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THE IMPACT OF PRICING ON THE PATRONAGE OF SAVINGS ACCOUNTS IN NIGERIAN BANKS

BY

MR. JOHN .J. UDOFA

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BEING A DISSERTATION SUBMITTED TO THE ST. CLEMENTS UNIVERISTY IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF DOCTOR OF PHILOSOPHY OF MANAGEMENT IN BANKING AND FINANCE.

ST. CLEMENTS UNIVERSITY

<u>DECLARATION</u>

I, Mr. John .J. Udofa, do hereby declare that, this dissertation is entirely my own composition. All references made to works of other persons have been duly acknowledged.

<div align="right">

John .J. Udofa

</div>

APPROVAL PAGE

This is to certify that, this research work was carried out under strict supervision and has been approved for submission to the St. Clements University in partial fulfillment of the requirements for the award of the Degree of Doctor of Philosophy of Management in Banking and Finance.

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    Project Supervisor   Academic Advisor

Administration
St. Clements University

<u>DEDICATION</u>

This Dissertation is dedicated to the Almighty God.

ACKNOWLEDGEMENT

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I also thank the following Dr. Brain, for his moral support and encouragement; Dr. Etuk N. Etuk, and Dr. Anthony Valentine Ndah for their invaluable contributions to this work.

To my Secretary Miss C. B Ebere who spent hours to type the manuscript and Mr. Joseph Akpa who spent hours in the computer room to ensure a decent production, I am equally indebted to. To all others who cannot be mentioned   here I say, may the good Lord bless them abundantly.

JOHN . J. UDOFA.

ABSTRACT

The tendency to have access to stable source(s) of funds to enable them carry out their daily operations without hitch or at least with minimum hitches, has made it mandatory for banks to go out full-force to source for a product that would sale for that purpose. Many banks have come up with products ranging from branding of some accounts with names and conditions attached as incentives or inducements to account holders. Based on the aforementioned, the researcher has set out to asses the impact of pricing or interest rate on the patronage of savings deposits-a core product in the Nigerian Banking system. Pricing is interest paid on customers' balances and interest charged the customers loans, advances and overdrafts. Marketers believe that, for one to penetrate the market and have a good share, one has to use the price penetrating strategy, which invariable, in some commodities helps, but the researcher wishes to find out whether this will be possible in a product like savings Account in the banking Industry. It has been the bankers' view at various times that if prices were adjusted to accommodate higher returns to savers, then this will help to stabilize and or help in mobilizing more savings deposits. In fact, it is the intention of the researcher to find out how feasible this might be. The researcher, in the course of trying to find out the viability or feasibility

or otherwise of the product "savings Deposit Account," would conduct field examinations through questionnaires and oral interviews with customers of the banks who have saving Account and those who are potential customers. The researcher would also go further to interview some bankers on the same issue. By so doing, the researcher will disclose the justification for the use of such approaches, instruments in use and source of data collected.

The analysis of the techniques used and the results interpreted with the proof of the hypothesis would be enough to determine saving deposit funds in the banking industry. The researcher would analyze the banking industry in relationship to competition, the pricing concept and price determination in conjunction with marketing of banking services, as it might affect the stabilization of deposits. In fact, the researcher intends to establish through the findings, that, <u>Pricing is not the major determinant or that savings deposits product does not respond directly to price adjustments.</u> That the price penetration strategy would not work properly on a banking product of this nature. The data obtained would be analyzed one after the other, and classified according to the questions, as arranged in the questionnaire and also according to, whether the person answering the questionnaire has a savings account in a bank or not. This will include age, qualification and job disposition

of the respondent. The data will be presented in tables, graphs, Histograms, Frequency and percentage distributions. The results would prove that, saving product would not respond to pricing, but will respond more to banks with stability and strong capital base.

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CHAPTER 1

INTRODUCTION

1.0.0

A bank is an organization that holds herself out to the public in order to receive deposits, which are payable on demand, to others. A bank is an establishment where money and other valuables are kept safely (Ahukannah L. I, et al, 2003 p. 75). Banking is also looked at as mobilization of funds from savers (those who have excess) and are wishing and willing to invest and channeling these funds to areas of need in a profitable manner. The process of mobilizing these funds by the banks is called **Liability Generation** and the process of channeling the funds to the area of needs is called **Assets Creation or Lending**. Generation of liabilities and assets creation or lending seem to be principal functions of banks. These are done, dependent on what type of a bank that is referred to for example, banks are being classified according to their specialized functions and mode of operation. In Nigeria, as well as in many other West African nations, five types of banks are identified. These are:

1.   Commercial Banks.

2.   Merchant Banks.

3.   Development Banks.

4.   Central Banks.

5.   (Savings and Loans) Primary Mortgage Institutions

All the aforestated banks have their primary and secondary functions which they perform in order to generate liability and create assets or lend. By 1985, Nigeria had about twenty-eight commercial banks, twelve merchant banks, three development banks and savings banks, (Nigerian Banking Almanac, 1985/86).

1.0.01   Commercial banks being the banks that have more to do with the saving Accounts, the dissertation will concentrate more on the commercial banks and their role in the operations of the saving Deposit accounts, it is undoubtedly true that commercial banks specialize in keeping money and valuables safely and in granting short-term loans, advances and overdrafts to individuals and corporate bodies, among other functions. Some of the specific safe keeping of cash and other valuables like certificates (shares, certificate of occupancy, school Certification, etc)

Jewelries, gold etc. for safe keeping. The cash accepted is being lodged in the accounts of the customers. The commercial banks act as agents to their customers-Some of the agency's services rendered to the customers include; collecting of payments for and on behalf of their customers, also, making of payments for and on behalf of customers. This may include collection and clearing of cheques for and on behalf their customers. It is true that commercial banks grants short-term loans like personal, car and furniture loans to their customers; they also grant advances to their customers who have current accounts; on provision of collateral security. Commercial banks give advice to their customer-for example commercial banks give technical advices to their customers wishing to make payments abroad, they advice on the best way to remit the payment. Brokerage services: - Commercial banks render brokerage services to their customers. This means that they buy and sell stocks, shares, and Treasury Bills on behalf of the customers. Discounting of Bills- Commercial banks discount bills of exchange, that is, they pay cash for bills of exchange before the bills mature. Commercial

banks issue travelers' cheques to travelers, foreign exchange and provide night safe facility off share. Commercial banks also conduct due diligence their customers. These are usually done through their foreign correspondents. Offer of employment opportunities-the commercial banks offer employment opportunities to qualified professionals in the society. In addition to the above services provided by the commercial banks, they also maintain accounts. The dissertation is going to dwell on the maintenance of accounts, must especially savings commercial banks are:-

a) Current Account,

b) Serving Account,

c) Deposit Account.

- Fixed Deposit

- Time Deposit

- Endowment Deposit

- Call Deposit.

d) Facility Account.

a)   The current Account is operated by the use of cheques, debit

advice, internal debits, pay in slips etc. this is an active account maintained with a commercial bank on which cheques are drawn and into which money is paid. Most banks, right from on set, do not pay interest on current account balances. But one of such incentives used in the Mid-eighties in some Nigerian banks to attract deposit, was to pay interest on current account balances in which not more than three withdrawals took place in one month. For that month, the bank will pay interest. The normal practice is that, the bank charges for its services on a current account in terms of commission on torn over (COT). Individuals, business concerns, clubs and associations are free to open and operate current accounts in the commercial banks of their choice.

b)   **Saving Account** – the saving Account as the name implies, is meant deposit of money not needed immediately. There are basically few differences between a savings and a current Account, these might be as follow: -

i) Cheque may be written, issued and or drawn on Current Account, but not on a saving Account.

ii) The bank pays interests on deposits in the saving Accounts but not on deposits in Current Accounts.

iii) Commission on turnover is earned by the bank on current accounts but are not earned on savings account.

iv) Drawings can be made as many times as possible on current accounts but drawings on savings account are restricted, in some case only e times in a month.

Saving accounts are aimed at attracting small depositors who do not want to spend all their earning immediately. The customers is given a savings passbook in which his deposits and withdrawals are recorded, funds can be withdrawn from a savings account without notice, but there are specific amount/balance that must be maintained in savings accounts, and in some commercial banks, the number of times mandatory for savings account holder not to exceed in making withdrawals in specified period of time.

c) Deposit Account – Commercial banks accept some deposits for safe keeping for a period. Customers who hold sufficient

liquid cash make use of this account. The account is very much like the savings account, except that, the interest rate in the account usually than that of the savings account and withdrawals here in this Deposit Account, is subject tenor strictly to tenor. The deposit account has been branded with various names, some include, Time deposit, Fixed deposit, Endowment Deposit, Call Deposit. All these are products of deposit accounts. These are all accounts whereby, customers lodge their monies which are withdrawable either at the expiry maturity or within a give notice.

d)   Facility account or Rollover Account – This is an account maintained by some commercial banks where a customer who has proved to be wealthy enough and has account in a commercial bank whose balance is capable of guaranteeing the customer to enjoy this running account. The customer has a facility to down run the account to a particular tune depending on the arrangement, but not for a period of more than one month. At the beginning of the month, the customer is allowed to start withdrawing money on the account to an agreed tune, but just

before the last working day of the month, the account is made good.

1.0.02   **MERCHANT BANKS**

The merchant banks, second largest group of banks operating in Nigeria (Nigeria banking Almanac 1985/86) are specialized banks, which facilitate commerce and industry in special ways, for example dealing in foreign Exchange, capital market/investment Banking activities and acceptance of Bills of exchange. The major activities of the merchant bankers are the provision of long and medium term finance for trade and industry. They also grant long term and medium term loans and advances to the deserving customers. They offer advisory services to cooperate organizations about mergers, re-organizations and project management/finance. They are also authorized ton issue and are dealers of negotiable certificates. Merchant Banks engage in lease that is, they acquire costly equipment for the duration of its life to user companies. The equipment is initially purchased by the merchant banks and then leased to the user company who has the option to buy the residue.

Merchant banks collect deposit only from corporate organizations and the amount in some cases may not be less than N50, 000. They also make payments on behalf of corporate organizations.

1.0.03   DEVELOPMENT BANKS

Development banks are government owed banks, which have the major function of providing long-term loans to farmers, industrialists, businessmen and government projects to develop the economy. Here in Nigeria, development banks may include among others, the Banks industry. As a rule, development banks do not give loans or invest in any project, the value of which is les than N 50,000. They do not take deposit from the public and they do not grant short-term loan. They underwrite shares for public limited liability companies.

THE CENTRAL BANK

The Central Bank is the bankers' bank and the banker to both Federal and State Government. The Central Bank acts as the heart that turns the wheels of the financial system of any nation. It is the Bank that is central to the operations of the financial system. In 1953, an official of the Central Bank of England Mr.

J.L. Fisher, was commissioned to advise the colonial government on the desirability and practicability of establishing a central bank in Nigerian. Mr. Fisher advised that, instead of a Central Bank in currency board should be established. Fisher's recommendation was not well received and so, the pressure continued. In 1955, a team from the World Bank carried out another investigation and came up with the recommendation that a "state bank of Nigeria" be established to perform most of the functions of a typical central bank, apart from issuing currency. Again, this recommendation did not meet the demands of Nigerians. So, in April 1957, a high official of the bank of setting up of a Central Bank. His favorable report was submitted in August 1957, and the Central bank of Nigeria was established in 1958. The bank started operations in July 1959. The Central bank of Nigeria was established to perform the following functions among others:

- To act as the government's banker by collecting proceeds from taxation and other revenue accruable to the federal government.

- To make advances of money to the government and advise the government no monetary matters.

- To formulate needed banking regulations to be followed by all other banks.

- To maintain accounts for all other banks in the country. This is more the reason why the central bank is being referred to as the banker's bank.

- To act as a lender of the last resort to the banking system.

- To act as the banker to central of the other countries.

- And to control the flow of cash in circulation. (Liquidity management)

The central bank maintains the actual control over the economy in various ways including the following:

- Open market operation: The strategy of engaging in open market operation by the central bank of Nigerian is used to reduce or increase the lending capabilities of the wishes to increase the quality of money in circulation; she buys stocks and bonds from the public. On the other hand, if she wants to

reduce the quantity of money in circulation, she sells bonds and stocks.

- Special deposits; the central bank has the right to require the other banks to make special deposits. This type of "forced" deposits has the effect of limiting the liquid cash available to the banks for other operations.

- Control of interest Rate; The commercial bankers charge inter on loans granted to their customers and they pay interest on or charged as interest on loans they grant their customers is determined by the Central Bank. Usually, when the central bank wants to reduce the flow of currency in circulation, she raises the bank rate, so that borrowing becomes unattractive because of the high interest paid on borrowed funds. On the other hand if the Central Bank wants to increase the currency in circulation, she lowers the bank rate. This has the effect of making savings less attractive and borrowing more attractive.

- Cash and Liquidity Reserve Ratio; The Central Bank requires all the commercial bank to have a stipulated level of cash in

their CBN deposit account. In addition, at least liquid cash must bank 25% of the loans granted by the commercial bank.

- Persuasion: The Central Bank sometimes engages in friendly dialogue with the other banks in order to agree on how banking activities are to be carried out. Some economics refer to this strategy as moral suasion, because it is based on mutual understanding and compromise dictated by the needs of the nation.

- Exchange Rate Management: The Central Bank of Nigeria uses the Dutch Auction System (DAS) to intervene and manage the exchange in the economy. The objective is to achieve a stable exchange rate require in the economy.

1.1.01 DEPOSITS AS INPUT IN PRODUCING LOANS.

It is understood that, banks use many input to produce loans. Like any other firm, a bank uses Labor (e.g. tellers, accountants, and loan officers) building, computers and utilities. She also issues commercial papers, stocks and bonds to obtain financial and working capital. Unlike with other firms, however, the primary source of the funds a

bank uses to produce its inputs is the reserve created when the bank accepts deposits. It is important to know that at the very minute one deposits is thus ₦10, 000 into one's account, (i.e. both current and savings accounts), the reserve at one's bank increases by N10,000. By law, the bank must keep a fraction (say 9%) of ones deposit as required reserves. She may also hold an addition 1 – percent as excess reserves against withdrawals. The remaining 905 will be used to supply loans in loanable funds market.

Thus, primarily, the bank wants deposits in order to create reserves, which she can use to produce loans on which she will earn interest. Therefore the individual bank's demand for deposit (and indeed the demand for any input into the production process) is called a derived demand – demand derived from the demand for loans that banks try to satisfy. That is to say, to high light the important role deposits play in producing loans by taking the levels of all other inputs, such as accountants, teller and loan officers, as may be the case.

1.1.02   TOTAL MARGINAL PRODUCT

The demand for deposit depends on their productivity. <u>Total product</u> refers to total level of output produced with a given quantity of an input, for example, if example, if ₦200, 000 in deposits permits a bank to issue ₦160,000 in loans, the total product of ₦200,000 in deposits is ₦160,000 in loans.

Marginal Product is the change in total product or (total output) that results from a one unit change in the usage of input, holding the quantities of other inputs constant. For instance, if a one Naira increase in deposits increases the amount of loan issues by 80 kobo, the marginal product of deposit is 80 kobo in loans. There is no doubt saying that, in most production processes, initial increases in the use of an input will lead to successively larger increases in total output. In a hairstyling saloon, for example, the first hairdresser hired, increased the number of haircuts from zero to say, two haircuts per hour. The marginal product of the second hairdresser is three haircuts, which is greater than the marginal product of the first hairdresser. The reason for the increase in the marginal product of the second hairdresser may be the fact that when the phone rings, one hairdresser can continue to cut

hair while the other answer the phone. When there is only one worker, production stops when the phone rings.

For given levels of other input as more and more of a specific input is used, its marginal product eventually begins to decline, that is, total product continue to increase, but at a _decreasing_ rate. For example, hiring a third hairdresser may increase output from five to seven haircuts per hour. In this instance, the marginal product of the third hairdresser is two is two haircuts, which is less than the marginal product of the second hairdresser. Further more, as more and more hairdressers are packed into the salon, the marginal product of each additional hairdresser gets smaller and smaller this phenomenon is known as the _law of diminishing returns._ This states that if the amount of one input increases and the amount of all other input remain constant; the marginal product of the input eventually begins to decline.

Applied to banking, the law of diminishing marginal return says that for given quantities of other inputs, increasing the amount of deposit will eventually lead to a declining marginal product of deposits. Bank most hire labour and capital equipment (such as computers) to monitor loan payments, staff teller window, collect bad debts, process

loan applications and keep the books on each deposit and each loan account. For given these levels of inputs, as the bank attracts more and more depositors, the desks of loans officers and accountants pile up with new account forms and loan applications. As a result the amount of new loans the bank can issue eventually diminished.

Part of figure 1.1 shows that, the total product for loans-the relationship between loans produced by a bank and the amount of deposits in the bank, holding other input constants. As deposits increase from ₦0 to ₦100M, the amount of loans the bank issues rises at an increasing rate. For instance, the first ₦50M in deposits yields ₦40M in loans, and the marginal product of the second ₦50M- increase loan by ₦45M. The marginal product of the first ₦50M in deposits is ₦40 in loans, and the marginal product of the second ₦50M in deposits is ₦45M in loans. The 'extra' ₦5m in loans is reflected in the increasing slope of the total product curve as deposits rise from ₦0 to ₦100M.

Part 'b' graphs the marginal product of deposits (Mpd), which is less when deposits are ₦50M than when deposits are ₦100M. It is expected that one should note the relation between the marginal

products of deposits graphed in part 'b' and the slope of the total product cure in part 'a'. As the total product curve gets steeper, its slope increases and the marginal product of deposits also rises when the total product curve gets flatter, its slope declines and the marginal product of deposits falls.

It is also important to realize that, as deposits increase beyond ₦100M in part 'a' of figure 1.1 the total amount of loans increases, but at a decreasing rate. In particular, increasing deposits from ₦100M to ₦200M increases loans by only ₦45M, ₦40M less than ₦85M in loans that resulted from increasing deposits from ₦0 to ₦100M, the slope of the total product curve declines as deposits increase beyond ₦100M, indicating that the marginal product of each additional deposits declines over this range. This is consistent with the declining marginal product curve in part 'b' for deposits beyond ₦100M. In part 'b', the law of diminishing marginal returns applies when deposits exceed ₦100M.

Loans

(Millions ₦)

(a)   Deposits (Millions)   Total Product
                                                             (Total Loans)

Figure 1.1.02a

130 - - - - - - - - - - - - - - - - - -

                    48

85 - - - - - - - - - -

Deposits (Millions)
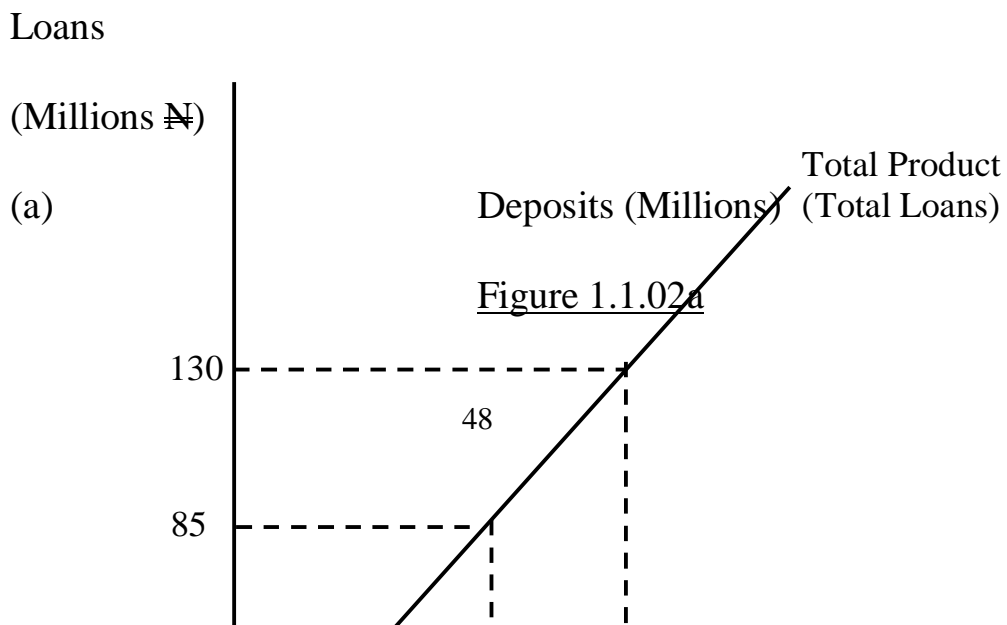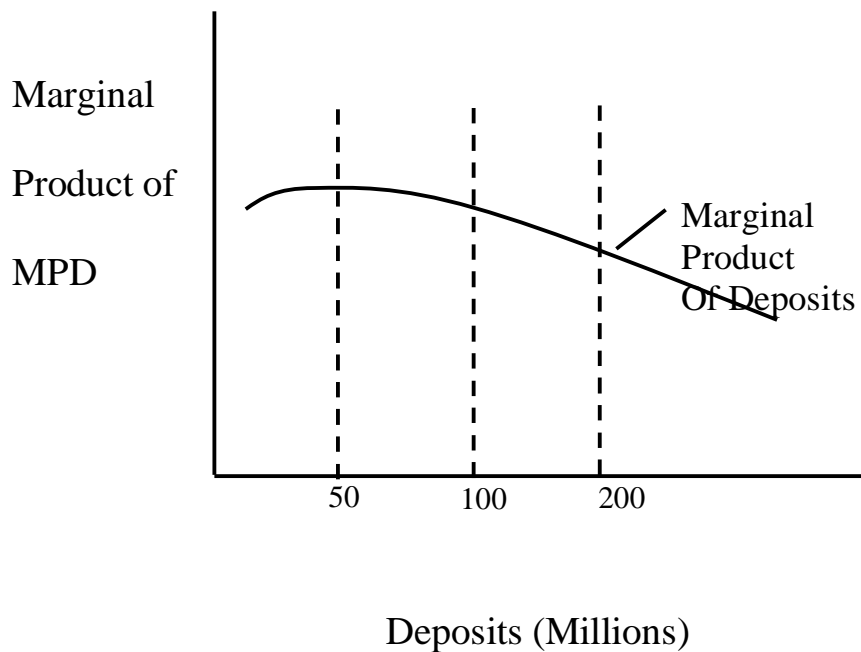
Figure 1.1.02b

These figures show the production function for loans as a function of deposits, holding other banking inputs constant. As deposits increase from ₦0 to ₦200m, the bank's loans (it total product, or output) increase from ₦0 to ₦130m. This is shown in part 'a', where loans are graphed on the vertical axis and deposits on the horizontal axis, part 'b' graphs the Marginal Product of deposits – the slope of the production function in part 'a'. As deposits increase, so do size of deposits changes. The first ₦100m in deposits yields ₦85m in loans, while the next ₦100m in deposits yields only N45m in additional loans.

This is due to the law of diminishing marginal returns, which is illustrated by the declining marginal product of deposit when deposits exceed ₦100m in part 'b'.

1.1.03   A SIMPLE TECHNILOGY FOR PRODUCING LOANS

One can more clearly see the link between bank loans and bank deposits by looking at simple loan technology that builds on what must have been learned about fractional reserve banking. For example, if the required reserved ratio is rr. Meaning the bank is required by law to keep a constant fraction, rr, of her deposits on reserve. Thus, if we let D denote deposits, the bank can legally lend up to (1- rr)* D of its deposits. However, as deposits increase, the bank may be able to immediately issue the quantity of loans allowed by law due to diminishing marginal returns. This is most likely to be the case at very small banks, where loan officers sometimes are unable to process sufficient loan application to keep pace with using deposits. In this case, the production of loan is a function of the amount of deposit the bank can legally loan: L= F ([1-rr]D).

A case in point, if the required reserve ratio is .09 and deposits are ₦1M, the bank can legally issue up to ₦910,000 in loans. How much it will actually produce demands on its production function. Perhaps, the bank will only issue ₦900,000 in loans. When deposits grow to ₦2M, the bank will be legally able to issue up to ₦1,820,000 in loans. Since [1-.09]8 ₦ 2,000,000 =   ₦1,820,000. However, because of diminishing marginal returns, the bank actually might transform deposits into only ₦1,750,000 in loans. Like the total product curve graphed in part 'a' of figure 1.1, these numbers illustrate that a doubling of bank deposits will not double the amount of loans when diminishing marginal returns to deposits exist.

In another way round, assuming a large bank can produce loans according to the relation L = (1-rr) *D, where L is the amount of loans, rr is the constant required reserved ratio, and D is the level of deposits. (a) Graph this bank's total product curve as a function of deposits when the required reserve ratio is .1. (b) Graph the total product curve when the required reserve ratio is .2. What can you conclude about the impact of a change in the required reserve ratio on the production of loans. (c) Graph the bank's .1 and .2. What happens to marginal product when the

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required reserve ratio increased? (d) Does this bank's production loans satisfy the law of diminishing returns?

(a)   When the required reserve ration is .1, the formula for the total product curve is L = .98D, which is graphed as the linear relation in part 'a'. it is important to note that, ₦100,000 in deposits produces ₦90,000 in loans.

(b)   When the required reserve ratio increase to .2 the total product curve becomes L = 8*D, which is also plotted in part 'a'. given the higher required reserve ratio, only ₦80,000 in loans can be produced with ₦100,000 in deposit. We conclude that an increase in the required reserve ratio decrease the total product curve for loans.

(c)   when the required reserves ratio .1,each additional naira in deposits increases loans by 90 kobo, so the marginal product of deposits is .9. This is graphed in part 'b' as the horizontal line MPD = .9. When the required reserve ratio increases to .2, each additional naira in deposits increases loans by 80 kobo, so the marginal product of deposits is .8. This is also graphed in part 'b' as the horizontal line MPD = .8. Thus, an increase in the required reserve ratio decreases the marginal product of deposits.

(d)   Since the marginal product curve is horizontal, the production process of this bank does not exhibit diminishing marginal returns, here a doubling of bank deposits leads to a doubling of loans, since the bank is able to maintain the same level of excess reserves (zero) regardless of the size of its deposits.

Total loans

(Thousand ₦)

Initial Total
Product Curve
L=90

(a)

90 ....

80 ....

L=80
New Total
Product Curve

100 Deposits (Thousand ₦)

Figure 1.1.03a

Marginal

Product

(b)

9 ——————————————————————— $MP_D = .9$

8 ——————————————————————— $MP_D = .8$

Deposits (Thousand ₦)
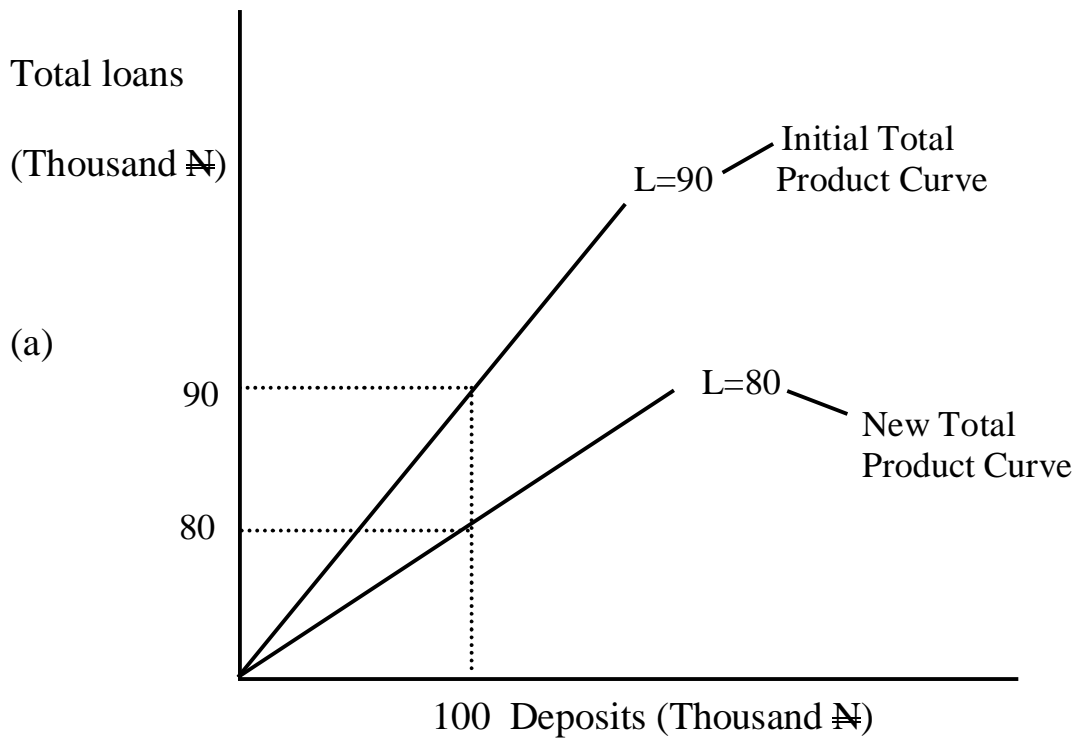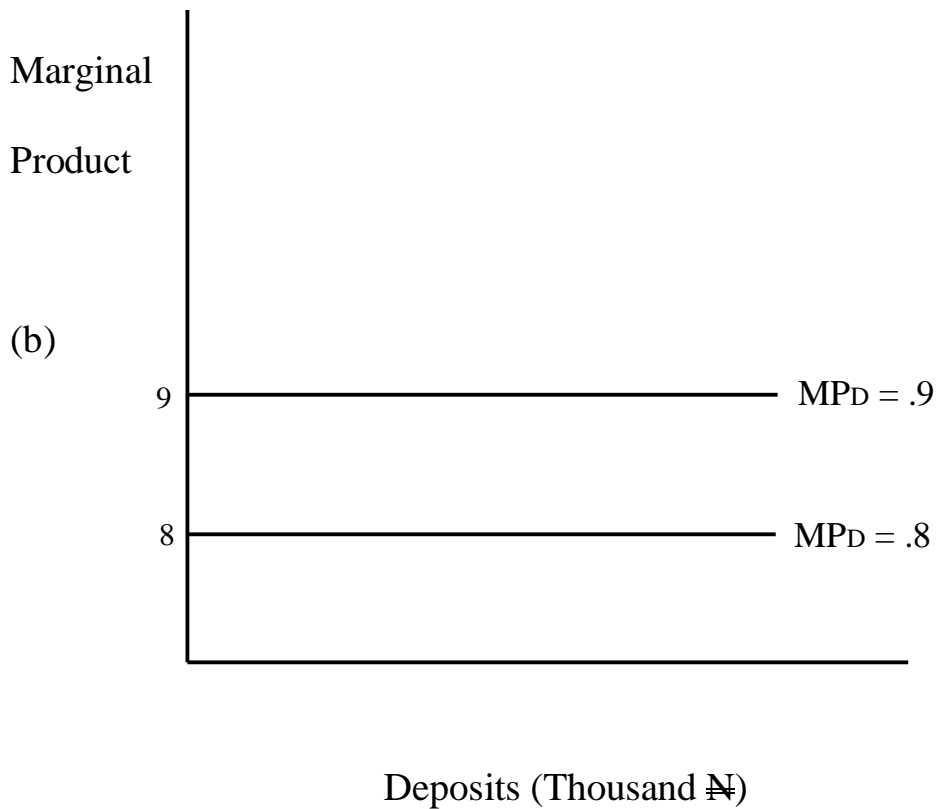
Figure 1.1.03b

1.1.03   <u>THE DEMAND FOR DEPOSITS BY PURELY</u>

<u>COMPETITION BANKS</u>

Having understood the production relationship between a bank's

output (loans) and input (deposits), we would also have to take a look

at how banks determine the interest rate on deposits and the level of

deposits needed to produce loans. These figures vary with the market structure of the deposit market. Similarly, the loan market, purely competitive banks and with market power behave differently. First of all, we shall begin with a look at a bank in a purely competitive market.

1.1.05 *MARKET SUPPLY AND THE SUPPLY OF DEPOSITS TO AN INDIVIDUAL BANK*

In fact, in a purely competitive deposit market, individual banks are small relative to the entire market for deposits and must pay their depositors the market rate on deposits. Depositors would not choose to deposit funds in a bank that offered a lower rate on deposits than the rate other banks offered.

When the market for bank deposit is purely competitive, the intersection of the market demand and supply of deposits determine the market interest rate on deposits to use as an input in producing loans. Households and businesses supply these deposits. Part 'a' of fig 1.1.05a illustrates equilibrium in the deposit market; the interest rate on deposits – determined by the intersection of the market demand and supply curve – is 4 percent. The supply of deposits to an <u>individual</u>

bank is horizontal at the market interest rate on deposits which is 4

percent in part 'b' in fig 1.1.05, because the individual bank must offer

that rate. In contrast, the supply of deposits to all banks in the deposit

market is upward sloping in figure 1.1.05. The reason for the difference

is that at the individual bank level, depositors are very sensitive to

changes in the banks' interest rate. If a purely competitive bank reduces

the rate it paid on deposits below the market rate, the bank would lose

its depositors to other banks. Thus, the supply of deposits to an

individual purely competitive bank is perfectly elastic at the market rate

deposits.

Supply of Deposits to Purely Competitive Bank
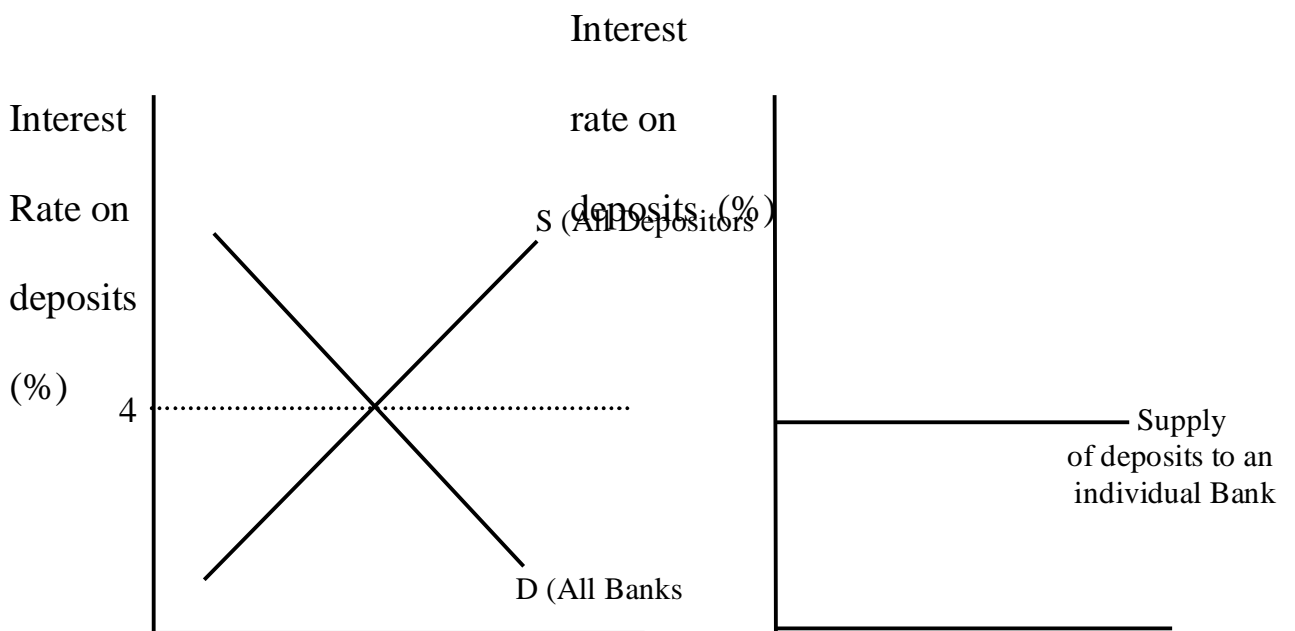
Market Amount of Deposits (Thousand ₦).   Deposits at

Individual banks (Thousand ₦).

(a)   (b)

Figure 1.1.05a and b

The figure 1.1.05 shows how the deposit interest rate offered by purely

competitive banks is determined. Part 'a' shows the market demand (D)

and supply (S) curves for deposits. The intersection of these curves

determines the market rate of interest on deposits and the total market

amount of deposits. Part 'b' shows that the supply amount of deposits.

Part 'b' shows that the supply of deposits to any one bank is a

horizontal line at the market rate interest of 4 percent. If an individual

bank attempts to offer an interest rate lower than a percent, it will

receive no deposits because depositors will go to another bank that

offers market rate of interest.

1.1.06 *THE VALUE MARGINAL PRODUCT OF DEPOSITS*

It is important to realise that, purely competitive bank must pay the market interest rate on deposits (iD) to attract deposits. They must also charge the market interest rate on loans (iL) if they wish to issue any loans. In fact profits are largely determined by the difference in these rates. While purely competitive banks have no power over the interest rates charged for loans or part on deposits, they can control the number of loans they issue at those rates. Purely competitive banks determine the level of loans that maximizes profits. All that remains to complete our analysis of purely competitive banks is to see how banks determine the amount of deposits they need to generate these loans. Let MPD represent the marginal product of deposits – the additional amount of loans a bank can issue if it acquires an additional ₦1 in deposits. Since the bank loans out money at the market interest rate of iG, the value marginal product of deposits (VMPD) to the bank – the additional revenue it gets from an additional ₦1 of deposits is-

VMPD = iL* MPD

The value marginal product of an additional ₦1 of deposits simply reflects the value of the interest income that will generated by

obtaining an additional ₦1 of deposits and converting the resulting reserve into loans to maximize profits, a purely competitive bank continues to attract deposits up to the point where the value marginal product of deposits equals the bank' cost of acquiring an additional Naira of deposits:

VMOD = iD

To see why, suppose a ₦1 increase in deposits increases loans by 80 kobo. So that the Marginal Product of the last deposits (the increase in loans) is .80. If the interest rate on loans is 10 percent, the value of the marginal product of the deposit is

VMPD = .1* .80 = .08.

