was allocated to miscellaneous which includes considerable number of short-term assets. This is quite justified since the non-life companies' businesses include considerable number of short-term insurance contracts. Moreover, these companies are faced with the ever present danger of catastrophe which constantly drain down their assets. Thus, their liabilities and assets cannot be predicted with precise accuracy. Since there is element of variability in liability flow of these companies, it is reasonable to

1. See Raynes, H. E. "Insurance", London, Oxford University Press. 1960.

include the total assets as an explanatory variable in the demand for asset equations. The forward commitment process cannot be used by the non-life companies owing to the shorter duration of the insurance contract they deal with, and hence this does not enter into demand for asset equations.

The estimated equations for non-life companies are as stated in table A below.

Table A

Results of the Estimated Equations of Non-Life Insurance Companies' Investment Behaviour in Nigeria.

$$10.4 \quad FGS_t = 1.9623 + 0.21114A_r + 0.13522IA_t - 0.88139SB_r + .813FGS_{t-1}$$

$$(3.3624) \quad (2.7924) \quad (4.1436) \quad (2.3963) \quad (10.977)$$

$$\bar{R}^2 = 0.98$$

$$F\text{-Statistics} = 572.178$$

$$10.5 \quad SB_t = 1.1268 + 0.45294SB_r - 0.11779FG_r + 0.21172IA_t + 0.95433SB_{t-1}$$

$$(3.1281) \quad (4.5715) \quad (-2.4626) \quad (2.6783) \quad (15.318)$$

$$\bar{R}^2 = 0.98$$

$$F\text{-Statistics} = 729.276$$

Equation 10.4 which is the non-life insurance companies' demand for Federal Government Stocks equation clearly supports a prior view that shares and Federal Government stocks are good substitutes for each other in the non-life insurance portfolios. The demand for Federal Government stocks depends very significantly on the level of total assets just like that of demand for FGS equation of life companies.

Equation 10.5 explains the determinants of demand for shares by the non-life companies and the positive coefficient of  $SB_r$  and the negative co-efficient of  $FG_r$  clearly confirm the substitute relationship between the FGS and SB. The overall performance of the two equations is quite good apart from the serial correlation which exists in equation 10.4, but which of course can be approximated to 1.5 to be in the acceptable range. **Because** DW statistics has no meaning in equation with lagged variable, it is

not reported here.<sup>1</sup> However, since the substitutability between the FGS and the Shares was empirically established in both equations and since the D.W. of 1.4985 can safely be rounded up to become 1.5, we considered it sensible to report it like that. Moreover, the results are only tentative since this represents the first attempt at estimating the determinants of demand for investment assets by insurance companies in Nigeria.

#### SECTION IV

##### 10.5 A DYNAMIC MODEL OF THE FINANCIAL SECTOR OF NIGERIA

This study begins with the traditional financial institutions and proceeds to the examination of modern credit institutions such as commercial banks with respect to the analysis of their importance and investment behaviours. From there, we discuss the monetary policy and try to establish the relationship between the total domestic credits and external sector and in this last chapter, sections I through III have concentrated on the empirical examination of the role of other financial institutions and their investment behaviour in the Nigerian economy. In this section, it is imperative to develop a model on the Nigerian Financial Sector which will embrace all the financial institutions already discussed under one umbrella. The importance of this exercise lies in the fact that it represents the first bold attempt at investigating the working of the Nigerian financial sector in a detailed model which explicitly takes into account all sources of disturbance of the private sector's stock equilibrium. The purpose of this final analysis is to investigate whether some monetary propositions, developed and tested mainly in the context of developed countries, can be valid and useful for economies with less developed financial sectors like Nigeria with its characteristic heavy intervention by the authorities in the credit market. This analysis is a bit influenced by the work of Magee,<sup>1</sup> 1976 and that of Feige and Johannes,<sup>2</sup> 1981, as well as the framework of monetary approach to balance of payments.

1. See S.P. Magee, (1976) "The Empirical Evidence on the Monetary Approach to the Balance of Payments and Exchange Rates" in American Economic Review, 66 pp 163-170
2. See also Feige and Johannes, (1981). "Testing the causal relationship between the domestic credit and reserve components of a country's monetary base" in Journal of Macroeconomics, 3, pp. 55-76

### 10.3a Brief Theoretical Underpinnings:

The Monetary Approach to the Balance of Payments presented by the work of Frenkel and Johnson (1976) is built on a number of specific monetary assumptions, some of which may be stated as follows:-

- (i) that the exchange rates are pegged
- (ii) that the economy is in long-run full-employment equilibrium
- (iii) that the demand for money is a stable function of income
- (iv) that changes in the money supply do not affect real variables
- (v) that a country's price level and interest rate do converge in the long run on the world level because of the high elasticity of substitution between goods in international trade and highly mobile capital and
- (vi) that governments are incapable of pursuing sterilisation policies continuously.

These assumptions are really basic and represent the main pillars on which the Monetary Approach to Balance of Payments rest. There have been many critics of this approach, however, especially from the Keynesian tradition. For example, Von Whitman (1975) argued that there is not a one-to-one relation between changes in the domestic money supply and the level of reserves as assumed by the monetary tradition. In his conclusion, he expressed the view that many of the policy implications of the monetary approach to the balance of payments are largely not applicable to current problems. In his criticism on the monetary demand for money specification, Tsiang (1977) argued that only the demand for money for asset purposes should be included in the demand for money function since only the variations in the asset demand will affect the spending on goods.

As part of their efforts to respond to their critics, the proponents of monetary approach appear to concentrate on how to reconcile the different balance of payment theories and hence narrow down the problems to the issue of reconciling long and short run aspects of the approach.

1. See Von Whitman (1975) "Global Monetarism and the Monetary Approach to the Balance of Payments", Brookings Papers on Economic Activity, No. 3

2. S.G. Tsiang, (1977), "The Monetary Theoretic Foundation of the Modern Monetary Approach to Balance of Payments", Oxford Economic Papers November.

The theoretical and statistical problems which resulted from the empirical investigation of some monetary propositions seem to be due to the invalid imposition of some of the above assumptions on the short-run of a particular series of observations over a certain period of time. One of the arguments levelled against the monetary theory borders on how the theory should conform with the real life situation. It is important that any theory underlying any model is sufficiently generalised if it is to be applicable to real-world data. An abstraction from reality in order to obtain unambiguous results is in general not appropriate for any empirical analysis. On this particular ground some specifications of the monetary approach have been subjected to some criticisms as already pointed out above, especially from the Keynesians.

The proponents of monetary theory have pointed out the budget constraint imposed on any country by its balance of payments but silent on the budget constraints on all other sectors. For example, the analysis that embodies the government budget in the manner in which Christ (1968)<sup>1</sup> suggested, emphasises the influence of this constraint on the stock equilibrium of the private sector in the same way that monetary approach concerns itself with the impact of external flows on the same stock equilibrium as shown by the work of Currie (1976)<sup>2</sup>. The same thing applies to the commercial banks and the manner in which they balance their own assets and liabilities. Many economists seem to have the short-comings of using ex-post accounting identity, especially its misleading tendency. Because of this it is essential that any consideration of supply and demand with respect to volume of credit must take care of the fact that any change in the volume of credit must be accompanied by a change in some other variable or parameter in the system. Moreover, the cost of credit must be taken care of.

1. C. Christ (1968), "A simple macroeconomic model with a government budget restraint" in Journal of Political Economy, 76, pp 53-67
2. D. Currie (1976) "Some criticisms of the monetary analysis of balance of payments correction" in The Economic Journal, 86 pp.508 - 520
3. See also J.A. Frenkel, T. Gylfason and J.F. Heliwell (1980) "A Synthesis of monetary and Keynesian approaches to short-run balance of Payments theory in the Economic Journal, 90, pp. 582 - 592.

In the monetary analysis, the domestic credit is treated as an exogenous variable. As already noticed in chapter 9 where the total domestic credit was analysed as an intermediate target of monetary policy, the issue of domestic credit has two different but not necessarily interrelated facets. For example it may relate to the ultimate control of domestic credit by the monetary authorities; or to the independence of credit from the external sector. This important issue cannot be well treated in the monetary model where credit is merely derived residually from the simple identity as written below

$$M_0 = Cr + Fr \quad (10.6)$$

where  $M_0$  = Money       $Cr$  = domestic credit  
 $F_r$  = Foreign reserves

Imposing the budget constraints on both the banking and public sectors renders this point more illuminating. Thus defining the broad money in terms of the banking and public sector (the latter inclusive of the Central Bank) yields the following identity equation:

$$M_0 = (GBD + BLA + HGP - nFLB - FBG - nDDFI) + Fr \quad (10.7)$$

where

GBD is the budget deficit.

BLA = bank' credit to the private sector

HGP = holding of government securities by the private sector

nFLB = net foreign liabilities of banks

FBG = foreign borrowing by the government

nDDFI = non-deposit liabilities of Financial institutions

and  $Fr$  = foreign reserves.

In equation 10.7 above, the domestic credit expansion is shown by the terms in the bracket. Any increase in the government's foreign borrowing (FBG) would lead to an increase in total domestic credit, (Cr). Such increase would also cause an equal and offsetting change in  $Fr$ , thereby leaving

$M_0$  unchanged. Thus a change in foreign reserves tells us nothing about  $M_0$  except giving us the definition of the balance of payments as implied by equation 10.7 above, but which is still not useful in this analysis.

By replacing  $Fr$  by its components - current account (CUA), the capital account of the private and banking sectors (CAPS and NFLB respectively) and the foreign borrowing by the government (FBG) will yield the following equation:

$$M_0 = (GBD + BLA - FBG) + (CUA + CAPS) - nDDFI_s \quad 10.8.$$

In the above, the first bracket represents the total domestic credit in the economy while the second stands for the external flow of money into the domestic money stock. Of course, the non-deposit liabilities of the banking (nDDFI<sub>s</sub>) is residual item. In this model, the total domestic credit is put in a clear theoretical context and is shown to be determined by the independent decisions of three sectors - the government, the banking and the private. Thus a change in the government sector with respect to domestic credit may also lead to an automatic change in the private sector which is contrary to the situation in equation 10.7 since one cannot definitely be sure whether the two sectors are really independent. In making a decision on how much public borrowing would be needed, the government may first examine the balance of payments position. Similarly, the banks and other financial institutions may first examine their foreign liabilities position before making a decision on how much BLA to make available. One can also relate the holding of government securities by the private sector (HGP) to the capital account of the private sector (CAPS). Thus it is quite clear that this important aspect of exogeneity of the total domestic credit has been ignored by the monetary approach. In this context, the "causality" analysis represented by the work of Feige and Johannes (1981) appears to be limited in scope.