In other words, the last Naira in deposits earned the bank 8 kobo in interest income. If the market interest rate the bank must pay is 4 percent, the cost to the bank of one more Naira in deposit is only ₦1*.04 kobo. it costs the bank less (4 kobo) to attract another Naira in deposits than it will receive by converting the deposit into a loan (8 kobo). Clearly, it pays for the bank to obtain additional deposits and convert them into loans. But as the bank acquires more deposits, the law of diminishing marginal ret urns implies that the marginal product

of deposits falls, which reduces the value marginal product. As the bank attract additional deposits, VMPD falls until it eventually equals the interest rate on deposits, iD. The bank will not actively seek additional deposit, because doing so would reduce the value marginal product to a level below the interest rate on deposits. In that case, the bank would pay more for the last deposit than it could earn by converting it into a loans. Thus to maximize profits, a purely competitive bank will aggressively seek deposits up to the point where VMPD = iD.

Figure 1.1.06 below illustrates the profit maximizing level of deposits for a purely competitive bank. The vertical axis measure the interest rate on deposits and the horizontal axis measures the Naira amount of deposits. The supply of deposits to the individual bank is horizontal at the market interest rate of 4 percent. The point at which the value marginal product of deposits (VMPD) equals the interest rate on deposits, D*, since the VMPD curve determine the bank's quantity of deposits demanded at each interest rate on deposits, it is the individual purely competitive bank's demand cure for deposits, The

demand for deposits by a purely competitive bank is downward sloping

due to the Law of diminishing marginal return.

Profit – Maximizing Amount of deposits in pure competition

Interest Rate

on Deposits

(%)

4 — Supply of deposits to
an individual Bank

VMPD

D*
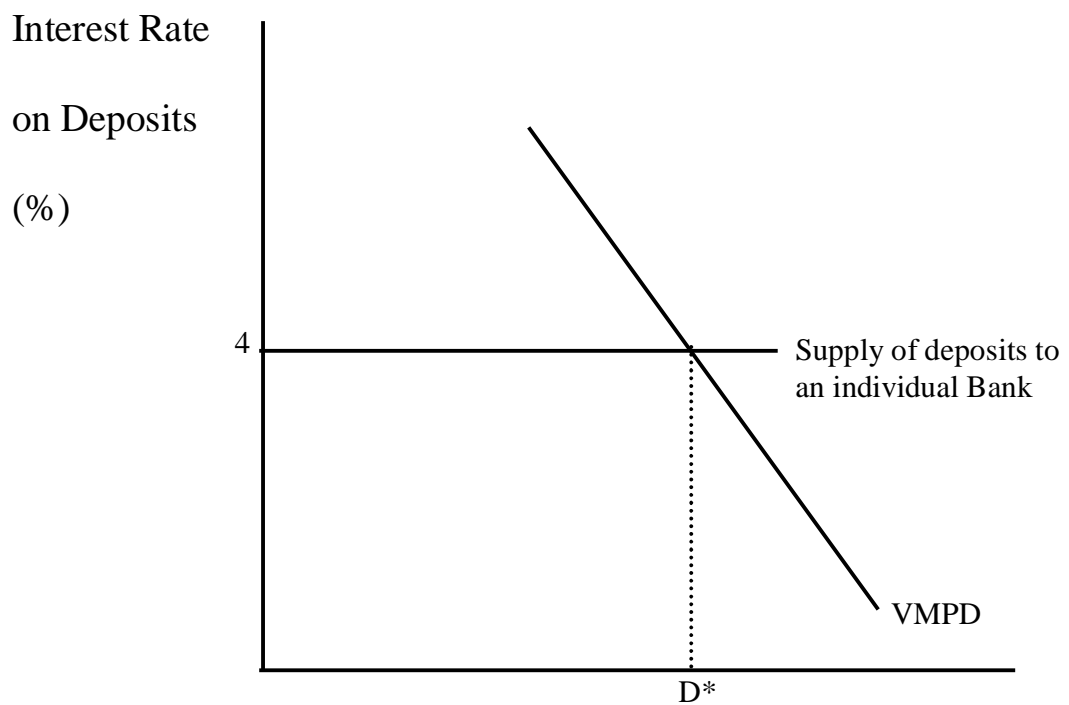
FIGURE 1.1.06

1.1.07   **THE DEMAND FOR DEPOSITS BY BANKS WITH**

MARKET POWER

The preceding analysis is relevant only for very small

banks that are <u>unable </u>to influence interest rates. In contrast, larger

banks typically have power that enables them to raise loan rates or lower deposit rates without losing their entire customer. To determine the profit-maximizing level of deposits for banks with market power, we distinguish between two possible cases. In the firs, the bank has market power in issuing loans but no market power in obtaining deposits. In the second, the bank has market power in both the market for loans and the market for deposits.

1.1.08   **<u>MARKET POWER IN THE LOAN MARKET ONLY</u>**

First of all, we will consider a bank that has market power in the loan market but not in the market for deposits. Thanks to her market power in the loan market, the bank faces a downward – sloping demand for loans, as we have previously seen. This means, they must lower the interest rates on loans to issue additional loans. However, since the bank operates in a purely competitive deposit market, it can readily obtain deposits at the market interest rate on deposits.

Figure 1.4 below illustrates this situation. In part 'a', demand for the individual bank's loan is downward sloping, which reflects the bank's market power in the loan market. In part 'b', the supply of

deposits to the bank is perfectly elastic at the market – determined interest rate. Reflecting the fact that the bank obtains deposit in a purely competitive deposit market.

Demand for loans at a bank with market power and supply of deposits to individual banks.

Individual Bank's Amount of Loan (Millions)
(a)

63
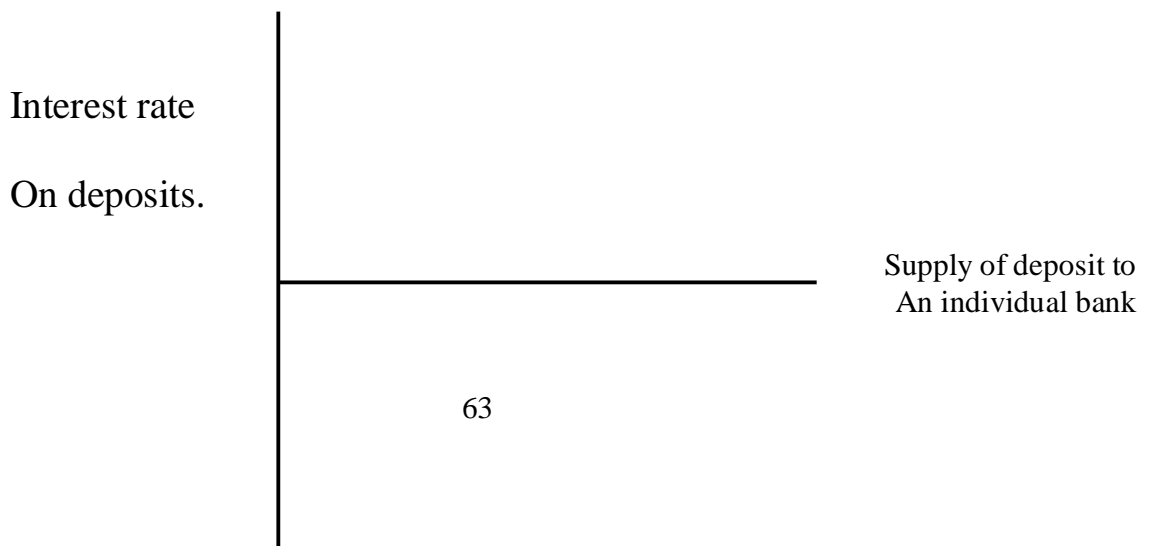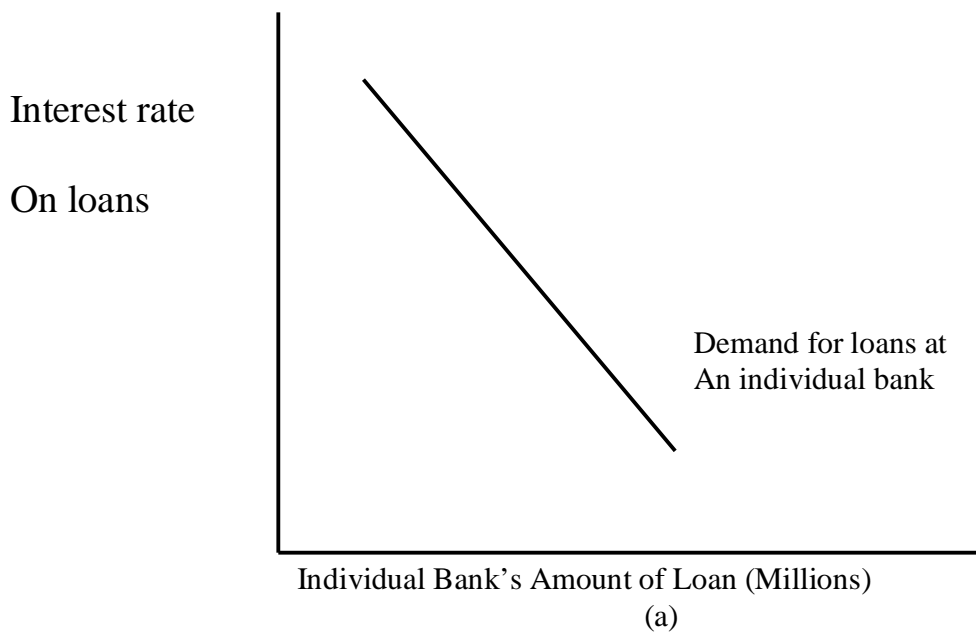
Market Interest

Rate iD

Figure 1.1.08

If a bank has market power in the market for loans, it must lower the interest rate it charges for loans to make more loans. This is illustrated in part (a) by a downward sloping demand curve for loans. Since this bans operates in a purely competitive deposit supply curve in part (b). The bank needs not charge the interest rate on deposits to attract more deposits.

In fact, each additional Naira in deposits that the bank obtains increases loans by the marginal product of deposits, MPD. Since the bank has market power in the loan market, to issue additional loans, she must lower her loan interest rate. The additional revenue the bank receives when she issues another Naira in loans is the marginal revenue received from a loan by the change in loan resulting from the receipt of

an additional Naira in deposits; we obtain the <u>Marginal Revenue Product of Deposits (MRPD)</u>.

MRPD = MRL * MPD.

This tells us the additional interest income the bank will if it accepts another Naira in deposits and convert the corresponding reserves into loans. How many deposits must a bank with market power in the loan market attract to maximize profit? When the interest rate on deposits is market determined and given by iD, the bank attracts deposits until the marginal revenue of loans multiplied by the marginal product of deposits equals the interest rate on deposits:

MRPD = iD

OR

MRPD = iD.

It is important understand the intuition behind this rule. MPD is the additional amount of loans the bank can make with the reserves generated from an additional Naira deposit. MRL tells us how much the increase in loans will increase the bank's revenue. Multiplying Marginal Product by Marginal Revenue gives us the additional revenue

from another Naira of deposits (since the marginal products tell us the additional loans, and multiplying by marginal revenue tells us the additional revenue from these additional loans). For profit maximization, MRPD, should equal the cost of an additional Naira of deposits, which is the interest rate on deposits (iD). Thus, when the profit-maximizing level of deposits is achieved, the additional revenues from attracting the last Naira of deposits.

Table 1 being the banks that have more to do with the saving Accounts below; illustrates this principal. The deposits vary from ₦0 to ₦200m, and the associated level of loans varies from ₦0 to ₦130m. the marginal product of deposits is calculated as the change in loans (DL) divided by the change in deposits (DD). For example, when deposits rise from ₦0 to ₦50m, loans increase from ₦0 to ₦40m, so the marginal product of deposits is ₦40/₦50 = .8. When deposits increase from ₦50m to ₦100m, loans increase from ₦40 to ₦85m and the marginal product deposits is ₦45/₦50 = .9.

Calculating the Marginal Revenue Product Deposit,

"The marginal revenue product of deposits in column 7 is the marginal product of deposits (column 3) times the marginal revenue of

issuing loans (column 6). The marginal revenue product of deposits declines as the bank receives more deposits."

Deposits. Marginal (million) MRL	Loans. Marginal (Million) Revenue Product Deposits	Marginal. (Million) Revenue	Interest. Product Deposits	Revenue. Rate on Loans	Revenue. ₦
D	L	$\triangle$	MPD=$\underline{L}$	iL	$\triangle$ $\triangle$L
R=iLxL	=$\underline{R}$	MRPD=			
		$\triangle$ D			

MRL x MPD

(1)	(2)	(3)	(4)	(5)	(6)
(7)					
0	0	-	15%	0	-
-					

50	40	.8	11%	4.4	11% 8.8%
100	85	.9	6.5%	5.525	25% 2.25%
150	115	.6	3.5%	4.025	-5% -3%
200	130	.3	2%	2.60	-9.5%- 2.85%

Table 1.1.1

As can be seen in table 1.1.1 above, columns 2 and 4 show the demand for loans at this bank. When the interest rate in column 4 is high, such as 15%, the quantity of loans demanded rises to ₦40m in accord with the law of demand. Multiplying each entry in column 2 by the corresponding entry in column 2 by the corresponding entry in column 4 gives us column 5, the revenue (interest income) the bank earns from issuing different amounts of loans: R=iL*L. Assuming the bank charges 11%, it will be able to issue ₦40m in loans to earn revenue of ,11* ₦40m or ₦4.4m. If the bank lowers its interest rate to

6.5%, the amount of loans it issues increases to ₦85m and revenue increases to ₦5.525m.

Column 6 summarises the Marginal Revenue to the bank of issuing loans – the change in bank revenues divided by the change in the amount of loans. For example, if a bank increases her loans from ₦0 to ₦40m, the marginal revenue is (₦4.4 – ₦0)/(₦40 – ₦0) = .11 or 11%. Thus, column 6 contains an entry of 11% when the bank issues ₦40m in loans. When loans are ₦85m, we calculate marginal revenue as (₦5.525 – ₦4.4)/(₦85 – ₦40) = .025, or 2.5%. Thus note that as the amount of loans increases from ₦40m to ₦85m, marginal revenue declines from 11 to 25%. Furthermore, if the bank increases her loans to ₦115m, marginal revenue becomes negative. This indicates that, after sometimes or some point, as the bank issues more loans, her total revenue falls because the additional revenue from issuing more loans is more than offset by the revenue lost from the reduction in the interest rate the bank needed to issue more loans.

Finally, column 7 of the table calculates the marginal revenue product for deposits as the marginal revenue of loans (column 3). The bank maximizes profits by continuing to attract deposits up to the point

where the marginal revenue product of deposits equals the interest rate on deposits. For example, if this bank can obtain all the deposits she wants at an interest rate of 2.25%, she will choose to attract ₦100m in deposits to maximize profits. When deposits are ₦100m, the interest rate on deposit of 2.25% will just equal the marginal revenue product of deposits. The bank will issue loans of ₦85m at a loan interest rate of iL=6.5%. She will have revenue (interest income) of ₦85m*.065 = ₦5.525m, while her interest costs on deposits are ₦100m*0.0225 = ₦2.225m.

There are two reasons the demand for deposits slopes downwards in the case of a bank with market power in only the loans market first, if diminishing marginal returns exist, the marginal product declines as additional deposits are obtained, causing MRPD to decline. Second, because the marginal revenue of loans decreases as more loans are issued, MRPD declines as deposits increase. The second factor is not present in the case of a purely competitive banks. <u>Thus, a bank with market power in the loan market will have a downward sloping demand for deposits even if there are not diminishing marginal returns to deposits.</u>

1.1.09   **MARKET POWER IN BOTH THE LOAN AND DEPOSIT MARKET**

It is true that, large banks have market power in both the loan and the deposit market and this tends to lower the interest rate they pay depositors. This is done this way.

Any profit-maximising bank compares the benefits of obtaining an additional naira in deposits with the corresponding costs. If a bank enjoys market power in the loan market, the relevant measure of the loan market, the relevant measure of the benefits to the bank of obtaining an additional Naira in deposits is the marginal revenue product of deposits (MRPD):

$$MRPD = MRL * MPD$$

However, the cost of obtaining an additional Naira in deposit differs when the bank has market power in the deposit market, since it faces an upward-sloping supply curve for deposits such as the one labeled S in Figure 1.6. This affects the bank's cost of obtaining additional deposits. For example, if the bank currently obtains Do in deposits and wishes to increase deposits to D1, it must this situation, the cost to the bank of obtaining an additional Naira in deposits is not

the current interest rate on deposits but the Marginal Resource Cost of Deposits (MRCD), the change in the cost of deposits due to a ₦1 change in the level of deposits.

Calculation of the Marginal Resources Cost of Deposits

The Marginal Resource Cost of Deposits is the change in deposit interest required to obtain an additional Naira in deposits. The marginal resource cost of deposits, increase as additional deposits are received. This is because, the only way a bank with market power in the deposits market can attract more deposits is to raise the interest rate paid to depositors.

Quantity Supplied of Cost Deposits (Million ₦)	Interest on on Deposits	Interest Cost (Millions ₦)	Marginal Resource of deposits $\triangle C$ D

D	iD	$C = i_D * D$	$MRCD = \dfrac{\triangle}{\triangle}$
25	0.5%	.125	-
50	1%	.5	1.5%
75	1.5%	1.125	2.5%
100	2%	2.0	3.5%
125	2.5%	3.125	4.5%
150	3%	4.5	5.5%

Table 1.1.2

Table 1.1.2 above shows how to calculate the Marginal Resource Cost. The first two columns summarise the supply of deposits to this bank. As the interest rate on deposits rises, so does the quantity supplied. For instance, if the bank pays .5% interest, she attracts ₦25m in deposits, she attracts ₦25m in deposits, which costs the bank ₦0.125m. If the bank wants to increase the interest rate on deposits to 1 percent. When it does so, its costs increase to ₦ 0.5m. The change in cost divided by the change in deposits is the Marginal Resource Cost.

In the case, the Marginal Resource Cost is ₦.375/ ₦ 25 = 0.015 or

1.5 percent.

Profit-Maximising Amount of Deposits in Bank with Loan Market Power

Interest Rate

On Deposits

(%)

2.25

Supply of Deposits to

an individual bank

MRPD=MRL   x

MPD

100

Deposits at an individual bank (Million ₦)
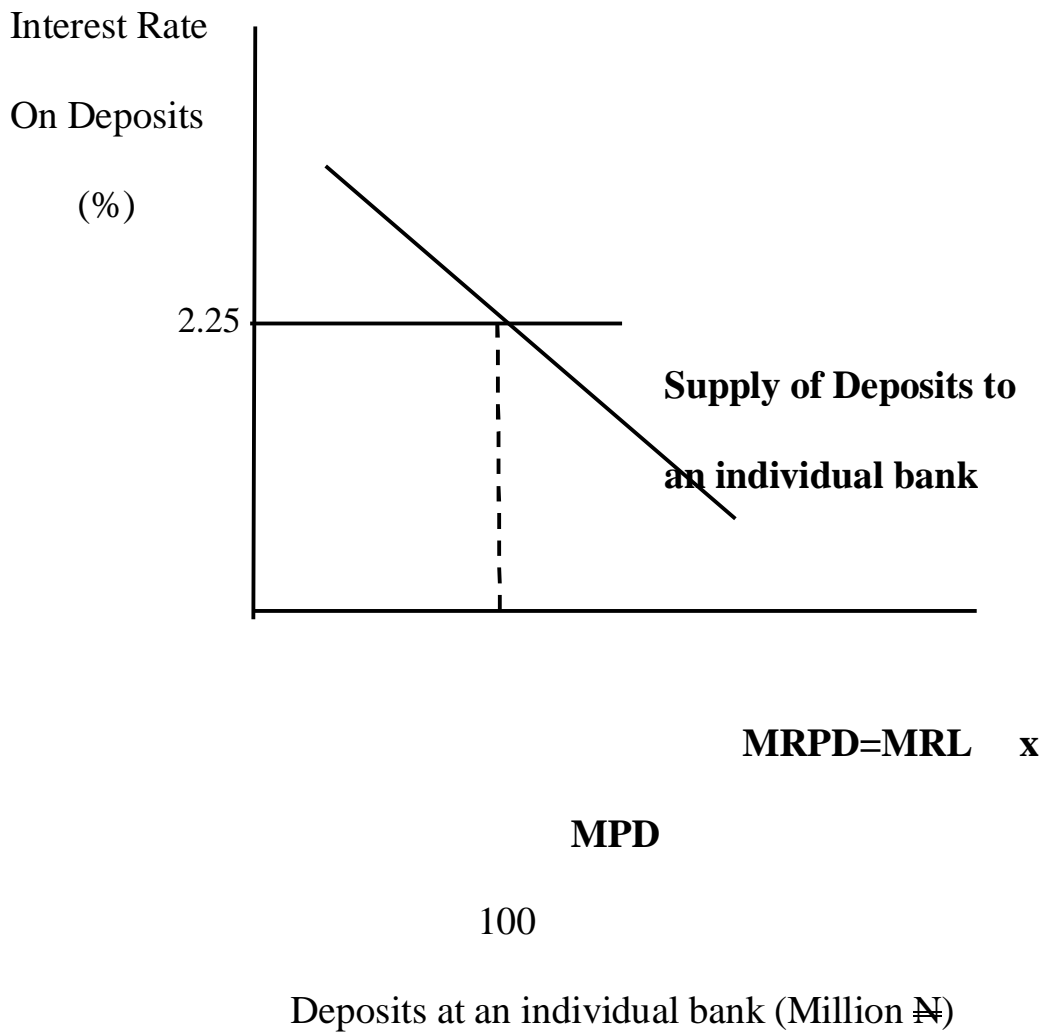
Figure 1.1.09

The banks MRCD is greater than 1 percent, the interest rate on deposits, because the bank must raise the interest rate from .5 to 1 percent, not just on the additional ₦25m in deposits but also on the initial ₦25m. Imagine what happens if the bank announces that it was going to pay 1 percent only on new deposits but existing deposits would still earn .5 percent! The existing deposits would likely be withdrawn and re-deposited as new deposits. Thus, the concept of marginal resource cost takes into account the fact that, a bank with market power can raise additional deposits only by increasing the market interest rate on all deposits and this raise costs by more than just the amount paid on the additional deposits. In figure 1.1.10 below, the marginal resource cost curve, MRCD, lies above supply curve of deposits, because an increase in deposits raises resource cost by more than iD.

Having understood the relevant benefits and costs to a bank of obtaining additional deposits, one can easily determine the level of deposits that maximize bank profits. A bank with market power in both the loan and deposits market will maximize profit by obtaining deposits

up to the profit where the additional costs if increasing deposits, MRCD, just equals the additional revenue from increasing deposits.

MRPD, or MRPD = MRCD.

1.1.10 MARGINAL RESOURCE COST OF DEPOSITS

This bank has market power in both the loan and deposits markets. Consequently, it must lower the interest rate on loans to make additional loans and must raise the interest rate on deposits to obtain additional deposits. The need to raise deposit interest rate to obtain more deposits is shown by the upward sloping supply curve of deposits, S. The curve labeled, MRCD is the marginal resource cost of deposits. To increase deposits from Do to D1, the bank most raise the interest rate it pays depositors from iDo to iD1

Marginal Resource Cost of Deposits Graphed

Interest Rate

On Deposits   MRC**D**   S

(Depositors)

iD^1 ....

iD^O ....

                                    76

                    D^O D^1
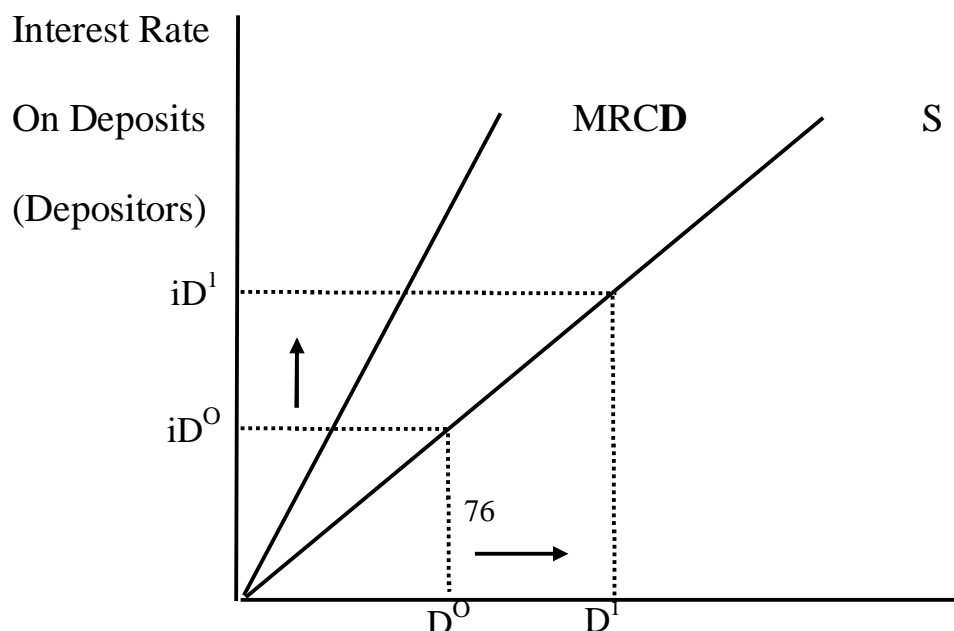
Deposits at an individual bank (Millions)

Figure 1.1.10

1.1.11   **Profit-Maximising Amount of Deposits: The Case of Market Power Both in the Loan and Deposit Markets**

In figure 1.1.11 below, the intersection of MRPD and MRCD at point A, so that the profit maximizing quantity of deposits is D*. What interest rate on deposits will the bank pay to attract D* deposits? Since the bank in figure 1.7 has market power in the deposit market, it will pay the lowest possible interest rate that will generate D* in deposits. This interest rate is determined by point B on the supply curve, which corresponds to an interest rate of iD*. In other words, if the bank offers depositors an interest rate of iD*, the quantity of deposits supplied will be D*, which is the profit maximising level. If the bank offered a lower interest rate, it would attract fewer deposits than D* and therefore would not maximize profits.

PROFIT MAXIMISING AMOUNT OF DEPOSITS.
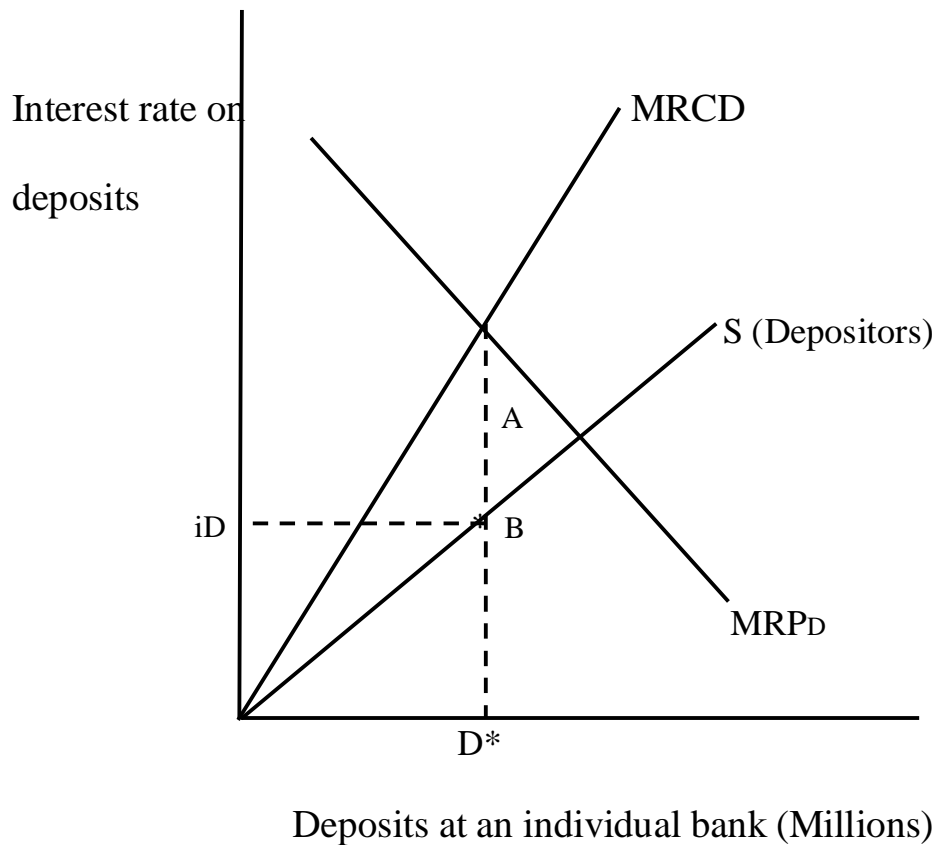
Figure 1.1.11

1.1.12   UNCERTAINTY AND BANK DEPOSITS

Herein under, the researcher has taken the final step in analyzing deposits as input into producing loans and has shown how banks deal with uncertainty concerning when deposits will be withdrawn. In fact, to maximize profits, a bank must convert the reserves generated by its optimal level of deposits into loans. In doing so, however, the bank converts liquid assets (reserves) into less liquid

assets, (loans). This raises the possibility that the bank will not have enough liquid assets to meet its depositor's demands. In this section, the researcher has examined how banks solve this problem and also how the failure to solve it can lead to bank panic.

Bank withdrawals and the Law of Large Numbers.

How can a bank dare to convert into a loan the liquid reserves created when one deposits money in his account? If one deposit N100 and the bank is certain that one will not withdraw the funds for a year, It can loan out the reserves he has deposited for one year without losing any sleep. In reality however, banks do not know how long each depositor will leave their deposits in the bank before withdrawing funds. How then do banks deal with this uncertainty?

The answer lies in what statisticians call the law of large numbers. When applied to banking, the law says that, if an individual withdrawal decision is independent and the number of depositors is large, the bank can determine very precisely how much it an afford to lend out and still cover the withdrawals of its many depositors. One of the best ways to grasp the law of large number is to illustrate what it implies about something we all understand: Flipping a coin. When you

flip a coin, there is a 50-50 chance it will come u heads. If you flip a coin only once, you cannot be certain whether it will turn up heads or tails. However, if you flip a coin repeatedly, you will find that the ratio of the number of heads to the total number of flip get closer and closer to the probability that any one tosses will result in heads, which is ½. For Example, if you flip a coin 10 times, you may find that 4/10 of the flips are heads. If you flip a coin 100 times, may be 47/100 of them will be heads. If you flip a coin 1000 times, you can be very confident that close to ½ of the flips will turn up heads. Even though the outcome of any one-coin toss is purely random, when the outcomes are average over a large number of tosses, the result can be predicted with great certainty.

Similarly as the number of depositors at a bank increases, the bank can predict with increasing accuracy, the amount of withdrawal depositors will make in a given period of time. To be sure, the amount withdrawn by a single individual is uncertain, just as the outcome of a coin toss is. But when the bank averages over a large number of depositors, this randomness vanishes. The bank can then

predict with great certainty the amount of reserves it needs to cover withdrawals.

To see why, suppose there are N depositors in the bank, each with an equal-size account. Thus, if the total deposits at the bank is D, any individual, I has Di=D/N of these deposits in his or her name. If individual I withdraws with Naira of deposits, the fraction of deposit withdrawn denoted Di, is Di=Wi/Di=Wi/D/N.

Notice that different individuals withdraw different fractions of their deposits, that is, Di, varies across different individuals in much the same way that different toss of a coin result in different outcomes. If we divide both sides of the above expression by the total number of depositors' (N), we get

$$D = \frac{Edi}{N} = \frac{Ewi}{D}$$

In other words, the average fraction of fraction of deposits withdrawn by all depositors' (d) equals the total withdrawals by all individuals (Ewi) divided by total deposits at the bank (D). If withdrawal decisions are independent of one another and the number of depositors is large, the law of large numbers says that total withdrawals

as a fraction of total deposits is very close to the probability that one depositor will withdraw his or her deposits. For instance, if the probability that any one depositor will withdraw funds from the bank is P, then when N is very large,

$$D = P = \frac{Ewi}{D}$$

This means that when a bank has a large number of depositors, it knows total withdrwals, as a fraction of total deposits will be very close to the probability, P, that asingle depositor will withdraw his or her funds from the bank. This is true even though the bank does not know whether any individual depositor will withdraw funds. For instance, if P = 5, there is a 50-50 chance that you will withdraw all of your deposits. Still by keeping one half of all deposits as reserves and loaning out the rest, a bank with many depositors can be reasonably sure of having enough reserves to cover withdrawals by you and other depositors.

1.1.13   <u>SAVING DEPOSITS AS A BANK PRODUCT</u>

In Nigeria, up to the mid-eighties, banks operated under very strict regulation and because the number of banks granted the

operational licence were few, the industry remained largely in the sellers market. In the process, such acronym like armchair banking became prominently used. As at that time, customers had to take businesses to the banks and follow through to see them consummated. It was also common for customers to wait long hours in banking halls to cash cheques. This era and style of banking ended in the post mid-eighties when banking license became liberalised. The liberalisation of banking license also came with some measure prederegulation in the sector, key issues like interest rate, foreign exchange sourcing etc. were deregulated.

The liberalisation brought about a phenomenon increase in the number of banks operating in Nigeria and also brought an intense competition for businesses in the sector. Intense competition became necessary because this period also coincided with the period of economic decline in Nigeria. The volume of business available could hardly be sufficient for the number of banks in the country. Though some measures of deregulation were witnessed in areas like interest rate, the regulatory agencies introduced other stricter regulatory

approach to the management of liquidity in the economy. Some of the measures introduced includes:-

- The withdrawal of Government and its agencies/parastatal funds form the commercial banks vaults to the Central Bank of Nigera (CBN);

- Introduction of stabilisation securities;

- Introduction of discriminating 'Cash Reserve Ratio' (CRR) between the Commercial Banks and the Merchant Banks;

- Increase in Liquidity Ratio etc.

All these measures were aimed at conscripting the available liquidity in the banking system and to also reduce the rate of inflation in the economy. However, the net effect of these strict policies on liquidity management in the system was the death of stable funds in the banking system.

The death of stable funds in the banking system thus compelled banks to depend on demand deposits to fund their lending. The need to source long-term stable funds became imperative. Nigerians banks had to introduce various kinds of products to attract stable funds and also manage their mix of liabilities in such a way that their capacity to

create assets will not be impaired. The central key here has been how to attract these deposits in order to be less dependent on demand deposit. A bank of its volatility.

One source of key stable fund in the banking system is the savings deposit. A bank with a large pool of savings will be able to plan its activities better and also achieve better results. The importance of Savings Deposits in a bank basket of products cannot therefore be overemphasized.

1.2.0   <u>**STATEMENT OF THE PROBLEM**</u>

The primary role of a financial system in any economy is to enhance the transformation of the savings of individuals and businesses into investments by others. Savings in this case being defined as Income minus Expenditure on goods and services in a given period while investment is the purchase of physical assets that are used to produce goods and services.

A financial system is therefore, expected to provide the principal means by which a person (which could be an individual, a business enterprise, a farmer, governmental unit, etc.). Who has saved

money out of current income can transfer these savings to someone else who has productive investment opportunities and needs money to finance them.It is this transfer of money, which ultimately results in the creation of what is called a <u>Financial Asset.</u> A Financial Assets is therefore a claim against the future income and assets of the person issuing the financial asset. Just as there is a financial asset owned by someone, there is a corresponding financial liability. From this view point of the issuer, this claim against the future income and assets of the person issuing the financial asset, is a financial liability. Financial assets created through any of the means provided are the basic "products" of a financial system – the bank.

In banks, financial products are largely divided into two (2) main groups. These are:-

<u>Assets Creating Products and The Liability Generating Products.</u> In this dissertation, the researcher is concentrating on savings deposit, which is one of the <u>core liabilities generating products.</u> Saving deposit is a product that is common to all banks and constitutes core steady deposits to the banks. This study is to determine how pricing can influence the patronage of this product – "Saving Deposits".

1.3.0   <u>**OBJECTIVE OF THIS STUDY**</u>

The major objectives of the dissertation are as follows:-

(a)   To determine whether pricing can significantly or materially affect the patronage or otherwise of savings deposit in banks.

(b)   Examine the difficulties of growing saving deposits in Nigerian banks and the possibilities of overcoming the difficulties.

(c)   Evaluate the benefits of saving deposits to banks, relative to other forms of deposits.

(d)   Make suggestions on how savings deposit porfolio can be raised and sustained in the bank.

1.4.0   <u>**RATIONALE FOR THE STUDY**</u>

A savings deposit is a core deposit, which provide stable funds for planning in banks. A study of this nature will be of immense benefits to all banks wishing to grow their savings deposits portfolio. Marketers of financial products including facilitators in various strategy seminars on this issue will find this study a useful companion.The following among others make a study of this nature very compelling:-

(a) Whether the general rule that a decrease in price can elicit increase sales volume is applicable to the savings deposits as a banking product.

(b) What methods/strategies aside pricing can be used to stimulate patronage of this "banking product" – Savings deposit.

(c) Which markets in terms of demographic segmentation patronize the product more.

(d) The study will expose the expectation of savings depositors.

1.5.0 **METHODOLOGY**

The researcher intends to undertake the study through the following. Theres will be library research on the subject and also on Empirical study on the subject. Under the empirical studies, the researcher intends to:-

(a) Administer questionnaires to saving account customers of Nigeria banks. The researcher will also administer questionnaires to potential account customers. These questionaaires will not be administered to the same population so as to ensure that the population

to be adminitered is scattered enough in order to obtain the desired spread for the project.

(b)   Two banks will be selected for the exercise, a big old generation bank and one small new generation bank. There will be an analysis of the movements in pricing and the movements in the portfolio of their savings deposits.

(c)   The researcher also intends to have oral interview with the desk officers of the savings deposits of these banks.

(d)   There will be oral interviews with the decision-makers in the banks on their expression on the behaviour of this product.

(e)   Both primary and secondary data will be used in the conduct of the study. The data will then be presented using tables, graphs, histpgram, chats, etc to aid the interpretation.

(f) The findings will be analysed, interpreted explained and deductions made, based on the findings. This which is of great importance to the banking industry and the entire financial system.

1.6.0   **THE SCOPE OF STUDY**

The study is pexpected to cover a three (3) year period from 2001 – 2003. The interpretation is to carry out the study on current data i.e. within the same socioeconomic indices.

As mentioned "supra" two banks have been selected for the exercise, the old generation banks; selected is Union Bank of Nigeria Plc. While the new generation bank selected is Co-operative Development Bank Plc.

Under the arrangement, the first chapter will be devoted to general introduction to the study, the second chapter will be the literature review on the subject and also bring out some fundamental issues on banks deposits. Chapter three will focus on the methodology used. While chapter four will be data presentation and analysis including the testing of the hypothesis. Chapter five will dwell on the discussion of the results. The summary of findings, conclusions/ recommendations including bibliograhics and references will come under chapter six. Appendices may also be included if need be.

Limitation:- Due to time constraint and financial cost involved in the conduct of the study, the researcher would wish to limit the study within the scope stipulated above.

CHAPTER 2

LITERATURE REVIEW

2.0.0   **INTRODUCTION**

According to Osubor J. U. in his book <u>Business Finance and Banking in Nigeria,</u> commercial banks are a nation's most important financial institutions in the sense that their performance of services are unique and are distinguished from other forms of financial institutions or intermediaries because of the following characteristics:-

(a)   Commercial banks hold the nation's money supply.

(b)   They are the only financial intermediaries whose demand deposits   circulate as money.

(c)   Commercial banks' lending can create additional bank deposits through redeposit of the money by the borrower, unless the public chooses to hold more currency.

(d)   They have the sole power to create money through the mobilsation and monetisation of debt or throgh a promise to pay IOU and also the power to destroy money.

Commercial banking is said to be one of the oldest industries. These banks are the most important types of financial institutions in terms of aggregate assets. In terms of employment, commercial banking is one of the largest industries. For instance, in Nigeria, commercial banks have continued to be the dominant segment in the banking industry. They accounted for 78.4% of the total credit outstanding at the end of 1990. The seven largest commercial banks in Nigeria accounted for 44.5% of aggregate banks' assets, 55.3% of total deposits and 48.3% of total credit outstanding as at the end of 1990 (CBN Annual Report, 1990).

2.0.01   **EVOLUTION**

Trade in Nigeria, before the arriival of the Arabs and Portuguese traders in the early 18th century, was strictly by barter – direct exchange of goods and services for goods and services. But in 1870, when theses traders arrived, a mixed barter – "money" economy was introduced. The mixed barter- money economy simply meant that during the period, commercial and economic activities among Africans were by barter whereas, such activities between Africans and

Arabs/Portuguese were commonly carried out using one form of commodity, money or the other, such commodity money used include terms like coral beads, cowries, manila, brass and copper rods, bottles, cases of gins, livestock and even slaves who by then, served more as beasts of burden.

The Portuguese, who were said to be the first Europeans to visit the West African Coast, eventually popularised the use of cowries and Manila as monetary instruments in their trading activities in the then Ancient Kingdom of Benin. The Portuguese thereafter, monopolised trading activities in West African Coast, including Nigeria. Not quite long after the British Traders arrived on the West African Coast. It could be noticed that just a few years after the arrival of these British traders, they conquered the Portuguese traders and took over the monopoly of all commercial and economic activities in four different nations on the West African Coast, namely, Gold Coast (now Ghana), when it was discovered that these British traders did not only come to trade, but in the actual sense to rule. This however, led to the colonisation of the four West African Countries by the British colonial administration.

With the subsequent setting up of a British colonial administration in these countries, the use of currency (mainly the British Silver Coins) was greatly encouraged. This, however, was the first step in the process of monetising these economies: Which in actual sense facilitated exchange greatly and discouraged barter.

The idea of banking in Nigeria dates back to the early period of the colonial administration. The British traders had monopolised all commercial and economic activities in Nigeria having introduced the use of British Silver Coins as a medium of exchage and as a means of payment. The activities of the expatriate (mainly British) corporations, the financial transactions of the colonial government, the decline of the barter system of exchange and the increasing acceptance of the British silver currency pressurised the need for modern day banking in Nigeria, principally for the proper execution and transmission of funds, to effectively and efficiently serve the British Colonial government and their corporations.

(a)   **Expatriate Banks**

For this reason, an expatriate shipping firm based in Liverpool, England, operating stemship services between its home base, Liverpool

and West Africa Coast, known as Elder Dempster and Company Limited, invited the African banking corporation of South Africa to establish a branch of its bank in Lagos in 1892. This bank was established principally for the services of foreign companies and as such, was closely monitored by Elder Dempster Company Limited. This bank, African Banking Corporation (ABC) in Lagos, experienced some difficulties initially because of the recession that had hit Lagos. It was not able to mobilise enough funds to support the expatriate firm and so ran into financial problem. It eventually decided to transfer its interest to Elder Dempster and Company Ltd. Barely a year after it had opened its doors to the public.

Elder Dempster and Company Ltd., was determined to establish a banking office in Nigeria, if not for any other reason, at least, to facilitate international trade, aminly by distributing the British Silver currency and repatriating the profits of the foreign firms. So in March 1894, the company registered a limited liability company in London under the name the Bank of British West Africa, (BBWA). The bank was registered with an initial authorised capital of E10,000 and was later increased to E100,000 in the same year. The BBWA opened

its 1st Lagos branches the same year 1894. Other branches were opened in major West African Cities such as Accra, Freetown and Bathurst and a branch in the then old Calabar. This bank – BBWA has the unique feature of being the first successful expatriate bank in Nigeria; and is today known as the FIRST BANK OF NIGERIA PLC. The bank since its inception in the British colonies had the sigular privilege of enjoying the monopoly for the importation and distribution of Silver currency from the Royal Mint in London.

Then, in 1899 to break the complete monopoly of the Nigerian banking secene by BBWA, the Royal Niger Company (now UAC of Nigeria Plc) established another bank known as the Anglo-AfricaN Bank in old Calabar.

The bank later changed its name from Anglo-Africa bank to Bank of Nigeria and subsequently opened up other branches in Burutu, Jebba and Lokoja all in a bid to compete with BBWA. However, due to the fierce competition and the monopoly for the importation of Silver currency from the Royal Mint and its distribution enjoyed by BBWA, the bank sold out to BBWA in 1912. From then on, the BBWA enjoyed fully monopoly of the Nigeria banking scene.

The West African Colonial Government had observed that with the transfer of the monopoly of distribting British Silver Coins transferred to BBWA and the eventual successful introduction of the British currency, the West African colonies were absorbing about 25% of the Royal Mint output. And as such, the West African Colonial Government demanded among other things:

i)   A share of seigniorage.

ii)   Replacement of the British silver coin by a West African issued coin.

iii)   The establishment of more banks in the areas.

These demands triggered off a series of commissions of enquiries set up by the UK Secretary of State for the colonies. The final outcome of the various commisions was the establishment of a West African Currency Board in 1912 based on Lord Emott committee recommendation. This board was to be responsible for the distribution of British silver currency and the financing of export trade of expatriate firms in the whole of British West Africa colonies. To meet these objectyives, the West Afrtican Currency Board (WACB) decided to

appoint BBWA the sole agent for the custody and distribution of the British silver currency issued by the currency board (WACB). The bank of British West Africa (BBWA) therefore, continued to enjoy this absolute monopoly of the Nigerian banking until in 1917 when Barclays bank DCO (Dominion, Colonial and Overseas) opened its first branch in Lagos. Within five years of its operations, it opened about fifteen branches in West Africa. This bank has the unique feature of nbeing the second successful expatriate bank in Nigeria, today known as UNION BANK OF NIGERIA Plc. The Nigerian banking scene was therefore, dominated by these two British banks – the BBWA and Barclays bank, DCO, between 1894 and 1933.

By 1949, another expatriate bank, the third known as the British and French bank (now called United Bank for Africa Plc) was established. These expatriate banks, it must be emphasied, came principally to render services in connection with international trade, so their relations at that time were chiefly with the expatriate trading companies and with the colonial government. They largely ignore the development of local African Enterprenuership. There was no attempt whatsoever by the expatriate banks to train Africans in the art of

banking. For many years, the highest position occupied by an African in any of these banks was that of a labourer or manager.

Moreover, the habit of banking was being killed in the country because funds deposited by Nigerians were used to either support expatriate firms operating in Nigeria or were sent abroad for investment and thus development in their own country. Investments and meaningful development in the country were therefore lacking. Although, these three expatriate banks controlled close to 90% of aggregate bank deposits. Nigerian businessmen, women and industrialists were discriminated against in terms of credit policies and management development of the expatriate bank. Even when things started improving, Nigerians were not employed in high management positions in the expatriate banks, and even when employed, they were not exposed to any further management training programmes. Hence from 1914 to the early 1930's, several abortive attempts were made to establish indigenous banks to break this foreign monopoly of the Nigerian banking sector.

b)   **INDIGENOUS BANKS**

To differentiate expatriate banks from the indigenous banks; expatriate banks are those banks in Nigeria owned and managed by foreigners in this country, whereas, indigenous ones are those wholly owned and managed by Nigerians. Angered by the discriminatory attitude of these expatriate banks against Nigerian businessmen, women and industrialists; coupled with their nonchalant stance over the development of the local environment; the industrial and commercial bank was established by a handful of patriotic Nigerians in 1929. It had its office in Lagos. But in 1930, the bank liquidated because of under capitalisation, bad financial management, aggressive competitions from the expatriate banks, and of course, most importantly because of the wave of economic depression which had hit the whole world at that time. In 1931, just two years later, another indigenous bank known as the Nigerian Mercantile Bank was established with greater courage and planning. However, because this bank was under the leadership of the same man who was in charge of the defunct industrial and commercial bank two years earlier, the bank had problems mobilising any meaningful deposits.

In fact, both its paid-up capital and total deposit liabilities did not exceed E8000 (Osubur J. U. 1984). It was therefore, rather impossible for the bank to prudently operate under such condition and as such went into voluntary liquidation in 1936.

In 1933, another attempt was made towards a successful establishment and maintenance of an indigenous bank. The bank was known as the National Bank of Nigeria. The bank was registered with an authorised capital of E250,000, by which only E2,046 was paid up capital in 1934. This was however, increased to E29,000 in 1946 and then by 1948, 30th June its paid up capital had increased to E70,876. Also the deposit liabilities of the bank increasingly jumped from E7,830 in 1936 to E345,930 in 1946. Loans and advances to indigenous businessmen and women amounted to about E22,000 in 1946. The bank therefore had the unique feature of being the first successful indigenous bank in the country. The bank is still in business today as National Bank of Nigeria.

AGBONMAGBE BANK founded by Chief Okpe in 1945. This bank is said to have experienced some financial difficulties and so

was taken over by the then Western Regional Government in 1969 and its name changed to WEMA Bank.

The 5th indigenous bank, the Nigerian Penny Bank was set up in the early 1940's. This bank in 1946 collapsed under the weight of mismanagement. Then, came the Nigerian Farmers and Commercial Bank in 1947. The bank grew so rapidly that within four years of operations, it had opened up to thirty branches with one branch in London. Because of this over-expansion, management found it very difficult to monitor all its activities, thus leading to management and accounting inefficiency. This ultimately led to its liquidation in 1953. The year 1952 saw the establishment of the Merchant bank, which had opened its doors to the public for business, only to close doors against the public in 1960.

It might be seen that the second successful indigenous bank was the African Continental Bank Ltd. They started as a private company in 1937 as TINUBU PROPERTIES LTD. Registered with an authorised capital and initial paid-up capital of E500. Ten years later, in January, 1947, the name was changed to TINUBU BANK LTD and in November of the same year, it was registered as the African

Continental Bank Ltd (ACB Ltd) with an authorised capital of E20,000 of which E10,000 had been issued and paid up by June, 1948, long before it commenced operations on 1st September, 1948. Chief (Dr) Nnamdi Azikiwe, the Owelle of Onitsha and the first Nigerian President founded this bank. Because of the failures of these and many other banks not mentioned in our discussion, the period, 1892 to 1952 has always been referred to as the free banking era in the annals of Nigerian Banking.

According to CBN study, 22 banks were registered in Nigeria during this free banking era (FBE). But the figure quoted from government records and later confirmed by the then Financial Secretary (A Colonial Administrator), a total of 185 banks were actually registered in Nigeria.

According to the records 145 banks were registered between 1892 and 1947 and in 1952. However it is believed, that most of these banks were merely registered without actually commencing operations.

It is really interesting to note that the free banking era (1892 to 1952) was characterised by two main features according to G. O.

Nwankwo in his book "The Nigerian Financial System." The two main features include:

i)   The absence of any banking legislation, anybody could set up a banking company. Provided he registered under the companies' ordinance. Section 2(i) of this ordinance prohibited the formation of a banking company or partnership consisting of more than ten persons for the purpose of carrying on the business of banking unless it was registered as a company. Since no such partnerships were formed, it therefore, meant that anybody could register under the ordinance to do banking business, provided the membership did not exceed ten. If membership exceeded ten, the organisation was not prohibited from engaging in banking business; all that had to be done to commence banking business was to register as a company under the ordinace.

Once registered, the individusl or company could engage in any type of banking business without any restrictions except that, under the stamp duties ordinances (No. 5 of 1939), the banking company could not issue bank of England notes. Although such a company could issue its own notes, no note issuing commercial

bank has ever been established in Nigeria. The other restriction, or rather requirement, was that under section 108 of the companies ordinance, the banking company had to render a half-yearly statement of its liabilities and assets which must be exhibited in a conspicuous place in all offices of the company. However, all said and done, it is the absence of any banking legislation, which earned the period (1892 – 1952) the accolade of the free banking era because anybody could set up and engage in the business of banking.

ii)   Secondly, it was during this period that the three biggest expatriate banks and the two biggest indigenous banks were established. The expatriate banks were the bank of British West Africa (BBWA), the Barclays bank DCO; an the British and French bank. The two indigenous banks were the National Bank of Nigeria and the African Continental Bank Ltd.

iii)   With the sad experience during the free banking era (i.e. failures of many banks causing depositors' money to be thrown down the drain) an urgent need for legislation for the control of

banking in Nigeria became very apparent if only to protect the depositors.

The colonial government therefore, invited Mr. G. D. Paton an official of the Bank of England to enquire into banking in Nigeria and to determine the cause(s) of the bank failure. Paton studied the problem and consequent upon his report, the first banking legislation to generally regulate banks and protect depositors was enacted. This legislation was called the 1952-banking ordinance, thus becoming the first banking legislation in Nigeria.

2.0.02   **FUNCTIONS**

Section 6, of Decree No. 25 of 1991, defines "banking business" to mean the business of receiving deposits on current account, savings account or other similar accounts, paying or collecting cheques, drawn by or paid in by customers; provision of financial or such other services or business as the Governor may, by order publish in the Gazette, designated as banking business, the same section went further to define a "commercial bank" to mean any

bank in Nigeria whose business includes the acceptance of deposits withdrawable by cheques. Thus a commercial bank is an institution which accepts deposit from the public and in turn advances loans by creating credit. It is different from other financial institutions in that they can create credit though they may be accepting deposits and making advances.

The importance of commercial banks can best be illustrated by a brief explanation of their major functions.

i)   **Pooling of Savings:-** Commercial Banks perform this very important function (which happens to be the aim of this dissertation), to all sectors of the economy by making available the facilities for the pooling of savings through acceptance of deposits from the public and then, making these funds available for economically and socially desirable purposes. Accepting deposits is the oldest function of a bank and the banker in those days used to charge a commission for keeping the money in its custody when banking was still developing as an institution.

At present, a commercial bank accepts three major kinds of deposits from the customers.

(a)   Saving Deposits are those on which the bank pays small interest to the depositors who are usually small savers. These depositors are allowed to draw their money upon presentation of their saving account passbook through, legally they are required to give enough notice (normally about fourteen days) to the banker before withdrawal but in practice, banks have not insisted on this requirement.

(b)   Current Account Deposits normally are maintained mostly by businessmen and sometimes by Salary or Wage earners. They can withdraw any amount standing to their credit in currency deposits by cheques with notice, unlike the saving accounts. Formerly in Nigeria, the bank does not pay interest on such accounts, but instead charges a nominal sum for services rendered to the customer. However, since the advent of SAP in 1986 with its attendant deregulation, banks were allowed to start paying interest on current account deposits, taking into consideration the customer's average or possible minimum balance during the month, the number of items they have

presented for collection and the number of cheques they have written.

Current Account Deposits are the principal and most popular accounts. They are accounts opened so that cheques can be paid into them and drawn on. Deposits on currnt account are repayable on demand (i.e. no notice is required before money on demand be withdrawn). Thus, it is also called Demand Deposit.

(c)   Deposits are also accepted by commercial banks in <u>Fixed or Time Deposits.</u> Savers, who do not need money for a stipulated period, say, from 6 months to longer periods ranging up to 10 years or more are encouraged to keep it in *Fixed Deposit Accounts*. The bank pays a higher rate of interest on such deposits. The rate of interest depends on the maturity period of the fixed or time deposit.

(d)   These pooled funds are thus, made available to businessmen who may use them for the expansion of their productive capacity and to consumers for such items as housing and consumer goods. When the economy booms, the society enjoys high degree of affluence that enables the society to save a

substantial portion of their income, and it is the commercial banking system that provides the facilities that would pool such savings.

ii) **Payments Mechanism** – One other important function performed by commercial banks is the provision of a payment mechanism or the transfer of funds. This function becomes increasingly important as more and more Nigerians place greater reliance on the use of cheques and credit cards. Because of the poor banking habits of an average Nigerian, coupled with the fraudulent tendencies amongst Nigerians, the economy tends to remain a cash economy, whereby majority of the economic transactions are carried out using currency notes and coins.

However, demand deposits are currently assuming a larger portion of transactions among the businessmen and women, and they are being used more efficiently. As technology within our banking industry improves, one would discover that the desire of business firms and individuals to use their funds more efficiently and the ability of depositors to synchronise their receipts and

expenditurewould be enhanced through the use of cheques as a payments mechanism.

Cheques drawn on banks are cleared through the CBN facilitated clearing houses located at various parts of the country, mostly at state capitals cheques drawn on and deposited in the same town, there could be a direct exchange of cheques.

But when several banks are involved within the same city, a clearing house arrangement is usually employed. The process becomes a bit more complicated, time-consuming, and expensive when cheques are cleared between banks located in different parts of the country. Such clearing s are often handled through the branch-banking or where there is no branch office, through correspondent banking system. Banks located in any of the Northern States, for example, might send cheques drawn on any of the Eastern States' banks to banks in Lagos, which would in turn route the cheques to the banks in their area on which the cheques were drawn. Cheques are easily cleared through the clearing houses located at each CBN branch office or Currency Centre.

The CBN has introduced process, reduced costs, and improved accuracy. Efforts were made in 1986, to improve the efficiency of the cheques clearing system in Nigeria with regard to the procedures and practices for presentation and clearing of cheques. Consequently, all local inter-state and intra-state cheques were regarded as cleared if after 5, 12 and 21 days, respectively (including the day they were deposited), the collecting bank failed to inform the customer depositing the cheque of any adverse development concerning the cheque. This was intended to minimise delay in the clearing of cheques. Furthermore, the rules and regulations of the clearing houses system, were modified to include safeguards against certain fraudulent practices. Thus, a delayed cheque is to be accepted by the collecting bank if fraud is suspected provided the account is funded. In 1987, the following additional rules and regulations on the operations of the clearing system were introduced to further reduce the incidence of fraud through cheques:-

a)   A collecting bank should accept delayed cheques where fraud is suspected provided the account is still funded.

b)   Collecting banks would be responsible for the papers they collect if it is shown or proved that the necessary precautions had not been taken, and,

c)   Collecting banks would have the right to return suspected cheques or an instrument on collection banks.

In recent years, considerable thought and research have been attempted by some innovatine banks in Nigeria, to what become known as *chequelss banking or the chequesless society*. This is the use of some form of electronic transfer of funds system that would eliminate the bank cheque and most of the paper work attendant to it. Examples of these include the Automatic Teller Machines (ATMS) of Societies Generale Bank of Nigeria Plc., nicknamed "CASH-POINT_24" and the "FIRST CASH" of First Bank of Nigeria Plc., and then the Electronic Funds Transfer Services offered by Universal Trust Bank Plc. And a host of others.

These have gone a long way to simplify the payment mechanism eliminating the burden of paper work formerly involved.

iii) ***CREDIT EXTENSION TO CUSTOMERS.***

One of the primary functions of Commercial Banks is the extension of credit facilities to worthy customers or borrowers. A commercial bank lends a certain percentage of the cash lying in deposits on a higher interest rate that it pays on such depositors. The difference between the lending rate, and deposit rate gives the bank its profit. Section 23 (1) of Decree No 25 of 1991 demands that every bank shall display at its offices the lending and deposit interest rates for interest of the public.

In making credit available, commercial banks are rendering great social services, through their action. Production is increased, capital investment are expanded, and a higher standard of living is realised. According to CBN Monetary and Credit Policy guidelines, a bank total credit shall comprise loans and advances, equipment leasing and net inter-bank float in respect to call money, certificates of deposit, bankers acceptances, commercial papers, bills discounted and naira promissory notes.

Extension of credit facilities by commercial bank is very important to the economy, for it makes possible the financing of

the Agricultural Commercial and industrial activities of the nation. Indirect or found – about production as against direct production where consumable goods are secured by the direct application of labour and land or natural wealth is made possible through the extension of these credit facilities. Also, bank credits make possible production for invention. For example, in the food industry, if Nigeria cannot consume all the food that is harvested and processed immediately, bank credits to carriers would enable them to purchase, process, can and store the food which may later be sold to retailers and ultimately to consumers. One may discover therefore, that, the bank credits to the carriers have made possible the economic handling of the food crop during this interval of time, i.e. from producer to carrier, to wholesaler, to retailer, and finally to consumer.

In Nigeria, the CBN Monetary and Credit Policy Guidelines for 1992 fiscal year, popularly known as CBN Monetary Policy Circular No. 26 requires Commercial Banks to accord priority in their sectoral allocation of credits as shown in the table below:-

SECTOR	PERCENTAGE ALLOCATION
1. PRIORITY SECTORS	50.00
a) Agricultural Production	(15.0)
b) Manufacturing Enterprise	(35.0)
2. OTHERS	50.0

Total (1+2)	100.0

Banks are to regard allocation targets in 1 (a) and 1 (b) as minima and that of 2 as maxima.

In view of the need to accelerate rural development in Nigeria. Commercial banks are also required by the CBN Circular No. 26 of 1992 to lend at least, a minimum of 50.0 percent of total deposits mobilised in the rural community in form of credits extended exclusively to finance economic activities based on those areas. Also required of the commercial banks, is the allocation of a minimum of 20.0 percent of their total credit outstanding to small scale enterprises wholly owned

by Nigerians. This is in a bid to promote small scale enterprises in Nigeria.

If the commercial banks make available these agricultural credits to farmers in time for example, they will be able to purchase seeds, feeds, fertilizers, and the many other items necessary for raising and harvesting the agricultural commodities that would feed our ever expanding population. Similarly, banks' credits to manufacturers, both large and small scale, would make possible the purchase of raw materials and machinery and the employment of labour which in time would produce goods that would be demanded by industries, governments, and consumers.

In the sectoral allocation of credit to others which includes commerce, (as indicated in the table above) transportation, consumers, etc., Commercial banks are required to extend a maximum of 50.0 percent of their total credits outsanding to these other sectors which are not regarded as priority sectors by the government. However, if the commercial banks make funds available to these sectors, one would find retailers and wholesalers being able to stock their shelves and move goods for people to consume. Goods can also be transported from

producers to the ultimate consumers because of the financial assistance of the banks to transportation enterprises. In addition to financing the agricultural, commercial, and industrial activities of the nation. Nigerian commercial Banks could facilitate consuption by making loans available to the consumers, (most of them are presently shying away from consumer lending). Funds may be extended to consumers by the banks for the purchase of such items as low cost houses, cars and house-hold appliances.

So far, we have been examing the economic effects and social results of commercial banks' credits extended to the private sector of the economy; what about the public sector? Because the government receipts are not always equal to expenditures, temporary borrowing from commercial banks is not uncommon; therefore, the provision of banks credit provide for the smooth operation of government. In general, capital projects and improvements by the government are usually not financed out of operating revenue but out of bond issues. Thus, when commercial banks purchase Federal Government and/or State Government development stocks, they are providing funds for such capital projects and improvement; such as the building of schools

and hospitals, construction of roads and other social infrastructure. Because of these expenditures, our standard of living would improve. Development stocks are long-term debt instruments or securities issued by the government. Sometimes, the government may decide to borrow on short-term basis to meet up some deficits in its budgetary expenditures. Such borrowings are usually done by the purchae of government short term securities by the commercial banks. These securities issued by the CBN on behalf of the Federal Government of Nigeria include Treasury Bills and Treasury Certificate.

iv) *FINANCING FOREIGN TRADE:*

A lot of differences might be noticed to exist among the different nations of the world. These differences arise because of the existence of National Monetary Systems, unfamiliarity with the financial ability of buyers and sellers in foreign nations and, in some cases, language barriers. Because of these much adored differences, commercial banks in Nigeria provide international banking services to facilitate foreign trade and travels.

If for example, a Nigerian who orders cars from France, raw materials from Germany, equipment and machinery from England or shoes from Italy, discovers that the various foreign sellers are not willing to accept the Nigerian Naira in payment, there definitely has to be a kind of arrangement that will enable the Nigerian Importer to pay for these goods in the currencies of the various foreign countries.

To do this, the Nigerian importer could go to his or her commercial bank in Nigeria and quickly and efficiently arrange for the amounts of foreign exchange needed. Then this bank may have the foreign currencies of these countries on hand but if not, it can arrange for the immediately through an inter-bank arrangement.

Sometimes, as is often the case in international trade, the Nigerian importer may encounter a situation where his foreign business partners or the foreign experts are unwilling to ship the goods, without adequate arrangement made for payments. In fact, even the Nigerian importer would prefer an arrangement that would be more binding and businesslike instead of the loose type of arrangement discussed above. The proper arrangement could be obtained from the international banking department or sector of a commercial bank. This department

can handle more satisfactorily through the issuance of a commercial letter of credit (LC) – which is a written statement on the part of the commercial bank to an individual or firm guaranteeing that the bank will accept and pay a draft up to a specified sum an amount of money, if presented to the bank in accordance with the terms of the letter of credit. When a letter of credit is issued, both the Nigerian importer and the foreign exporters are protected; the type and the condition of the goods are normally specified, and the credit of the bank is being substituted for that of the Nigerian importer whose financial standing is not known to the foreign exporters. Thus, a commercial bank finances foreign bills of exchange and paying for them on behalf of its customers.

A commercial bank also transacts through its foreign exchange department or international banking department other foreign exchange business and buys and sells foreign currencies. Many Nigerians who travel abroad demand the services of the foreign exchange department of a commercial bank. Such travellers could purchase foreign currency up to the limit allowed by the law or purchase travellers cheques which

would be used for minor and other incidental expenses upon arrival in the foreign nation.

As can be deduced from the above, one can conclude that financing of foreign trade and travels by commercial banks contributes to a free flow of trade between nations and at lower prices than if these services were not in existence. Increase in international trade and its complexity and sophistication have also increased the international banking services of commercial banks in Nigeria.

v)   VALUABLES FOR SAFEKEEPING:

This particular function of the commercial bank evolved during Goldsmith banker era when goldsmiths had the strongest safe or vaults that were difficult to enter even by the best of burglars. The safekeeping of valuables is therefore, one of the oldest functions performed by the commercial banks.

The protection of valuable could be categorised into two areas or department of a commercial bank:-

a) The Safe Deposit Boxes – These boxes are made available to bank customers on rental basis, who have control of their valuables at

all times. All the bank has to do is to provide the vault, the box, and the other facilities necessary for the operation of a safe box. However, the bank has to ensure that access to the vault is properly controlled by making sure that it is only the customer who has rented the boxes or his authorised representatives have access to it. The bank provides thus the guarantee by ensuring proper identification of the person entering or permitted access to the vault through a very careful supervision by providing double locks.

Usually, the items kept in the box are such that are of value only to the owner. These include such items like insurance policies, certificatesm deeds, securities and other personal items. For example, in the USA; with the approval of legal authorities upon the death of a customer, such boxes opened have been found to contain items as love letters, a congressional medal of honour, a purple heart, a rare coin, a lock of hair or a wedding ring.

b) The second safekeeping refered to herein, differs from deposit box in that the bank in this case, has custody of the valuables and acts as an agent for the customer. Under this arrangement, banks are concerned primarily with caring for securities such as stocks and bonds.

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In most cases, a department is normally in charge of these items in the big banks. Its main function is to hold for safekeeping securities that have been pledged as collateral for a loan and sometimes, may hold securities held in trust by the Trust Department of the bank. It is not uncommon to find relatively smaller banks that cannot afford such facilities making use of those of a bigger bank.Corporations that own securities prefer to keep them with the banks for safekeeping. In developed nations like UK and the USA, holders of securities, who are normally cautious of their earnings, will ask their banks not only to hold their securities in safekeeping while they are gone away from their homes for a prolonged period but also to clip and cash bond coupons and receive dividends and credit them to their accounts.

Under the above arrangement, a commercial bank in Nigeria performing this function, may decide to accept the items either in sealed boxes or envelopes with the contents unknown to the bank officials, or made 'open' with the items listed and signed for. A banker who accepts items under any of the above discussed arrangements have entered into a contract of bailment; whereby the banker becomes the Bailere and the customer the Bailer. If the bank charges a fee for

keeping the items, he is refered to as a "paid bailee", and if he does not charge, he becomes a "gratiotous bailee". If you are a paid bailee, the law requires that you show greater care in the discharge of your duty and responsibilities as a bailee.

vi) TRUST SERVICE

A person's accumulation of wealth, the need for expert management of this wealth and the desire to pass it on to various beneficiaries heve given rise to a multitude of trust services. Trust services are closely related to banking in that such skills as the maintenance of records, safekeeping, the deposit function, financial analysis, and decision making are all attributes of commercial banks. With the growth of financial assets throughout Nigeria, the market for trust services is expected to grow tremendously in the next few years.

Trust Services result in a fiduciary relationship; that is, one party acting for the benefit of another in matters coming in within the scope of their relationship and, in most instances, involving the holding of properties commonly administered by the trustee for the benefit of a third party or parties. In general, the functions of a trust department

may be classified into three broad services; the settlement of estates the administration of trust and guardianship and the performance of agencies.

So individual who have accummulated an estate, even of moderate size, should have an interest in providing for the distribution od such individuals may have made "wills" and should therefore, ask the Trust Department of Commercial Bank's to act as executors. Moreover, many of these wills, might have provided for the creation of personal trust under which the Trust Departments have the responsibilities of investing and caring for the funds and distributing the proceeds as established by the trust agreement.

Trust Department, in addition, provide certain service to corporate customers. One of such service include the administration of pension and profit sharing plans, they also serve as trustees in connection with bond issue and as transfer agents and registrars for corporations sometimes, a trust department of a commercial bank may be entrusted with the administration of sinking funds and performance of such other activities connected with the issuance and redemption of stocks and bonds.

Trust services may be performed by individuals or corperate organisation, including the trust departments of of commercial banks. Because of the advantage of a corporate trustees over an individual acting in this capicity, most trust services in developed nations, are performed by bank trust departments. These advantages are experience, permanence, financial responsibility, responsiveness to obligations, specialsation, group judjement, impartially and adaptability.

Vii) *Credit Creation*

One of the most important functions performed by the commercial banks is the creation of credit. It is this particular function that distinguishes commercial banks from other financial institutions. The creation of credit is accomplished by the lending and investing activities of commercial banks, in cooperation with the central Bank of the nation.

Like other financial institutions, commercial banks aims at making profits, for this purpose, they accept deposits and advance loans by keeping a small cash in reserves for the day – to – day transactions and as may be required statutorily. When a bank advances a loan, it

opens on account in the name of the borrowers and does not pay him in cash, but allows him to draw the money by cheque according to his needs. By granting this loan, or even an overdraft, the bank creates credit.

The power of the commercial banking system to create credit is of great economic significance, it results in the elastic credit system that is necessary for economic progress at a relatively steady rate of growth (Reed, et at. 1980).The operations and expansion of the nations productive facilities would have been impossible if there were no bank credits. It could have, in some instances, brought delays in both operations and expansion of the facilities, awaiting the accumulation of funds from profits or other outside sources. Under such a situation, productive units would be compelled to keep larger working capital balances in order to meet the fluctuation cash flow needs; such a practice would be very uneconomic since large sums would have to be held idle for some period, which during the seasonal peaks of business activity such funds might not be sufficient.

The central bank of a nation plays an important role in the ability of the commercial banking system to create money. This is done

through the central bank's monetary and credit policy, circular which main objective is to provide a conducive monetary/fiscal environment commensurate with the national objectives of stable prices, sound economic growth, and a high level of employment. (see C B N monetary policy circular No. 37 of 2003/4) (please refer to appendiced). An economy needs an adequate but not excessive money supply. If the rate of increase in money supply in an economy lags behind, the rate of increase in production of goods and services, the resultant effects to the economy is deflation, while on the other hand, if the increase in money supply is at a more rapid rate than does the production, inflation results, with all of its adverse effect on the various economic variables.

In Nigeria, a case in point, the CBN uses various Monetary Control Mechanisms as Enumerated in the CBN Circular No 26 of 1992 to check the money creation ability of Nigeria Commercial Banks. Such Mechanisms include the Reserve Requirements (Cash Ratio and Liquidity Ratio), Open Market Operation (OMO), and Stabilization Securities. Since Commercial Banks play a very important

role in the implementation of these policies, these reserve are used to maintain stability in liquidity management.

viia) Demonstration of Credit Creation:- The main objective of a Commercial bank is profit maximization. To achieve this objective the banks accept cash in demand deposits and lend out some of the cash on credit to borrowers. Herein, Demand deposits may be categorized into two:-

1)   when customers deposit currency with commercial banks and

2)   When commercial banks lend out discount bills, grant overdraft facilities, and make investment through bonds and securities.

In this case, the first type of demand deposits are called "Primary Deposits". Commercial Banks play a passive role in opening these deposits. The second deposits are called "Derivative Deposits". Commercial banks actively create such deposits.

A bank is not a cloak room where one keeps currency and expects to claim the same and every currency he has deposited whenever he desires. Bankers have known from experience that there

will never be a time when all depositors would come to withdraw all or even part of their monies at the same time and on the same day. Some will withdraw while others deposit on the same day. So based on this experience, as long as commercial banks keep a small cash in reserve for day – to – day transactions, and also the reserve requirements, the bank is able to lend on the basis of excess cash, when the bank lends, it opens a demand deposit account (current account) in the name of the borrower. By experience, the banker knows that the borrower will with draw money by cheques which will be deposited by his creditors in this same bank or some other banks, where they have their own accounts. Settlements of all such cheques are made in the clearing house. The same procedures would be followed in other banks. The banks are therefore, able to create credit or deposits by keeping a small cash in reserves and lending the remaining amount known as excess reserves.

When the bank grants the loan, it has actively created a claim against itself and in favour of a borrower. According to Paul A, Samuelson in his book Economics "The claims the bank takes from its customers, in exchange for the deposits entered in the books, are the

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bank's assets. The standard assets of a commercial bank are overdrafts and loans, bills discounted, investments and cash".

It is important to realise that commercial banks usually grant overdraft facilities to their customers with demand deposits account on the basis of some security. The amount of the overdraft facility granted is normally entered in an existing demand deposit account of the customer who is then allowed to draw cheques for the overdraft amount agreed upon. By so doing, the bank creates Risk Assets.

Also, when a commercial bank discounts a bill of exchange, what it has in effect done, is that it has bought the bill from the customer for a short period of time, say 90 days or less. The amount of the bill discounted is then credited in the current or demand deposit account of the customer who withdraws it through a cheque or the bank may pay the amount of the bill discounted through a cheque drawn on itself. In both cases, the bank creates a deposit equal to the amount of the bill of exchange less the discount charges.

Finally, the commercial bank also ideally, creates deposit by making investments through buying government bonds and

securities. The bank normally would pay for the bond through a cheque drawn on itself to the Central Bank. If the bank bought the bond from a stock of exchange, it would credit the amount in the demand deposit account of the seller, if he is a customer of the particular bank. Otherwise, the bank would pay a cheque drawn on itself which is deposited in some other bank. In any case, a deposit has been created either in this bank or some other bank. In all such cases, the liabilities and assets in the banking system on the whole are increased. Thus, the loan by the commercial banks create deposits. Since these loans are granted by commercial banks, they in the same sense create credit.

viii) *The Process of Credit Creation*

Having gone so far, based on the aforementioned, it will be good to explain the actual process of credit creation. It is important to note that the ability of commercial banks to create credit depends so much on the fact that they need only a small fraction of cash to deposit. If on the alternative, banks keep 100 percent cash against their deposits, then, there would be no credit creation at all. Nowadays, experience has taught bankers that they do not need to keep 100 percent cash reserves.

They are legally required to keep a fixed percentage of their deposits in cash and then, they can lend and or invest the remaining amount. The actual credit creation process can be comprehended from the following illustrations: -

1) Mr. Mzenda Iho deposits ₦100, 000 in his bank, Ayu Bank Plc. Ayu Bank Plc credits his demand deposit (current) account by ₦ 100, 000 and automatically, has entered into a contract to pay him the ₦ 100, 000 cash on demand.

2) Mr. Mzenda Iho, issues a cheque of ₦ 40, 000 to Miss Mbalamen.

3) Miss Mbalamen can cash the cheque at Ayu bank Plc, and have her money in cash. This would result to a decrease in Mzenda Iho's account and also an outflow of money (₦40, 000) from the banking system.

ii) If Mbalamen banks also with Ayu Bank Plc, and decided not to cash the cheque but to deposit it into her current account, Ayu bank Plc will pass book entry crediting her account with ₦40, 000 and debiting Mzenda Iho's account for the same amount, there has been

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no physical movement of cash at all, just book entries. Thus, total bank deposit balance remains the same.

iii)   The recording becomes more complex if Mbalamen banks with another bank say, Azemba Bank Plc. The banking system would then use a method of settling their claims against each other, called the clearing house system that is of course, if Mbalamen pays the cheque for the credit of her account at Azemba Bank Plc.

3.   Bankers have known from experience that only a small proportion of their customers wish to have their money in cash at any one time. Based on this knowledge, banks now create money or credit by granting loans and overdrafts which far exceed the actual cash available.

In each case, the bank credits current account of the customer involved with the agreed amount. By granting credit to the customers, the bank has created deposits (or money).