With respect to sterilisation issue, one can employ identity equation 10.8 also as a basic format of analysis. Through manipulation of the stock of government debt, (GBD), the government can neutralize the effect of external

flow of capital on the money stock in the short run. The government can also operate directly on the holding of government securities by the private sector (HGP) through the instrument of open market operations and also on the level of loans and advances granted by the banking sector (BLA) through the imposition of credit ceiling and guidelines as obtained in most developing countries in order to remove the impact of the external capital flows.

However, the correct disaggregation of the money stock identity is very related to the form in which the money supply process is analysed.

In the model building, the common way of treating the money stock by many economists is to regard it as either being determined by the demand or supply function. In the monetary approach, for instance, the stock of money is treated as being determined by a demand function while total domestic credit is regarded as policy variable and the external flows are assigned the equilibrating role.

Another method is to regard the components of money stocks as endogenous so that the money stock is treated as being residually determined. In this context, there is an implicit assumption that the money supplied is equal to the money demanded to hold by the public. Bergstrom (1976) and Goodhart, (1979) have both argued that such method also suffers the same problems associated with the use of an identity as a behavioural relationship in some of the monetarist formulations. There is, therefore, a need for disequilibrium analysis since such approach is also consistent with the nature of money as a means of payment and as being present in all market transactions.

Money is widely acceptable in all exchange transactions and because of this a disequilibrium in any other market would certainly manifest itself in the money market before any adjustment can be made. And since money may be held temporarily, especially in an uncertain economic situation, this means that individuals do not immediately adjust to the desired level, but temporarily allow their money holdings to be either above or below what they actually required. People can accept money even when they do not desire to retain it.

1. See A. Bergstrom (1976) on "Statistical Inference in Continuous Time Economic Models" North Holland, Amsterdam.
2. Also see C.A.E. Goodhart (1979) "Money in an open economy" in Ormerod P. ed., Economic Modelling, London: Heinemann Educational Books.

In the context of the above arguments, money component as expressed in the identity equation 10.3 is our main focus. However, any difference in magnitude between the desired and the actual money stock is regarded as back into the supply process at each point in time.

#### 10.5b SPECIFICATION AND ESTIMATION OF A SHORT-RUN MODEL OF NIGERIAN F. SECTOR

Using the above theoretical framework, the monetary hypothesis is being tested for Nigeria. However, since the main focus of this study is on the commercial banks and other financial institutions in Nigeria, the model is built on financial sector alone, treating the real income as exogenous. This approach has some inspiration from the work of Melitz and Sterdyniak (1978)<sup>1</sup> and that of Davidson and Keil (1981)<sup>2</sup> but has to be modified to suit the developing nature of Nigerian economy. Data availability also leave us no option. For instance, data are only available in yearly series instead of quarterly.

In Nigeria, the fiscal policy is usually motivated by development considerations and political commitment contrary to the Keynesian analysis of aggregate demand. Hence there is no other option than to treat budget deficit as exogenous.

As can be seen in Table 10.31 which shows the model, the Nigerian economy is divided into 4 major sectors, namely the public sector, which includes the Central bank of Nigeria, the banking sector, comprising of commercial banks and other financial institutions, the private sector and the foreign sector.

As can be seen from Table 10.31, the demand for real balances function is postulated in equation 10.9 with the underlying assumption that the wealth holder is only confronted with a choice between spending and holding real balances in the form of currency and deposits. In the context of Nigerian economy with less developed financial sector, this assumption seems very reasonable since private holdings of securities is still very limited. For this reason also, expected inflation is treated as the only opportunity cost.  $r_f, \dots, r_k$  are the alternative interest rates

1. See Melitz and Sterdyniak (1978) "An econometric study of the British Monetary System" in the Economic Journal, 89 ; 2 See Davidson and Keil (1981),

represented by  $dr$  which is the weighted average of the other rates on deposits.

The external components of money stock is expressed in equation 10.10 as already defined in the previous section. Since for many years Nigeria's balance of payments was always in deficit, the composite variable was, therefore negative for the greater part of the period under review. However, in order to get their logarithm defined, the negative balances were multiplied by  $-1$ . We cannot estimate two separate equations for the cumulated current account (CCUA) and net foreign liabilities of the private sector (FLPS) since in Nigeria, the bulk of private capital inflows consists of long-term capital largely associated with a few large investment projects. And since the decisions concerning these investment projects and their completion are spread over quite long periods, it is difficult to associate nFLPS with current economic conditions at least in the short-run. In equation 10.10, we include the variable for money stock,  $M_0$ , domestic price level,  $dp$ , foreign prices in domestic currency  $fp$  to measure the purchasing-power parity effect and a proxy variable  $GP$  which is used as an indicator of foreign position of the country which dictates whether the government should intervene in the financial sector or not. Such indicator can be in the flow (or stock) of foreign reserves or the flow (or stock) of the external component of money measured by nominal income. In specifying our general response function, we include such variables as explanatory arguments in the short run. We also include a variable to represent a set of exchange rate dummies (which is the weighted average of some exchange rates). In Nigeria exchange rate parity has been allowed to remain fixed for long time in relation to major currencies and only minor changes had been effected in some occasions. Since 1984, however, the Nigerian exchange rate is no longer pegged in relation to other currencies. Because of the fixed nature of Nigerian exchange rate before 1984, therefore,

exchange rates are treated as fixed with one dummy to represent the changes in the exchange rate path.

In specifying our reaction function for the authorities' foreign borrowing as expressed by equation 10.11, we devise appropriate proxy variables as follows: (a) cumulated official settlement balances (COS) defined in our model as the sum of the current account plus the private and the banking sector's capital accounts, (b) government financing requirements represented by HGP, and (c) the public borrowing from the foreign sector (FBG), which is assumed to be mainly long-term capital. It is believed that what cannot be financed domestically has to come from the foreign sector and as the government is assumed to have no alternative, but to resort to the foreign sector, interest rate variable is not included. Moreover, considering the various guarantees that are required by the lenders, the long bargaining period which usually precedes such loans and the political considerations involved, it is difficult to see the importance of interest rates. For example, in Nigeria, there had been a long argument on whether the country should get the IMF loans or not. The issue was turned into an open debate and the overwhelming arguments did not support the IMF loans with all the conditions attached with it. This is a clear evidence of political consideration. Interest rate did not feature in the debate at all.

Also included in the model for foreign borrowing of the government is the stock of foreign debt, scaled by the nominal income which provides an additional long-run effect. It should be noted that the larger the foreign debt of any country, the heavier will be the burden on the public and the lower will be the credibility of that country. Hence the inclusion of the stock of foreign debt,  $\frac{(FBG)}{Y_p}$

For the banking sector, we specify the variables which determine the supply of total domestic credit as expressed by equation 10.12. The consideration of the banking sector in a model like this needs special caution in view of the fact that there are some specialized financial institutions as already discussed earlier, which account for more than 20 per cent

1. See the West Africa Magazine of 14th October, 1985, pp. 2141.

of the total domestic credit. These specialized institutions are under the Federal Government which created them for the purposes of meeting the credit needs of certain sectors of the economy, most especially agriculture and manufacture. What makes it further complex is the fact that the Nigerian authorities not only set the prices of loans (interest rates), but also control the quantity of such loans. The authorities do this by devising a complicated system of incentives for some types of loans and credit ceilings and guidelines for others which dominates the Nigerian credit markets. The loans granted by the specialized institutions are a typical case of credit rationing, since the interest rates charged for such loans are usually lower than those of the commercial banks and other financial institutions. The hypothesis of the credit rationing, therefore, seems to be valid for the rest of the financial institutions since all of them are expected to comply with the credit guidelines often issued from time to time by the Central Bank to them including the commercial banks. Hence the caution is necessary because of this high degree of intervention in the domestic loan markets by the authorities and also because the financial market is not yet well developed which, therefore, implies that the demand for credit cannot be adequately satisfied by any alternative means.

From the supplier's side, therefore, credit has to be considered together with the ~~FGG~~ (holding of government securities by the banking sector). The portfolio composition of most financial institutions are to some extent determined by the interest rates and liquidity considerations as our estimates have shown in chapter 7 and this chapter. The reserve requirements are usually fixed by the monetary authorities depending upon the quantity of deposits and the type of loans.

In our banking sector as expressed by equation 10.12, bank deposits (DD) have been used as a proxy for banks' liabilities. Since the net foreign liabilities of the banking sector (nFLB) which are mainly deposits in foreign exchange by emigrants are very small compared with the total bank deposits and the fact that they are exogenously determined, we have no option than to eliminate them from the model

By so doing, we are able to avoid non-linearity problems in the solution of the whole system. Variable  $Q$  in the equation stands for the liquidity ratio and is used as a proxy for direct government intervention which we define as follows:

$$Q = \frac{BDCNB + HGB}{(DD + NCBC + nFLB)}$$

where BDCNB = banking sector deposits with the Central Bank of Nigeria

HGB = holding of the government securities by the banking sector

DD = banking sector deposits

NCBC = Central Bank Credit to the banking sector

nFLB = Net Foreign Liabilities of the banking sector.

The  $Q$  is regarded as a policy variable in the hands of the Nigerian monetary authorities since they can operate on both the numerator and the denominator. The price of loans represented by  $L_r$ , which is the weighted average of various types of loan rates, is treated as being exogenously determined in the context of the reasons given previously.

Equation 10.13 is an expression of demand for currency, i.e. notes and coins. It is specified as a function of interest rates on deposits since the cheque system still has a limited application in Nigeria. Therefore, it will be easy to see the process of substitution between currency and savings deposits. Also, substitutability between currency and physical goods is tested through the inclusion of the expected rate of inflation proxied by EP and the real income. (See Table 10.2)

Finally, equation 10.14 is an expression of how the rate of inflation is determined. If an economy is a closed one, in a monetary model, the tendency is to postulate the price level as a long-run function of the excess demand for money. In an open economy like the one being considered here, under the assumption of the operation of "law of one price" being held in the long-run, one would expect the domestic prices to be simultaneously equal to foreign prices. A weaker formulation will be to assume that  $FP/DP$  is equal to a constant, but not necessarily equal to unity. However,

Table 10.3.