Thus, the principal process by which the banking system creates money is by the granting of loans and overdrafts, every loan and overdraft approved by a commercial bank creates a new money. Normally, upon the granting of a bank loan or overdraft, the customer

can draw a cheque to effect a payment. Usually, such cheque will b e paid to another bank account. After the cheque has been cleared, there is an increase in the total deposit liabilities in the banking system as a new deposit has been created.

In order to explain further, the process of credit creation, let us see how an initial cash deposit of ₦ 100, 000 can increase the banking system total deposits and by how much. There is no monopoly bank these days, but there are many commercial banks that operate in this country. So to explain the process of credit creation, we have to make the following assumptions (just for theoretical purpose).

Assumption:

i)   The banking system is comprised of several banks.

ii)   The statutory reserve ratio, (i.e. proportion of total deposits to be kept in reserves) is 30 percent. In other words, 30 percent is the required reserve ratio fixed by law.

iii)   Banks have more loans up to the limit set by the reserve requirements before the receipt of any additional cash.

iv)   All commercial bank loans and/or overdrafts are withdrawn by borrowers in currency which is spent and re-deposited by the ultimate recipient of the money in the same or another bank.

v)   One of the banks reserve ₦ 100, 000 in cash.

vi)   There is no cash drain or leakage in the banking system.

vii)   There are credit worthy customers of the banks willing to borrow as much as banks are able and willing to lend.

In Nigeria, the CBN Decree No.24 of 1991 (section 39) empowers the CBN to from time to time, issue directives by circular requiring the commercial bank to maintain certain reserves. (please refer to the appendices)

Section 15 (1) of Banks and other financial institution decree No.25 of 1991, stipulates that every bank shall maintain with the CBN cash reserves, and special deposits and hold specified liquid assets or stabilization securities, as the case may be, not less in amount than as may, from time to time, be

prescribed by the CBN by virtue of section 39 mentioned above. (please refer to Appendices) According to CBN circular No.27 of 1993, the reserve requirements have been fixed as follows: -

a)   Cash reserve requirements – every commercial bank shall observe a minimum cash reserve ratio (i.e. ratio of cash reserve to total deposit liabilities) of 9.5 percent. See monetary/fiscal policy guidelines for 2004/2005 – refer to Appendices

b)   While the liquidity ratio for commercial bank is 40 percent.

Since the CBN circular call for a reserve of 6 percent against deposits, bank with deposit of ₦ 1million will be required to hold a minimum of ₦ 95, 000 of reserves. These are referred to as Required Reserves which are the amount of reserves that a bank must hold, as determined by the amount of its deposit and the percentage that the law specifies must be held against those deposits.

The CBN circular also states what kinds of asset may be counted in the computation of liquidity ratio. (Liquidity ratio), for all banks vault cash meets the reserve requirement. These are:

-       Treasury Bills

-       Placement With Discount Houses.

-       Placements With Banks backed by Treasury Bills

-       Cash.

Deposits held at the CBN by commercial banks also qualify as reserves. These reserves are known as legal reserves which are all assets that the bank holds that the law permits to be used in meeting reserve requirement. If we assume that the above – mentioned bank, with required reserves ₦ 95, 000 of vault cash, its legal reserves are ₦ 100, 000 of vault cash.

In short, required reserves are the minimum amount that the bank must hold in liquid form(some percentage of its deposits) other statutory reserves are appropriations from profits after taxation which are not available for distribution or dividend or to be capitalized.

It is unlikely that a bank required reserves and legal reserves will be exactly equal. Its legal reserves must, of course be at least as much as its required reserves, and they usually will be some what greater, as shown in the example. The difference

between legal reserves and required reserves is the banks Excess Reserves.

EXCESS RESERVES = LEGAL RESERVES – REQUIRED RESERVES (EQUATION 12 – A)

Given the reserve requirements, anything that changes either legal or required reserves necessarily changes excess reserves.

Excess reserves are therefore the key to a commercial bank's lending power. No matter how many billion naira of deposit a bank may be liable for and no matter how large its capital, it cannot lend a kobo unless it has excess reserves. If it does have excess reserves, it may lend approximately the amount of the excess. For even if the entire proceeds of the new loan should shortly be withdrawn (decreasing legal reserves by the same amount), the bank will still have the necessary minimum reserves required against its remaining deposit.

Going back to the explanation of the actual process of credit creation let us still remember our assumptions. Experience has taught Nigerian bankers that generally they can lend up to a maximum of 70 percent of their total deposit liabilities. The remaining 30 percent is held in liquid assets to meet both required reserves and depositors

demands for cash. Based on this, assume that Ayu Bank Plc on receiving the initial deposit of ₦ 100, 000, places ₦ 30, 000 in reserve with CBN and proceeds to lend the balance of ₦70, 000 to Mr. Mtoo to enable him purchase a car from Emmy Motors Ltd.

Mr. Mtoo writes a cheque for ₦70, 000 and delivers the cheque to Emmy motors Ltd who pays the cheque into its current account at Adzemba Bank Plc. Azemba Bank Plc, after the normal clearing house transactions, has ₦70, 000 new deposit credit to the account of Emmy Motors Ltd.

Azemba Bank Plc now keeps 30 percent or ₦21, 000 of the deposit as reserves, and proceeds to lend out 70% or ₦49, 000 of the deposit to its customers, Miss Mbalamen, who after her account has been credited, issues a cheque for the ₦49, 000 to Terry's Designers to pay for purchases.

Terry's Designers which banks with Naira Bank Plc pays the cheque into her account, further creating a new deposit within the banking system. This process goes on and on as illustrated in the example below, until the original cash deposit of ₦100, 000 has been used up and no bank has any excess reserve to lend. In our example,

column A represents the legal Reserves (in other words deposit held as reserves), column B is the Required Reserves while column C represents the Excess Reserves as derived in Equation 12 – A.

From our illustration in the table below, the total of column A (Legal Reserves) which represents the total new deposits created, amounts to ₦3, 333, 000 (3.3 multiply by the cash deposit) while column C (Excess Reserves) gives us the total loans extended to the economy, amounting to ₦ 2, 333, 000.

The results obtained thus, can be measured by the credit creation multiplier which is calculated thus: -

$$\frac{\text{Total Amount of New Deposits Created}}{\text{Amount of Initial Deposits}} \quad \text{--- (Equation 12-B)}$$

Using Equation 12 – B we can derive the credit multiplier as follows:

$$\frac{\text{Total Amount of New Deposit Created}}{\text{Amount of Initial Deposit}} = \frac{3333000}{100000} = 3.3$$

Thus, the credit multiplier = 3.3

Meaning: - this simply means that assuming that 30 percent of deposits is kept in the form of required reserves, the banking system would be able to create credit (or money) 3.3 times, with any given deposit, all things being equal.

CREDIT (MONEY) CREATION BY COMMERCIAL BANKS

(30% Required Reserves Ratio)

Deposits	Deposit A ₦	30% Reserve B ₦	Loan Extended 70% C ₦
Initial Deposits	100, 000	30, 000	70, 000
Redeposit 1st	70, 000	21, 000	49, 000
" 2nd	49, 000	14, 700	34, 300
" 3rd	34, 300	10, 290	24, 010
" 4th	24, 010	7, 200	16, 810

" 5th	16, 810	5, 050	11, 760
" 6th	11, 760	35, 20	8, 240
" 7th	8, 240	2, 480	5, 760
" 8th	5, 760	1, 720	4, 040
"9th	4, 040	1, 220	2, 820
"10th	2, 820	840	1, 980
"11th	1, 980	600	1, 380
Redeposit 12th	1, 380	410	970
"13th	970	290	680
"14th	680	200	480
"15th	480	150	330
"16th	330	100	230
"17th	230	70	160
"18th	160	50	110
"19th	110	30	80
"20th	80	20	60
"21st	60	20	40

"22ⁿᵈ	40	10	30
"23ʳᵈ	39	10	20
"24ᵗʰ	20	10	10
"25ᵗʰ	10	10	0
	3, 333, 000	100, 000	2, 333, 000

Mathematical Derivation of the money (Deposit) or credit multiplier-

The credit multiplier method operates rather too long and confusing. A more simple approach to the calculation of the credit multiplier could be obtained mathematically. The relationships between the maximum increase in total deposit liabilities and change in reserve requirement can therefore be derived mathematically. In our example, we shall assume that the required reserve ratio is the same for all commercial banks (in Nigeria,) and that banks hold zero excess reserves.

Consider the following Equation:

$R = r \times DL$ ……………… (1)

Where   R = Total Reserves

r = Required reserve Ratio

DL = Deposit Liabilities

In other words, total reserves in the commercial banking system equal the required reserve ratio multiplied by the deposit liabilities.

Now divide each side of equation (1) by r

$$^R/r = r \times {}^{DL}/r \ldots\ldots\ldots\ldots (2)$$

The right hand side of equation (2) can be simplified by eliminating r, so that, $^R/r = DL\ldots\ldots\ldots$ (3)

Equation (3) can be further simplified as

$$R \times {}^1/r = DL \ldots\ldots\ldots$$

$$R \times {}^1/r = DL \ldots\ldots\ldots\ldots (4)$$

Now multiply the left hand side and the right hand side of equation (4) by a small change, which we $\triangle$ denote   y ; so that

$$\triangle R \times {}^1/r = DL \ldots\ldots\ldots\ldots (5)$$

Now equation (5) shows that a change in total reserves that produces excess reserves will increase deposit liabilities by the factor $^1/r$ times the change in total reserves.

Thus, $^1/r$ = DL

Consider our earlier illustration in the table above

₦100, 000 x 1/3000 = DL

₦100, 000 x $\underline{1000}$ = DL

        3000

₦3, 333, 000 = DL (Deposit Liabilities)

<div align="center">OR</div>

Simply:

Credit multiplier = $^1/r = ^1/_{30}$ = 3.3

    DL = 3.3 x ₦100, 000

    = ₦3, 333, 000

In the example, a cash deposit of ₦100, 000 leads to the commercial banking system being able to create new deposit liabilities of ₦3, 333, 000 and lend a total of ₦2, 333, 000 in form of credits to the economy (obtained ₦3, 333, 000 – ₦100, 000) with a required reserve ratio of 30 percent.

2.1.0   **THE BANKING INDUSTRY**

The banking industry is made up of numerous individual banks as well as savings and loans and credit unions. In the united state and other industrialized nations especially, the government actively regulates the banking sector. In particular, the banking industry is subject to rules and regulations imposed by various federal regulatory agencies, including CBN, NDIC etc. In this area the researcher intends to have an economic analysis of the many rules and regulations the supervisory agencies impose on the banking industry, how they affect the operations of the banking industry.

2.1.1   *DUAL BANKING*

Banks initially provided a safe place to store Gold Bankers soon realized that most of the gold in their vaults was never withdrawn. Eventually, banks began to issue bank notes which were an early form of paper money.

Prior to 1863, each bank issued its own bank notes, which could be redeemed on demand for gold. Although banks were regulated by the states, in which they operated, it was relatively easy for

unscrupulous individuals to defraud banks and merchants by counterfeiting bank notes. Because each bank's bank notes differed in appearance from those of other banks, it was difficult to determine whether a particular bank note was genuine or counterfeit. Some banks issued bank notes that exceeded the value of the assets the banks hold, while others defaulted on the bonds backing their bank notes. As a result of these and other problems, many state chartered banks failed.

In the United States of America, the National Banking Act of 1863 was passed in an attempt to eliminate the problems associated with the state banking system and individual banks' bank notes (Elyasiani ,E., and S. Mehdian "Efficiency in the commercial Banking Industry: A production frontier Approach." Applied Economics, (22 April 1990), 539 – 551). Under the new banking system this act created, the Federal Government issued charters to certain banks. These banks known as National Banks, still exist today under the regulatory supervision of the U.S. Treasury (More specifically, the comptroller of the currency). The intent of the act was to entirely eliminate the state banks by imposing heavy taxes on the bank notes they issued. The bank notes of national banks, however, could be used currency without

having to pay such heavy taxes, thus putting state banks at a competitive disadvantage. But the state banks quickly countered by creating a close substitute for currency, called <u>Demand Deposits</u>, which were the fore-runners of the cheques you use today. This innovation not only allowed the state banks to survive but led national banks to adopt demand deposits an well.

As a consequence, today we have a <u>dual banking system</u> where state and national banks co-exist.

2.1.2 <u>**ACQUIRING A BANK CHARTER.**</u>

Opening a bank involves considerable red tape and financial capital. This condition restricts free entry and may reduce competition in the banking industry. To form a bank, the parties involved must obtain approval from the relevant regulatory body (herein Nigeria) CBN. The process of obtaining such approval used to be known as acquiring a bank charter. But today it is simply known as obtaining a banking license management. The promoters are also expected to be men of proven integrity. In today's Nigeria the capital requirement for the establishment of a Bank is ₦2bn. As at the time of writing this,

there is a directive that the capital base be increased to ₦25Bn. This is however still being debated.

2.1.3 *STATUS OF THE LOAN FORTFOLIO*

One important purpose of supervision and examination is to reduce the hazards of asymmetric information between bank mangers and the public, regarding the riskiness of the banks loan portfolio and thus, assure depositors that the bank is a safe place to deposit funds. To this end, bank regulations require the examining body to evaluate the quality of the banks loan portfolio and verify that the bank has sufficient assets and reserves to cover its deposits. This examination helps alleviate depositors concern about such things as the quality of loans issued by the bank.

Quality loans are loans with a high probability of being repaid. For example, suppose your bank claims to have ₦100m. in risk assets, it would be difficult (and costly) for you to verify this information, but a bank examiner does this for you. He or she examines the portfolio to determine whether the assets really are worth ₦100m. If the assets consist solely of idle cash, the time value of the banks assets is clear.

However since banks use reserves to issue loans most of the bank's assets will be in the form of loans rather than cash.

In fact two – thirds of the average bank's assets consist of loans. The time value of these loans depends on whether the borrowers are making their interest and principal payments on time (that is, whether the loan conform to the prudential guidelines). For instance, the value of a car loan on the books might be ₦100, 000 even if the loan is in default if the bank is forced to repossess the car and can sell it for only ₦60, 000, the time value of the loan is ₦60, 000, and the bank has overstated the loan's value by ₦40, 000. A bank examiner, however, can require the bank to value such assets properly.

When loan is in default, the bank examiner may require the bank to either write off the loan that is not, included as an asset – or liquidate the asset. Doing so reduces bank's (assets) net worth, or capital. If this happens too often, the bank capital may fail to satisfy minimum capital regulation. A bank in this situation (and) any bank that is caught manipulating the books to hide information from the examiner) is classified as a "problem Bank." Such a bank will be very

heavily scrutinized in the future, and its officers may even face penalties and legal actions.

2.1.4   *AN OVERVIEW OF BANKING REGULATION*

In the United State of America, a lots of regulating bodies oversee the operations of the more than 14, 000 commercial banks. These large number of banks complied with numerous regulatory agencies requirement. Not only is it difficult for the average citizen to understand the operation of the banking system but even banks struggle to fully understand the nature and implications of regulations on their operations. A report by the federal financial institutions Examination Council (which consists of regulatory bodies that include the federal Reserve system, the comptroller of the currency, and the federal deposit insurance cooperation estimated that complying with banking regulations costs commercial banks and thrifts institutions (savings and loans, credit unions, and mutual savings banks) anywhere from $7.5 billion to 17 billion each year. This includes the cost of paper work, legal fees, and other costs of conforming to government mandates. As a result of the report, as of 1994, the Clinton administration was

considering proposals to ease the regulatory burden on the banking industry.

Regulation of the banking industry aims at achieving several goals. The first is maintaining bank solvency or alternatively, limiting bank failures. The presence of symmetric information makes it difficult for the average depositor to know how safe his or her deposits are at a bank, and the mere rumor that a bank is on the verge of failure could cause a bank panic. Proponents of regulation argue that government's presence to regulate and monitor banks bolster depositors' confidence, thus enhancing the stability of the banking system.

Another goal of regulation is to ensure the liquidity of the banking system/industry, making sure that bank can honor their promise to redeem demand deposits for currency on demand. In Nigeria, the fact that the CBN is the lender of the last resort and the NDIC insures depositors helps bank honor their promise to depositors.

The third goal is to promote economic efficiency which includes providing deposit and loan services to people in local communities at competitive interest rates. Regulators have enacted myriad regulations

designed to foster such competition by keeping banks from growing too big and gaining monopoly power in loan and deposit markets.

The banking system we know today, has been shaped directly and indirectly by legislation designed to achieve one or more of these goals of regulation. As may be seen later, however, some pieces of legislation did not have their intended effect, and as a result, multiple layers of new legislation have been added over the years, to deal with the problems they created, furthermore, it will be discovered that, banks have successfully gotten round many of the regulations through financial innovations and loophole in the laws.

2.1.5 *HOW BRANCHING RESTRICTIONS SHAPED THE BANKING INDUSTRY*

Like in the United State of America, a distinguishing feature of their banking system is the large number of small local banks. This is the result of a long history of regulations that restricted banks from freely opening branches within state and across the nation. Imagine a law that allowed a shoe manufacturer to sell shoe only to consumers

who live in the same city as its plant! That is in effect, what branching restrictions in many states required banks to do.

Branching restrictions grew out of fear that in their absence, banks would grow progressively larger and acquire excessive market power, making them lest sympathetic to the needs of the people and businessmen in local communities. Consequently, numerous banks were formed across the states to service the needs of local communities. Many states (primarily those in the Central United State) limited the ability of state – chartered banks to branch within their state boundaries. This practice, called limited branching restricted the number of branches a bank could have within a state. Some states took this to an extreme, enacting unique banking' laws that allowed a bank to serve only a single location in its state. However, not all states limited the ability of their banks to open branches within their boundaries. Primarily along the west coast some states allowed statewide branching, which permitted banks to open branches throughout the state.

Initially, national banks in the United States of America were not subject to the branching restrictions imposed by the states, and as a

result they had an advantage over state banks. To level the playing field, congress passed <u>McFadden Act of 1972</u>, which made national banks subject to the same branching restrictions imposed by state regulations on state – chartered banks. Since most states had restrictions against branching, neither state nor national banks could freely establish across state lines. As a result, numerous small banks emerged across the country as individual states enacted laws that prevented entry by out – of – state banks.

To contract this trend with the current move towards free trade within the boundaries of the European Community, recently, Gerald .P. O'Driscoll, Jr., economist and Vice President at the Federal Reserve Bank of Texas, wrote about the lack of free trade within the United States. This is particularly a problem in services and financial markets, including banking. O'Driscoll, contrasted this situation with the move towards free trade within the boundaries of the European Community (EC)

A guiding principle in Europe is that of mutual recognition. This principle stipulates that each member state will recognize the rules and regulations of other member state. The European Community will

establish some minimum criteria that all member states must adopt. Other than those, each member state will make its own rules and regulations, and these will be recognized as valid by all other member states.

What exactly does this mean? It means that a bank established under the rule of the Netherlands is free to operate in Germany under the rule that apply in the Netherlands as long as it obeys the overall EC rules, moreover, this applies even if the German banks are disadvantaged by more favourable banking rules in the Netherlands.

In fact in the United States, federal Banking Guidelines apply to banks in all states. However, after meeting these requirements, states are free to add additional regulations. Under the principle of mutual recognition, though a bank chartered in Texas would be free to operate in New York or California while obeying the state laws from those of New York or California and even if they gave the Texas bank an "Unfair" advantage.

What are the implications of adopting this principle of mutual recognition? First, it will certainly create a single market, with free entry across the 50 states. No longer will states be able to keep out

banks chartered in other states or even to regulate them. Second, state banking rules and regulations will tend to evolve towards those of the most liberal states, subject only to the Federal Minimum Standards. This will occur as banks naturally seek charter from the state that provides the most favourable regulation. This is exactly what happened in the United States for corporate charters. (Source: O'Driscoll, Jr., Gerald, What About Free Trade Within The United States From Southwest Economy. Jan/February 1992, 1 – 5).

Over time, however, two financial innovations occurred that allowed banks to get around these laws to better serve their customers: Bank Holding Companies and Electronic Banking. These innovations, along with recent changes in state laws that grew partly out of the S & L crisis of the 1980s

2.1.5a **Bank Holding Companies:** - Such as Citicorp (which owns

City Bank) and Mellon Bank Corp. (which owners Mellon Bank), are corporations that own the controlling interest in one or more banks. A bank holding company may also own other companies that are in

businesses related to banking such as credit card services and life insurance, some bank holding companies, known as <u>non-bank banks,</u> do not provide the full services offered by full service banks for example, a non-bank bank might have an office that accepts deposits but does not make loans and another office that makes loans but does not accept deposits.

Bank holding companies evolved as a financial innovation to enable banks to circumvent branching restrictions. By acquiring the controlling interest of banks located in different regions of the country, a bank holding company could effectively offer services to customers in different regulations or states without violating branching laws. Congress responded to this innovation by passing the <u>Bank Holding Companies Act of 1956,</u> which restricted bank holding companies from acquiring banks in other states without the consent of those states. Further innovations occurred due to a loophole in the law that allowed one – bank holding companies to cross state lines. Congress closed this loophole when it passed the <u>Bank Holding companies Act 1970,</u> which extended restrictions on bank holding companies to one bank holding companies. Despite these attempts to limit bank holding company

acquisitions, bank holding companies today indirectly hold (through their subsidiaries) more than 90 percent of all bank deposits.

2.1.5b **Electronic Banking – Automatic Teller Machines (ATMS)**

Now it is possible for individuals located far from their banks to withdraw funds from their bank accounts via machines located in other cities, states and even countries. However, most of these transactions take place within the same states as the banks holding the deposits. Many Automatic teller machines are not owned by a particular bank but paid for on a per-transaction basis. Consequently they technically are not branch banks and are not controlled by branching regulations. However the regulatory decision not to count on ATM as a bank branch was made only after much discussions and negotiations. Today banks are free to place these machines where they please. Electronic Banking thus represents a financial innovation that circumvents branching restriction and allows depositors ready access to their deposits in area far from their banks.

Current status – during the 1980s, states gradually began relaxing their regulations on inter-state banking. This resulted in part, a need to allow out of state banks acquire failed banks and S&L and to accommodate the needs of corporations that have office in different regions. This trend has continued through the 1990s and has led to a dramatic change in the structure of banking. Most states now permit branching within their borders, and a few have reciprocal privileges than states. As of July, 1994, every state except Hawaii allowed some form of interstate banking.

2.1.6   ***THE ECONOMIC IMPACT OF BANKING***

                     REGULATIONS

It has been discovered that legislation and regulatory bodies have imposed variety of rules and regulations that have shaped the banking industry into what it is today. Whereas, the primary aim of such regulations was to enhance the stability of the banking industry and protect depositors, some of the restrictions ultimately had the opposite effects. It has already been seen that over the years, banks have come up with financial innovations that circumvent many of these laws. In

this section, we will examine some of the economic implications of various regulatory policies for the markets for loans, deposits, and other credits. We may also discover that some regulations have had adverse effects on consumers and banks.

2.1.6a   <u>**BANK CHARTERS**</u>

The requirement that banks be chartered before they can operate, distinguishes the banking industry from many other industries. The strict capital requirements and lengthy time period required for the approval of a bank charter limits entry by new banks – this means that if existing banks are earning sizeable economic profits, it is difficult for a new bank to quickly emerge and compete away some those profits.

<u>Effect of Entry into the Banking Industry</u>

Loan Interest
Rate (%)

$\downarrow$

$D^O{}_F = MR^O$

164
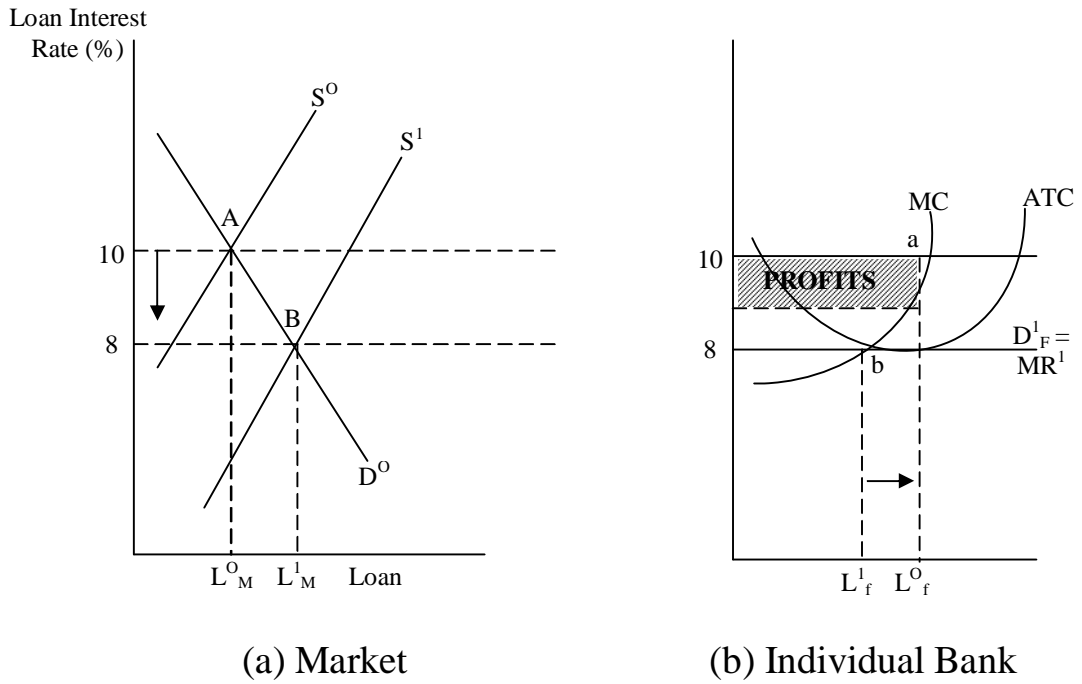
Figure 2.1.6a

"Part a shows the market for loans where the initial interest rate is 10% at point A, part b shows the situation for an individual competitive bank, which initially produces at point a. if new banks are allowed to enter this market, the supply of loans in part a shifts to S^1 lowering the market interest rate to 8% at point B, the individual bank adjusts its loan to point b, where it earns zero economic profits. In lower interest rates on bank loans and bank earn zero profit.

Part of figure 2.1.6 shows the market supply and demand for loans in a purely competitive banking industry. The equilibrium interest rate – 10 percent in this example – is determine by the intersection of the supply (S^o) and demand (D^o) curves for loans at point A in part of figure 2.1.6.

Part b illustrates the situation for an individual bank. An individual bank in a purely competitive market can issue loans at the market interest rate of 10%, so the demand for an individual bank's loans is horizontal and given by D^O_F. Since the interest rate is also the individual bank's marginal revenue curve, the bank maximizes profits by issuing the quantity of loans where the interest rate equals the marginal cost of loans, which is at point a in part b of figure 2.1.6. this corresponds to L^O_f loans issued by the individual bank, at an interest rate of 10 percent. The economic profits earned by this bank are given by the shaded rectangle.

If entry into the banking industry were unrestricted and existing banks were earning profit, new banks would enter the banking industry to reap some of the profits. The entry of new banks would shift the market supply curve in part a figure 2.1.6. to the right to S^1 resulting in

a new equilibrium at point B. notice that as a result of the entry of new bank into the industry, the interest rate on loans falls to 8%. Borrowers now obtain loans at a lower interest rate due to increased competition in the banking industry.

The decline in the market interest rate shifts the demand for an individual bank's loans down to D^1_F in part b of figure 2.1.6. Marginal revenues now equals marginal cost at point b. Furthermore, at point b the interest rate on loans exactly equals the bank's average cost of issuing loans; the bank now earn zero economic profits.

Proponent of restrictions on entry into banking argue that the negative aspects of restricted entry (the higher interest rate to borrowers) are more than offset by the positive aspect. First they argue that restricting entry of new banks means fewer banks will fail, since bank will earn greater profits. Second, by carefully screening applications for a bank charter, banking authorities can prevent the entry of banks that are likely to fail in the first place. Together, these factors reduce the likelihood of bank failure and also decrease the size of the insurance claims that must be paid on those banks that do fail.

2.1.6b   BRANCHING RESTRICTION –

Impact of Branching Restrictions on Deposit Interest Rate
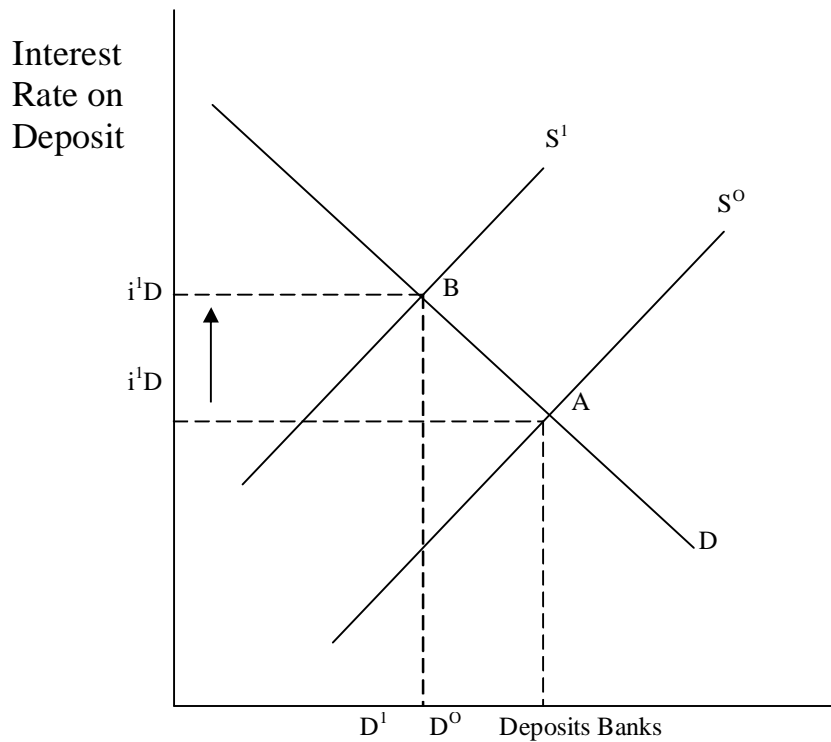
Figure 2.1.6b.

Restriction on the number of branches banks can have reduces the market supply of deposits from s^o to s^1. This raises the interest rate on deposits from iD^o to iD^1, resulting in fewer deposits at banks

Branching restrictions decrease the accessibility of bank deposits and loans outside the area serviced by a bank, which reduces competition among banks and inconveniences customers. Individuals

keep fewer funds on deposit, since they need larger stashes of cash for unexpected trips outside of bank services areas. This decreases the market supply of deposits from S^O to S^1 figure 2.1.6b and increases the interest rate on deposits from iD^o to iD^1. (Remember, banks use deposits to produce loans; therefore, they are the demanders in the deposit market, and house holds are the suppliers). Thus, because of branching restrictions, banks actually have to offer higher interest rates on deposits to attract customers than they would otherwise. These higher rates partially compensate depositors for the inconvenience of keeping deposits at bank. But since an increase in the interest rate paid on deposits increases a bank's marginal cost of issuing loans, interest rates on bank loans will rise as well. This rise is further exacerbated by lessened competition among banks for loan customers.

As might have been noticed earlier, banks today are less adversely affected by branching restrictions than in the previous decades due to the emergence of automated teller machines. As a result, depositors are now willing to maintain larger balances in their accounts, knowing they can readily withdraw funds from ATMS in distant location. The emergence of ATMS shifts the supply of loanable funds

from S^1 back to S^O in figure 2.1.6b, lowing the cost to bank of obtaining funds.

A subtler but more important aspect of banking restrictions is their effect on the riskiness of a bank's loan portfolio. When a bank is restricted to making loans and obtaining deposits in a small geographic area it is more sensitive to fluctuations in local market conditions than banking activities across larger geographic region. Consider a bank in a city in the Gulf Coast that is restricted from opening branches outside the city. If a hurricane hits and destroys the city, depositors are likely to withdraw sizeable amounts of their saving from the bank. Moreover, loans to borrowers in the city may not be repaid. This can have disastrous effect on the bank. In contrast if the bank is allowed to open branches throughout the United States, for example, the local hurricanes will not likely affect withdraws in other regions of the country, and loans issued elsewhere will not be affected. Consequently, the bank will be diversified, the unanticipated withdrawals in the local area will likely be offset by unexpected deposits in other regions. In short, branching restrictions actually increase the likelihood of bank failure.

Bank holding companies, as we have noticed, allow bank to circumvent these negative aspects of branching restrictions, A bank holding company that owns the controlling interest of many banks across the country owns a diversified portfolio of bank, just as an investor who owns shares of stock in many different companies is diversified largely for this reason. The 1990s have seen a movement towards allowing banks and bank holding companies more freedom in crossing regional boundaries as well as in the type of activities they can conduct.

2.1.6c   **Interest Rate Restrictions**

In addition to agencies specifically designed to supervise the banking industry, the federal legislation body also pass laws that have an impact on the banking industry. Herein under we shall briefly take a look at some of the laws and regulations that affect the interest rate banks may charge for loans and pay on deposits.

i)   Usury Laws – many states (in the United States), have usury laws, which are ceilings that restrict the interest rate lender can charge on loans and credit card balances. Figure 2.1.6c below shows the impact of usury law on the banking industry.

Usury Laws and Shortages of Loans
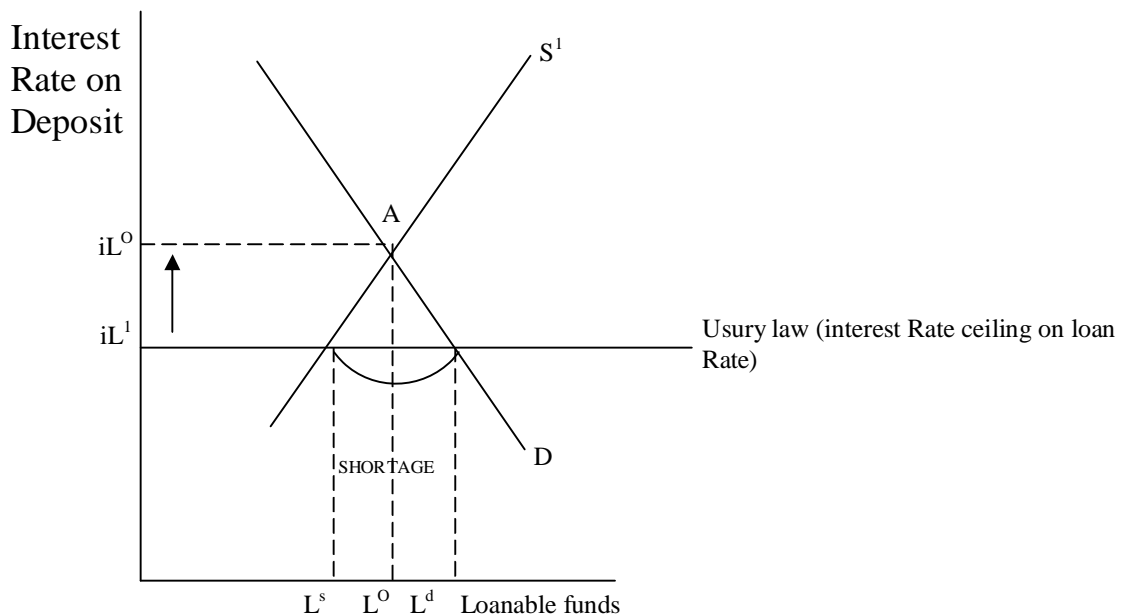
Figure 2.1.6ci

The market – clearing interest rate, iL^O is determined at point A by the intersection of the demand for and supply of loanable funds. A usury law requiring that the interest rate be no more than iL^1 creates shortage of loanable funds. The market – clearing amount of loans is L^O but at an interest

rate of iL^1, the quantity supplier of loans is only L^S while the quantity demanded is L^D, this creates shortage of L^d - L^s

.

Without a usury law, market forces determine the interest rate while the supply of and demand for loanable funds interest rate is iL^O, and the banking industry issues a total of L^1 loans. The usury law makes it illegal to charge an interest rate above iL^1 for a loan. At this regulated interest rate, borrowers desire L^d loans, but the quantity supply of loans is only L^s. the usury law result in a shortage of L^d - L^s loans, and fewer loans are issued (L^o).

By reducing the interest rate banks can legally charge on loans, usury laws, resulting in lower profits for banks. In extreme instances, where the cost to a bank of obtaining funds exceeds the interest rate the bank can legally charge for loans, the bank may choose to issue no loans at all. In less extreme circumstances, such as those depicted in figure 2.1.6c, the bank issue loans, but to few borrowers than want them at the ceiling interest rate.

Since usury laws result in a shortage of loanable funds, banks respond by loaning funds to only the most creditworthy borrowers; in

essence, they ration credit. The interest rate required to compensate a bank for the risk of loaning to a non creditworthy individual (who is less likely to repay a loan) may exceed the rate allowed by law. Credit rationing can thus negatively affect borrowers whose bank view as bad credit risks. This is an unfortunate paradox, since the most common reason given for passing usury laws is to protect those borrowers who most need funds from having to pay high interest rate. Usury laws often prevent such individuals from borrowing any funds at all, at least from a bank.

ii)   Regulation Q – Regulation Q restricted the maximum interest rate banks could pay on savings and time deposits. However, in the United States, fortunately, for all small savers, the gradual elimination of these restriction began with DIDMCA in 1980s. A closer look at how this affected borrowers and lender:-

Part 'a' of figure 2.1.6cii below shows the market for deposits, where households supply deposits to banks and banks demand them. In the absence of Regulation Q equilibrium is at point A, the interest rate on deposits is 8 percent, and the result level of deposit is D^o. For

simplicity, suppose banks convert all deposits to loans, thus the supply of loans is given by the vertical line labeled $S = D^o$ in the part b of figure 2.1.6cii. In the absence of an interest rate ceiling on deposits, the equilibrium in the loan market is at point B and the interest rate on loans is 10 percent.

Now suppose an interest rate ceiling of 5 percent is impose in the deposit market, as it was during the 1970s under Regulation Q using supply and demand analysis to illustrate the problem of disintermediation; At a rate of 5 percent, banks desire D^d in deposits, but households deposit only D^s in funds; the result is a shortage of deposits. Because of this shortage, bank can now issue fewer loans. In particular, since they can issue only D^s in loans, the result is a shortage of deposits. Because of this shortage, bank can now issue fewer loans. In particular, since they can issue only D^s in loans, the supply curve of loans in part b shifts to the left to $S = D^s$. The effect of this decrease in the supply of loans, due to availability of fewer deposit, is to increase the interest rate changed on loans from 10 to 12 percent. Thus, interest rate ceilings on deposits – designed to keep bank costs rate – actually increase the rate bank charge – on loans. in fact, the law harms

borrowers, lender, and banks. Those depositing money in banks receive a lower interest rate (5 percent) while those borrowing money from banks pay a higher rate (12 percent). Banks make fewer loans, of course, DIDMCA phased out ceilings on deposit rates, which had the opposite effect of lowering interest rates on loans and raising rates on bank deposits.

Regulation Q and Loan Interest Rate

Deposit Interest Rate (%)

Loan Interest Rate(%)

$S = D^s$ $S = D^o$

S^1

A

8

12

5

10

B

D

D

D^s D^o D^d Deposits

D^s D^o Loans

Deposit market

Loan market

(a)
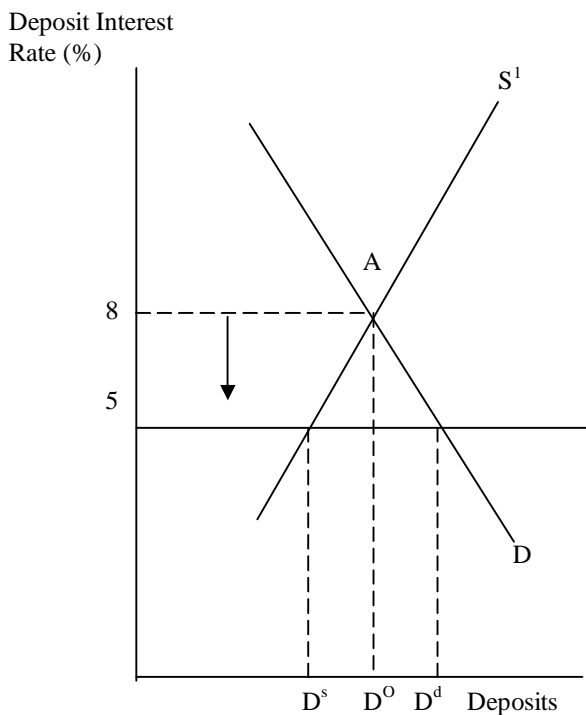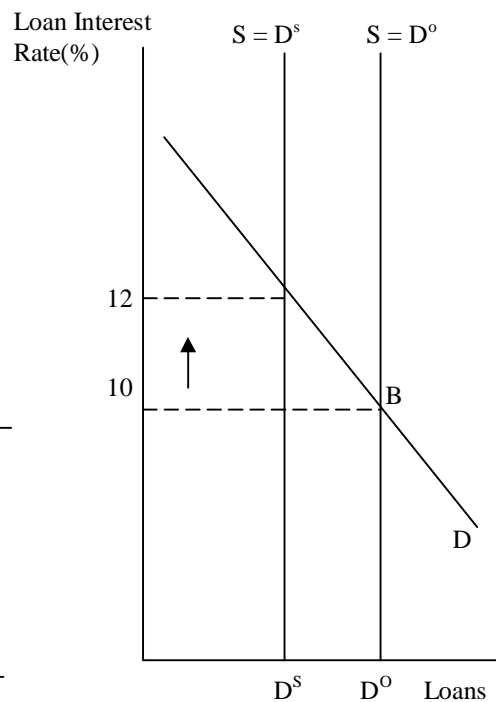
(b)

Figure 2.1.6cii

Part a depicts the deposit market where the market – determined interest rate on deposit is 8 percent and D^O deposits is provided to banks assuming for simplicity that, the supply of loans equals the quantity of deposits, D^o worth of loans is converted into D^o worth of loans by banks in part b. This is given by the vertrical supply of loans curve $S = D^o$ and results in an interest rate changed on loans of 10 percent. If there is a restriction on the interest rate paid on deposits (as Under Regulation Q) of 5 percent, the quantity of deposits falls to D^S in part a. This implies that the quantity of loans banks may offer also falls to $S = D^s$, and the interest rate on laons rises to 12 percent in part b. Thus, restrictions on the interest rate paid on deposits raises the interest rate changed on loan.

iii)   Uniform Reserve Requirements – prior to DIDMCA, bank that were not members of the Federal or National banks were subject to lower reserve requirements than member banks. As a consequence of DIDMCA, uniform reserve rquirments were instituted across all

depository institutions. These uniform reserve requirements gave the National Banks considerably more control over the money supply and the banking industry than was the the case prior to DIDMCA.

This can be seen from figure 2.1.6.ciii below the figure shows the market forloanable funds before uniform reserve requirements were in place, if states and other authorities controlling reserve requirements and non member banks and thrifts set reserve reqquirements at 15 percent, the supply of loanable funds is given by S^o. The equilibrium intetrest rate is iL^O, and the quantity of loans issued by all banks ia L^o. If authorities lower reserve requirements to 10 percent, their institutions can then issue more loans at any given interest rate, since a smaller fraction of deposits must be kept reserve. Consequently, the supply curve shifts to S^1, resulting in a lower interest rate (i^1L) and loans (L^1). Thus prior to DIDMCA, changes in reserve requirements by authorities other than the federal affected interest rate and the equilibrium quantity of loanable funds. The example illustrates that the federal was not the only driver at the wheels of the banking system prior to DIDMCA.

Decrease in Reserve Requirements and Loan Interest Rate

Loan Interest
Rate

S^O (15% Reserve Requirement)

S^1 (10% Reserve Requirement)

i^OL

i^1L

D

L^O L^1

Loans Issued by Bank
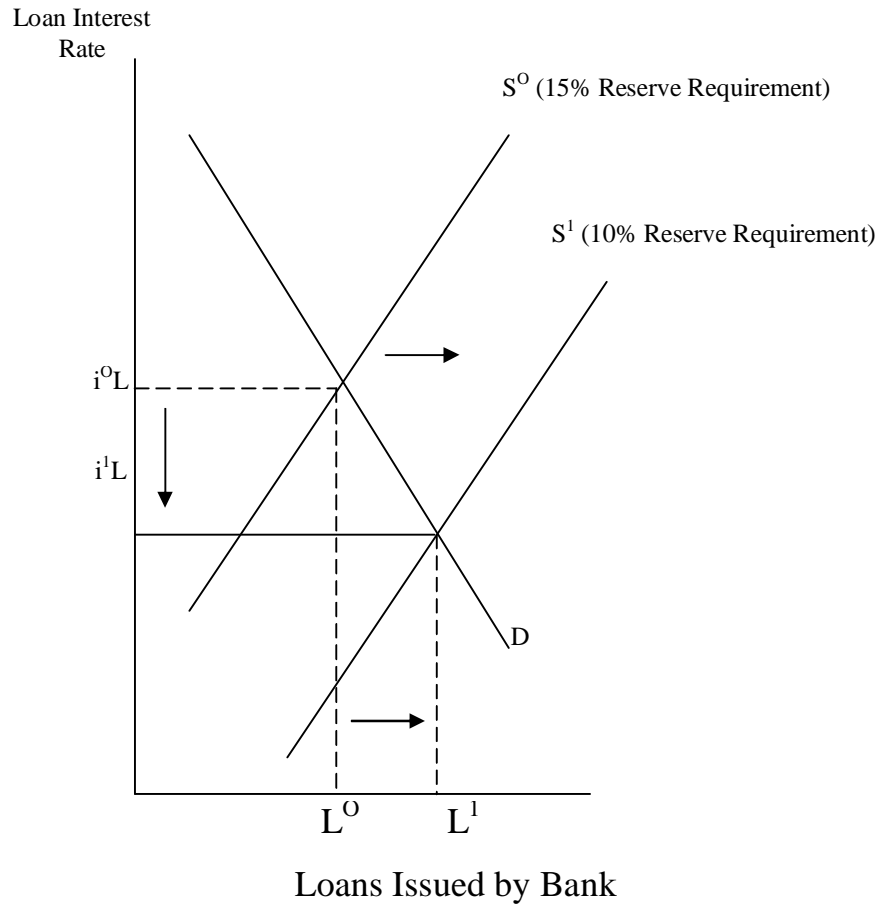
Figure 2.1.6ciii

Prior to DIDMCA, changes in reserve requirments by depository authorities other than the federal could affect interest rates. Here a cut in the reserve rquirement at depository institutions (such as thrifts or state banks) that are not members of the fed increases the supply of loanable

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funds to S^l, resulting in a lower interest rate. DIDMCA changed this possibility by allowing the fed to set uniform reserve requirements across all depository institutions, thus giving the fed greater control over the banking system. The fed used this power in the early 1990s when it reduced reserve requirements, resulting in lower interest rate as shown above.

Today, the fed controls reserve requirements for all depository institutions, and it alone has the authority to change them. For instance, between 1990s and 1992, the fed decreased its average reserve requirement from 10.73 to 7-28 percent of total checkable deposits. Simlar reductions occurred on April 2, 1992, when it lowered reserve requirements on transactions accounts from 12 to 10 percent. This had effects simlar to those shown in figure 2.1.6ciii above, resulting in lower interest rates.

It is important to note that, we have pointed out however, historically, the fed has been reluctant to change reserve requirments, and as a result they have tended to remain stable over time. There are two reasons for this stability. First, the federal can use a host of other

policies to affect the financial system; second, prior to DIDMCA, the Federal was reluctant to change its reserve rquirements because setting them below those of non member institutions would place those institutions at a disadvantge relative to member banks. While it remains to be seen whether the federal will change reserve requirements more frequently now that unifrom reserve requirments are in place, most economists believe it will not.

     iv)   Deposit Insurance – insulates depositors from losses due to a bank failure. As a consequence, even if you hear a rumor that your bank is about to be distressed, you will have little reason to be concerned or withdraw funds from your account. This enhance the safety of the banking system by reducing the likelihood of a bank panic.

     Solidly speaking, suppose you are considering to deposit money in two banks. One bank offers a high interest rate on savings deposit, and the other bank offers a lower interest rate. One bank is more likely for you to find out which one is to spend considerable time and money researching each banks financial situation. In which bank would you choose to deposit money?

If the banks did not have deposit insurance, you would probably spend lots of time trying to find out how likely each bank is to fail before making a decision. But with deposit insurance, you need not spend time collecting this information; you can simply shop around for the highest rate or deposits. You would correctly reason, "So what if the bank fails? The FDIC will pay back every penny I have deposited". Thus is the moral hazard: you can take action to avoid losing your deposits, but since you are insured, you fail to do so.

What if the bank offering the higher interest rate does so because it knows it is more likely to fail than to survive? It reasons that, being on the brink of bankruptcy, its only hope is to attract additional deposits by offering higher interest rates than that of other banks so that it can increase the number of loans it issues. But to cover the higher cost of obtaining deposits, the bank will have to change to a higher interest rate on loans than other banks do. In this case, this can lead to adverse selection: The only people willing to pay the higher interest rate for a loan will be those who are unable to obtain funds at lower rates from other banks because they are bad credit risks. As the banks issue more loans to bad credit risks, the likelihood that it will fail actually increase.

Thus, it is important to realise that deposit insurance leads to both moral hazard (people don't carefully check out the financial status of a bank before depositing money an d banks take risky loans) and adverse selection (the higher interest rate on loans tends to attract borrowers who know they are bad credit risks). Together, these actors tend to increase the probability of bank failure and the cost to the FDIC of covering depositors losses.

2.1.7 *THE BANK AS A FIRM: LOANS*

Purely Competitive Banks.

When individual banks are small relative to the market, they cannot influence the interest rates they charge for loans. In other words, they are price takers. This situation typified a model called pure competition among banks. The market for bank loans is purely competitive if;

> a) There are many buyers and sellers of bank loans, each of which is "Small" relative to the whole market.

b) Each bank provides similar bank loans; that is, no product differentiation exists.

c) Buyers and sellers of banking services have full information about current market interest rates.

d) There are no transaction costs (the costs associated with securing and making loans). The conditions for pure competition are unlikely to hold exactly, but they serve as a useful bench-mark and may approximate reality in some cases. Many market for banking services have numerous buyers and sellers (or demanders and suppliers) of loans, especially those in large cities. Moreover, loans made by different banking firms are similar in nature. It makes little difference in most cases whether a loan is provided by First City or First National. All that matters is the terms of the loans, which include the interest rate on the borrowed funds. Suppliers and demanders of loans are likely to be well informed about alternative sources of loans and the rates charged. Finally, while transactions costs are seldom zero, they are unlikely to

be a dominant portion of the cost of demanding or suppling a loan.

If you remember the theory of perfect competition from your principles if economics course, you will notice a similarity between pure competition and an alternative industry model known as perfect competition. The key difference between these two models is that a perfecly competitive market has in addition to the four characteristics listed above a fifth characteristic known as <u>free entry and Exit.</u> Pure competition does not require that there be free entry into and exit from the banking industry.

The reason we use the model of pure competition to analysis banks that lack market power is that, there is no free entry into banking. Despite the deregulation of bank interest rates, entry into the banking industry is still heavily controlled by Federal, State and Local regulations. Among other things, this implies that, it is difficult for an enterperenur to open a bank. A maze of applications and other red tape must be approved at many levels of government before a bank can be chartered. Exit is less of a problem, since banks can be sold or, with sufficient time and care, liquiated.

In a purely competitive banking market, no individual bank has market power and in effect must charge the "market – determined" interest rate. The reason is simple; since there are many banks, each offering loans that are essentially identical, borrowers would just as soon obtain a loan from one as from any other, since there are no transactions costs, borrowers will obtain loans from the bank that offers the lowest interest rate. If one bank attempts to charge a higher interest rate than all other banks, borrowers would go elsewhere for their loans.

2.7.7a   *__Market Demand and the Demand for an individual Banks Loans__*

In a purely competitive banking market, the intersection of the market supply and demand curves determine the equilibrium interest rate on loans, as in part a of figure 2.1.7ai below shows, Banks supply loanable funds, while households, business, and government demand them. The equilibrium loan interest rate is 10 percent. The equilibrium Naira value of loans, measured on the horizontal axis ia ₦500m.

It is important to remember that, in purely competitive markets, individual banks are price takers; that is, they take the market interest

rate as given. This is also illustrated in figure 2.1.7ai, by the horizontal demand for loans, an individual bank faces. Individual banks must take the equilibrium interest rate on loans as given and can provide as many loans at this rate as they choose to make.

It is also important to stress that, the demand for loans at the market level is downward sloping, whereas the demand for loans provided by an individual purely competitive bank is horizontal. Borrowers are much more sensitive to a change in the interest rate of an individual bank than changes in the market interest rate, because, at the market level, few substitute sources of funds exist, in contrast, there are many substitutes for loans provided by an individual bank (namely, loans from other banks).

Market and Individual Bank's Loan Demand in Pure Competition

iL(%)

S^o
(All banks)

10

D
(All borrowers)

500   187

Market Amount of loans (Millions ₦)

iL(%)

Demand for loans
at an Individual
—D   Bank.

Individual Bank's Amount
of loans (millions ₦)
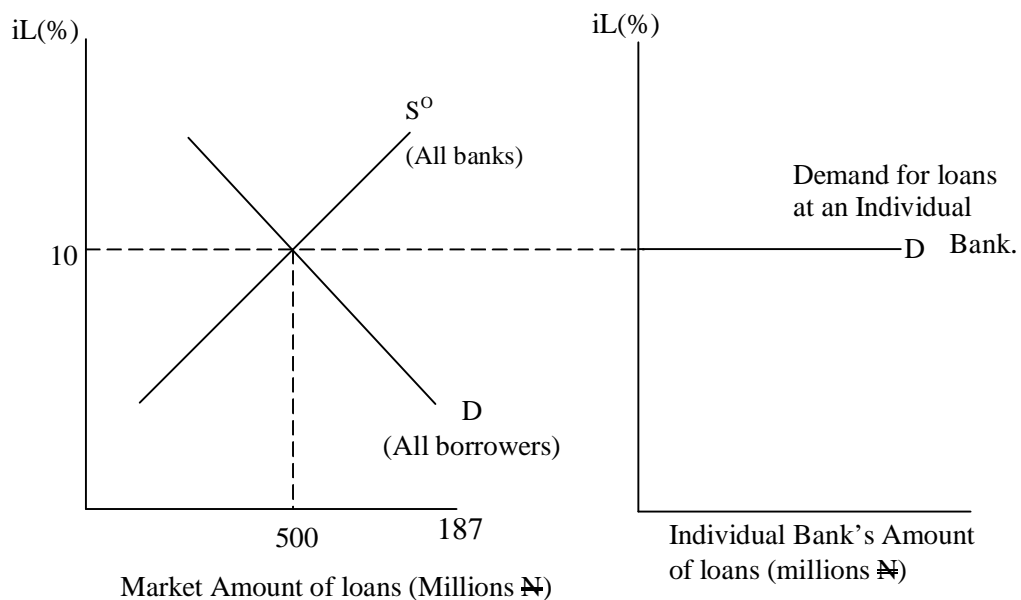
<center>(a)   (b)</center>

<center>Figure 2.1.7ai</center>

This figure above shows how the market determines the interest rate a purely competitive bank can charge on its loans. In part a, the market demand for loans is downward sloping, and the market supply curve for loans is upward sloping. The market clearing interest rate is determined by the intersection of the market demand and supply curves, part b shows the demand for loans at an individual bank. Demand is horizontal, or perfectly elastic, at the market interest rate of 10 percent, since an individual bank has no control over the interest rate it changes.

2.1.7b   Elasticity of Demand for Loans

Economists use a concept called *the elasticity of demand* to measure the sensitivity of demand to price change. (That is to say, the degree of responsiveness of demand to the changes in price). In the

<center>188</center>

loan market, the elasticity of demand for loans measures how responsive the quantity demanded of loans is to a change in the interest rate, it is the percentage change in the quantity demanded of loans divided by the percentage change in the interest rate on loans. Formally, if L is the quantity demanded of loans and Y is the loan interest rate, the interest elasticity of demand for loans is

$$E = \frac{\% \triangle L}{\% \triangle_i L}$$

Where $\triangle$ means " a change in". If E is greater than 1 in absolute value, a 1 percent increase in the interest rate leads to a greater than 1 percent reduction in the quantity demanded of loans. In this case, the demand for loans is elastic (that is, responsive) to change in interest rate. In contrast, if E is less than 1 in absolute value, a 1 percent increase in the interest rate reduces the quantity demanded of loans by less than 1 percent. In this case, the demand for loans is inelastic (that is, not very responsive) to a change in the interest rate.

The formula for interest elasticity of loan demand contains a pitfall you should avoid. In particular, since interest rates are stated in

percentages, such as 5 percent or 10 percent, you may be tempted to think that an increase or decrease in the interest rate of 1 percent - say, from 5 to 6 percent is a percentage change of 1 percent. This is not correct. The percentage change formula is $\Delta L / L$, just as it is for prices. Thus, an increase in the interest rate from 5 to 6 percent is a percentage change of $(6-5)/5 = .20$ or a 20 percent change.

The market demand for loans is more inelastic than the demand for loans by an individual bank. In fact, the demand for an individual bank's loans is perfectly elastic when the market is purely competitive. This is because, if a purely competitive bank increases its interest rate even slightly above the market rate, it will lose all of its loan customers. Thus, the elasticity of demand for a purely competitive bank's loans is infinite in absolute value, or perfectly elastic. This is why the demand for the loans provided by an individual bank is horizontal at the market determined interest rate on bank loans.

2.1.7c   **The Purely Competitive Bank's Loan Decision**

Supply and Demand at the market level determines the market interest rate on loans. A purely competitive bank must take this loan

rate as given, and determine how many loans to issue at this rate. Take notice that, the bank's goal is to maximize its profits. How many loans will a profit-maximising bank issue? To answer this question, we must understand the nature of the bank revenues and costs, since profits are the difference between revenues and costs. Do remember too that, from the principles of economics course, the distinction between accounting profits and economic profits.

Economic profits are the difference between revenues and total opportunity costs. Since accounting profits do not include all opportunity costs, accounting profits are higher than economic profits. Thus, some banks can earn zero economic profits but report earning (Accounting), profits on their income statements. These banks would be earning just enough accounting profits to cover the opportunity cost of resources tied up in the banks.

The bank's revenues from issuing L Loans are given by

$$R = {^i}L \times L,$$

Where L is the market interest rate on loans and L is the Naira Value of loans provided by the individual bank; that is, revenues are merely the interest rate on loans times naira value of loans issued. For

example, if a bank issues ₦1M in loans at an interest rate of 10 percent, the bank's revenue (interest income) is N1,000,000 x .10 = N100,000.

Part 'a' of figure 2.1.7ci graphs the revenues of an individual bank as a function of the naira amount of loans on the horizontal axis. Note that, this relationship is linear, since the bank receives the same interest rate,   L, on each additional Naira in loans. Furthermore, revenues increase as more loans are made. When LA loans are made, revenues are N150M. When loans increase to LM, revenues increase to N500M.

The cost of issuing L loans represented as C(L) and consists of two components. The first is the Cost of funds, since banks require funds in the form of reserves to make loans. These reserves can be obtained by attracting deposits, and the cost of deposits is the interest rate paid on deposits in the bank times the quantity of deposits. The second component is the general cost of administering the bank, which includes the cost of staffing the deposit window with tellers, the cost of the loan officers and staff needed to process loan applications, other operating costs such as the building and utilities, and the cost of covering loans that are in default. In part 'a' of figure 2.1.7ci, costs,

C(L), increase as more loans are made. For example, When LA loans are made, costs are N150M. When loans increase to LM, costs increase to N200M. Note too that, the cost function intersects the vertical axis at a cost above zero. Even when the bank makes no loans, it must pay certain costs, such as the costs associated with the building and utilities. These are called *Fixed Costs,* since they are paid at any level of loans, including zero. Costs that change when the bank changes the quantity of its loans are called *Variable Costs.*

Why is the revenue curve a straight line while the cost curve is not? Do remember that, the individual firm in pure competition cannot affect the market price, so revenue to that firm is simply the interest rate times the Naira amount of loans or L x L. This is a straight line through the origin, labeled R (for bank revenue), in figure 2.1.7ci.

Profit Maximisation in Pure Competition: The TR – TC approach.

Bank revenue
And Costs
(Million ₦)

500

(a)

200

150

L^{Δ} L_M L^B

Revenue, R
(Slope = $^i L$

Costs, C(L)

Slope = MC_L

Naira Amount of Loans, L

(b)   300

Maximum Bank Profits

Profit, R-C

L^A 194 L^M L^B
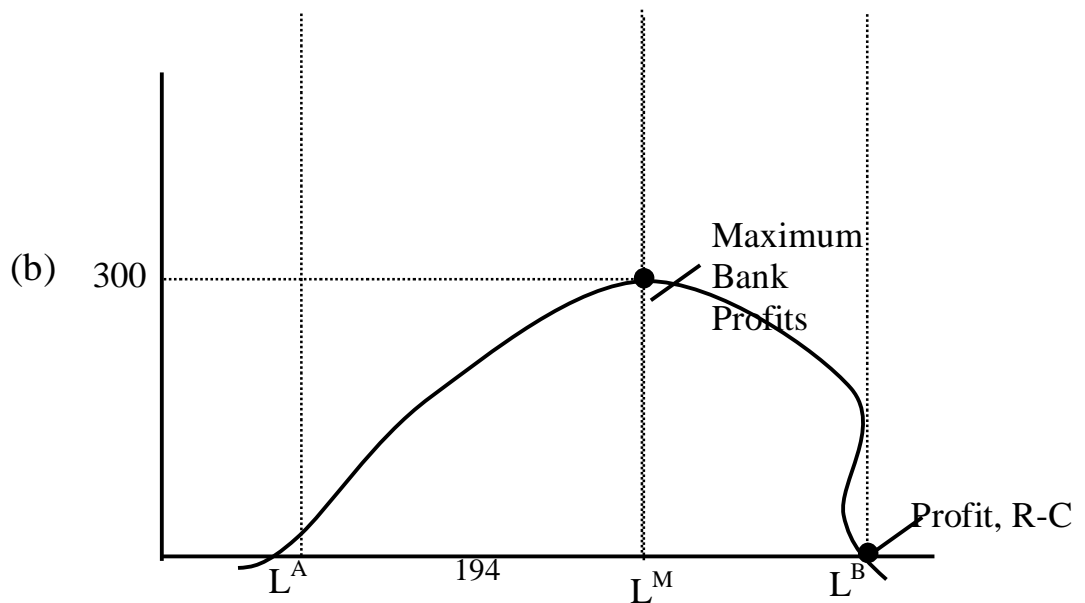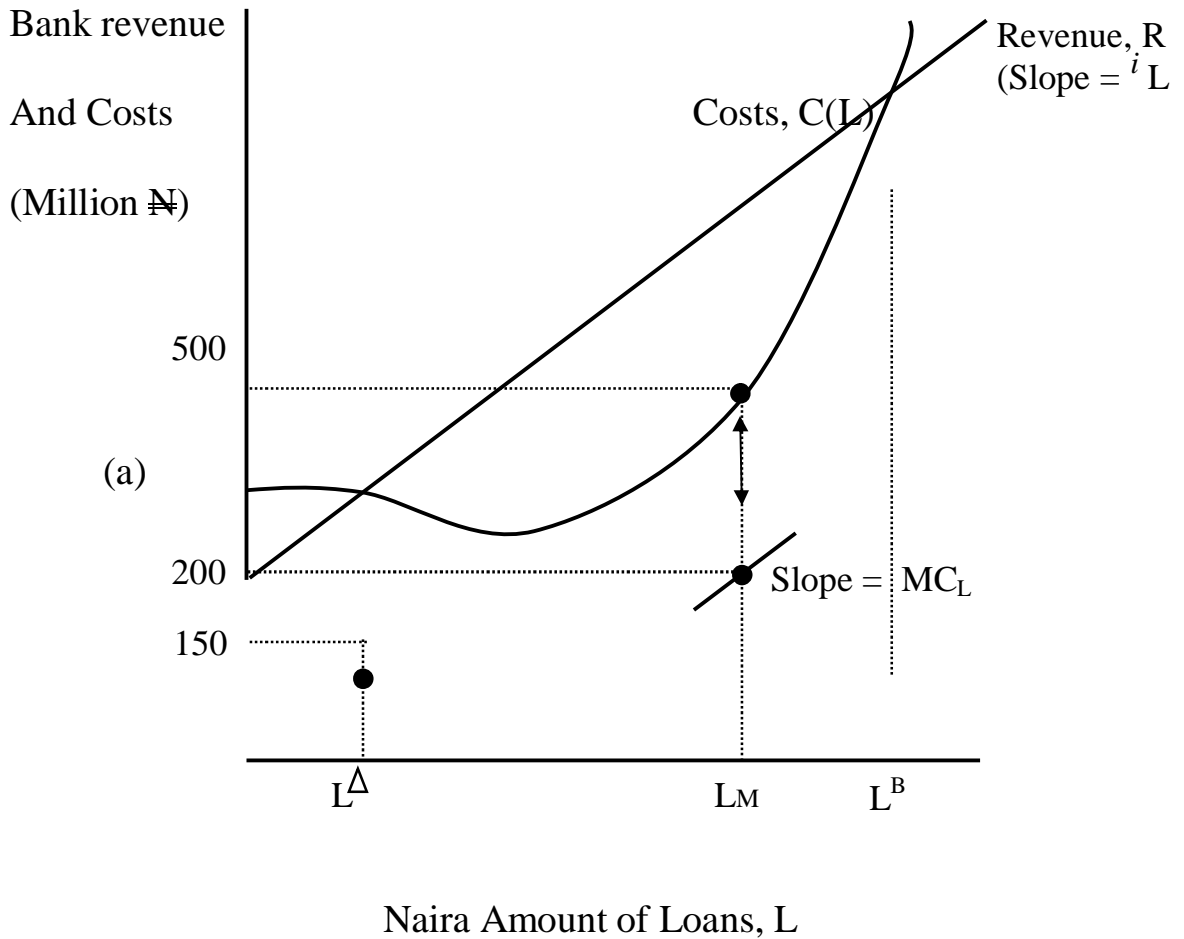
Naira amount of Loans, L

Figure 2.1.7ci

Individual banks offer the quantity of loans that maximises

Profits, where profits are the difference, between total revenues

and total costs. Part 'a' shows bank revenues, R, and costs C(L)

costs equal revenues at two levels of loans, LA and LB; at these

points, the banks' profits are zero, when the bank issues LM

loans, profits equal N500 – N200 = N300 Millions, and this is

the level of loans that maximizes profits. This can be seen more

195

clearly in part 'b' where bank profits are graphed as a function

of loans.

The shape of the cost curve reflects the fact that, as a bank makes more and more loans, costs first rise at a decreasing rate up to loan amount LA in the figure – and then begin rising at an increasing rate. Why? Consider a bank that opens up in a new building of a given size and has a given number of tellers, loan officers, and starts accepting deposits and making loans, its costs rise somewhat, but due mostly to the cost of paying interest on deposits. The building and labour costs are being paid regardless of the number of depositors, or loans. Thus, costs rise, but at a decreasing rate. At some point, however, the number of loans (and deposits) gets so large that costs start rising at an increasing rate. The number of loan applications and transactions engaged into service depositors becomes so large that it takes the ability of the bank's building and labour force to handle the work. At this point, the cost of making additional loan is not only the interest on deposits but also the cost of hiring and training more workers and the

cost of expanding the bank building. Thus, the shape of the cost curve is based on the fact that as a bank makes a larger volume of loans, eventually, the additional resources required making each additional Naira of loans increase, and hence costs will rise at ever increasing rates.

2.1.7d *Using Total Revenue and Total Cost to Determine the Optional Quantity of Loans.*

The individual bank's profits are differences between total revenues and total costs. In part 'a' of figure 2.1.7ci above, profits are given by the vertical distance between the revenue and cost curves. Please, notice that, when fewer than LA loans are made, the cost curve lies above the revenue curve, and thus, profits are negative (the bank experience a loss). For loan amounts between LA and LB, the revenue curve lies above the cost curve, and the bank earns positive profits. But for loans excess of LB, costs again exceed revenues, and losses result at these levels of loans.

Part 'b' of figure 2.1.7ci, graphs the difference between the revenue and cost curves in part 'a'. This profit curve summarizes the

profits the bank could earn for different quantities of loans. Notice that, profits are exactly zero at LA and LB. This is consistent with part 'a', since at these levels of loans costs exactly equal revenue. Furthermore, profits are maximized at point E, where the profit function (R-C) is at its highest point. This level of loans, LM, is the level that maximizes the bank's profits. Take note that, in part 'a' this point corresponds to the point where the vertical distance between revenue and costs is the greatest. Moreover, the slope of the cost curve at this level of loans equal the slope of the revenue curve.

It is no accident that, the slope of the revenue curve equals the slope of the cost curve at the profit maximizing level of loans. The slope of the cost curve is called *Marginal Cost* (MC_L) and reflects the cost to the bank of loaning out an additional Naira. For instance, if the cost to the bank of making an additional ₦1 loan is 07 kobo, the marginal cost of the loan is .07. Similarly, the slope of the revenue curve is the interest rate on loans (^iL) and reflects the revenue the bank would generate if it loaned out an additional Naira. If the interest rate is 8 percent, for instance, each Naira in loans yields the bank 08 kobo in interest income.

To maximize profits, a bank in pure Competition issues loans at the point where the marginal cost of a loan equals the interest rate on loans. The reason is simple. If the marginal cost were less than the interest rate (a point to the left of LM in part 'a' of figure 2.1.7ci), the bank could add more to revenue than to cost by loaning out an additional Naira. This is why it is not profitable for the bank to make fewer than LM loans. Similarly, if marginal cost were greater than the interest rate, the bank could reduce costs by more than its lowered revenue if it reduced its loans by N1. Thus, it would not be profitable for the bank to issue more than LM loans. To summarise, to maximize profits, a bank in pure competition produces the quantity of loans such that the interest rate on loans equals the marginal cost of loans;

$$^{i}L = MC_{L}.$$

This condition simply means that the revenues derived from issuing an additional N1 in loans (^{i}L) equals the cost to the bank of issuing additional N1 in loans (MC_{L}).

2.1.7e   <u>Using Marginal Revenue and Marginal Cost to Determine the Quantity of Loans.</u>

It will be seen that figure 2.1.7ei below shows another way to summarize the profit – maximizing loan decision of an individual bank in pure competition. Here, the interest rate on loans, $^{i}L = .10$ or 10%, is determined in the market and defines the demand curve for loans offered by an individual bank. The curve labeled MC_L represents the marginal cost to the bank of loaning and an additional naira. Please notice that at point A, Marginal Cost equals the interest rate on loans, which is the condition for maximizing profits. The level of loans that corresponds to this point is LM = N100M, so the purely competitive bank maximizes profit by issuing LM = N100M in loans. The bank issues the loans at the market interest rate, $^{i}L = 10\%$.

The curve labeled AC_L in figure 2.1.7ei below represents the average cost to the individual bank of issuing loans. The average cost of issuing L loans is defined as the ratio of costs to the total Naira value of loans issued.

$$AC_L = \frac{C(l)}{L}$$

For instance, if the cost to a bank of issuing N100m in loans is N5m, the average cost of each N1 in loans is $AC_L = N$ $\dfrac{5,000,000.00}{10,000,000.00} = 5\%$.

Note that the average cost of loans represents cost as a fraction of the Naira value of loans rather than a Naira amount. Like the interest rate, average cost is measured as a percentage of the Naira value of loans.

Profit Maximisation in Pure Competition

Naira value of loans (Million ₦)
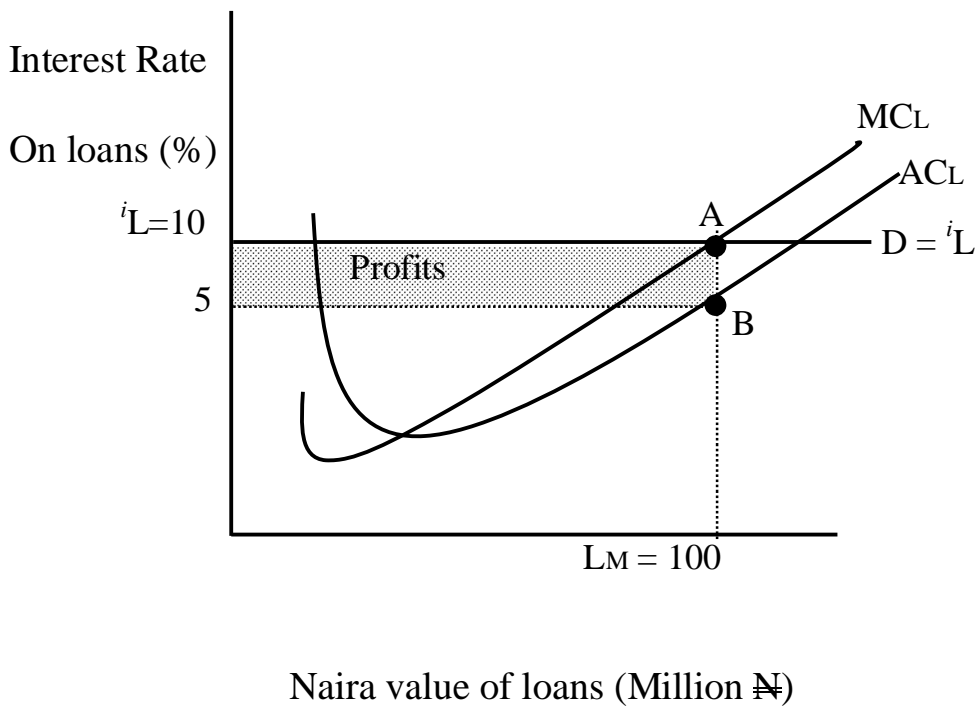
Fig. 2.1.7ei

To maximize profits, a purely competitive bank issues loans

such that the marginal cost of an additional loan
equals

the marginal revenue from an additional loan. The
marginal

revenue from an additional loan is simply the market deter-

mined interest rate, in this case, $^{i}L = 10$. The marginal cost

is the upward sloping curve labeled MCL. Profits are

maximized at point A, where marginal cost equals the

market interest rate. This corresponds to LM = N100M in

loans. The shaded region reflects profits, which is total

revenue minus total cost.

One can successfully use, figure 2.1.7ei above to determine the profits of the individual bank. To maximize profits, the bank issues LM = N100m in loans. The distance between the interest point A and B reflects the spread between the interest rate received on loans (10 percent) and the average cost to the bank of issuing LM = 100m in

loans (5 percent). In this example, the spread is .1 - .05 = 5%. Thus, net costs, the bank earns an average of 5 percent on the N100m in loans it issues. The bank's profits when it produces the profit – maximizing level of loans, is 0.5 x N100,000,000 = N5,000,000. This corresponds to the shaded area of the rectangle in figure 2.1.7ei. It is the base (N100,000,000) times the height (.05), or N5m.

2.1.8   *Banks With Market Power*

In contrast to purely competitive banks, banks with market power have some control over the interest rate they charge for loans. The interest rate charged on loans by a bank with market power is not market determined but depends on the quantity of loans the bank chooses to issue. A bank with market power faces a down-ward-sloping demand curve, such as the demand curve for loans issued by bank one in figure 2.1.8ai below. This down-ward-sloping demand curve indicates that some borrowers will obtain a loan from the bank even if the rate it charges is higher than the rates charged by other lenders of funds. For instance, if Bank One charges an interest rate of 7 percent on loans, it will be able to issue N150m, in loans. If it raises the interest rate to 10 percent, it will issue fewer loans – N100m – as some

borrowers either decide not to borrow or choose to borrow from other

banks. Thus, to issue more loans, a bank with market power must lower

the interest rate it charges on loans.