## The Model of the Nigerian Financial Sector 1960 - 1984

$$\ln \frac{M_o}{P_t} = a_o + a_1 \ln dr_t + a_2 \ln \frac{Y}{P_t} - a_3 \ln P_t^e \quad 10.9$$

$$\ln \frac{M_{ot}}{P} = b_o + b_1 \ln dr_t + b_2 \ln \frac{Y}{P_t} - b_3 \ln P_t^e + M_o/P_{t-1} \quad 10.10$$

$$\ln WE_t = c_o + c_1 \ln M_t^d + c_2 \ln WP_t + c_3 \ln PP_t \quad 10.11$$

$$\ln WE_t = d_o + d_1 \ln M_t^d + d_2 \ln MP_t + d_3 \ln PP_t + d_4 \ln WE_{t-1} \quad 10.12$$

$$\ln GF_t = e_o + e_1 \ln COS_t + e_2 \ln ND_t \quad 10.13$$

$$\ln GF_t = f_o + f_1 \ln COS_t + f_2 \ln ND_t + f_3 \ln GF_{t-1} \quad 10.14$$

$$\ln BL_t = g_o + g_1 \ln DD_t + g_2 \ln Q_t + g_3 \ln Lr_t \quad 10.15$$

$$\ln BL_t = h_o + h_1 \ln DD_t + h_2 \ln Q_t + h_3 \ln Lr_t + h_4 \ln BL_{t-1} \quad 10.16$$

$$\ln CU_t^d = i_o + i_1 \ln YP_t + i_2 \ln dr_t + i_3 \ln P_t^e \quad 10.17$$

$$\ln CU_t^d = j_o + j_1 \ln YP_t + j_2 \ln dr_t + j_3 \ln P_t^e + j_4 \ln CU_{t-1}^d \quad 10.18$$

$$\ln P_t^e = k_o + k_1 \ln M_{ot} - k_2 \ln dr_t + k_3 \ln WP_t \quad 10.19$$

$$\ln P_t^e = l_o + l_1 \ln M_{ot} - l_2 \ln dr_t + l_3 \ln WP_t + l_4 \ln P_{t-1}^e \quad 10.20$$

Identity Equations:

$$BL + HGSBS + NOACBN = DD + nFLB + NCCBNBs. \quad 10.20$$

$$Fr = CCA + nFLPr + nFLB + GF \quad 10.21$$

$$M_o = DD + CU \quad 10.22$$

$$COS = CCA + nFLPr + nFLB \quad 10.23$$

$$GBD + NCBNBs + NOACBN = HGSBs + HGSPR + GFB + CU.$$

- Where
- HGSB = holding of Government securities by the banks and non-banks
  - NOACBN = net holding of other assets by the Central Bank of Nigeria
  - DD = total demand deposits in the banking sector
  - nFLB = net foreign liabilities of banking sector
  - NCCBNB = net credit to the banks and non-banks by the CBN
  - CCA = cumulated current accounts
  - nFLPr net foreign liabilities of the private sector
  - GBD = Stocks of Government borrowing
  - HGSBS = Holding of government securities by the banks
  - HGSPR = Holding of government securities by the private sectors

Table 10.2 contd.

CU	=	Currency in circulation
PL	=	bank loans and advances
GP	=	Public borrowing from the foreign sector
Fr	=	Foreign Reserves
Mo	=	Broad Money ( $M^d$ is the desired money stock)
COS	=	Cumulated 'Official settlements balance'
Y/p	=	Real Income
Yp	=	Potential Income
Q	=	Liquidity ratio of the banking sector
dr	=	Deposit rates
WP	=	Foreign prices in domestic currency
$P^e$	=	Expected domestic prices

owing to the fact that equilibrium is not attained instantaneously, it is considered reasonable to test three disequilibrium effects which are, (a) the purchasing-power parity effect (FP/P), (b) the disequilibrium in the money market ( $M^d/M_0$ ), and (c) the disequilibrium in the goods market, as explained by the discrepancy between the potential and actual output ( $Y_p/Y$ ) which is already defined in the appendix. The results of the estimate is presented in table 10.2a below.

Table 10.2a  
Result of the Estimation of the Short-run Model  
of Nigerian Financial Sector 1961-84.

<u>Demand for Real Balances:</u>		<u>Equation</u>	<u>Dependent Variable = <math>M_0/p</math></u>			
<u>Equilibrium Model</u>						
C	Ldr	$LY_p$	LPE	$R^2$	DW	F-Stat.
1.7231 (2.19652)	4.3496 (2.0791)	0.1248 (2.008)	-0.1354 (-5.6390)	0.97	2.009	480.668
<u>Disequilibrium Model</u>						
C	Ldr	$LY_p$	LPE	$M_0/p_{t-1}$	$R^2$	DW
2.9912 (2.5671)	15.1640 (2.3305)	0.6741 (2.5017)	-0.01662 (-1.8080)	1.0182 (17.061)	0.98	1.99
						F-Stat = 531.205

<u>Foreign Sector:</u>		<u>Equation 10.10</u>	<u>Dependent Variable LE = (CJA + nPLPS)</u>			
<u>Equilibrium Model</u>						
C	$M^d$	WP	PP	$R^2$	DW	F-Stat=346.499
0.77972 (4.4885)	0.993 (1.6101)	0.6606 (7.0672)	0.8754 (4.3793)	0.98	2.294	
<u>Disequilibrium Model</u>						
C	$M^d$	WP	PP	$WE_{t-1}$	$R^2$	DW
0.39277 (2.8156)	0.4808 (1.7304)	-0.35434 (-2.0797)	0.6501 (2.2851)	0.4011 (2.5460)	0.98	2.477
						F-Stat. = 332.729

<u>Foreign Borrowing by the Government:</u>		<u>Equation 10.11</u>	<u>Dependent Variable GF</u>			
<u>Equilibrium Model</u>						

C	COS	GF/Yp=ND	R <sup>2</sup>	DW	F-stat.
1.5220	3.3993	8.0847			
(1.6921)	(6.4085)	(2.8794)	0.66	1.54	20.742

Disequilibrium

C	COS	ND	GF <sub>t-1</sub>	R <sup>2</sup>	DW	F-Stat.
0.38784	0.52167	0.7704	0.96411			
(1.6092)	(1.8184)	(2.37856)	(5.6540)	0.90	2.12	55.655

Equilibrium

<u>Banking Sector</u>		<u>Equation 10.12</u>		<u>Dependent Variable = BL</u>		
C	DD	Q	Ir	R <sup>2</sup>	DW	F-Stat.
-2.0884	0.7512	1.7399	0.75129			
(-2.1350)	(2.1079)	(2.3896)	(6.0776)	0.96	1.82	159.645

Disequilibrium

C	DD	Q	Ir	BL <sub>t-1</sub>	R <sup>2</sup>	DW	F-Stat.
-0.17518	0.3472	0.29257	0.7435	0.6773			
(-1.9492)	(2.9481)	(5.6750)	(2.2961)	(6.1834)	0.99	1.93	805.228

Demand for Currency: Equation 10.13 Dependent Variable = CU<sup>d</sup>

Equilibrium

C	Yp	dr	P <sup>e</sup>	R <sup>2</sup>	DW	F-Stat.
2.9511	0.8498	0.11013	0.20516			
(12.8958)	(4.2872)	(2.6665)	(7.8550)	0.82	1.54	30.55

Disequilibrium

C	Yp	dr	P <sup>e</sup>	CU <sup>d</sup> <sub>t-1</sub>	R <sup>2</sup>	DW	F-Stat.
0.78931	0.2092	0.3927	-0.8415	0.7801			
(2.1058)	(2.1640)	(1.61764)	(-1.9047)	(7.1679)	0.86	1.92	24.72

The Rate of Inflation Equation 10.14 Dependent Variable P<sup>e</sup>

Equilibrium

C	Mo	dr	Wp	$R^2$	DW	F-stat.
2.3035 (1.2839)	1.1835 (3.2366)	-2.9258 (1.3717)	0.98367 (2.0154)	0.95	1.88	76.49

## Disequilibrium

C	Mo	dr	Wp	$P_{t-1}^e$	$R^2$	DW	F-Stat.
-0.11528 (-1.9263)	0.55530 (5.2505)	0.74928 (1.7266)	0.3837 (2.7640)		0.98	1.46	334.127

The above model was estimated using the yearly average data to take care of seasonality and covering the period 1961 to 1984. All the equations were estimated by the standard OLS method and since several regressions were run, the reported results are the ones found to be most acceptable. Judged by standard statistical criteria, the fitted equations of the model generally performed well. In all cases, except the equilibrium form of equation 10.11, the coefficients of determination showed that more than 80 per cent of the variation in the dependent variables were explained by variations in the explanatory variables.

In equation 10.9, all the variables have the correct sign and very significant. The significance of the rate of interest clearly establishes that there is element of substitution between money and saving deposits in Nigeria. While in the short run, the expected rate of inflation ( $P^e$ ) is very significant in the demand for real balances model, in the long-run it is not.

With respect to the foreign sector, the results of equation 10.10 clearly confirms the role of the money market in influencing the balance of payments both in the long run and in the short-run. Other variables such as foreign rate of inflation, ( $Wp$ ) and the purchasing-power parity (PP) are also significant. Because the inclusion of domestic rate of inflation rendered the model unacceptable since most of the variables became not significant, and suffered from multicollinearity, we had no option then to drop it. Also tested was the dummy variable for the civil war year in Nigeria but have to be dropped also

since it was not only insignificant but also rendered the model quite unacceptable by any statistical standard.

The results of equation 10.13 show that the real income has both a short- and long term influence on the demand for currency in Nigeria. Both the expected rate of inflation and interate rate variables are very significant in the short-run but only significant at 5 per cent level with a one-tailed test which seems to suggest that in the Nigerian economy, people's expectation about inflation or interest rates is non-static. In all the equations, the dynamic response to changes in all the dependent variables has been suggested and confirmed by the results as evidenced by low standard error measured by t-statistics which are greater than 2 as can be seen in parentheses under each estimate.

Although, this result should be regarded as tentative, the overall performance of the model is quite good. The high  $R^2$ , the low ratios of standard error measured by t-statistics, and the lack of significant serial correlation all suggest that the estimated equations are close approximations to real-world situation. The earlier work on demand for money in Nigeria by Teriba (1974) is clearly confirmed by this result. with respect to the equation for demand for currency and demand for real balances.

#### 10.5d CONCLUSIONS

In our short-run model of the Nigerian financial sector, we have tried to provide a framework for a consistent test of monetary approach to balance of payments. We have also tried to establish a relationship between the money market and the balance of payments.

The tentative implication of our results is that the authorities can finance the budget deficits if they so choose and if they have the ability to do so without too much reliance on domestic banking sector. Now that the government revenue from oil has fallen as a result of fall in the price of oil, the inflow of foreign credit can be encouraged by the government only if such will be primarily used to expand the productive capacity of the country and not for consumption purposes.

1. See O. Teriba (1974) "The Demand for Money in Nigeria Economy" Some methodological Issues and Further Evidence: Nigerian Journal of Social Studies, vol. 16, No. 1 March.