Demand for Loans at a Bank With Market Power

Interest Rate

Charged by

Bank One (%)

10

7

D

Demand for loans
Issued by Bank One

0

100   150

Loans at Bank One (Millions ₦)
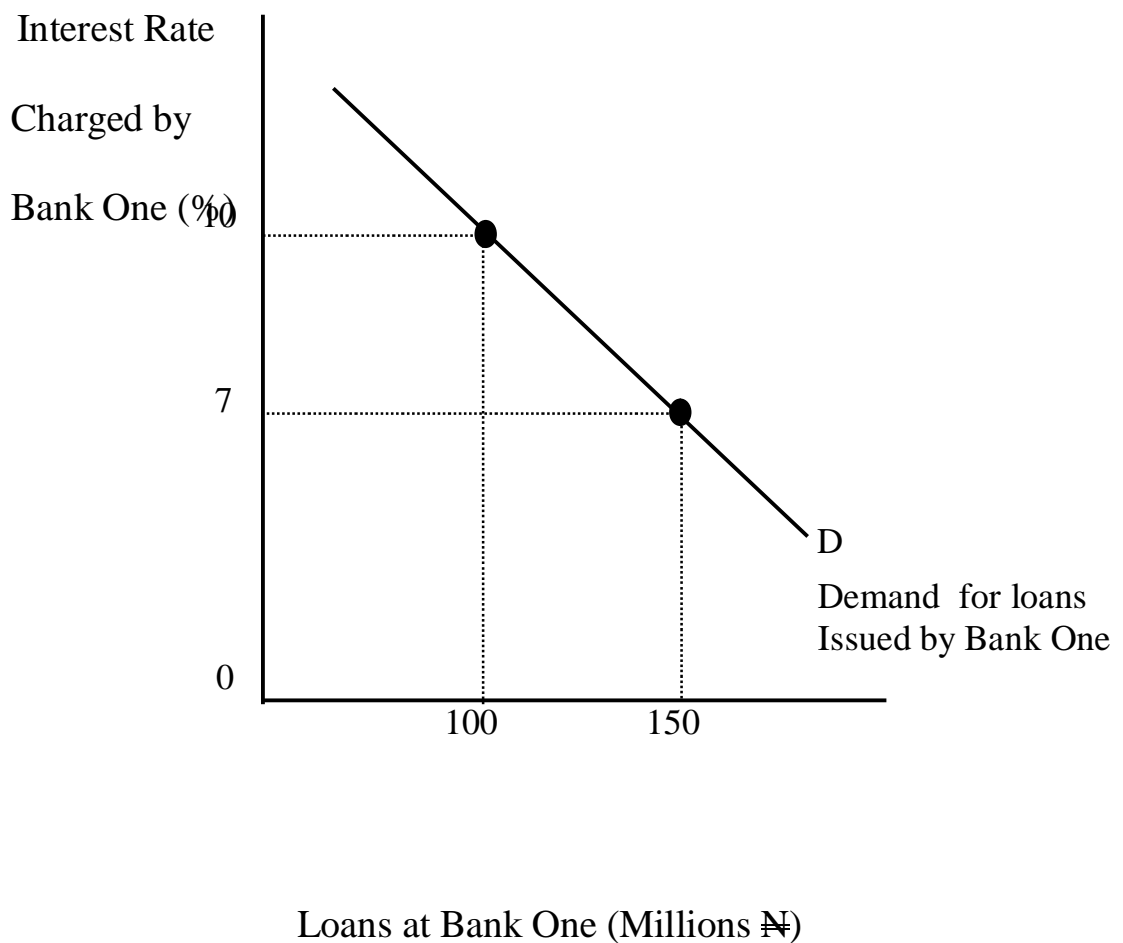
Figure 2.1.8ai

The Demand curve for loans at bank with market power is

denoted D. If bank one issues loan at 10 percent, it can sell N100m in

loans, if it lowers its rate to 7 percent, it can issue N150m in loan.

2.1.8b   *Sources of Market Power for Banks*

It is important to realise that, before examining how banks with market power choose which interest rate to charge for a loan, it is useful to briefly discuss factors that give rise to market power. But, in fact, a complete analysis of sources of market power is far beyond this dissertation. Herein under, the researchers wishes to review two sources of market power that is important for understanding why some banks enjoy market power; economies of scales and location.

2.1.8bi   *Economies of Scale and Monopoly Banks*

A Monopoly bank is a single bank that effectively services the entire market for loans. Many small towns have a single bank, and the transactions cost of obtaining a loan from a bank located in some distant location make it imperatively difficult, for household to obtain loans elsewhere. A natural question, however, is why small towns tend to have a single bank. The answer lies in what economists refer to as *Economies of Scale;* larger banks can provide loans at lower average

cost than smaller banks can. _Economies of Scale_ exist whenever the average cost curve decreases as the quantity of loan increases.

Consider the average cost curve for a bank illustrated in figure 2.1.8bi below, which exhibits economies of scale. Suppose borrowers desire N200m in loanable funds. If a single bank provided these funds, the average cost to the bank for providing the loans would be 8 percent.(Remember AC is not express as a Naira amount). To stay in a business, this bank would have to receive an interest rate on loans of at least 8 percent to cover the cost of providing loans. In contrast, if two banks share the market and each provides half of the N200m in loans, the average cost for each bank for providing N100m in loans would be 15 percent, because, neither would be able to take advantage of the economies of scale reflected in the shape of average cost curve.

Economies of Scale

Average cost

Of issuing

Loans (%)   15 · · · · · · · · · · · · · ●   Average Cost if Two Banks,
                                            Each issue N100m
                                            in loans.

                                            Average cost if One Bank
                                            issues N200m in loans.

         8 · · · · · · · · · 206 · · · · · · · · · · ●
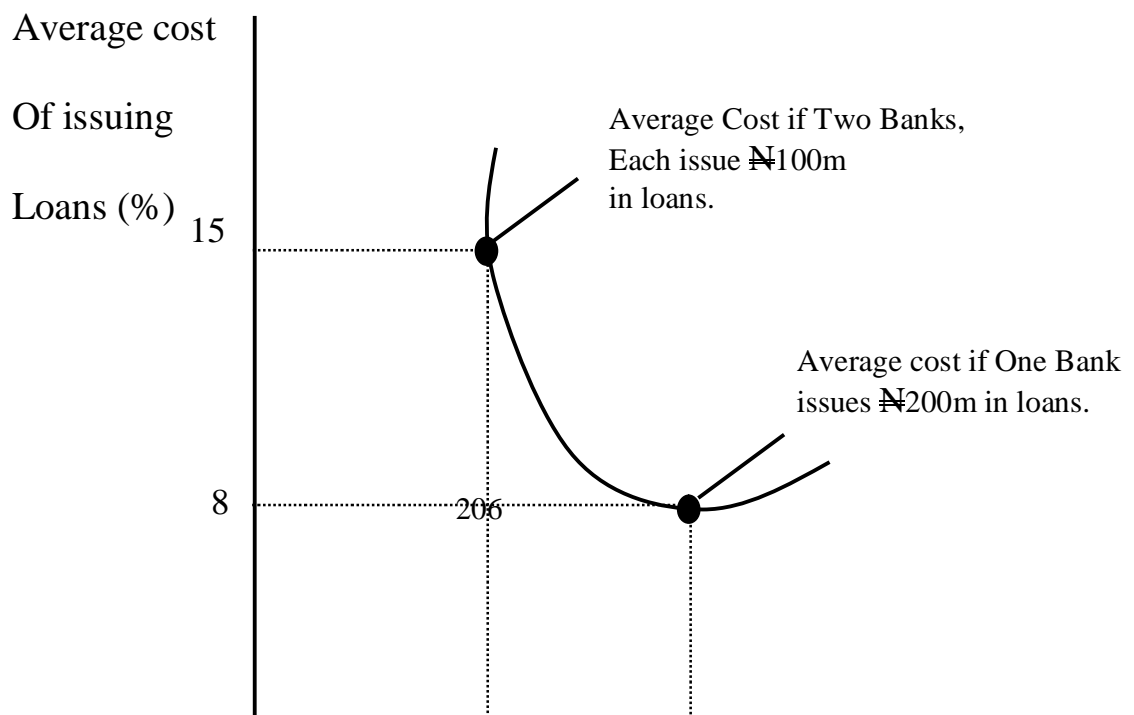
Naira value of loans (million ₦)

<u>Figure 2.1.8bi</u>

If the average cost of making loans exhibits economies

of scale, a single bank can serve the market at a lower

cost than can several banks serving the same market.

when N200m in loans, is demanded, this market, two

Banks sharing the market must charge 15 percent for

each loan to cover costs, while one bank can provide

the same number of loans at only 8 percent.

What does all these imply about the number of banks in this hypothetical small town? If there were two banks, each sharing 15 percent for loans, the banks would have an incentive to merge into a single bank (which would lower the average cost

of loans), (consider syndication of loans). Alternatively, one of the banks could lower its interest rate on loans to attract customers from the other bank and drive its competitors out of business, thanks to its lower average cost of servicing ₦200m in loans. In short, when sufficient economies of scale exist, a single bank will dominate the market for loans. A monopoly bank faces a down-ward-sloping demand curve for loans to borrowers located in its vicinity and thus can issue more loans only if it lowers the interest rate.

2.1.8bii **Location Advantage:**

Market power does not necessarily imply that a single bank services the entire market. In many instances, borrowers value the convenience of using a bank that is close to their homes or offices. If a bank across town offers a better deal on banking services, some borrowers will still choose to use the more convenient bank. Thus, by raising the interest rate on loans, a bank with a location advantage will lose some loan customers, but not all of them.

Of course, given modern technology such as the modern and the fax machine, the location is still important, however, if for no other reason than that bank, customers still find it convenient to visit their local bank for a number of services. While possible, it is usually very inconvenient for a borrower to arrange a loan without visiting his or her bank. Perhaps, it is possible to open account by mail, but this too is inconvenient. Ask yourself whether you would like to bank with First National Bank of Fairbanks, Alaska. The answer should convince you that location advantage is still important.

2.1.8c   *Profit-Maximising Loan Decisions For Banks With Market Power.*

It is now possible to examine how a bank with market power determines its profit-maximising interest rate and level of loans. These decisions are a bit more complicated than those of purely competitive banks because, the interest rate a bank with market power receives on its loans depends on the number of loans it issues.

It is paramount to consider the demand curve for loans at Bank One in part 'a' of figure 2.1.8ci. If the bank charges an interest rate of 30 percent, the quantity demanded of its loans is zero, so its revenue (graphed as a function of loans in part b) will also be zero, as shown by point A. On the other hand, part 'a' reveals that, if the bank lowers the interest rate on loans to 0 percent, it can issue ₦100m in loan. But since nothing times something is nothing, its revenues will be zero, corresponding to point B in part 'b' of figure 2.1.8ci. For interest rates between zero and 30 percent, however, the bank is able to issue varying amounts in loans. The revenue function in part 'b' of figure 2.1.8ci represents the revenues associated with these different levels of loans between ₦ 0 and ₦100m. For instance, if the bank charges an interest rate of 20 percent, it can provide ₦10m in loans and earn revenues of .20 x ₦ 10,000,000 = ₦ 2,000,000.

Demand and Revenue of a Bank With Market Power

Interest

30

210

Rate(%)

(a)

Loans at Bank One (Millions $)

Revenues

(Millions ₦)

(b)

2

Revenue (R)

A

211

B

0

10

100
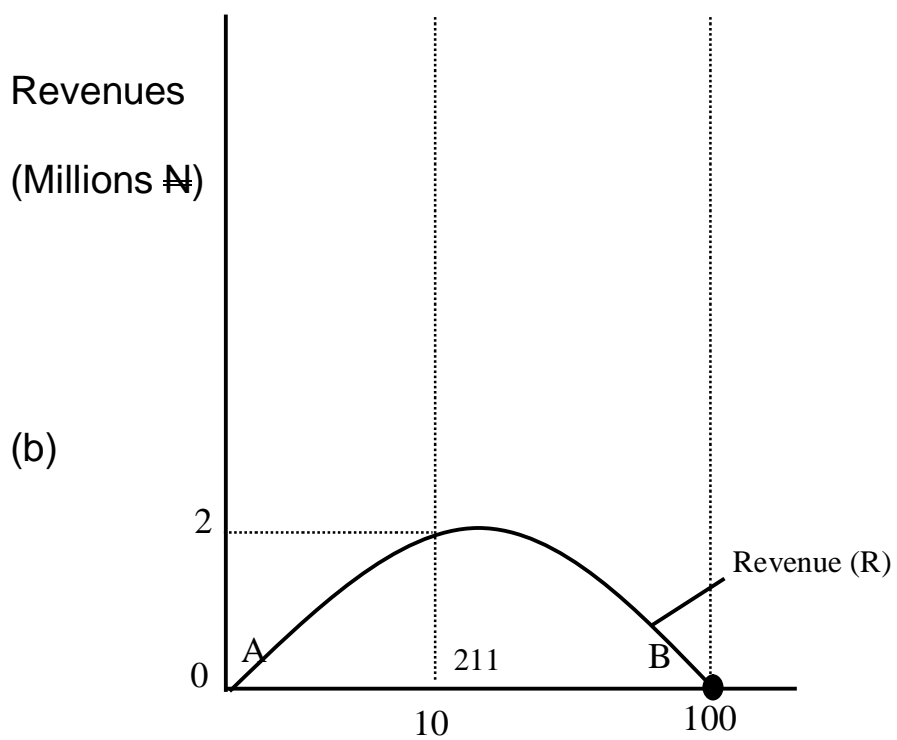
Loans at Bank One (Millions ₦)

Figure 2.1.8ci

Part 'a' illustrates the demand curve for loans issued

by

Bank One. If Bank One charges an interest rate of

30

Percent, no one will demand any loans. If it charges

no

Interest for its loans, ₦100m worth of loans will be de-

manded. Part 'b' shows Bank One's revenue

curve,

which depends on the quantity of loans issued, An

interest rate of 30 percent corresponds to point A in

part 'b'; an interest rate of zero corresponds to point

B. As the interest rate increases from zero to 30

percent, revenues initially rise and then begin to

decline.

To determine the level of loans that maximizes Bank One's profit, we superimpose the revenue curve in part 'b' of figure 2.1.8ci on the bank's cost curve to obtain the graph in part 'a' of figure 2.1.8cii. Notice that costs exceed revenues for points to the left of A or to the right of B and the bank makes a loss. Part 'b' of figure 2.1.8cii depicts these losses by graphing profits as a function of loans. At points A and B, revenues from loans exactly equal the bank's costs and profits are zero, which is consistent with the profit curve graphed in part 'b'.

Profit-Maximising Loan Decision for a Bank with Market Power
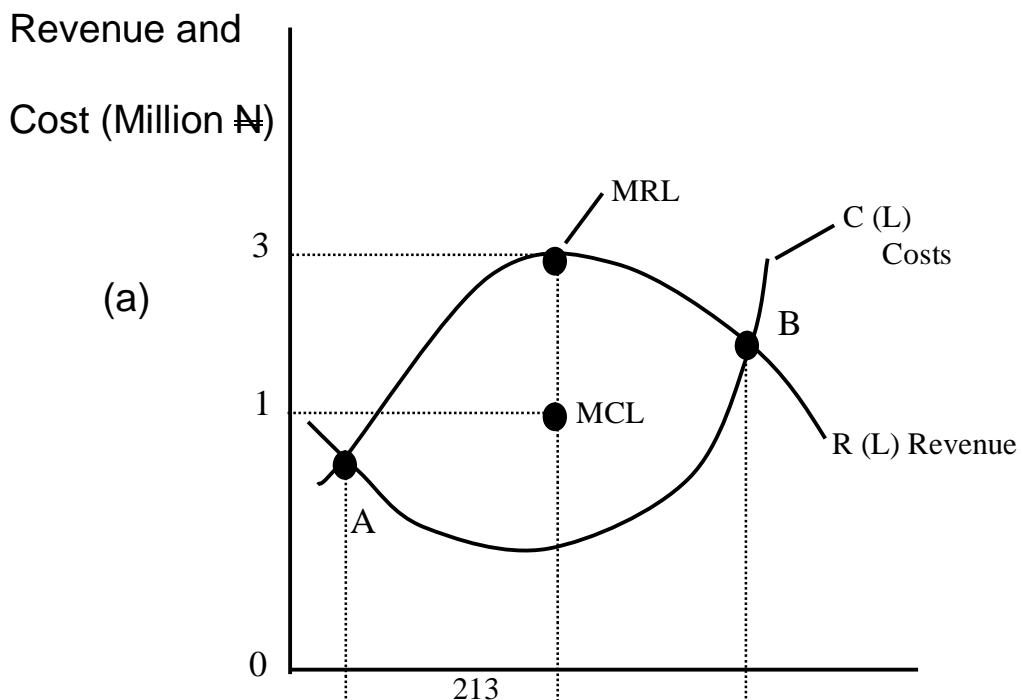
Loans at Bank One (Millions ₦)

Profits

(Millions ₦)

(b)

Loans at Bank One (Millions $)

Figure 2.1.8cii

In fact, part 'a' shows the revenue and cost

curves for

Bank One, while part b shows the bank's profits as a

function of loans. The slope of the revenue curve

is Marginal revenue (MRL), and the slope by the cost

is marginal cost (MCL).The bank will maximize profit

by expanding loans to the level where MCL=MRL.

this is given by ₦40m worth of loans, Note in part a

profit –maximising quantity of loans, total cost equals

N3m and total cost equals ₦1m. In part b, we see that profits are indeed as their highest as point C, where they equal ₦2m. And level of loans other than N4om will result in lower profits.

For loans between points A and B, revenues exceed costs and the bank earns profits. Notice that the vertical distance between revenues and costs is greatest at N40 m, in loans. At this point, revenues are N3m and costs are only N1m. Profits are thus N2m, which corresponds to point C in part b by figure 2.1.8 cii, where the profit curve achieves its maximum.

It is important to note that at the point of profit maximization, the slope of the bank's revenue curve (denoted MRL, in part a) equals the slope of the bank's cost curve (denoted MCL). The slope of the revenue curve, MRL, is the Marginal revenue to the bank of issuing additional loans. For instance, if by issuing an additional N1 in loans the bank increases its revenue by 10 kobo, the marginal revenue of additional loans is 10. Similarly, marginal cost (MCL) reflects the cost to the bank of issuing an additional N1 in loans. As the point of profit maximization, MRL = MCL.

To understand why MRL = MCL as the point of profit maximization, suppose the bank issues fewer than ₦40m in loans. This corresponds to a point where the slope of the

revenue function (MRL) is greater than the slope of the cost function (MCL). If MRL > MCL, the bank will be able to add more to revenue than to cost by offering more loans. As the bank expands loans up to ₦40m, MRL will equal MCL. Would the bank want to continue issuing loans beyond ₦40m? The answer is no. For loans in excess of ₦40m, MRL is less than MCL; Issuing loans in excess of ₦40m would increase costs more than it would increase revenue . In short, to maximize profits a bank with market power issues loans such that marginal revenue equals marginal costs.

In fact, figure 2.1.8ciii shows an alternative way to illustrate the profit maximising loan decision of a bank with market power, the demand curve for the bank's loans is given by D and is downward sloping since the bank has market power. The marginal revenue associated with loans is denoted MRL and lies below the demand curve, Notice that marginal revenue equals marginal cost at point A. Thus, the profit maximizing level of loans for this bank is LM.

The interest rate a bank with market power will charge for a loan is the maximum rate borrowers will pay for the profit maximizing level of loans. This interest rate corresponds with point B on the demand curve, so the profit- maximizing interest rate charged by the bank is $i^M\mathrm{L}$. Note that the bank charges an interest rate that exceeds its marginal cost of issuing loans, reflecting the banks market power.

To determine bank profits, note that the vertical distance BC in figure 2.1.8ciii reflects the spread between the interest rate received on each loan and the average cost of issuing loans. Multiplying this spread by the total value of loans (LM) determines the profits of the bank with market power. The shaded region in figure 2.1.8.ciii below shows these profits.

A Profit-Maximising Bank with Market Power

Interest Rate

On loans
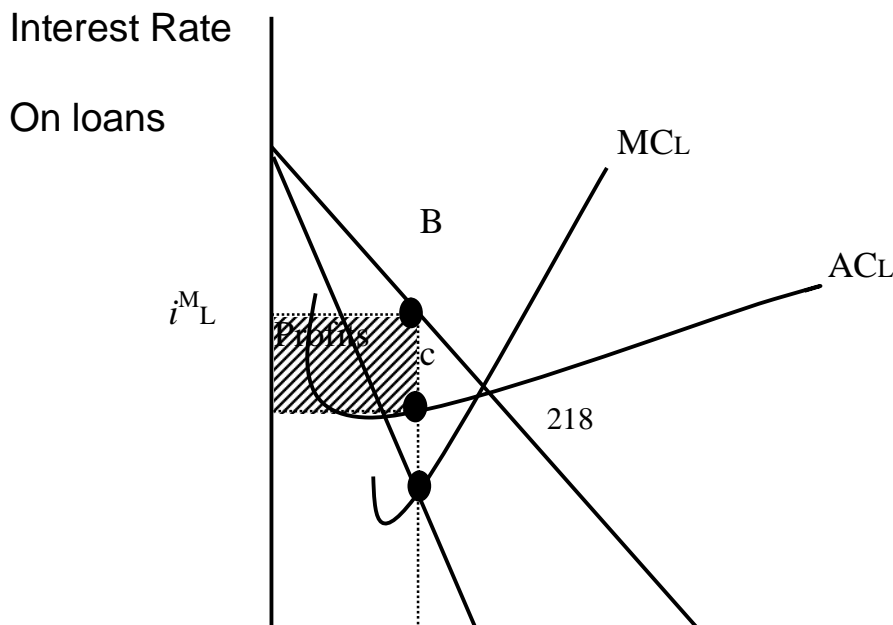
Naira Value of Loans (Millions N)

__Figure 2.1.8ciii__

A bank with market power issues the profit-maximising Quantity of loans where Marginal revenue (MRL) equals marginal cost(MCL). This occurs at point A and corresponds to LM worth of loans. The interest rate charged for these loans are given by the maximum interest rate, borrowers will pay for LM worth of loans. This interest rate, $i^M L$ is above the marginal cost of issuing loans, since the bank has market power, profits are given by the shaded area.

2.2.0   **__COMPETITION IN THE BANKING INDUSTRY.__**

Competitive Forces

One of the earliest philosophers, Mr. Michael Porter, has identified five forces that determine the intrinsic long-run profit attractiveness of a market or market segment: Industry Competitors, Potential Entrants, Substitutes, Buyers, and

Suppliers. His model is shown in various spheres, and the threats these forces pose are as follows:-

a) Threat of intense segment rivalry; a segment is unattractive if it already contains numerous, strong, or aggressive competitors. It is even more unattractive if it is stable or declining, if plant capacity additions are done in large increments, if fixed costs are high, if exit barriers are high, or if competitors have high stakes in staying in the segment. These conditions will lead to frequent price wars, advertising battles, and new product introductions, and will make it expensive to compete.

b) He also identified the threat of new entrants. According to him, a segment's attractiveness varies with the height of its entry and exist barriers. *(Michael E. Porter, Competitive strategy (New York: The Free Press, 1980), pp. 22 – 23)*. The most attractive segment is one in which entry barriers are high and exit barriers are low. Few new firms can enter the industry (like the banking industry) the poor performing firms can easily exit. When both entry and exit barriers are high, profit

potential is high, but firms face more risk because poorer-performing firms stay in and fight it out. When both entry and exit barriers are low, firms easily enter and leave the industry, and the returns are stable and low. The worst case is when entry barriers are low and exit barriers are high. Here, firms enter during good times, but find it hard to leave during bad times. The result is chronic over-capacity and depressed earnings for all.

c)   Threat of substitute products – A segment is also unattractive when there are actual or potential substitutes for the product. Substitutes place a limit on prices and on profits. The company has to monitor price trend closely. If technology advances or competition increases in these substitute industries, prices and profits in this segment are likely to fall.

d)   The interest of buyers' growing bargaining power. A segment is unattractive, if the buyer possesses strong or growing bargaining power. Buyers' bargaining power grows when they become more concentrated or organized, when the product represents a significant fraction of the buyers' costs, the buyers' switching is undifferentiated, when buyers are price sensitive

because of low profits, or when buyers can integrate upstream. To protect themselves, sellers might select buyers who have the least power to negotiate or switch suppliers. A better defense consists of developing superior offers that strong buyers can not refuse.

e)   The threat of suppliers' growing bargaining power. A segment becomes unattractive if the company's suppliers are able to raise price, or reduce quantity supplied. Suppliers tend to be powerful when they are concentrated or organized, when there are few substitutes, when the supplied product is an important input, when the costs of switching suppliers are high, and when the suppliers can integrate downstream. The best defenses are to build win-win relation with suppliers or use multiple supply sources.

2.2.1 *IDENTIFYING COMPETITORS*

In fact, to many, it may seem a simple task, for a company to identify its competitors. Coca-Cola knows that Pepsi Cola is its major competitor; Sonny knows that Matsushita is a major competitor, *(Hans Katayam, "Fated to feud: Sony versus*

Matsushita"" Business Tokyo (Nov. 1991): 28-32. and Petsmart.com knows that Petco.com is a major competitor. However, the range of a company's actual and potential competitors is in reality much broader. A company is more likely to be hurt by emerging competitors or new technologies than by current competitors.

It is understood that in recent years, many businesses fail to look to the internet for their most formidable competitors. A few years back, Bames and Nobles and Borders book store chains were competing to see who could build the most mega-stores, where browsers could sink into comfortable coaches and sip cappuccino. While they were deciding, an online empire called Amazon.com, Bezo's Cyber book store had the advantage of offering an almost unlimited selection of books without the expense of stocking inventory. Now both Bames and Noble and Borders are playing catch-up in building their own online stores. Yet, "Competitor Myopia" – a focus on current competitors rather than latent ones has rendered some businesses extinct: *(Michael Krantz, " Click Till You Drop", Time, July 20, 1988, pp. 34-*

39;Michael Kranss, "The web is taking your customers for Itself," Marketing News, June 8, 1998, p. 8.) which derive a huge portion of their revenue from classified employment, real estate, and automobile ads. When you can get free news content online, why should you buy a newspaper? The businesses with the most fear from internet technology are the world's middlemen (see "Marketing for the New Economy: displaced but not discouraged: what happens when E-Commerce Edges Out the Middlemen".).

2.2.1a   *Industry (Bank) Concept of Competition*

In the first place, what precisely is an industry? An industry is a group of firms that offer similar product or class of products that are close substitute for one another. Industries are classified according to number of sellers, degree of product differentiation, presence of entry, mobility, and exit barriers, cost structure, degree of vertical integration; and degree of globalization.

i)   Number of Sellers and Degree of Differentiation – The starting point for describing an industry is to specify the number of sellers and whether the product is homogenous or highly

differentiated. These characteristics give rise to four industry structure types:-

1.   **Pure Monopoly** – Only one firm provides a certain product or service in a certain country or area (local) electricity supply company. An unregulated monopolist might charge a high price, do little or no advertising, and offer minimal services. If partial substitutes are available and there is some danger of competition, the monopolist might invest in more service and technology. A regulated monopolist is required to charge lower price and provide more service as a matter of public interest.

2.   **Oligopoly** – A small number of (usually) large firms produce that range from highly differentiated to standardize. Pure oligopoly consists of a few companies producing essentially the same commodity (Oil, Steel). Such companies would find it hard to charge anything more than the going price. If competitors match on price and services, the only way to gain a competitive advantage is through lower costs. Differentiated Oligopoly consists of a few companies producing products (autos, cameras) partially differentiated along lines of quality, features,

styling, or services. Each competitor may seek leadership in one of these major attribute attract the customers favoring that attributes, and charge a price premium for that attribute.

3. **Monopolistic Competition** – Many competitors are able to differentiate their offers in whole or in part (restaurants, beauty shops), competitors focus on market segments where they can meet customers needs in a superior way and command a price premium.

4. **Pure Competition** – Many competitors offer the same product and service (stock market, commodity market). Because there is no basis for differentiation, competitors' prices will be the same. No competitor will advertise unless advertising can create psychological differentiation (cigarettes, beer), in which case it would be more proper to describe the industry as monopolistically competitive.

ii) Entry, Mobility, and Exit Barriers: Industries differ greatly in case of entry. It is easy to open a new restaurant but difficult to enter the aircraft industry, it might face mobility barriers when it tries to enter more attractive market segments.

Firms often face exit barriers, *(Kathryn Rudie Harrigan, the effects of Exit Barriers upon Strategic Flexibility, "Strategic Management Journal 1 (1980): 165-76).* Such as legal or moral obligations to customers, creditors, and employees, government restrictions; low asset salvage value due to over specialization or obsolescence; lack of alternative opportunities; high vertical integration; and emotional barriers. Many firms stay in an industry as long as they cover their variable costs and some or all of their fixed costs. Their continued presence, however, dampens profits for everyone.

Even if some firms do not want to exit the industry, they might decrease their size. Companies can try to reduce shrinkage barriers to help ailing competitors get smaller gracefully. *Michael .E. Porter, Competitive Advantage (New York: The Free Press, 1985), pp.225, 485).*

iii) Cost Structure – Each industry has a certain cost burden that shapes much of its strategic conduct. For instance, steel making involves heavy manufacturing and raw materials costs, toy manufacturing involves heavy distribution and marketing

costs. Firms strive to reduce their largest costs. The integrated steel company with the most cost efficient plant will have a great advantage over other integrated steel companies; but even then, they have higher costs than the new steel mini-mills.

iv) Degree of Vertical Integration: - Companies find it advantageous to integrate backward or forward (vertical integration). Major oil producers carry on oil exploration, oil drilling, oil refining, chemical manufacturing, and service-station operations. Vertical integration often lowers costs, and the company gains a larger share of the value-added stream. In addition, vertically integrated firms can manipulate prices and costs in different parts of the value chain to earn profits where taxes are lowest. There can be disadvantages, such as high costs in certain parts of the value chain and a lack of flexibility. Companies are increasingly questioning how vertical they should be. Many are out-sourcing more activities, especially those that can be done better and more cheaply by specialist firms.

v) Degree of Globalisation:- Some industries are highly local (such as lawn care); others are global (such as oil, aircraft engines, cameras). Companies in global industries need to compete on a global basis if they are to achieve economies of scale and keep up with the latest advances in technology. *(Porter, Competitive Strategy, Chapter 13.)*

2.2.1b.   *Market Concept of Competition*

It is important to understand that, in addition to the industry approach, one can still identify competitors using the market approach. Competitors are companies that satisfy the same customer needs. For instance, a customer who buys a word processing package really wants "writing ability" – a need that can also be satisfied by pencils, pens or typewriters.

The market concept of competition reveals a broader set of actual and potential competitors. Rayport and Jaworski suggest profiling a company's direct and indirect competitors by mapping the buyer's steps in obtaining and using the product.

2.2.1c. *Why Market Structures Differ*

It is important to remember that, government legislation has influence on market structures. Nationalised industries, for example coal and rail, are legal monopolies; they are the so licensed producers. Patent laws may confer temporary monopoly on producers of a new process. Ownership of a new raw material may also confer monopoly status on a single producer. Having noted these interesting special cases, we now develop a general theory of how the economic factors of demand and cost interact to determine the likely structure of a particular industry.

The Car Industry is not an oligopoly one day but perfectly competitive the next. It in long-run influences that we must seek the causes of different market structures. Similarly, although a particular firm may have a temporary advantage in technical know-how or work force skill, in the long-run a firm can hire another's workers and learn its technical secrets. In the long run all firms or potential entrants to an industry essentially have access to the same cost curve.

Demand, Costs, and Market Structure.
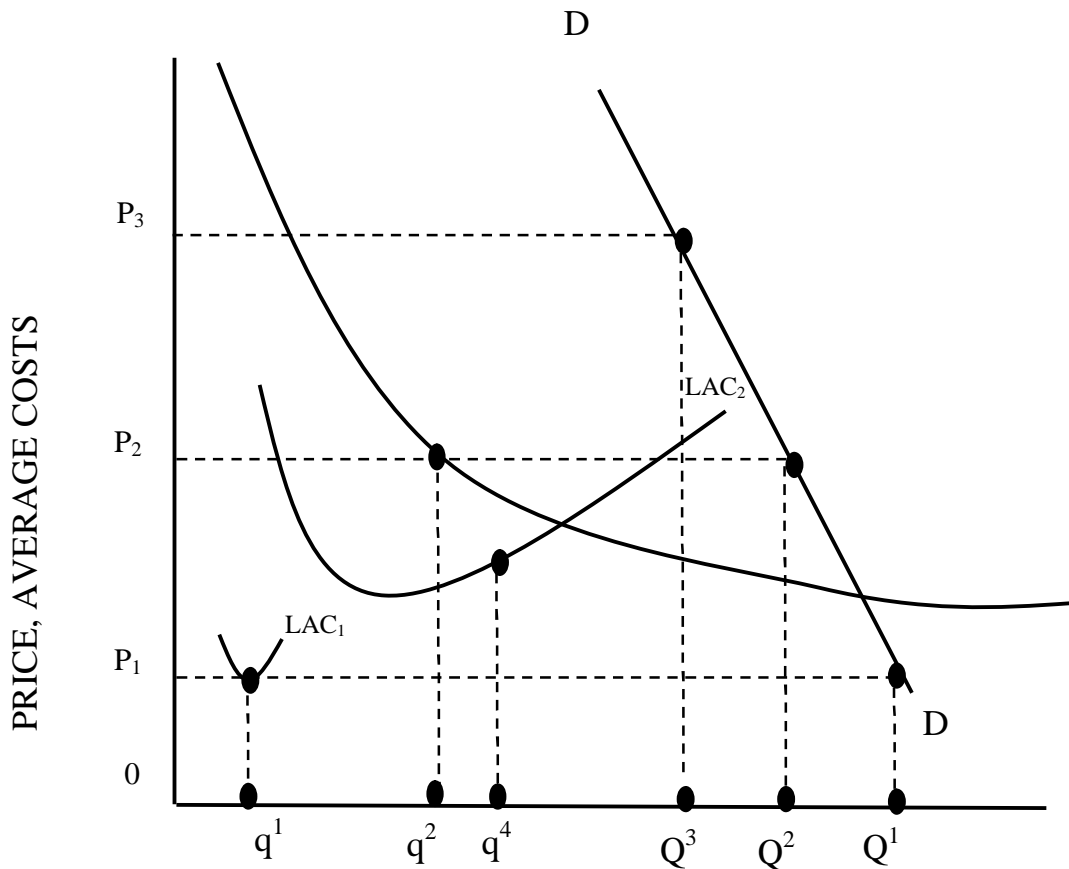
Figure 2.2.1ci

Output of a Firm and Output Q of the Industry

In a competitive industry, minimum efficient scale occurs at

an

output level q1 when firms have average cost curve LAC1,

The

industry can support a very large number of firms whose

total

output is Q1 at the price P1, when LAC 3 describes average

costs, the industry will be a natural monopoly, when a single

firm produces the entire industry output, no other firm can break

into the market and make a profit. For intermediate

positions such as LAC 2 the industry can support a few

firms in the long run, and no single firm can profitably meet

the entire demand. The industry will be an oligopoly.

With reference to figure 2.2.1ci above, the demand curve

DD is for the output of an industry. Suppose first that in the long

run all firms and potential entrants face the average cost curve

LAC1, at the price P1, free entry and exit ensures that each firm

produces q_1. Given the demand curve DD, the industry output is

Q1 and the industry can support N1 firms where N1 = Q1/q_1. If

q_1, the minimum average cost output on LAC1, lies sufficiently

far to the left relative to DD, then N1 will have a trivial effect on

industry supply and market price. We have discovered a perfectly competitive industry.

Now, suppose that each firm has the cost curve LAC 3. Economies of scale are very large relative to the market size. The lowest point on LAC 3 occurs at an output large relative to the demand curve DD. Suppose initially there were two producers, each producing q2. market output Q2 is twice as large. The market clears at P2 and both firms break even. However, if one firm expands a little its average costs will fall. It will also bid the price down. With lower average costs, that firm will survive and the other firms will lose money. The firm that expands will gobble up the whole market, undercut its competitors, and eventually drive the other firms out of business.

Having discovered an industry that is a natural monopoly; suppose that Q3 is the output at which its marginal cost and marginal revenue coincide. The price is P3 and the natural monopoly makes super-normal profits. Yet there is no room in the industry for other firms with access to the same LAC 3 curve. A new entrant needs a large output to get average costs down.

Extra output on this scale would so depress the price that both firms would make losses. The potential entrant is powerless to break in. The natural monopolist can completely disregard the threat of entry.

Finally, we have shown the LAC 2 curve with more economies of scale than a competitive industry, but fewer than a natural monopoly. This industry will support at least two firms enjoying economies of scale near the lowest point of their LAC 2 curves. It will be an Oligopoly. Attempts to expand either firm's output beyond q4 quickly encounter decreasing returns to scale and prevent it from expanding to drive its competitors out of business.

2.2.1d.   *Evidence on Market Structure*

The larger the minimum efficient scale relative to the market size, the fewer will be the number of plants, and probably the number of firms in the industry. What is the number of plants (NP) operating at minimum efficient scale that the current market size could allow? By looking at the total quantity of consumption

of a product we can estimate the market size. Hence we can construct estimates of NP for each industry.

How do we measure how many firms there are in an industry? Even industries that essentially have only a few very large firms may have some small firms on the fringe. The number of firms in the industry tell us nothing about their size or importance. It might be a misleading indicator of the essential structure of the industry. For this reason, economists use the N-firm concentration ratio to measure the number of important firms in the industry.

The N-firm Concentration Ratio is the Market Share of the largest N firms in the industry.

Thus, the 3-firm concentration ratio tells us the percentage of the total market supplied by the largest three firms that matter, they will supply almost 100 percent of the total market for the product. If the industry is perfectly competitive, the largest three firms will still account for only a tiny share of the total market for the product.

2.2.2.   *__MONOPOLISTIC COMPETITION__*

The essence of Oligopoly is inter-dependence. Large firms must guess what their large rivals are up to. Before turning to this exciting branch of the economic analysis, however, we shall begin with a simpler case.

The theory of monopolistic competition envisages a large number of quite small firms so that each firm can neglect the possibility that its own decisions provoke any adjustment in other firms' bahaviour. We also assume free entry and exit from the industry in the long run. In these respects the framework resembles our earlier discussion of perfect competition. What distinguishes monopolistic competition is that, each firm faces a down-ward sloping demand curve.

Monopolistic competition describes an industry in which each firm can influence its market share to some extent by charging its price relative to its competitors. Its demand curve is not horizontal because different firms' products are only limited substitutes. We have an example of a Corner grocers; location.

A lower price attracts some customers from another shop, but each shop will always have some local customers for whom the convenience of a nearby shop is more important than a few kobo on the price of a tin of coffee.

Monopolistically, competitive industries exhibit *product differentiation.* For Corner Grocers, this differentiation is based on location, but in other cases, it is based on brand loyalty. The special features of a particular restaurant or hair-dresser may allow that firm to charge a slightly different price from other producers in the industry without losing all its customers.

Although, brand loyalty and product differentiation may also be important in many other industries, these need not be monopolistically competitive. Brand loyalty limits the substitution between Ford and Vauxhall in the Car Industry but, with so few producers the key feature of the industry remains the oligopolistic inter-dependence of decisions of different firms. Monopolistic competition requires not merely product differentiation, but also limited opportunities for economies of scale so that there are a great many producers who can largely

neglect their inter-dependence with any particular rival. Hence many of the best examples of monopolistic competition are service industries where economies of scale are small.

The industry demand curve shows the total industry output which would be demanded at each price if every firm in the industry charged that price. The market share of each firm depends on the number of firms in the industry and on the price it charges. For a given number of firms, a shift in the industry demand curve will shift the demand curve for the output of each individual firm. For a given industry demand curve, an increase (decrease) in the number of firms in the industry will shift the demand curve of each firm to the left (right) as its market share falls (rises). But each firm faces a downward sloping demand curve. For a given industry demand curve, number of firms, and prices charged by all other firms, a particular firm can increase its market share to some extent by charging a lower price and inducing some consumers to *Switch* to its particular product.

As can be seen from figure 2.2.2i below, it shows the supply decision of a firm. Given its own demand curve DD and

marginal revenue curve MR the firm produces Qo at a price Po

making a short run profits equal to Qo x (Po – Aco). In the long

run these profits attract new entrants, who dilute the market

share of each firm in the industry, shifting their demand curves to

the left. Entry stops when each firm's demand curve has shifted

so far to the left that price equals average cost and firms are just

breaking even. In the figure 2.2.2i below, this occurs when

demand has shifted to the DD^1 and the firm produces Q1 at a

price P1 to reach the tangency equilibrium at F.

The Equilibrium for a Monopolistic Competitor
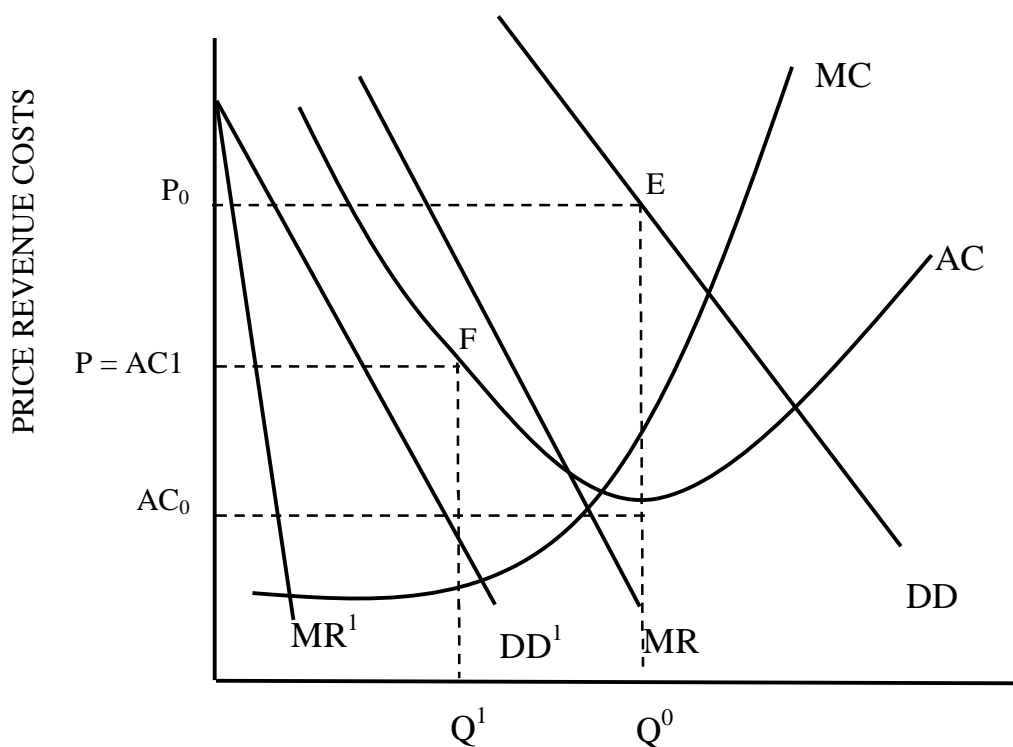
QUANTITY

Figure 2.22i.

In the short run the monopolistic competitor faces the

demand curve DD and set MC equal to MR to produce

Qo at a price Po. Profits are Qo x (Po – Aco). Profits

attract new entrants and shift each firm's demand curve

to the left. When the demand curve reaches DD^1, we

reach   the long-run   tangency equilibrium at F. The firm

sets MC equal to MR^1 to produce Q^1 at which P^1 equals

AC^1. Firms are breaking even and there is no further entry.

In Monopolistic Competition the Long-Run Tangency equilibrium occurs where each firm's demand curve is tangent to (just touches) its AC Curve at the output level at which MC equals MR. Each firm is not Maximising Profits but just breaking even. There is no further entry or exit.

Take note of about two things; regarding the firm's long run equilibrium at F. First, the firm is not producing at minimum average cost. It has excess capacity. It could reduce average cost by further expansion. However, its marginal revenue would be so low, this would not be profitable. Second, the firm retains some monopoly power because of the special feature of its particular brand or location. Price exceeds marginal cost.

The second observation helps to explain why some firms are usually eager for new customers prepared to buy additional output at the existing price. In Robert Bishop's phrase, it explains why "we are a race of eager sellers and coy buyers". It is

purchasing agents who get Christmas presents from sales reps, not the other way would, *(Quotation from Professor Bishop's unpublished magnum opus "Macro-economic Theory", on which generations of MIT economics graduates were raised).* Remarkably enough, under perfect competition, the firm does not care if another buyer shows up at the existing price. With price equal to marginal cost, the firm is already selling as much as it wants.

The theory of monopolistic competition yields interesting insights when there are many goods, each of which is a close but not perfect substitute for the other. For example, it explains why Britain exports Jaguars and Rovers to Germany and Sweden but simultaneously imports Volvos and Mercedes Cars. There are large economies of scale in making cars. In the absence of trade, the domestic car market would have worn For only a few varieties. Producing a large number of brands at low output would enormously raise average costs. International trade allows each country to specialise in a few types of car and produce a much larger output of that brand than the home

market alone could support. By swapping these cars between countries, consumers get a wider choice while each individual producer enjoys economies of scale, holding prices down.

2.2.3   **OLIGOPOLY BANKS**

Oligopoly is a situation in which only a few firms in the market produce a good or service, Thus, an Oligopoly bank competes for customers with only a few other banks. In this case, we shall focus on duopoly banks; two banks that compete with each other for loan customers. (the basic principles apply even if there are, say, three to five banks in the relevant market). The distinguishing feature of an Oligopolistic Market for banks is the high degree of inter-dependence among banks. One way to measure the degree of inter-dependence is to look at concentration ratios.

2.2.3a   *The Nature of Oligopoly Inter-dependence*

It is important to examine the nature of Oligopolistic inter-dependence. Consider two banks that are located on the same

block in a town, so either bank has a location advantage over the other. In this instance, actions by one bank will have a dramatic impact on the profits of the other bank. For example, if one bank lowers its interest rate on loans below that of the other bank, shoppers for loans will switch to the bank offering the lower interest rate. This will drastically reduce the profits of the bank offering the higher interest rate. This effect characterizes oligopolistic inter-dependence.

2.2.3b.   ***Using Games Theory to Model Oligopolistic Inter-dependence***

The interdependence of oligopolistic banks means the actions these banks take contain important strategic elements. Economists use _Games Theory_ to analyze these strategic need interactions, as we may use a simple game to illustrate these interactions between two banks. Table 2.2.3 below depicts, this Oligopolistic interdependence between two banks, Bank One and Bank Two. For simplicity, we assume each bank has a choice between two interest rates on loans; a high interest rate of 15 percent and a low interest of 8 percent. The first entry of

each cell of the matrix in the table below corresponds to the profits of Bank One, and the second entry corresponds to the profits of Bank Two. Looking at the table, we see that if both banks charge an interest rate of 8 percent, each bank earns zero profits. If Bank One charges 8 percent and Bank Two charges 15 percent, Bank One earns profits of ₦40, while Bank Two suffers losses of ₦10.

A Hypothetical Payoff Matrix

BANK TWO

Interest Rate	8%	15%
8%	₦0, ₦ 0	₦ 40, - ₦ 0
15%	- ₦10, ₦40	₦10, ₦40

BANK ONE

Table 2.2.3

Put simply, at the lower interest rate, Bank One steals Bank Two's customers and earns large profits at its rivals' expense. Likewise, if Bank One charges the high interest rate of 15

percent, when Bank Two charges the interest rate of 8 percent, Bank Two steals Bank One's customers. In this instance, Bank One losses ₦10, while Bank Two earns ₦40 in profits. But if both banks charge the high interest rate of 15 percent, each bank earns profits of ₦10 since they share the market equally.

In table 2.2.3 above, it has been revealed that, the profits Bank One earns depend not only on the interest rate it charges, but also on the interest rate the rival bank charges. Given this situation, what interest rate would each bank charge? Your initial answer might be 15 percent, since if each bank charged this rate, profits would be ₦10 for each bank. However, note that if Bank Two did charge an interest rate of 15 percent, Bank One could increase its profits from ₦10 to ₦40 by lowing its interest rate to 8 percent.

To determine the equilibrium outcome of this Oligopoly, consider the table above from Bank One's perspective. If Bank Two charged 8 percent. Bank One would maximize profits by charging 8 percent, since corresponding profits of zero are preferable to the loss of ₦10, it would incur by charging the high

interest rate against the competitor's low rate. If Bank Two charged 15 percent, Bank One would still be better off charging 8 percent, since the profits of ₦40 are higher than the profits of ₦10, it would earn by charging the higher interest rate. In short, regardless of the rate Bank Two charges, in this example, Bank One is always better off charging the lower interest rate. Please note that, because the payoff matrix is symmetric, the same is true from the view point of Bank Two. Thus, the equilibrium outcome for this oligopoly market is for each bank to charge the low interest rate to earn profit of zero.

This result may surprise you. Each bank finds it in its interest to charge a low interest rate, even though both banks would benefit if they agree to each charge a high rate. Why wouldn't the bank conspire to charge a high rate? Conspiring to charge a high interest rate is an example of collusion; acting in concert to make both banks better off. In the United States, collusion is illegal; banks cannot conspire to set high interest rates. There are other reasons, however, suppose the Presidents of banks secretly met and agreed to charge high

interest rates. Would they have an incentive to live up to their promise? Consider Bank One's point of view. If it cheated on the collusive agreement by lowering its interest rate, it would increase its profits from ₦10 to ₦40. Thus, Bank One has an incentive to induce Bank Two to charge a high interest rate so that Bank One can cheat to earn higher profits. Of course, Bank Two recognizes this incentive, which reduces the likelihood that the agreement will be made in the first place.

Suppose, however, that the president of Bank One is honest and would never cheat on a promise to charge a high interest rate. (she is honest enough to keep her words to the other President, but not so honest as to obey the law against collusion). What happens to Bank One if the president of Bank Two cheats on collusive agreement? Bank One experiences losses of ₦10, when Bank Two cheats. When the stock holders ask the president of Bank One why they lost ₦10, when the rival bank earned profits of ₦40, how can the president answer? She cannot admit she was cheated on in a collusive agreement, for doing so, would send her to jail for violating the law. Whatever

her answer, she risks being fired or sent to jail, and this reduces her incentive to enter into a collusive agreement in the first place. Thus the fact that only two banks service a market need not imply the banks have market power.

2.2.3c.   *Repeated Interaction.*

Based on our description of the duopoly market for loans, this illustrates what different banks have done in reaching a collusive agreement. An important feature of the analysis, however, is that, a bank incurs no costs if it cheats on the collusive agreement: it receives only benefits. Technically, the reason this occurred in the previous section is that, we assumed the underlying competition for customers was a "one – shot" (or one – time) interaction; that is the banks faced the pay off matrix presented in the table above, once.

In reality, of course, banks compete for customers day after day and year after year. When banks repeatedly face a pay off matrix such as the one in the above table, they an in some cases collude without fear of being cheated on. To see this, suppose

Bank One and Bank Two secretly met and agreed to the following: "let's each charge the high interest rate, provided neither of us has ever cheated before. If one of us cheats and charges the low interest rate, let's charge the low interest rate in every period thereafter." It turns out that, if both banks agree to behave this way, condition exist under which neither has an incentive to cheat. Before we look at this formally, let us examine the basis intuition. Under this agreement a Bank that cheats earns an immediate profit of ₦40 instead of ₦10, thus, there is still the immediate benefit to a bank of cheating on the agreement. However, because the banks compete repeatedly over time, cheating has a future cost: The agreement stipulates that if either bank ever cheats, each bank will charge low interest rate in all future periods. Thus, the bank that cheats will earn ₦0 instead of ₦10 in each future period. If the present value of the costs of cheating exceeds the one time benefit of cheating, it does not pay for a bank to cheat, and high interest rates can be sustained.

Now, let us formalize this idea. Suppose the banks agreed to the collusive plan outlined earlier, and Bank One believes Bank Two will live up to the agreement. Does Bank One have an incentive to live up to the agreement? If Bank One cheats, its profits will be ₦40 today but ₦0 in all subsequent periods, since cheating today leads Bank two to charge a low interest rate forever after. The best Bank One can One when Bank Two charge the low interest rate in this period is earn ₦0. Thus if Bank One cheats, the present value of its profit will be

Profit if its does cheat = ₦ 40 +0+0+0+0... If Bank One does not cheat, it will earn ₦10 each period forever. Thus the present value of the profits of Bank One if it does not cheat will be

Profits if it does not cheat =10 + $\dfrac{10}{1+r}$ + $\dfrac{10}{(1+r)^2}$ + $\dfrac{10}{(1+r)^3}$ + ...

$$= \dfrac{10(1+r)}{r},$$

Where r is the real interest rate the bank uses in its present value calculations. Bank one has no incentive to cheat if its earning from cheating will be less than its earnings when it does not cheat. In this example, there is no incentive to cheat if,

Profits if it does not cheat = ₦ 40< ₦ $\frac{10(1+r)}{r}$ Profit if it does not cheat,

which in time if r < $^1/_3$. In other words, if the real interest rate Bank One in its present value calculation is less than 33 percent (or $^1/_3$), it will lose more (in present value) by cheating than it will gain. The same is true for Bank Two. Thus if oligopoly bank compete repeatedly over time, they collude and charge high loan interest rate to earn ₦ 10 each period. This benefits banks at the expense of borrowers, which explains why there are laws against collusion.

2.2.3d.   **Banks with Imperfect Information.**

Thus far we have ignored an important consideration by individual banks in making loan decisions; we have assumed all borrowers are equally likely to repay their loans. In reality, some

borrowers fail to pay back loans, and this reduces bank profits. Of course, if a bank knows a particular borrower will not repay the loan, it will not agree to lend that person money in the first place. But banks suffer from *Imperfect information*: They do not know for certain, which borrowers will and which will not repay their loans. In this section, we are going to analyze the import of imperfect information on banks loan decisions.

2.2.3d*i* **Symmetric Information.**

It is important to first assume there is symmetric information, that is borrowers and banks have the same information about whether a loan will be repaid. Suppose the probability that a borrower with low income is able to repay a loan is 10 percent, while the probability that a borrower with a high income will be able to repay a loan is 90 percent. Thus on average only, one out of every 10 low income borrowers will repay loans, while 9 out of every 10 high- income borrowers will repay loans. In this case, symmetric information means when low income applies for a loan, both the bank and the borrower

know there is only a 10 percent chance the loan will be repaid. Similarly, when a high- income borrower applies for a loan, both the bank and the borrower know there is a 90 percent chance the borrower will repay the loan.

Therefore, when symmetric information exist, the expected return to the bank of lending to the high income borrower at a given interest rate is greater than that of lending money to a low income borrower. To be willing to lend money to a low income borrower, the bank must receive a higher interest rate to compensate for the additional default associated with the loan. In short, the bank discriminates against low- income borrowers by requiring them to pay a higher interest rate for loans than high-income borrowers pay. Individuals in each risk class pay an interest rate that fully compensates the bank for the riskiness of their own loans. Better credit risks do not subsidize poor credit risks when symmetric information exists.

Interest rates Charged to Good and Bad Credit Risks

Interest Rate charged to

charged to

Borrowers who are good

Bad

Credit Risks (%)

(%)

Interest   Rate

Borrowers who are

Credit   Risks

$^{i}G = 8$

D_G

A

MC_G

L_G

MR_G

$^{i}B = 15$

B

MCB

D_B

MR_B

L_B

Loans to Good Credit Risks   Loans   to   Bad Credit

(Millions ₦)   Risks (Millions ₦)

(a)   (b)
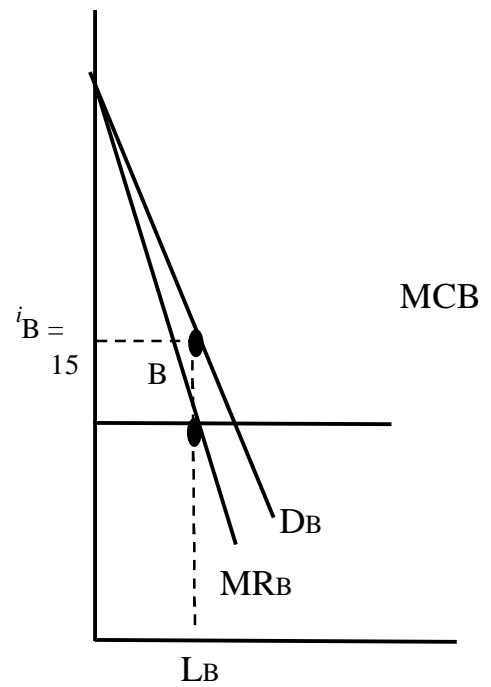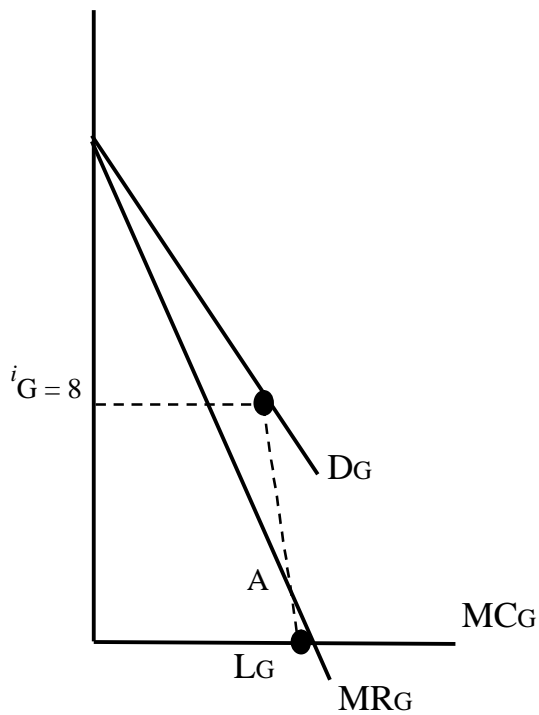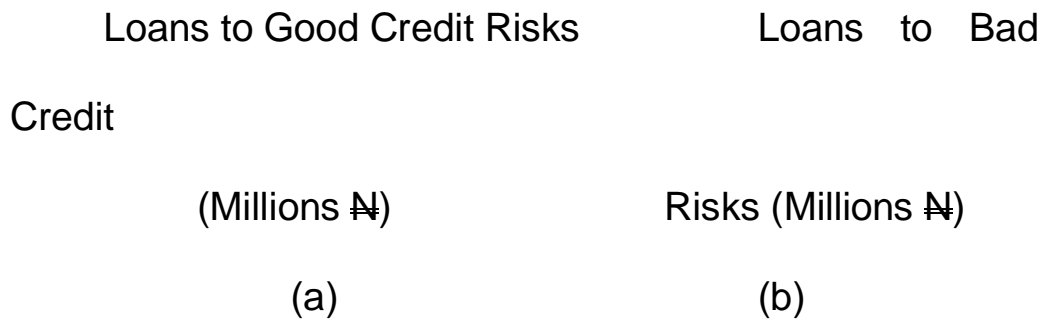
Figure 2.2.3di,

Here, a bank with market power charges different interest

rates to borrowers based on whether they are good or bad

credit risks. Part 'a' shows the demand and marginal cost

of issuing loans to good credit risks, and part 'b' shows the

situation for bad credit risks. The lower Marginal cost of

issuing loans to good credit risks (MCG) in part 'a' results

in a lower interest rate (iG) than that charged to bad credit

risks (iB) in part 'b' due to the higher marginal cost(MCB)

of issuing loans to bad credit risks.

Figure 2.2.3di above illustrate why a bank with market power will charge a lower loan interest rate to borrowers who are good credit risks (part 'a') and a higher interest rate to borrowers who are bad credit risks (part 'b'). For simplicity, one component of the marginal cost of issuing loans is the likelihood of default. Since defaults increase the cost to the bank of issuing loans. The marginal cost of issuing loans to good credit risks is denoted by MCG in part 'a', while the marginal cost of issuing loans to bad credit risks (part 'b') is denoted MCB. Notice that MCB > MCG, reflecting the higher marginal cost of issuing more risky loans. The marginal revenue of issuing a loan to a good credit risk equals the corresponding marginal cost at point A in part 'a' of figure 2.2.3di. Thus, LG loans are issued to borrowers who are good credit risks at an interest rate of iG=8%. Similarly, marginal cost revenue equals marginal cost for borrowers who are bad credit risks at an interest rate of iB = 15%. Since iB > iG, individuals who are bad credit risks obtain funds, but at a higher interest rate than do the credit worthy borrowers.

2.2.3dii   *Asymmetric Information and Adverse Selection*

We would now consider asymmetric information which is the situation in which borrowers have better information about their ability to repay a loan than the bank does. To be concrete, suppose, there are two types of borrowers, honest and dishonest. Honest and dishonest borrowers are identical in every observable respect (they have the same income, etc,) but differ in character, which is unobservable. For simplicity, assume honest borrowers repay loans 90 percent of the time, whereas dishonest borrowers repay only 10 percent of the time. Asymmetric information arises because borrowers know how honest they are, but banks do not.

Because a bank can not distinguish between honest and dishonest borrowers, it must charge the same interest rate to both types. This interest rate will be an average of the market rates, it would charge to each type of borrower if symmetric information existed. Asymmetric information creates a higher interest rate than the bank would charge to honest borrowers if there were symmetric information, but a lower rate than it would

charge to dishonest borrowers if symmetric information were available. In short, honest borrowers pay a higher rate to compensate for the fact that dishonest borrowers default most of the time. Honest borrowers thus subsidise dishonest borrowers.

Unfortunately, this is not the end of the story. As the interest rate rises above the rate honest borrowers would have to pay in the presence of symmetric information, some honest borrowers decide not to borrow, and the quantity demanded of loans by honest borrowers fall. This increases the proportion of loans issued to dishonest borrowers, thus increasing the number of defaults as a fraction of all bank loans. As defaults increase, the bank further raises the interest rate to offset the higher marginal cost of issuing loans. Because of the high interest rate, even fewer honest borrowers seek loans. Ultimately, by continuing to increase the interest rate, the bank ends up in a situation where it issues loans only to dishonest borrowers (who have no intention of repaying the loans in the first place), driving honest borrowers out of the market. *(This analysis was first applied to the market for used cars by George Akerlofin " The*

Market for'Lemon': Quality, Uncertainty and the Market Mechanism," Quartely Journal of economics, August 1970, pp.488 – 500).

This phenomenon is known as *Adverse Selection*: As the interest rate rises, honest borrowers decide not to borrow, and the bank is left with an adverse pool of borrowers – those who know they are more likely to default. When asymmetric information exists, an increase in the loan interest rate will raise the fraction of loans that will not be repaid. *(Steindl, F.G. and M.D. Weinrobe. "Natural Hazards and Deposit Behaviour at Financial Institutions: A Note." Journal of Banking and Finance, 7 (March 1983), 111 – 118).*

Adverse selection does not occur only because of asymmetric information about the honesty of borrowers. It also occurs because borrowers have inside information about the riskiness of the projects they are borrowing to finance. For example, suppose, you have decided to open a small restaurant. Your Aunt Agnes, has agreed to be your Chef, and she has a great collection of Italian recipes. The bank knows most new

restaurants fail but is convinced that your restaurant has a reasonable chance to succeed. It charges you a relatively high interest rate, but agrees to make the loan. What the bank doesn't know, but you do, is that Aunt Agnes has a weak heart and may not be able to work the long hours it will take to make the restaurant a success. Furthermore, you are not sure whether anyone else can replace Aunt Agnes as chef. In this case, you have more information than the bank does. You know the restaurant is actually a riskier venture than the bank thinks because of the risk to your aunt's health.

In fact, figure 2.2.3dii below illustrates the impact of adverse selection on the loan interest rate for a bank with market power. Since the bank cannot distinguish between good and bad credit risks, there is a single demand curve composed of good and bad credit risks alike. This demand curve is labeled DG + DB, signifying that it is the total demand by both types of borrowers. The corresponding marginal revenue curve is denoted simply as MRL. Let MCN denote the marginal cost of issuing loans in the absence of any defaults. If borrowers never

defaulted, banks would choose to make a quantity of loans at

point A, where MCN intersects MRL. We see that the bank would

issue ₦200m in loans and, with this quantity, the demand curve

tells us the interest rate would be 6 percent.

Adverse Selection and Loans at a Bank with market Power

Interest Rate

(%)

18
13
6

$MC^2{}_D$

6

$MC^1{}_D$

B

MC_N

A

$D = D_G + {}^D{}_B$

100 150 200

MR_L

Loans (Millions ₦)
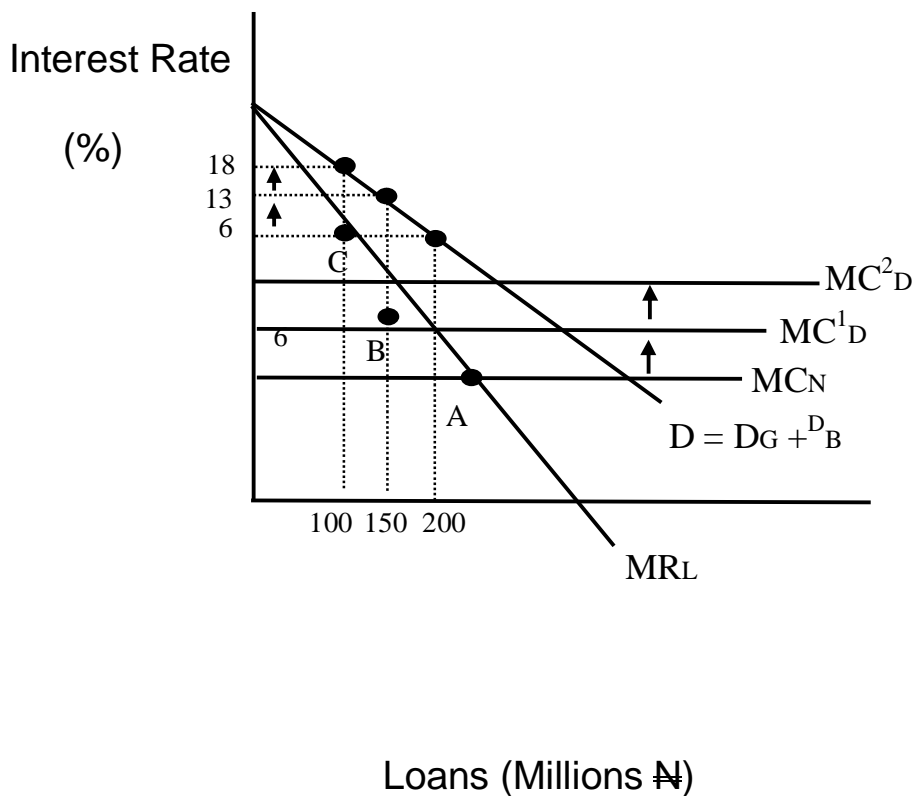
Figure 2.2.3dii

When borrowers have better information about their

status as credit risks than the bank does, the will face

a single demand curve, D = DG +DB, composed of

both Honest and dishonest borrowers. In the absence

of any Defaults, the marginal cost curve would be MCN.

as dishonest borrowers default, the marginal cost

increases to MCD^1 This lowers the quantity of the

loans from ₦200m to ₦ 150m, and the interest rate.

Goes up from 6 to 13 percent. In effect, honest borrowers

must pay higher interest rates because of the behaviour

of dishonest borrowers. Since dishonest borrowers do not

plan to pay back loans, they continue to seek loans even at

the higher interest rate. Honest borrowers, on the other hand, are less likely to borrow at higher interest rates. Therefore, the proportion of dishonest

borrowers increases, leading to an increase in defaults and further raising the marginal cost of making loans MCD^2. The result is an even higher rate of 13 percent. This phenomenon, known as adverse selection

leaves the bank with a pool of borrowers more likely to default.

Next, suppose dishonest borrowers default, but asymmetric information precludes the bank from distinguishing dishonest from honest borrowers. An increase in defaults raises the marginal cost of loans, since some loans now go unpaid. This higher marginal cost is represented in figure 2.2.3dii above the marginal cost curve when there are no defaults (MCN).

This increase in the marginal cost of issuing loans results in MRL = MCD^1 at point B. In turn, this increases the interest rate from 6 to 13 percent, resulting to a reduction in loans from ₦200m to ₦150m. Unfortunately, however, the reduction in the quantity demanded consists solely of honest borrowers; dishonest borrowers have no intention of repaying loans and

could care less what rate the bank charged. Thus, the fraction of loans issued to dishonest borrowers increases, leading to a further increase in marginal cost to MCD^2, This new marginal cost equals marginal revenue at point C, resulting in a rise in the interest rate to 18 percent. In the presence of asymmetric information, increase in interest rate can ultimately lead to a situation where the only individuals willing to pay the high rate are those who know they will default. In the absence of a mechanism for alleviating the problems generated by asymmetric information, banks would ultimately refuse to issue any loans at all.

2.2.3e. *Bank Strategies for Countering Asymmetric Information.*

After having seen the difference between symmetric imperfect information (imperfect because there is still uncertainty about whether a loan will be repaid, but this uncertainty is known by both borrower and lender) and asymmetric information (where borrowers have better information than lenders about ability or

willingness to repay). We have also seen how information asymmetries can lead to problems of adverse selection. Yet, even though limited information asymmetries exist in the banking industry, we all know that banks continue to make loans. In fact, as mentioned in Chapter 1 of this dissertation, loans are the engine that drives money creation in the economy. Because of this crucial role of loans, banks have developed several effective mechanisms to overcome default risks and other information asymmetries.

2.2.3ei   **Credit Report** – Banks rely heavily on credit reports for information about the loan applicants' credit histories. By examining the past credit history of a potential borrower, a bank reduces the level of asymmetric information about that person. In effect, the bank can infer the probability that a potential borrower will (or will not) default on a new loan by examining the frequency with which that borrower has defaulted in the past and the circumstances of such default. If the credit report is sufficiently accurate, symmetric information between the bank

and the potential borrower exists. In this case, the bank can set an interest rate for the borrower that is consistent with the risk involved in that business.

Unfortunately, this is not always easy to do. Credit reports pose two major problems. First, if they are inaccurate or incomplete, some asymmetric information will remain which will still lead to an adverse selection problem. Second, some potential borrowers have no credit history because they have never borrowed funds before. In this case, credit reports tell the bank nothing and therefore do not help reduce asymmetric information. Some first time borrowers may develop poor credit histories and other impeccable ones. The bank has no way of knowing which will be true for a given first-time borrower and thus needs some alternative strategy to deal with these cases.

2.2.3eii − **Reputation** − In the absence of any credit history, banks need some other method to deal with the problem of asymmetric information. Many banks attempt to build a reputation for being tough on borrowers who default. Toughness

might include foreclosing on the assets purchased with the loan money or seeking legal action to receive payment for the funds in default. In historical periods, being tough even included sending the defaulter to debtor's prison.

Is it "ethical" to be tough on those who default? Your answer might depend on whether you think the person who defaulted was dishonest (he/her was able to pay but chose not to or was truly unable to pay back the loan). From the view point of the bank, however, it is not always clear whether a defaulter is honest or dishonest. Dishonest defaulters can easily hide their assets to make themselves appear koboless. Asymmetric information makes it virtually impossible for a bank to determine the reason for default.

Given asymmetric information about the reason for default, suppose a bank adopts a policy of being lenient on those who default. This, of course, will lead to an adverse selection problem. The policy will attract dishonest borrowers in droves, ultimately driving interest rate on loans so high that only dishonest borrowers will choose to borrow money from the bank.

In contrast, consider a bank that adopts a policy of always being tough on defaulters. This increase the cost to dishonest borrowers of doing business at the bank. Indeed, if the bank is tough enough, dishonest borrowers will either borrow funds from a "kinder, gentler" bank, do without borrowed funds, or actually behave honestly (ie, repay loans). By investing in a reputation for being tough on defaulters, a bank can reduce the negative impact of asymmetric information. The bank benefits by having fewer defaults and since a lower number of defaulters reduce the loan interest rate, those who borrow from the bank benefit as well.

2.2.3eiii   **Collateral** – Many banks require borrowers to put up collateral to obtain a loan. Collateral is property or other assets pledged as security against default on a loan. If default occurs, the lender gets the collateral. Collateral is, in essence, a "hostage" the bank uses to induce the borrower to repay the loan. If the borrower does not repay the loan, the bank keeps the hostage; if the borrower does repay, the bank releases the

hostage. New Car loans and mortgages typically use the underlying asset purchased with the loan money as collateral. If the borrowers defaults on the loan, the bank can seize the car or the house and sell it to recoup some of or all of the loan proceeds.

2.2.3eiv - **Down Payments** – To successfully induce borrowers not to default, the collateral must be valuable enough to give individuals an incentive to repay their loans. This can be a problem in the case of, say, a mortgage or a new car loan. Suppose the only collateral put up for a mortgage loan is the house, and the money used to purchase the house comes solely from the bank. Then, in effect, no collateral exists. If the borrower defaults, the bank seizes the house, but the borrower receives the free use of it for the period up until the bank repossesses it. Clearly, this strategy will not include induce dishonest borrowers to repay loans.

One common mechanism banks use to counter this problem is to require a down payment. For example, suppose a

bank agrees to lend a borrower 90 percent of the value of a house; the other 10 percent must come from the borrower's savings. In this case, the bank's stake in the house is 90 percent of the house market value. If the borrower defaults and the bank repossesses it, it can be sold and the proceeds used to repay both the loan and the cost of fore closing on the house. The borrower loses the 10 percent down payment. Thus, a down payment reduces the incentive for even dishonest borrowers to default.

Does the use of down payment and collateral work in the real world? Mortgage lenders in some parts of the world have experienced numerous defaults in the late 1980s, despite the fact that loans require down payments and were collateralized. Is this consistent with our previous discussion? The answer is yes. During the late 1980s, real estate prices in some parts of the world fell by as much as 50 percent in some places. To see the impact of this on the incentive to default, consider a borrower who obtained a mortgage on a ₦100,000 house. The bank required a 10 percent down payment so the mortgage itself was

₦90,000, with the additional ₦10,000 coming from the borrower. As the above discussion indicates, when the market value of the house is ₦100,000, the borrower has no incentive to default; doing so would effectively give the bank an asset worth more than what was owed to the bank.

Now suppose that after the buyer has obtained the loan, the market price of the house falls, leaving the house worth only ₦50,000. The house is now worthless than the amount owed to the bank; thus, it is as if the bank had no down payment. If the borrowers does not default, he pays the bank N90,000 in exchange for a house worth only N50,000. If the borrower defaults, he pays nothing, and the bank receives an assets worth N50,000. Thus, since the price of the house fell below the value of the loan, the borrower has an incentive to default. To induce a borrower to repay the loans, the down payment must be sizable enough to keep the loan value below the market price/value of the house throughout the life of the loan. This did not happen in the southwest, and consequently the number of defaults skyrocketed during that period.

2.2.4   **ENTRY AND POTENTIAL COMPETITION**

After having discussed imperfect competition between existing firms, and other related issues, to complete our understanding of such markets, we must also think about the effects of potential competition from new entrants to the industry on the behaviour of existing or incumbent firms. Three cases must be distinguished where entry is trivially easy, where it is difficult by accident and where it is difficult by design.

2.2.4a   **Contestable Markets:-** We have seen that free entry to, and exit from, the industry was a key feature of perfect competition; a market structure in which each firm is tiny relative to the industry. Suppose, however, that we observe an industry with few incumbent firms. Before assuming that our previous analysis of oligopoly will be required, we must think hard about entry and exit. It is possible that this industry is a contestable market. *"A Contestable Market is Characterized by free entry and free exit"*

By free entry, we mean that all firms, including both incumbent and potential entrants, have access to the same technology and hence have the same cost curves. By free exit, we mean that there are no _Sunk_ or irrecoverable costs; on leaving the industry, a firm can fully recoup its previous investment expenditure, including money spent on building up knowledge and good will.

A Contestable Market allows hit-and-run entry. If incumbent firms, however few, are not behaving as if they were a perfectly competitive industry at long-run equilibrium (P=MC = Minimum AC), an entrant can step in, undercut them, and make a temporary profit before quitting again.

The theory of Contestable Market is controversial. There are many industries in which sunk costs are hard to recover or where the initial expertise may take an entrant, some time to acquire, placing it at a temporary disadvantage against incumbent firms. Nor, as we shall shortly see, is it safe to assume that incumbents will not change their behaviour when threatened by entry. But the theory does vividly illustrate that

market structure and incumbent behaviour cannot be deduced, simply by countering the number of firms in the industry.