It should be stated, however, that a straightforward generalisation of the above results would be risky, the more so because this represents the first empirical work on this issue using the Nigerian data. The framework of Nigerian financial sector is likely to be similar to that of other developing countries or some small European countries since in those economies, like Nigeria, the authorities intervene very heavily in the credit market. There is no doubt that through our model, it has been demonstrated that a valid test of the monetary approach is quite possible and useful for monetary policies.

## SUMMARY AND CONCLUSIONS OF THE STUDY

## SUMMARY AND CONCLUSIONS

The theoretical foundations of this study are that the financial institutions are very important for the growth and development of Nigeria and any nation and that their growth and roles in the economy are associated with the level of economic activities, and that in the provision of credit in Nigeria in the past, the unorganized financial institutions played a very significant role, in view of the alleged discrimination against the indigenous customers by the foreign banks in the allocation of loans.

As the survey of the literature indicates, an emerging consensus is that financial development facilitates real growth and that financial underdevelopment constrains the growth process. Of great significance is the thesis that financial development matters for real growth is based on the measurable increase in financial assets associated with a real increase in GNP and tangible wealth for some countries over time and across countries. An examination of the growth of commercial banks and other financial institutions as Nigerian economy develops also shows a significant association.

The most important function of all the financial institutions in any economy is to mobilise savings from the surplus sectors and lend to deficit sectors, and the extent to which this function is effectively discharged mirrors the efficiency of these institutions. Since the commercial banks are easily the most appropriate institutional vehicle through which savings can be directed from the less essential expenditures to productive investment, our study naturally starts from the development of banking institutions in Nigeria.

Starting with the unorganized institutions in Nigeria, survey of literature indicates that in most developing countries, these institutions have played a great role in providing credit not only to the rural agricultural communities, but also to the small businessmen who could not get loans from banks because of their inability to provide collateral securities.

One of the indigenous banks, Wema Bank, developed from an unorganized credit institution.

Many indigenous banks that were established between 1940s and 1950s were killed by the competition from the foreign banks in addition to other factors mentioned in the Paton Commission Report.<sup>1</sup> One important reason for the banking debacle witnessed in Nigeria was the absence of the Central Bank to act as a lender of last resort. The West African Currency Board could not prevent any bank failure since its activities were limited to the maintenance of the £WACB in strict parity with the British pound sterling. Our estimates have shown that under this board, money supply was a function of export trade, colonial government expenditure, the level of economic activities in Britain and the world trade situation.

Nigeria, like other member countries, decided to opt out of the Board ever before her independence in 1960. Since the establishment of the Central Bank of Nigeria in 1959, there has not been any record of bank failure, as a mark of importance of its existence. However, one other important reason for bank success is the government financial support to the indigenous banks each time they were in financial crisis. In fact all the banks in Nigeria (27), are more or less with substantial government participation following the indigenisation of banking of 1976.

The Nigerian monetary authorities have always favour low interest rate policy which is designed to enable investors to obtain loans at considerably low cost. However, inspite of this low, but relatively stable interest rates on savings, the monetary savings in Nigeria has been shown by our empirical investigation to be increasing even in those years when the real rate was negative. The logical explanation for this might be adduced to the relative stability of the value of monetary assets as a result of prolonged stability of consumer prices between 1960 and 1967. However, during the high price inflation of 1970s, there was a considerable increase in the monetary savings, but this might be explained in terms of the growing prosperity of Nigerian economy as a result of oil boom.

1. See P.D. Paton Commission's Report of 1948.

In fact during 1970s, almost all the countries in the world experienced negative real rate of interest on savings. For example, our computation of real interest rates for selected countries including Nigeria shows that in 1974, all the countries had negative real rate of interest in varying magnitudes.

On the empirical investigations on the determinants of household savings in Nigeria, it has been established that, like Gupta's (1970) work on India, the interest rate variations have a significant effect on personal savings. Other variables such as number of bank offices, income, price levels and government expenditures are very important determinants of household as well as national savings not only in Nigeria but also in most of our selected countries.

In the light of our findings and our diagrammatic exposition of the level of household savings and real rate of interest in Nigeria, based on the 'financial repression hypothesis', it is clear that this hypothesis might be relevant to Nigeria. One can, however, state that real interest rate is not the only major determinants of growth of household savings in Nigeria as already demonstrated by the results of our estimates. It is our belief that the proponents of financial repression hypothesis have made a sweeping generalization across all the developing countries without considering their different social and economic characteristics as well as ideological beliefs which can affect the inflow of capital and relative standards of their financial developments. The limited number of cases on which they based their conclusions can certainly not be the basis of generalization for all the developing countries. However, their innovative work on the issue of the importance of real rate of interest on domestic saving is fully supported by our empirical findings on Nigerian domestic savings, using the mean of the real deposit rates of interest on all financial claims, instead of the real deposit rate of interest used in McKinnon's work.

Our findings on the effect of interest rate variations on total domestic credit show insignificant effect on the volume of domestic credit. Our

results of the TDC model bring into the limelight the importance of credit in Nigerian economy and its effects on the final targets of monetary policy. The use of selective credit controls by the monetary authorities seems to be justified since variations in interest rate have no significant effect on the demand for loans. Our empirical investigation on the external targets of monetary policy also seems to validate the monetary approach to balance of payments which holds that there is a significant relationship between the trade balance and total domestic credit on the one hand and between the foreign exchange rate variations and domestic money supply ( $M_1$ ) on the other. The good performance of  $M_1$  as an intermediate variable when the exchange rate is the target, and its bad performance relative to both the  $M_2$  and the MB when the GDP is the target also suggests that the most appropriate intermediate targets of monetary policy for internal and external purpose must not necessarily be the same.

The significant relationship revealed by our empirical investigation of the monetary policy and capital inflow implies that the monetary authorities can, if they choose, use effectively domestic interest rate variations to encourage the inflow of foreign capital and discourage the flight of capital out of the country.

Our study of other financial institutions in Nigeria shows that in spite of many obstacles, such as bad management, government regulations, shortage of competent personnel, and the inability or unwillingness on the part of many of them to take initiatives, they have all experienced considerable growth in their operations in varying magnitudes and have contributed immensely to the economic development of Nigeria through provision of medium and long-term loans for development projects. The insurance companies, the Pension Funds, the Federal Mortgage Bank and Post Office Savings Bank, are very notable in the area of provision of medium and long-term loans and to a small extent, the merchant banks. However, their performances are still below expectations but can be improved by accepting all the various recommendations made by the Financial System Review Committee. The same goes with the Nigerian specialized

institutions such as the Nigerian Bank for Commerce and Industry, the Nigerian Agricultural and Cooperative Bank and the Nigerian Industrial Development Banks.

The principles under which these specialized institutions operate need to be reviewed in the light of the economic circumstances of the country, in order to enable them to be able to help the local industrialists and businessmen in the private sector where they have so far made little impact.

Finally, our short-run model of Nigerian financial sector presents us with an opportunity to have a consistent test of monetary approach to balance of payments. We have tried to establish a relationship between the money market and the balance of payments.

The conclusion which easily emerges from our results is that the authorities can finance the budget deficits if they so choose and if they have the ability to do so without too much reliance on domestic banking sector. Now that the government revenues from oil have fallen sharply, owing to the world oil market situation, the inflow of foreign capital can be encouraged by the government only if such will be primarily used to expand the productive capacity of the country and not for consumption purposes.

In general, the study have shown that although commercial bank deposits been growing steadily over the years, the magnitude of the growth has been reduced by the establishment of other financial institutions. However, banks are still very dominant in the national savings market, controlling 85.6 per cent of the total deposits in 1984. Unfortunately, inspite of indigenisation of banking, there is still little change in the nature of credit they provide to the economy. They still prefer to give short-term credit rather than long-term. The conclusion that emerges from the model of their investment behaviour is that variation in the quantity of loans

be in response to variation in loan rates, but that there are other variables much stronger than profit motives. We have also established empirically that credit rationing exists in the commercial bank loan market in Nigeria.

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  - All the Insurance Companies
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Table 10. A

**THE NIGERIAN NATIONAL PROVIDENT FUND: 1961 - 1984. GROWTH RATE  
OF EMPLOYERS AND EMPLOYEES IN THE SCHEME AND INVESTMENT  
(In Million Naira)**

	No. of Employers	% Change	Nb of Employees	% Change	Amount of Of Contribution N	% Change	Amount Of Investment N	% Change
1	1260	-	53000	-	49.9	-	50.5	-
2	5011	291.7	63501	0.8	50.1	0.4	52.6	4.6
3	5200	3.8	63849	0.5	51.5	2.8	53.9	2.5
4	6149	18.2	63700	-0.2	58.2	11.5	54.1	0.3
5	6339	-10.8	64301	0.9	60.5	0.04	60.1	17.0
6	5917	-2.0	65901	3.5	60.9	0.06	61.9	3.0
7	5900	-0.3	66722	3.4	63.0	3.4	65.3	5.5
8	6020	2.0	70022	4.9	63.5	0.07	66.4	2.8
9	6101	1.3	79114	1.7	64.1	0.09	70.9	6.9
10	6290	3.1	82212	3.6	69.8	8.9	82.7	16.6
11	7060	12.2	965230	17.6	98.1	40.5	104.1	25.9
12	8336	18.1	965236	0.006	103.9	5.9	114.0	9.5
13	9059	8.7	1130301	17.1	122.4	17.8	130.5	14.0
14	7584	-16.3	1157331	2.4	144.9	18.4	61.6	23.8
15	7968	5.1	1304307	12.7	160.5	12.7	200.4	24.0
16	8478	6.4	1314307	7.7	179.2	11.6	210.5	5.0
17	7880	-7.0	1624294	23.6	180.1	0.5	232.8	10.6
18	8478	7.5	1614294	-0.6	267.7	48.6	339.8	45.9
19	9060	6.8	1311658	-18.7	290.8	8.6	401.5	18.1
20	9051	-0.09	1368658	4.3	295.1	2.8	550.1	37.0
21	8090	-10.6	1456058	6.4	330.4	12.1	590.6	7.4
22	9001	11.3	1868658	28.3	399.5	20.9	601.8	1.9
23	8994	-0.08	1931791	3.4	459.4	15.0	711.8	18.3
24	9068	0.18	1931791	-	490.0	6.6	820.1	15.2
25		14.3		4.9		15.1		11.5

Sources: National Provident Fund Office, Lagos and CBN Annual Report and Statement of Accounts of various years.

Table 10.B Appendix B  
**THE GROWTH OF DEPOSITS AND TOTAL ASSETS OF MORTGAGE BANKS**

1968 - 1985 (In Million Naira)

Year End	Amount of Deposits Nm.	Deposit Growth Rates	Total Assets Nm.	Asset Growth Rates
1968	1.8	-	169.9	-
1969	2.0	11.1	170.8	0.5
1970	2.6	30.0	173.8	1.7
1971	4.0	53.8	176.1	1.3
1972	5.3	32.5	176.8	0.4
1973	5.5	3.8	178.1	0.7
1974	7.3	32.7	180.5	1.3
1975	10.4	42.5	181.2	0.4
1976	14.4	38.5	183.4	1.2
1977	16.8	16.7	185.2	0.9
1978	19.2	14.3	187.9	1.4
1979	27.9	45.3	197.2	4.9
1980	40.7	45.9	334.8	69.8
1981	56.0	37.6	428.0	27.8
1982	75.4	17.8	466.1	8.9
1983	89.9	19.2	512.0	9.8
1984	116.5	29.6	586.0	14.4
1985	113.9	-2.2	586.0	-

Source: Compiled from the Central Bank of Nigeria Annual Report and Statements of Account of various years.

Table 10C

THE GROWTH IN DEPOSITS, TOTAL ASSETS, TOTAL AND MORTGAGE LOANS OF NIGERIAN

BUILDING SOCIETIES, 1955 - 1962

(In Thousand Naira)

Year	Deposits N	Total Assets N	Total Mortgage Issued N	Mortgage/ Deposit Ratio	Mortgage/ Assets Ratio
1955	1500	13116	4800	3.2	0.036
1956	6072	127022	33454	5.3	0.025
1957	6324	173190	36370	5.7	0.021
1958	5634	206810	51682	9.2	0.025
1959	17400	119952	43320	2.5	9.036
1960	48670	115830	403320	8.3	0.35
1961	49480	1651011	410011	8.3	0.025
1962	50240	169257	429981	8.5	2.5

Source: Nigerian Statistical Abstract, various years.

**Table 10.D**  
**FEDERAL MORTGAGE BANK'S LOAN AND INVESTMENTS 1963 - 1985**

**(In Million Naira)**

Period	Total Loans and Investment	Loans and Mortgage Advance	Percentage of Total	Investment	% of Total
1963	0.75	0.6	80	0.15	20
1964	1.2	0.8	66	0.4	34
1965	1.7	1.0	58.8	0.7	41.2
1966	1.2	1	83.3	0.2	16.7
1967	1.0	0.8	80.0	0.2	20.0
1968	1.5	0.7	46.6	0.8	53.4
1969	2.8	2.1	75.0	0.7	25.0
1970	3.4	2.4	70.6	1.0	29.4
1971	5.0	3.5	70.0	1.5	30.0
1972	11.8	10.4	88.1	1.4	11.9
1973	15.8	14.2	89.9	1.6	10.1
1974	21.8	20.8	95.4	1.0	4.6
1975	33.9	32.1	94.7	1.8	5.3
1976	52.2	50.2	96.2	2.0	3.8
1977	84.5	83.5	98.8	1.0	1.2
1978	112.1	100.1	89.3	12.0	10.7
1979	185.6	144.6	77.9	41.0	22.1
1980	300.6	207.0	69.1	93.0	30.9
1981	281.0	274.9	90.4	27.0	9.6
1982	423.7	327.0	77.2	96.7	22.8
1983	445.7	360.7	80.9	85.0	19.1
1984	7.9	7.9	100.0	-	-
1985	14.2	13.2	93.0	1.0	7.0

\* The Federal Mortgage Bank was undergoing reorganization and hence information by its activities in 1984 and 1985 was scanty.

Source: Compiled from the Central Bank of Nigeria Annual Report and Statement of Accounts of various years as well as figures obtained from one of the bank's Officials for 1984 and 1985.

Table 10.E

COMPARISON OF FINANCIAL INSTITUTIONS IN NIGERIA IN TERMS OF VOLUNTARY SAVINGS 1960 - 1985 (In Million Naira)

Com. Bank Time Dep. Nm.	% of total	M. Bank Time Dep. Nm.	% of total	Post Office Savings	% of Total	Building Societies Savings	% of total	Bonds Premium Savings Cert.	% of total	Total Savings
68.5	85.2	3.5	4.3	6.4	8	1	1.25	1.0	1.25	80.4
76.9	89.5	1.3	1.5	6.7	7.8	0.5	0.6	0.5	0.6	85.9
83.2	91.0	1.0	1.1	6.2	6.8	0.5	0.55	0.5	0.55	91.4
94.2	85.9	4.9	4.5	6.0	5.5	2.5	2.3	2.0	1.8	109.6
114.8	86.3	5.8	4.4	5.9	4.4	2.6	2.0	3.9	2.9	133.0
153.4	87.6	7.9	4.5	4.8	2.7	4.8	2.7	4.1	2.5	175.0
190.3	92.2	8.1	3.9	4.5	2.2	4.2	2.0	2.2	1.1	206.4
161.2	98.9	7.5	4.1	4.8	2.6	5.4	3.0	3.0	1.4	181.4
201.6	92.6	6.9	2.8	4.9	2.0	4.5	1.9	1.5	0.7	241.4
265.4	94.4	6.7	2.4	5.1	1.8	2.8	0.9	1.2	0.5	281.2
396.6	95.8	6.8	1.6	5.1	1.9	2.8	0.6	0.5	0.4	411.8
441.6	95.7	7.2	1.6	4.6	0.9	6.6	1.4	1.2	0.4	461.2
539.1	95.2	10.8	1.9	4.3	0.7	10.1	1.8	2.2	0.4	566.5
685.5	95.2	17.1	2.4	4.5	0.6	10.6	1.5	2.5	0.3	720.2
1074.8	96.3	22.0	1.9	4.7	0.4	12.8	1.1	2.8	0.3	1137.1
1723.0	94.8	63.4	3.5	8.1	0.4	18.8	1.0	3.1	0.3	1816.4
2154.0	95.5	69.1	3.1	6.9	0.3	22.1	0.9	3.2	0.2	2255.3
2465.4	95.0	82.4	3.2	8.0	0.3	35.2	1.3	4.0	0.2	2595.0
2843.0	94.5	110.7	3.7	8.1	0.3	42.8	1.4	4.2	0.1	3009.7
3981.6	95.7	111.4	2.7	7.7	0.2	55.8	1.3	4.8	0.1	4160.2
5470.1	94.1	219.7	3.8	7.3	0.1	75.1	1.3	5.0	0.08	5769.9
6366.3	93.3	328.0	4.8	5.8	0.08	114.4	1.5	5.2	0.06	6819.7
7358.2	91.4	522.6	6.5	4.8	0.05	158.9	2.0	8.1	0.01	8052.6
8618.4	91.1	631.1	6.3	5.0	0.05	175.8	1.9	9.5	0.1	9439.8
8956.8	89.9	872.9	8.7	7.3	0.07	116.5	1.2	0.1	0.05	9953.6
9994.9	88.7	1145.1	10.2	8.1	0.07	113.9	1.01	0.1	0.02	11262.1

Source: Compiled from the Central Bank of Nigeria Annual Report and Statement of Accounts of various years.

The above figures represent monthly averages.

Table 10.F

## OIL EXPORT EARNINGS OF NIGERIA

1958 - 1984

(In Million ₦)

Period	Volume of Exports In Million Barrels	% Growth Rate	Value of Exports in Million Naira	% Growth Rate
1958	1.8	-	1.8	-
1959	3.9	116.7	5.2	188.9
1960	6.2	59.0	8.4	61.5
1961	16.5	166.1	22.6	169.0
1962	24.7	49.7	34.4	52.2
1963	27.7	12.1	40.4	17.4
1964	43.4	56.7	64.0	58.4
1965	96.9	123.3	136.2	112.8
1966	139.5	44.9	184.0	35.1
1967	109.3	-21.6	142.0	- 22.8
1968	52.1	-52.3	77.6	- 45.3
1969	197.2	278.5	301.2	293.3
1970	383.4	94.4	509.6	69.2
1971	542.5	41.5	1053.0	106.6
1972	651.0	20.0	1176.2	11.7
1973	723.3	11.1	1893.5	61.0
1974	795.7	10.0	5365.7	236.2
1975	627.8	-21.1	4565.1	- 14.9
1976	736.8	17.4	6321.7	38.5
1977	744.4	1.0	7072.8	11.9
1978	667.4	-10.3	5401.6	-23.6
1979	812.7	21.8	10166.8	88.2
1980	701.3	-13.7	13523.0	33.0
1981	458.2	-34.7	10280.3	- 24.0
1982	452.1	- 1.3	8292.0	- 19.3
1983	456.0	0.8	8527.7	2.8
1984	470.2	9.1	9665.8	13.3

Sources: CBN Economic and Financial Review of various years.

**Table 10.6**  
**THE STRUCTURE OF HOLDINGS OF OUTSTANDING TREASURY CERTIFICATES**  
**(In Percentages)**  
**1969 - 1985**

Year	Total Outstanding (In Million Naira)	Central Bank	Commercial Banks	Acceptance Houses	Federal Government	Others
1969	1.25	0.01	98.1	-	-	1.9
1970	2.52	5.4	90.9	-	-	3.8
1971	3.05	0.04	87.0	1.4	9.2	0.9
1972	3.4	0.04	69.1	1.1	29.3	0.4
1973	3.4	2.0	81.2	1.6	14.4	0.8
1974	3.4	1.2	87.0	-	7.7	1.0
1975	3.3	0.9	93.8	-	4.0	0.6
1976	2.26	1.0	89.9	-	-	7.9
1977	10250.0	9.0	89.1	-	-	1.0
1978	16600.0	48.3	48.0	0.2	-	3.5
1979	2310.0	46.4	36.2	0.7	-	16.7
1980	2727.6	58.3	30.6	0.7	-	10.4
1981	2307.6	48.2	37.1	0.8	-	13.9
1982	1797.0	46.8	41.7	0.6	-	10.9
1983	2201.2	48	41	0.7	-	10.3
1984	5115.7	48.1	40.2	0.7	-	11.0
1985	7081.1	49.2	40.0	0.6	-	10.2

Source: Computed from the Central Bank of Nigeria Annual Report and Statement of Accounts of various years.

Table 10. H

THE STRUCTURE OF HOLDINGS OF OUTSTANDING TREASURY BILLS  
(In Percentages)

1961 - 1985

Year	Total Outstanding (Million Naira) Nm	Central Bank %	C-11 Money Fund %	Commercial Banks %	Federal And State Governments %	Others %
1961	0.31	15.8	=	52.1	-	32.0
1962	0.52	20.8	-	36.0	-	43.2
1963	0.56	21.7	9.4	18.8	9.3	40.3
1964	0.75	12.9	6.0	24.1	23.2	33.8
1965	0.88	18.4	6.3	28.1	15.3	31.7
1966	1.13	23.7	2.4	26.5	14.0	33.4
1967	1.74	42.7	2.2	26.9	12.7	15.5
1968	2.4	7.2	2.4	76.1	2.8	11.5
1969	3.35	4.4	2.0	70.0	3.5	20.0
1970	5.31	11.4	2.9	56.4	6.2	23.0
1971	7.34	24.5	1.7	32.4	22.1	19.4
1972	7.4	6.9	1.8	27.8	46.8	16.6
1973	7.4	11.5	2.2	38.9	30.9	17.2
1974	7.4	2.5	1.7	62.2	16.3	16.5
1975	7.4	0.8	--	81.4	3.0	13.3
1976	7.4	0.8	--	80.3	1.9	15.1
1977	9.1	5.4	--	71.4	2.0	19.4
1978	19.8	15.1	--	65.1	--	19.8
1979	110.1	20.2	--	68.0	--	11.8
1980	212.5	40.2	--	51.1	--	8.7
1981	2150.8	38.6	--	35.5	--	25.9
1982	1797.0	46.8	--	41.7	--	11.5
1983	2245.0	47.0	--	48.2	--	4.8
1984	13858.0	33.8	--	46.8	--	19.4
1985	14976.0	28.5	--	53.3	--	24.2

Source: Calculated from Central Bank of Nigeria Annual Report and Statement of Accounts of various years.

Table 10.I

APPENDIX I

THE STRUCTURE OF HOLDINGS OF OUTSTANDING TREASURY BILLS  
(In Percentages)

1961 - 1985

Year	Total Outstanding (Million Naira) Nm	Central Bank %	Call Money Fund %	Commercial Banks %	Federal And State Governments %	Others %
1961	0.31	15.8	=	52.1	-	32.0
1962	0.52	20.8	-	36.0	-	43.0
1963	0.56	21.7	9.4	18.8	9.3	40.3
1964	0.75	12.9	6.0	24.1	23.2	33.8
1965	0.88	18.4	6.3	28.1	15.3	31.7
1966	1.13	23.7	2.4	26.5	14.0	33.4
1967	1.74	42.7	2.2	26.9	12.7	15.5
1968	2.4	7.2	2.4	76.1	2.8	11.5
1969	3.35	4.4	2.0	70.0	3.5	20.0
1970	5.31	11.4	2.9	56.4	6.2	23.0
1971	7.34	24.5	1.7	32.4	22.1	19.1
1972	7.4	6.9	1.8	27.8	46.8	16.6
1973	7.4	11.5	2.2	38.9	30.9	17.0
1974	7.4	2.5	1.7	62.2	16.3	16.5
1975	7.4	0.8	--	81.4	3.0	13.7
1976	7.4	0.8	--	80.3	1.9	15.1
1977	9.1	5.4	--	71.4	2.0	19.1
1978	19.8	15.1	--	65.1	--	19.8
1979	110.1	20.2	--	68.0	--	11.8
1980	212.5	10.2	--	51.1	--	8.7
1981	2150.8	38.6	--	35.5	--	25.9
1982	1797.0	46.8	--	41.7	--	11.5
1983	2245.0	17.0	--	48.2	--	4.9
1984	13858.0	33.8	--	45.8	--	19.1
1985	14976.0	28.5	--	53.3	--	24.0

Source: Calculated from Central Bank of Nigeria Annual Report and Statement of Accounts of various years.

Table 10.3

PERCENTAGE DISTRIBUTION OF NUMBERS OF TRANSACTIONS AT LIGOR STOCK  
EXCHANGE 1961 - 1985

Year	Government Securities No.	%	Industrial Securities No.	%	Total
1961	92	27.5	242	72.5	334
1962	175	25.2	520	74.8	695
1963	206	41.6	415	58.4	711
1964	404	41.7	581	59.0	985
1965	391	38.4	627	61.6	1018
1966	501	45.7	595	54.3	1096
1967	336	44.0	427	56.0	768
1968	286	44.3	360	55.7	646
1969	307	55.5	246	44.5	553
1970	303	47.8	331	52.2	634
1971	101	1.1	751	7.6	952
1972	258	28.7	640	71.3	898
1973	232	34.4	537	65.6	819
1974	256	8.4	2807	91.7	3063
1975	193	27.8	501	72.2	694
1976	321	31.6	696	68.4	1017
1977	337	20.4	1314	79.6	1651
1978	243	9.8	2230	90.2	2473
1979	124	3.8	3098	96.2	3228
1980	316	4.4	6924	95.6	7140
1981	120	1.2	10080	98.8	10200
1982	184	1.8	9830	98.2	10014
1983	188	1.6	11737	98.4	11925
1984	194	1.1	17250	98.9	17444
1985	314	1.3	23232	98.7	23546

Source: Central Bank of Nigeria Annual Report and Statement of Accounts of various years.

Table 10.K

THE OWNERSHIP AND VALUE OF TRANSACTIONS AT NIGERIAN STOCK EXCHANGE  
1961 - 1985 (In Million Naira)

Year	Government Securities Nm.	% of Total Value	Industrial Securities Nm.	% of Total Value	Total Value of All Securities
1961	1.42	93.4	0.1	6.6	1.52
1962	4.27	90.8	0.33	7.0	4.56
1963	9.77	97.8	0.65	6.2	10.4
1964	11.82	81.5	0.2	15.5	14.0
1965	14.4	90.7	1.5	9.3	15.86
1966	15.2	90.9	1.2	7.1	16.4
1967	10.1	96.9	0.3	3.1	12.5
1968	12.58	93.4	0.0	1.6	12.8
1969	16.2	96.9	0.18	1.1	16.6
1970	16.4	98.6	0.24	1.4	16.67
1971	16.3	90.3	1.75	9.7	18.1
1972	26.2	96.4	0.98	3.6	27.2
1973	91.8	90.4	0.53	0.6	90.4
1974	48.4	97.4	1.3	2.6	49.6
1975	62.8	98.6	0.9	1.4	63.7
1976	111.3	99.5	0.6	0.5	111.8
1977	178.8	99.3	1.2	0.7	180.0
1978	187.2	98.7	0.5	1.3	189.7
1979	249.6	98.1	4.8	1.9	254.4
1980	380.4	97.3	8.4	2.2	388.8
1981	298.8	98.0	6.0	2.0	304.8
1982	207.0	96.3	8.0	3.7	215.0
1983	391.4	98.4	6.3	1.6	397.7
1984	241.0	93.9	15.7	6.1	256.7
1985	295.3	92.7	23.2	7.3	318.5

Source: Computed from the Central Bank of Nigerian Annual Report and Statement of Accounts of various years,

Table 10.1.

APPENDIX I

AGGREGATE SOURCES OF FUNDS OF ALL SPECIALIZED INSTITUTIONS IN NIGERIA, 1960 - 1966  
(in Million Naira)

Category	1960		1961		1962		1963		1964		1965		1966	
	Amount N	% of Total												
Grant	41.2	62.2	41.4	55.1	43.0	50.5	45.2	48.3	48.1	43.6	51.2	42.7	56.6	43.3
Share Capital (paid-up)	5.0	7.6	5.4	7.2	6.4	7.5	6.8	7.2	15.0	13.6	14.9	12.5	14.9	11.4
Reserves	1.6	2.4	1.4	1.9	1.6	1.9	2.0	2.1	3.6	3.2	5.0	4.2	4.8	3.7
Loan Capital	18.2	27.5	26.4	35.1	33.2	39.1	38.6	41.2	42.0	38.2	46.8	39.1	52.0	39.8
Deposits	0.2	0.3	0.6	0.7	0.8	1.0	1.2	1.2	1.4	1.4	1.8	1.5	2.2	1.8
Total	66.2	100	75.2	100	85	100	93.8	100	110.1	100	119.7	100	130.5	100

Sources: CBN Annual Report and Statements of Accounts of various years

Table 10.2

APPENDIX 10.M

LOANS & ADVANCES BY THE SPECIALIZED FINANCIAL INSTITUTIONS IN  
NIGERIA 1960 - 1966 (In Million Naira)

Specialized Financial Institutions	1960		1961		1962		1963		1964		1965		1966	
	Amount	% of Total												
Eastern Nig. Devt. Corporation	8.9	21.3	9.1	21.2	11.4	24.5	14.0	27.4	14.6	22.4	16.9	23.8	19.3	24.5
Federal Loans Board	0.7	1.7	0.9	2.0	0.9	1.9	0.9	1.8	1.0	1.5	1.0	1.4	1.0	1.3
Nig. Ind. Devt. Bank Ltd.	1.9	4.6	1.9	4.4	2.0	4.3	2.0	3.9	8.7	13.3	8.9	12.6	11.1	14.1
Northern Nig. Devt. Corporation	12.3	29.2	11.4	26.5	11.8	25.4	13.5	26.5	15.6	23.9	18.1	25.6	20.2	25.7
Northern Nig. Investment Ltd.	-	-	0.2	0.1	1.2	2.6	1.9	3.7	7.8	12.0	8.2	11.6	8.9	11.3
Western Nig. Devt. Corporation	11.1	26.6	11.2	26.5	10.0	21.5	9.5	18.6	8.7	13.4	10.2	14.4	12.1	15.4
Western Nig. Finance Corporation	6.9	16.5	8.3	19.3	9.2	19.8	9.2	18.0	8.8	13.5	7.5	10.6	6.1	7.7
Total	47.7	100	43.0	100	46.5	100	51.0	100	65.2	100	70.9	100	78.7	100
Nigerian Building Soc.	3.0	63.8	4.5	60.8	6.2	96.4	6.3	55.5	6.9	52.3	7.7	50.9	8.0	53.7
Northern Nig. Housing Corporation	-	-	-	-	0.6	3.4	0.7	5.9	1.2	9.1	1.6	10.6	1.7	11.4
Western Nig. Housing Corporation	1.7	36.2	2.9	39.2	4.2	38.2	4.5	38.6	5.1	38.6	5.8	38.5	5.2	34.9
TOTAL	4.7	100	7.4	100	11.0	100	11.7	100	13.2	100	15.2	100	14.9	100
GRAND TOTAL	46.4		50.4		57.5		62.8		78.4		86.1		93.6	

Source: Compiled from CBN Economic and Financial Review of various years.

Table 10. B

CHANGES IN LOANS AND INVESTMENTS OF SPECIALIZED INSTITUTIONS IN NIGERIA

(In million Naira) 1960 - 66

Year	Loans and Advances N	Changes		Investments N	Changes		Loans and Investments N	Changes	
		Amount N	%		Amount N	%		Amount N	%
0	10.2	-		8.0	-	-	18.2	-	-
1	13.9	3.7	36.2	8.4	0.3	3.7	22.3	4.1	22.5
2	16.2	2.3	16.5	9.9	1.5	17.8	26.1	3.8	17.0
3	17.8	1.6	9.9	12.2	2.3	23.2	30.0	3.9	14.9
4	18.3	0.5	2.8	17.9	5.6	45.9	36.2	6.2	20.7
5	18.1	-0.1	0.5	20.0	2.1	11.7	38.1	1.9	5.2
6	18.6	0.5	2.7	20.7	0.7	3.5	39.3	1.2	3.1
Age 1966		1.2	0.8		1.8	15.1		3.0	11.9

Notes: Compiled from CBN Report and Annual Statement of Accounts and the NIDB Reports and Statement of Accounts of various years.

Table 10.0

THE NIGERIAN INDUSTRIAL DEVELOPMENT BANK LTD: LOANS AND DEBENTURE SANCTIONS  
 AS AT DECEMBER 31ST, 1967 - 1985  
 (In Million Naira)

Year	Total	Growth Rate	Equity		% of Total	Loans and Debentures	% of Total
	Amount N	%	Amount N	Growth Rate %		Amount N	
1967	8.6	19.4	1.9	-	22.3	6.7	77.7
1968	8.4	-2.3	2.0	5.3	23.2	6.5	76.8
1969	12.7	51.2	2.7	35.0	21.0	10.0	79.0
1970	18.8	48.0	3.1	14.8	16.6	15.7	83.4
1971	29.0	54.2	4.4	6.8	15.3	24.6	84.7
1972	33.1	14.1	4.7	6.8	14.2	28.4	85.8
1973	49.5	49.5	6.9	46.8	13.9	42.6	86.1
1974	66.1	33.5	9.0	30.4	13.6	57.1	86.4
1975	124.3	88.0	13.2	46.6	10.7	111.1	89.3
1976	175.1	40.9	19.1	14.7	10.9	156.0	89.1
1977	247.3	41.2	23.5	23.0	9.5	223.8	90.5
1978	185.9	-24.8	14.2	-39.6	7.6	171.7	92.4
1979	199.8	-3.3	13.2	-7.0	7.3	166.6	92.7
1980	213.6	18.8	6.6	-5.0	3.1	207.0	96.9
1981	94.3	55.8	11.7	77.3	12.4	82.6	87.6
1982	48.1	-48.9	5.3	-35.0	12.0	42.3	88.0
1983	39.8	-17.2	1.3	-77.6	3.3	38.5	96.7
1984	19.0	-53.3	1.1	5.8	8.6	17.9	94.2
1985	66.8	251.5	1.9	2.8	2.8	64.9	97.2

Sources: NIDB Annual Report and Bank returns of various years.

Table 10. P

NIGERIAN INDUSTRIAL DEVELOPMENT BANK INVESTMENT PROFILEAS AT 31ST DECEMBER 1967 - 1985( In million Naira )

Year	Total Investment Amount N	Equity Investment Amount N	% of Total	Loans and Debentures Amount N	% of Total	Remarks
1967	4.7	1.4	30.2	3.3	69.8	
1968	5.6	1.7	30.5	3.9	69.5	Decline
1969	5.3	2.0	38.7	3.3	61.3	"
1970	9.1	2.2	24.4	6.9	75.6	Increase
1971	12.3	2.5	20.9	9.7	79.1	Increase
1972	15.6	3.2	20.4	12.4	79.6	Increase
1973	19.1	3.3	17.2	15.8	82.8	Increase
1974	24.6	4.7	19.1	19.9	80.9	Decline
1975	33.6	6.7	18.4	27.4	81.6	Increase
1976	61.6	10.3	16.8	51.3	83.2	"
1977	106.6	17.5	16.4	89.3	83.6	"
1978	125.0	10.9	8.7	114.1	91.3	"
1979	179.8	3.2	1.8	76.6	98.2	"
1980	213.6	38.0	17.8	75.6	82.2	Decline
1981	93.0	11.7	12.6	81.3	87.4	Increase
1982	48.1	5.8	10.4	43.1	89.6	Increase
1983	39.9	1.3	3.5	38.5	96.5	Increase
1984	45.8	1.3	2.8	44.5	97.2	Increase
1985	52.8	3.1	5.8	49.7	94.2	Decrease

## Sources:

Nigerian Industrial Development Bank Reports of various years and CBN Annual Report and Statements of Accounts of various years.

DISTRIBUTION OF INVESTMENT APPROVED BY THE NIDE BETWEEN FOREIGN-OWNED  
AND NIGERIAN-OWNED COMPANIES BETWEEN  
1968 - 1983 (In Million Naira)

Year	Total Investment Approved N	Foreign Controlled Nm	Percentage Share of foreign-owned companies %	Nigerian- owned Companies Nm	Percentage Share of Nigerian- owned companies
68	1.4	1.35	96.4	.05	3.6
69	4.8	3.5	72.9	1.3	27.1
70	6.4	2.63	41.0	3.72	58.1
71	11.4	3.91	34.3	7.49	65.7
72	1.0	0.7	70.0	0.3	30.0
73	17.8	4.1	23.0	13.7	77.0
74	19.3	1.5	7.8	17.8	92.2
75	59.8	13.6	22.7	46.2	77.1
76	51.4	0.7	1.4	50.7	98.6
77	74.4	6.1	8.2	68.3	91.8
78	65.0	3.5	5.4	61.5	94.6
79	3.2	0.2	6.2	3.0	93.8
80	5.8	0.5	8.6	5.3	91.4
81	6.8	0.6	8.8	6.2	91.2
82	12.0	1.0	8.3	11.0	91.7
83	5.8	0.2	3.4	5.6	96.4
84	19.0	0.2	1.1	18.8	98.9
85	64.0	1.1	1.7	62.9	98.3

Sources: NIDE Reports of various years.

Table 10.R

The Nigerian Bank for Commerce and IndustryLoans and Investment1974 -85

(In Million N)

Year	Total Amount of Loans Approved	Equity Share Investments	No. of Projects
	N	Nm	
1974	17.0	1.8	27
1975	20.1	1.8	32
1976	76.7	2.9	77
1977	80.1	3.2	79
1978	65.2	3.5	68
1979	97.1	5.1	204
1980	213.6	38.0	300
1981	94.3	12.0	75
1982	48.1	5.8	52
1983	124.1	18.0	450
1984	150.0	18.2	300
1985	161.1	16.8	379

Source: Compiled from the Central Bank Report of various years, and the Nigerian Bank for Commerce and Industry Annual Reports.

NIGERIAN AGRICULTURAL BANK LTD: COMMITMENTS BY TYPE OF CLIENTS 1977 - 1985  
IN MILLION NAIRA

Year	Category of Borrowers	1977			1980			1981			1983		
		No. of Projects	Amount Nm.	% of Total	No. of Projects	Amount Nm.	% of Total	No. of Projects	Amount Nm.	% of Total	No. of Projects	Amount Nm.	% of Total
	Individuals	58	40.2	16	106	30.8	20.0	133	34.2	21.7	206	65.8	23.1
	Cooperatives -	15	27.7	11	51	33.8	21.9	84	40.5	25.7	98	73.5	25.8
	Companies	65	50.1	20	92	35.3	22.9	116	41.6	26.4	108	75.5	26.5
	State Corporations	25	99.0	39	27	27.7	18.0	55	22.1	14.0	65	31.4	11.0
	State Government	7	36.4	14	30	18.6	12.1	56	14.1	9.0	61	28.5	10.0
	Others	-	-	-	19	7.8	5.1	44	5.0	3.2	40	10.4	3.6
	Total	170	253.4	100	325	154.0	100	488	157.5	100	578	285.1	100

Category of Borrowers	1984			1985		
	No. of Projects	Amount Nm.	% of Total	No. of Projects	Amount Nm.	% of Total
Individuals	267	52.6	19.7	684	62.2	19.9
Cooperatives	100	60.1	22.5	900	57.2	18.3
Companies	120	42.7	16.0	1250	64.1	20.5
State Corporation	70	46.5	17.4	980	65.3	20.9
State Governments	82	63.0	23.6	820	60.7	19.4
Others	36	9.9	0.8	985	3.2	1.0
Total	675	267.2	100.0	5619	312.7	100.0

Sources: Compiled from the CBN Annual Report and Statement of Accounts of various years.

NIGERIAN AGRICULTURAL AND CO-OPERATIVE BANK : SECTORIAL ALLOCATIONS OF LOANS  
(In Million Naira)

Sectors	December 1980 Loans & Advances			December 1981 Loans & Advances			December 1983 Loans & Advances			December 1985 Loans & Advances		
	No. of Projects	Amount N	% of Total									
Animal Husbandry	44	5.4	3.5	66	5.3	3.4	86	15.5	5.4	102	20.0	6.4
Food crops	69	36.0	23.4	192	60.0	38.1	246	105.1	36.9	5102	125.2	40.0
Other crops	53	23.9	15.5	24	35.9	22.8	69	40.1	14.1	182	58.2	18.6
Fishery	6	13.6	8.8	7	14.4	9.1	10	18.5	3.8	15	18.4	5.8
Poultry	90	9.8	6.4	114	6.0	3.8	120	10.9	33.3	318	86.2	27.5
Others	-	66.1	42.4	-	35.9	22.8	-	95.0	6.5	-	4.7	1.7
Total	325	154.0	100.0	488	157.5	100	578	285.1	100	5619	312.7	100

Sources: Computed from CBN Annual Reports and Statement of Accounts of various years.

\* Others include the Statutory Corporation projects

Table 10.3

PERCENTAGE DISTRIBUTION OF INVESTMENT PATTERN OF EACH OF THE CATEGORIES  
OF INSURANCE IN NIGERIA 1960-64

	Life Insurance						Non-Life Insurance					
	Type of Assets						Type of Assets					
	Government Securities	Stocks, Shares & Bonds	Mortgages and Loans	Cash & Bill Receivable	Miscellaneous	Total Asset Investments	Government Securities	Stocks, Shares & Bonds	Mortgages & Loans	Cash & Bill Receivable	Miscellaneous	Total Asset Investments
60	9.5	15.8	43.1	26.3	5.3	100	9.2	30.6	8.2	52.0	n	100
61	22.9	14.7	45.9	10.1	6.4	100	17.1	27.9	8.1	46.9	n	100
62	24.2	15.2	40.8	11.2	8.0	100	14.4	31.2	7.2	47.2	n	100
63	28.3	15.7	35.8	11.9	8.3	100	13.0	30.4	5.2	51.3	n	100
64	26.3	16.7	32.0	10.9	14.1	100	15.4	28.2	7.3	49.1	n	100
65	27.9	16.4	30.9	11.5	12.3	100	9.8	25.9	8.9	55.3	0.01	100
66	28.4	17.2	29.6	11.5	13.0	100	11.5	22.1	10.6	53.1	2.6	100
67	28.2	16.1	29.3	12.6	13.8	100	16.4	17.0	10.8	53.5	2.3	100
68	26.9	14.5	26.3	18.8	13.6	100	17.1	24.8	9.8	45.7	2.6	100
69	20.2	12.4	23.8	40.5	3.1	100	14.0	26.6	8.6	48.7	2.1	100
70	18.7	17.2	23.7	36.6	3.8	100	10.0	24.0	8.4	51.9	5.7	100
71	26.5	10.0	16.8	42.0	4.7	100	9.4	19.8	7.7	55.8	7.3	100
72	25.4	16.2	17.2	30.5	10.7	100	17.0	12.9	11.8	46.3	12.0	100
73	26.9	12.3	16.7	34.1	10.0	100	14.2	12.3	6.6	49.3	17.6	100
74	21.5	11.1	21.7	36.0	9.7	100	6.3	15.0	6.7	32.5	39.5	100
75	22.8	10.6	22.3	36.1	8.2	100	9.9	11.3	5.4	33.6	39.8	100
76	26.4	14.3	25.1	23.6	11.2	100	8.7	9.8	6.8	38.1	36.6	100
77	23.3	12.9	24.5	23.4	15.9	100	10.5	7.0	8.6	36.4	37.5	100
78	26.4	15.3	24.1	19.6	14.6	100	10.3	8.2	9.9	30.9	40.7	100
79	32.8	15.5	24.7	13.6	13.4	100	10.1	10.0	10.7	30.0	39.2	100
80	33.5	15.1	23.9	13.9	13.6	100	10.3	10.4	10.7	29.4	39.2	100
81	35.5	16.2	24.3	15.5	18.5	100	11.0	10.5	11.8	31.1	35.7	100
82	34.9	14.8	22.4	15.2	12.7	100	10.8	12.1	11.3	30.4	35.4	100
83	33.1	16.3	23.2	15.2	12.2	100	10.7	12.2	11.4	30.4	35.3	100
84	38.1	18.2	30.5	9.2	4.0	100	10.8	12.4	12.6	29.0	35.5	100
85	42.0	22.1	35.2	0.6	0.1	100	10.7	12.6	12.3	30.0	34.4	100

Sources : Computed from Nigerian Statistical Digest, CBN Economic and Financial Review, CBN Annual Report and statements of Accounts and Economic Statistical Review of various years.

INVESTMENT PATTERN OF INSURANCE COMPANIES  
IN NIGERIA 1960 - 1984  
(In Million ₦)

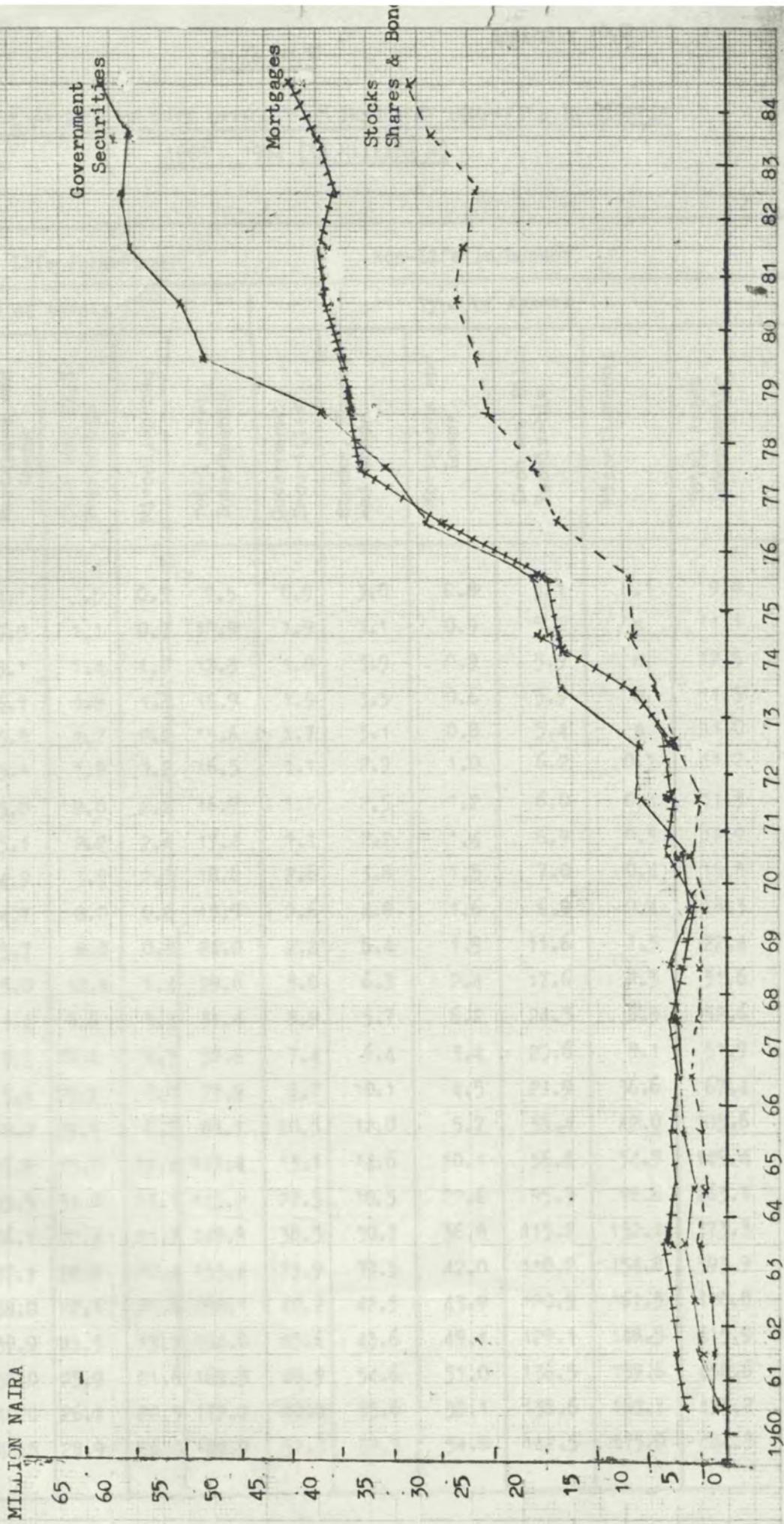


Table 10.U

Appendix 10.U

INVESTMENT PATTERNS OF EACH CATEGORY OF INSURANCE COMPANIES IN NIGERIA  
1960 - 1984 (In Million N)

yr	Life Insurance						Non-Life Insurance					
	Type of Assets						Type of Assets					
Nm	Government Securities	Stocks, Shares and Bonds	Mortgages and Loans	Cash and Bill Receivable	Miscellaneous	Total Asset Investments	Government Securities	Stocks, Shares and Bonds	Mortgages and Loans	Cash and Bill Receivable	Miscellaneous	Total Asset Investments
60	0.9	1.5	4.1	0.5	0.5	9.5	0.9	3.0	0.8	5.1	0.1	9.8
61	2.5	1.6	5.0	1.1	0.7	10.9	1.9	3.1	0.9	5.2	n	11.1
62	3.1	1.9	5.1	1.4	1.0	12.5	1.8	3.9	0.9	5.9	n	12.5
63	4.5	2.5	5.7	1.9	1.3	15.9	1.5	3.5	0.6	5.9	n	11.5
64	4.1	2.6	5.0	1.7	2.2	15.6	1.7	3.1	0.8	5.4	n	11.0
65	4.6	2.7	5.1	1.9	2.2	16.5	1.1	2.9	1.0	6.2	0.1	11.2
66	4.8	2.9	5.0	2.0	2.2	16.9	1.1	2.5	1.2	6.0	0.3	11.3
67	4.9	2.8	5.1	2.2	2.4	17.4	2.1	2.2	1.4	6.9	0.3	12.9
68	5.0	2.7	4.9	3.5	2.5	18.6	2.6	3.8	1.5	7.0	0.4	15.3
69	4.0	2.5	4.7	8.0	0.6	19.9	2.6	4.9	1.6	6.9	0.4	18.3
70	4.5	4.1	5.7	8.8	0.9	24.0	2.2	5.4	1.9	11.6	1.3	22.4
71	7.9	3.0	5.0	12.4	1.4	29.6	3.0	6.3	2.4	17.6	2.3	31.6
72	7.9	5.1	5.4	9.6	3.4	31.4	8.9	5.7	6.2	24.3	6.3	52.6
73	15.3	7.0	9.5	19.4	5.7	56.9	7.4	6.4	3.4	25.6	9.1	51.9
74	15.4	8.0	15.6	25.9	7.0	71.9	4.2	10.1	4.5	21.9	36.6	67.4
75	18.6	8.7	18.2	29.5	6.7	81.7	10.5	12.0	5.7	35.4	42.0	105.6
76	29.4	16.0	27.9	25.7	12.4	111.4	13.1	14.6	10.1	56.8	54.9	149.4
77	33.9	18.7	35.5	34.0	23.1	145.2	27.5	18.5	22.6	95.7	98.8	263.1
78	39.6	23.8	36.1	29.4	21.9	149.9	38.5	30.7	36.8	115.2	152.1	373.3
79	50.4	24.1	37.1	20.9	20.4	153.4	39.9	39.5	42.0	118.2	154.8	393.9
80	53.3	26.4	38.0	22.1	21.6	159.1	42.2	42.5	43.9	120.9	161.3	410.8
81	58.3	25.1	39.9	25.5	13.9	164.0	45.6	43.6	49.1	129.1	148.5	415.9
82	59.3	24.5	38.0	25.9	21.6	169.9	48.9	54.6	51.0	136.5	159.6	450.6
83	57.1	28.1	40.0	26.1	20.9	172.2	48.8	55.6	52.1	138.6	160.1	455.2
84	61.3	30.2	43.5	28.9	26.0	189.9	52.3	59.7	54.8	142.5	175.0	484.3

Sources: Computed from Nigerian Statistical Digest, CBN Economic and Financial Review, CBN Annual Report and Statements of Accounts and Economic Statistical Review of various years.