That is why, in the previous stage, we were careful to stress that a monopolist is a _Sole Producer who can completely discount fear of entry._ More generally, we must now refine the classification of market structure.

2.2.4b   **Innocent Entry Barriers** – Our discussion of entry barriers distinguishes those that occur anyway and those that are deliberately erected by incumbent firms. First, _an innocent entry barrier is one not deliberately erected by incumbent firms._ In his pioneering study in 1956, the American Economist Joe Bain highlighted three types of entry barriers: product differentiation, absolute cost advantages, and scale economies. The first of these is not an innocent barrier, as we shall shortly explain. Absolute cost advantages where incumbent firms have lower cost curves than those that entrants will face may be innocent. For example, if it takes time to learn the business, incumbents will face lower costs, at least in the short-run, if they

are smart, they may already have located in the most advantageous site. In contrast, if incumbents have undertaken investment or R&D specifically with a view to deterring entrants, this is not an innocent barrier.

Figure 2.2.1ci allows us to see the role of scale economies as an innocent entry barrier. There we explained that, if minimum efficient scale is large relative to the industry demand curve, an entrant cannot get in to the industry without considerably depressing the market price, and it may prove simply impossible to break in at a profit.

The greater are such innocent entry barriers, the more appropriate it will be to neglect potential competitors from entrants. The oligopoly game then reduces to competition between incumbent firms along the line, we have already discussed. Where innocent entry barriers are low, one of two things may happen. Either incumbent firms accept this situation, in which case competition from potential entrants will prevent incumbent firms from exercising much market power – the outcome will be be closer to that of perfect competition – or else

incumbent firms will try to design some entry barriers of their own.

2.2.5 STRATEGIC ENTRY DETERRENCE

Strategy is defined as a game plan when decision making is interdependent. The word "strategic" is much used in everyday language, but it has a precise meaning in economic palace. Thus, "A strategic move is one that influences the other person's choice, in a manner favorable to one's self, by affecting the other person's expectations of how one's self will behave."

Please refer to figure 2.2.5 below, for simplicity, there is only one incumbent firm and the game is against a potential entrant. The entrant can choose to come in or stay out. If the entrant comes in, the incumbent can either opt for the easy life, accept the new rival, and agree to share the market – or it can fight.

STRATEGIC ENTRY DETERRENCE

Entrant

In   Stay out

Incumbent   277
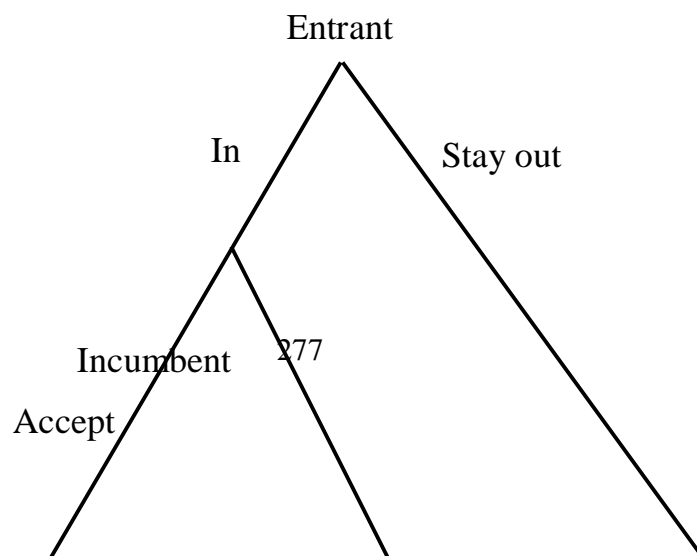
Accept

Profits without Deterrence	1 1	-1 - 1	5 0
Profits with Deterrence	-2 1	-1 - 1	2 0

Figure 2.2.5

In the absence of deterrence, should the entrant

enter, the incumbent does better to accept entry

than to fight. The

entrant knows this and hence enters. Equilibrium is

the top

left hand box, and both firms make a profit of 1. But

if the incumbent pre-commits and expenditure of 3

which is

recouped only if there is a fight, the incumbent will

resist

entry, the entrant will stay out, and equilibrium is the bottomright hand box. The incumbent does better, making a profit of 2.

If the entrant is large, the easy life may actually involve an output reduction by the incumbent, so that the two firms' joint output will not depress the price too much. Fighting entry means producing at least as much as before, and perhaps considerably more than before, so that the industry price collapses. In this *Price war,* sometimes called *predatory Pricing* by the incumbent, both firms do badly and make losses. The top row of boxes in figure 2.2.5 shows the profits to the incumbent and the entrant in each of the three possible outcomes.

If the incumbent is unchallenged it does very well making profits of ₦5. The entrant of course makes nothing. If they share the market, both make small profits of 1. In a price war, both make losses. How should the game go?

Suppose the entrant comes in. Comparing the left two boxes of the top row, the incumbent does better to cave in than to fight. The entrant can figure this out. Any threat by the

incumbent to resist entry is not credible threat – when it comes to the crunch, it will be better to cave in. Much as the incumbent would like the entrant to stay out, in which case the incumbent would make profits of 5, the equilibrium of the game is that the entrant will come in and the incumbent will not resist. Both make profits of 1, the top left hand box.

The incumbent, however, may have got its act together before the potential entrant appears on the scene. It may be able to invent a binding pre-commitment which forces itself to resist entry and thereby scares off any future challenge. The incumbent would be ecstatic if a Martian appeared and guaranteed to shoot the incumbent's directors if they ever allowed an entry to be unchallenged. The entrants would expect a fight, would anticipate a loss of 1, and would stay out, leaving the incumbent with a permanent profit of 5.

In the absence of Martians, the incumbent may be able to achieve the same effect by economic means. For example, suppose the incumbent invests in spare capacity. This capacity is expensive, and is unused at low output. The incumbent has

low output in the absence of entry or if an entrant is accommodated without a fight. Suppose in these situations the incumbent loses 3 by carrying this excess capacity. The second row of boxes in the figure above, reduces the incumbent's profits by 3 in these two outcomes. In a price war, however, the incumbent's output is high and the spare capacity is no longer wasted; hence we do not need to reduce the incumbent's profit in the middle column of boxes in the figure as above. Now consider the same again.

If the entrant comes in, the incumbent loses 2 by caving in but only 1 by fighting. Hence entry is resisted. Foreseeing this, the entrant does not enter, since the entrant loses money in a price war. Hence the equilibrium of the same is the bottom right-hand box and no entry takes place. Strategic entry deterrence has been successful. It has also been profitable. Even allowing for the cost of 3 for carrying the spare capacity, the incumbent still makes a profit of 2, which is better than the profit of 1 that was made in the top left-hand box when no deterrence was attempted and the entrant came in.

Does deterrence always work? No. Suppose in figure 2.2.5 above, we change the right-hand column. In the top row the incumbent gets a profit of 3 if no entry occurs. Without the pre-commitment, the equilibrium is the top left-hand box as before. But if the incumbent has to spend 3 on a spare capacity pre-commitment, it now makes a profit of 0 in the bottom right hand box when entry is deterred. The entrant is still deterred, but the incumbent would have done better not to invest in spare capacity but to let the entrant in, and make a profit of 1.

We can extend this analysis in two ways. First, the above model suggests that price wars should never happen. If the incumbent is really going to fight, then the entrant should not have entered. This of course requires that the entrant knows accurately the profits of the incumbent in the different boxes and therefore can correctly predict its behavior. In the real world, entrants sometimes get it wrong. Moreover, if the entrant has much better financial backing than the incumbent, a price war may be a good investment for the entrant. The incumbent will

exit first, and thereafter the entrant will be able to catch up and get its losses back with interest.

Second, is spare capacity the only kind of pre-commitment available to incumbent? Pre-commitments must be irreversible, otherwise, they are an empty threat; and they must increase the chances that the incumbent will fight. Generally, anything with the character of fixed and sunk costs will be of interest: fixed costs artificially increase scale economies and make the incumbent more keen on high output, and sunk costs cannot be reversed. Advertising to invest in goodwill and brand loyalty is a good example. So is product proliferation. If the incumbent has only one brand, an entrant may hope to break in with a different brand. But if incumbent has a complete range of brands or models, an incumbent will have to complete across the whole product range, which ups the ante.

2.2.6 <u>TERM STRUCTURE OF INTEREST RATES</u>

Term structure of interest rates refers to the relationship between yield to maturity and length of time until a loan, bond or other debt securities become due (mature). <u>Term Structure</u>

<u>Theories</u> – Economists hypothesize four major causes for differing term structures; the expectations theory, the liquidity preference theory, the segmented markets theory, and the preferred habitat theory.

2.2.6a **<u>The Expectations Theory/Hypothesis</u>** – The pure expectations hypothesis argues that investors forecast future levels of the short term rate and then invest in short term or long term bonds so as to maximize their return. It assumes that investors have homogeneous expectation and can forecast rates with perfect certainty and accuracy. Investors, according to the theory, may trade without transactions costs, and each selects that security or portfolio of securities which maximizes his return during the period in which his funds are available for investment. The investor selects short and long term bonds in a sequence to arrive at the highest expected terminal wealth. In short and long term yields are equated in the equilibrium when the actual return on a long term bonds are equals the compound returns on an alternative sequence of short term bonds.

Thus, the yield curves (a curve which shows yield to maturity as a function of time to maturity) shape is a function of investor's predictions of future yields. Thus, if R denotes actual (market) yield to maturity; r stands for future yields expected by investors; t the post-subscript, the bonds maturity, and the pre-subscript, the time (date) of the yield (it is always the present time); then actual two-years bond yield is equated to the present one-year and the expected one year yield next year;

$$(1+{}_tR_2)(1+{}_tR_2) = (1+{}_tR_1)(1+{}_{t+1}r_1)$$

$$\text{i.e } (1+{}_tR_2) = (1+{}_tR_2)(1+{}_{t+1}r_1)$$

In general, actual long term yields can be expressed as a series of shorter-term yields. Thus, an n-year bond is equated with one-year bond as follows:

$$(1+{}_tR_n)^n = (1+{}_tR_1)(1+{}_{t+1}r_1)............(1+{}_{t+n-1}r_1)$$

2.2.6b. **The Liquidity Preference Theory** – This risk premium model, a variant of the expectations hypothesis is of Keynesian inspiration of (1930), but articulated largely by Hicks (1930). It asserts that short term bonds are less risky and therefore, modifies the expectation by adding a premium to long

term issues. That is, it accepts the view that yields on various maturities are related to each other by the expectations of future long rate, and hence also short rates, but it calls attention to differences in the degree of certainty which attaches to the expected return to be obtained, in the short-run from holding securities of different length. According to the theory, while the return on short term securities is certain, the return on longer maturities is not guaranteed because of the uncertainty of future rates and hence of the end of period market value of the bond.

In addition, the uncertainty tends to be greater the longer the maturity, since a given change in the long rate tends to produce a greater variation in terminal value the longer the remaining life to maturity. Thus, in order to induce the market to hold the longer term maturities (since as risk averters they would prefer shorter-term bonds) supplied by long term borrowers, the expected return on these maturities must be greater than that on shorter-term instruments by an expected risk or liquidity premium. In other words, investors desire liquidity, quick convertibility into cash with only a small loss of principal. Thus,

they demand a premium yield for longer term securities. Long term security issuers are willing to pay a premium to avoid frequent refunding, which are costly and risky-refunding requires the replacement of an old debt issue through the sale of a new issue, and by issuing long term securities borrowers avoid the frequent transaction costs each time a short term security matures and is financed.

Thus, the actual yield curve will tend to rise more than the curve implied by the pure expectations theory due to the rising risk premium as the term to maturity rises. The size of the risk premium may be expected to depend on the relative supplies of longer maturities and the strength of investors' risk aversion.

Symbolically, therefore, the actual yield curve is composed of expected future short-term rates and liquidity premium. Liquidity premiums are algebraically expressed by adding the term to the basic expectations equation:

$$(1+tRn)^n = (1+tR_1) \ (1+t+1 \ r1+L_2)$$

$$...................(1+t+n-1r1+L_n).$$

2.2.6c Segmented Market Theory (Institutionalists).

This market segmentation hypothesis segments the market by maturity and argues that yields of each maturity are determined by relatively independent supply and demand forces. Institutional investors contend that short, intermediate and long term bond markets are segmented and that both lenders and borrowers have definite preferences for instruments of a specific maturity, and for various reasons, partly due to institutional factors and regulations constraining financial intermediaries will tend to stick to securities of the corresponding maturity, without paying attention to rates of return, on other maturities (Culbertson, 1957). Thus, the rates for different terms of maturity tend to be determined, each in its separate market, by their independent supply and demand schedules. Such rates so set may imply wide differences in the expected return obtainable in the current period, or over some sequence of periods, by investing in different maturities but such difference would not induce traders to move out of their preferred habitat hence the discrepancies become extreme and glaring.

2.2.6d   **Preferred Habit Theory**

This theory, posited by Modigliani and Sutch (1966) blends the above three theories. It shares with the Hicksian approach the notion that the yield structure is basically controlled by the principle of the equality of expected returns but modified by the risk premiums. However, this theory differs in the fundamental sense of asserting that different transactions are likely to have different habitats as suggested by the segmentation theory resulting in shift of funds between different maturity markets through speculations and arbitrage. Basically, this theory implies that the spread $s(n, t)$ between the long rate $R(n, t)$ and the short rate $R(1, t)$ should depend primarily on the expected change in the long rate $R^e(n, t)$. This spread may also be affected by supply of long and short term securities by primary borrowers (i.e. by borrowers other than arbitrageurs) relative to the corresponding demand of primary lenders, to an extent reflecting prevailing risk aversion, transaction costs, and facilities for effective arbitrage operations. These views are summarized in these equations.

Expected current return on an n period bond

= R(n, t) + expected capital gains

= R(1, t) + Ft

Where Ft is the net effect of relative supply factors and may in principle be positive or negative.

Thus, solving for R(n, t) and taking the expected capital gain as proportional to the expected fall in the long rate, i.e $\triangle$ to - R^e(n, t) we can also write:

$$R(n, t) = R(1, t) - \text{Expected Capital gain Ft}$$

$$= R(1, t) + B_{\triangle} \; R^e(n, t) + Ft.$$

2.2.7. <u>STRUCTURE AND DETERMINATION OF INTEREST RATES</u>

The rate of interest is the reward for parting with liquidity for a specified period. It is the inverse proportion between a sum of money and what can be obtained for parting with control over the money in exchange for a debt for a stated period of time.

In this scene, it is seen as a measure of the unwillingness, of those who posses money to part with their liquid control over

it. It is the 'price' which equilibrates the desire to hold wealth in the form of cash with the available quantity of cash, i.e. the price of credit. Interest rates as the price paid for the right to borrow and use loanable funds, are the cost of holding money. That is, they are the prices that must be paid to get people to forgo willingly the advantages of liquidity.

The market rate of interest is roughly equivalent to the sum of the forms of Friedman's cost of holding money, viz: the market or nominal rate of interest equals (approximately) the real rate of interest plus the rate of increase in the price level – The nominal interest plus the rate of increase in the price level. The nominal interest rates are the rates of interest actually paid while the real interest rates are the nominal rates minus the expected rate of inflation.

2.2.7a – __Determination of Interest Rates.__

Various theories of interest rates put together explain or provide variables which determine interest rates. These theories differ because of differences of opinion as to whether interest

rates are monetary or real phenomenon. These theories are: The classical theory of interest, the Keynesian liquidity preference theory of the rate of interest, the loanable fund theory of interest, the neo-classical theory of Pigou, the Hicksian IS-LM frameworks and Monetarist framework of Friedman. These are briefly sketched in turns.

i)   **The Classical Theory of Interest.**

According to the classical theory the interest rate, is determined by the intersection of the investment–demand-Schedule and the saving schedule, ie, schedule disclosing the relation of investment and savings to rate of interest. However, no solution is possible because the position of the saving-schedule will vary with the level of real income hence the Keynesian attack of the classical theory of interest on the ground that it is indeterminate. That is, as income rises, the saving-schedule will shift to the right hence we can not know what the rate of interest will be unless we already know the income level. But we cannot know the income level without already knowing the rate of interest, since a lower interest rate will mean a larger

volume of investment and so, via the multiplier, a higher level of

real income. Thus, the classical theory fails to offer a solution.

The diagram below illustrates the classical position.

Classical Interest Rate Determination.
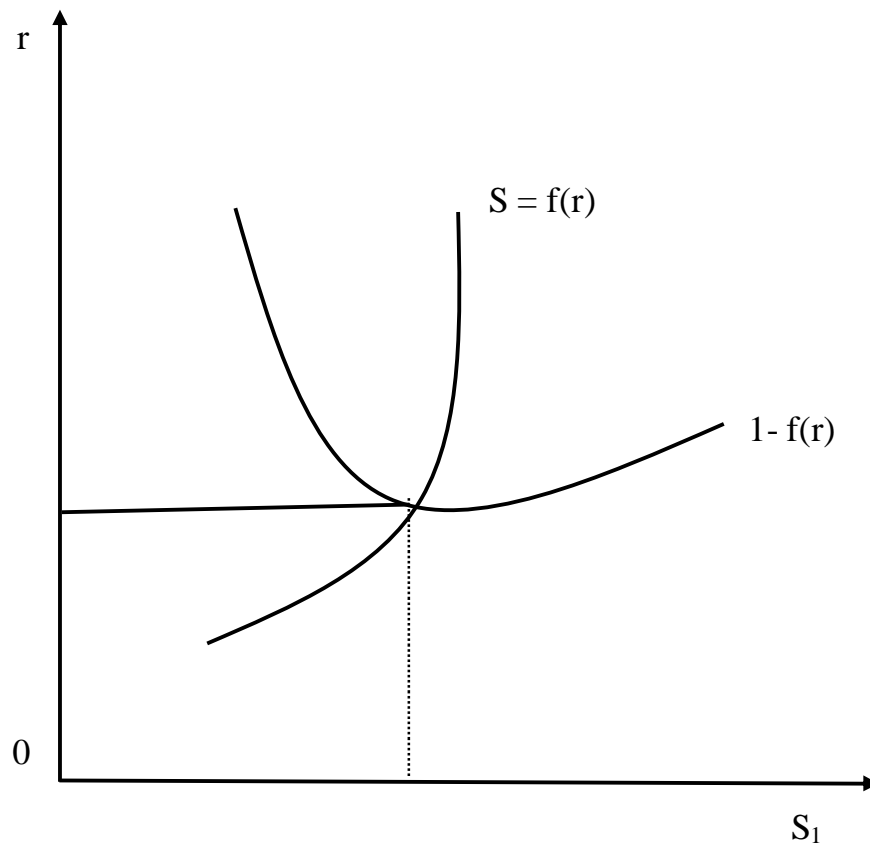
Figure 2.2.7ai.

ii) **The Keynesian Liquidity Preference Theory of the Rate of**

Interest:-

This theory posits that the rate of interest is determined by the intersection of the supply-schedule of money (perhaps interest inelastic, if rigorously fixed by the monetary authorities) and the demand schedule for money (the liquidity preference schedule).

However, this analysis is also indeterminate because the liquidity preference schedule will shift up or down with changes in the income level. Thus, money supply and demand schedules cannot give the rate of interest unless we already know the income level hence, the same criticism of indeterminacy Keynes leveled against the classics is applicable to his theory. Figure 2.2.7aii below shows the Keynesian position.

Keynesian Interest Rate Determination.
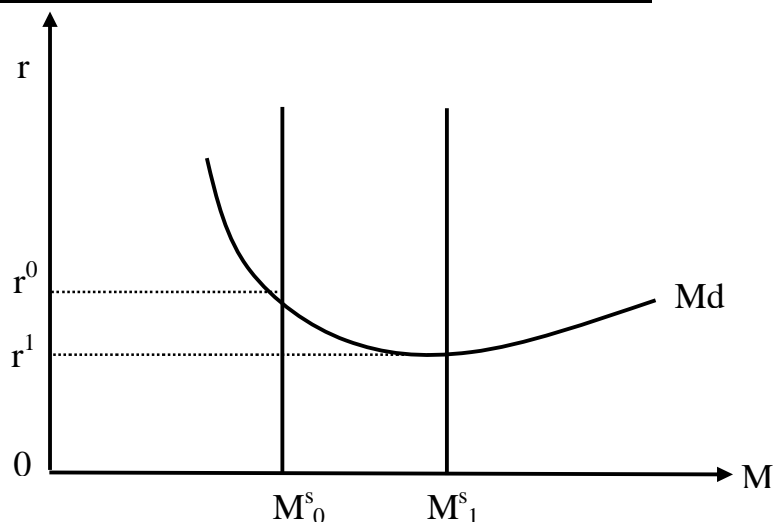
Figure 2.2.7aii

The implication of the Keynesian analysis is that an increase in money supply results in a fall in the interest rate.

iii) **The Loanable Funds Theory of Interest Rate.**

According to the loanable funds theory of Dennis H. Robertson, the rate of interest is determined by the intersection of the demand schedule for loanable funds with the supply schedule. Here, the supply-schedule is compounded of savings(in the Robertsonian sense, voluntary saving) plus net addition to loanable funds from new money (MS) and the dishoarding of idle balance (DH). However, since the "savings portion of the schedule varies with the level of disposable income" (ie "yesterday's income") it follows that the total supply schedule of loanable funds also varies with income. Therefore, this theory is also indeterminate.

The loanable funds position is also as show in the figure below.

Loanable Funds Theory of Interest Rate
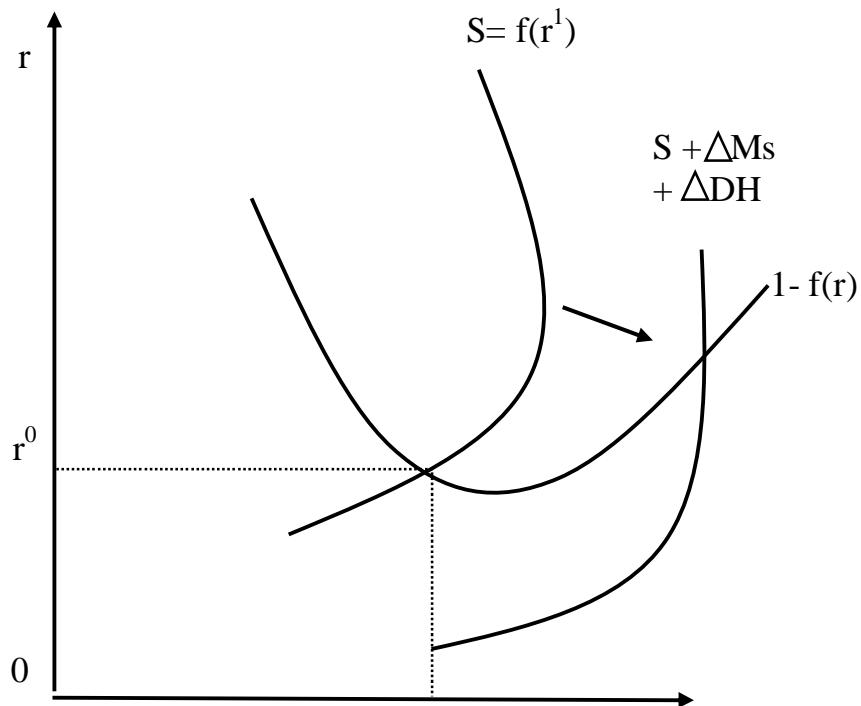
Figure 2.2.7aiii

iv) **The Neo-classical Theory of Pigou**

In the Pigouvian parlance, interest rate is determined by the intersection of the demand-schedule for money with the

supply schedule of savings. Here, the relevant supply schedule is conceived in terms of saving out of current income, i.e , the excess of the total income received over income received for services in providing for consumption. Thus, income, consumption, and saving, all apply to the same period, however, whether or not current income is fed in past from the injection of new money or from the stand point of the Pigouvian or neo-classical definition. That is, income whether it springs from the spending of funds borrowed from banks credit displayed as sole in the process of income creation. Thus in the neo-classical or Pigouvian theory "saving" is in effect the same thing as loanable funds hence the same criticism applies to them.

v)   The Hicksian IS-LM Framework.

The Keynesian and the Neo-classical proposition, taken together, supply us with a theory of the interest rate of J. R .Hicks. From the Keynesian view- point, we get a family of liquid preference schedule at various income levels. These together with the supply of money fixed by the monetary authorities, give us the Hicksian LM – Curve which tells us what the various rates

of interest will be (given the quantity of money and the family of liquidity preference curves) at different level of income.

On the other hand, the neo-classical formulation provides us a family of saving schedule at various income levels. These together with the investment demand schedule give us the Hicks IS – Curves, meaning that the neo-classical framework tells us what the various level of income will be (given the investment-demand schedule and family of savings-schedule) at different rates of interest.

Thus, the "IS-Curve" and the "LM-Curve" refer to functions relating the two variables: income and rate of interest. Therefore, income and the rate of interest are determined together at the point of intersection of these two curves or schedules. At the point of intersection income and the rate of interest stand in a relation to each other such that:-

a)   Investment and Savings are in equilibrium (i.e. actual saving equals desired saving), and

b)The demand for money is in equilibrium with the supply of money (i.e. the desired amount of money is equal to the actual supply of money).

The Hicksian IS-LM framework can be illustrated as follows:

<u>Hicksian IS-LM Framework.</u>
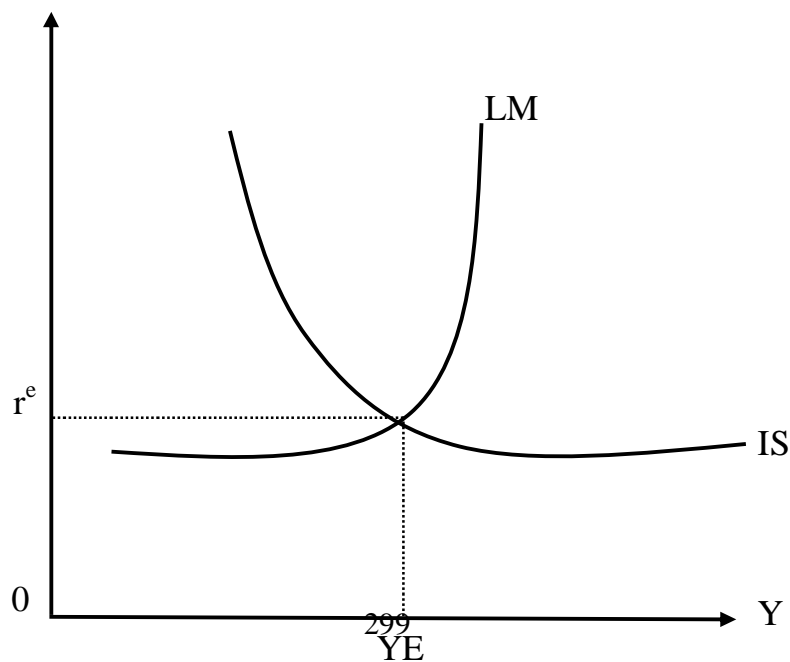
Figure 2.2.7av

The formal analysis of the IS-LM framework. Sir John R. Hicks combined the neo-classical and Keynesian formulations to develop the IS-LM framework. What then is the IS-LM framework? The IS-LM framework refers to the locus of all pairs of income and interest rates for which both the expenditure and monetary sectors are simultaneously in equilibrium.

If we assume absence of government expenditure, undistributed corporate profits and international trade, the analysis will be as follows:-

The IS-Curve: the expenditure sector

The IS Curve refers to the locus of pairs of income and interest rate for which the expenditure sector is at equilibrium.

This can be derived from either of two alternative procedures viz:

a)   When we assume that income is determined by consumption and investment expenditures:

$$Y = C + 1 \quad \text{...} \quad (1)$$

$$C = a + by \quad \text{......................................} \quad (2)$$

$$I = Io + I_1 + Y - I_2 r \quad \text{.........................} \quad (3)$$

We then solve for the endogenous Variable (y) in terms of the exogenous (r); i.e.

$$Y = a + bY + 1_o + 1_1 Y - 1_2 r$$

Hence

$$Y = bY - I_1 Y = a + 1_o - 1_2 r$$

$$Y = (1 - b - 1_1) = a + 1_o - 1_2 r$$

$$Y = \frac{a + 1_o}{1 - b - 1_1} - \frac{1_2 \cdot}{1 - b - 1_1} r \quad \text{.............} \quad (4)$$

This equation (4) expresses the equilibrium level of income as a function of the interest rate.

b) The use of equilibrium condition which is cast in terms of the equality between the desired levels of saving and investment namely;

$$I = S \quad \text{..} \quad (5)$$

$$S = a + (1 - b)Y \dots\dots\dots\dots \text{(6)}$$

Substituting equations (6) and (7) into the equilibrium condition (5), we obtain:

$$-a + (1-b)Y = 1_o + 1_{1Y} - 1_2 r$$

Solving the above equation for Y in terms of r, we again derive equation (4):

$$Y = \frac{a + 1_o}{1 - b - 1_1} - \frac{1_2}{1 - b - 1_1}r$$

This equation provides the level of income at each rate of interest for which the desired levels of saving and investment are equal to each other. Its graphical representation as shown in figure 2.2.7avi below is called the IS – Curve.

If we introduce government economic activity but assuming a closed economy, we shall have

$$Y = C + 1 + G \dots\dots\dots\dots\dots \text{(8)}$$

$$C = a + bYd \dots\dots\dots\dots\dots \text{(9)}$$

$$1 = {}^1o + {}^11 + Y - {}^11 \dots\dots\dots\dots \text{(10)}$$

$$Yd = Y - T \dots\dots\dots\dots\dots \text{(11)}$$

$$T = -to + t1Y \dots\dots\dots\dots\dots \text{(12)}$$

Where Yd = disposable income, and T = taxation.

IS CURVE

r

I S

Q

Y
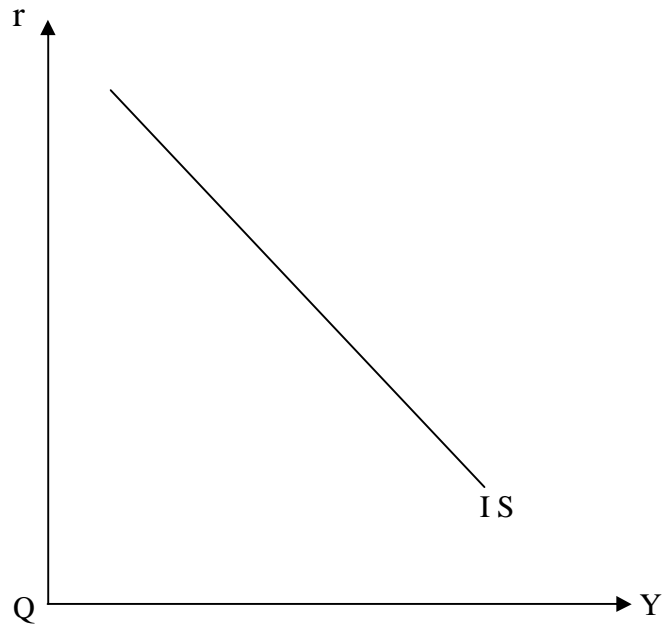
Figure 2.2.7avi

Solving for income in the terms of the rate of interest and substituting $G = G_o$ autonomous government expenditures, we obtain once more the equation for the IS curve:

$$Y = \frac{a+1o+bto+Go}{1-b(1-t_1)-1^1} - \frac{1_2}{1-b(1-t_1)-1_1} r +++++ (13)$$

The LM – Curve: The Monetary Sector.

The LM – curve refers to the locus of all pairs of income and interest rates, for which the monetary sector is at equilibrium or for which the demand for money equals its supply.

This can be derived by considering equations of the money market:

$$\frac{M^d}{P} = Mo + M_1 Y - M_2{}^r \ldots\ldots\ldots\ldots (14)$$

$$\frac{M^d}{P} = \frac{M^s}{P} \ldots\ldots\ldots\ldots (15)$$

Substituting (14) into (15) we have

$$\frac{M^s}{P} = M_o + M_1 Y - M_2{}^r \ldots\ldots\ldots (16)$$

Assuming that the value of the exogenous variables are say $M^S{}_o$ and P_o the above equation reduces to:

$$\frac{M_o{}^S}{P_o} = M_o + M_1 Y - M_2{}^r \ldots\ldots\ldots (17) \text{ which contains two}$$

unknowns, Y and r. Solving for r in terms of Y we find:

$$r = \frac{M_o}{M_2} - \frac{M_o{}^S/P_o}{M_2} + \frac{M_1Y}{M_2} \ldots\ldots\ldots\ldots (18)$$

This equation (18) expresses the equilibrium rate of interest as a function of the level of income and its graph is called LM – Curve as can be seen below

__LM – Curve: Money – Market Equilibrium__
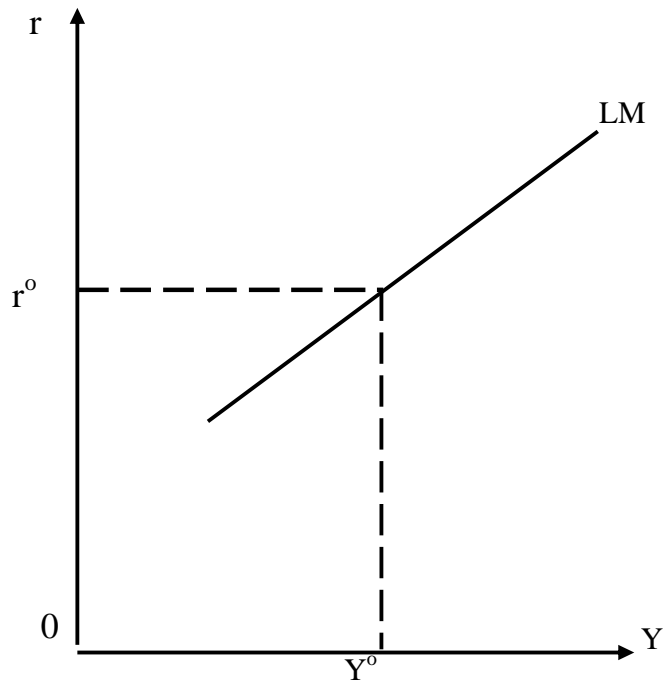
Figure 2.2.7avii

1S – LM Curves: Given the price level the above two markets, (expenditure and money market) acting together will simultaneously determine unique equilibrium values for income and the rate of interest. This is done by combining the 1S – and the LM curves so far derived. Thus, the intersection of the 1S – and LM – curves gives the one pair of values for Y and r at which both sectors are simultaneously in equilibrium for each price level. This is illustrated graphically as thus:

1S LM Curve General Equilibrium
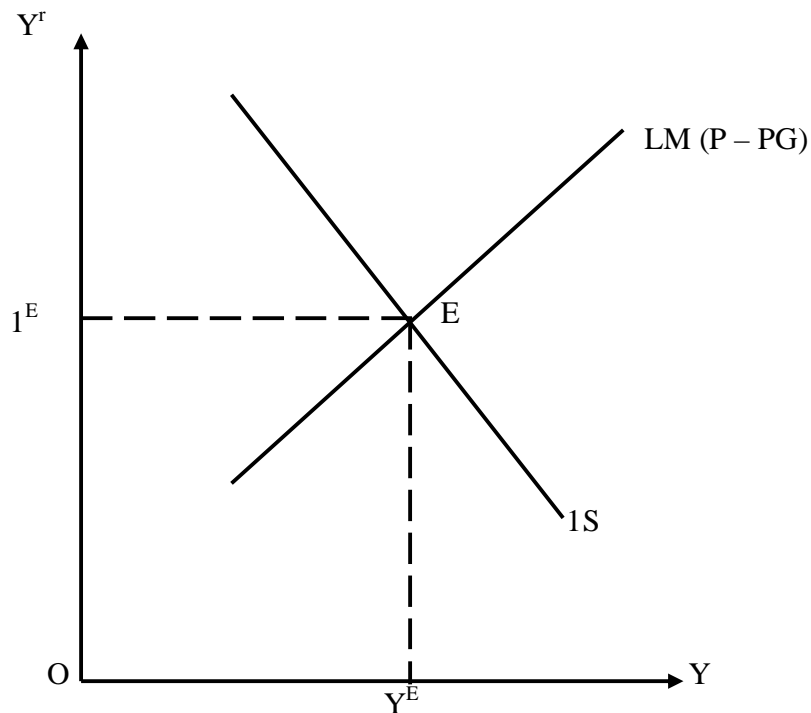
Figure 2.2.7viii

The expenditure and monetary sectors considered simultaneously: Under a closed economy, the equation of the expenditure in conjunction with those of the monetary sector are:

$$Y = c + 1 + G \ldots\ldots\ldots\ldots (1)$$

$$C = a + bYd \ldots\ldots\ldots\ldots (2)$$

$$1 = Io + I_1Y - I_1r \ldots\ldots\ldots (3)$$

$$Yd = Y - T \ldots\ldots\ldots\ldots (4)$$

$$T = -lo + t1Y \ldots\ldots\ldots\ldots (5)$$

$$\frac{M^S}{P} = M_o + M_1y - M_2r \ldots\ldots (6)$$

$$\frac{M^d}{P} = \frac{M^S}{P} \ldots\ldots\ldots\ldots (7)$$

Combining equations (1) and (5) as usual, we obtain:

$$[(1 - b)(1 - t_1)] Y + Io^r = a + 1_o + bt_o + G \ldots\ldots (8)$$

The 1S – Curve

On the other hand substituting (6) into the equilibrium condition (7) given us,

$$M_o + M_1 Y - M_2 r = \frac{M^S}{P}$$

Which can be rewritten as

$$M_1 Y + M_2{}^r = \frac{M^S}{P} - Mo \ldots\ldots\ldots (9)$$

- The LM Curve: Pulling equation (6) and (9) together, we form the system: $[(1 - b)(1 - t_1)] Y + I_1{}^r = a + Io + bto + G$

$$M_1 Y - M_2{}^r - \frac{M^S}{P} - M_o$$

To solve the above system, we may use the second equation to solve for r in terms of Y:

$$ie \quad = \frac{-Ms/P - Mo}{M_2} + \frac{M1Y}{M_2} \ldots\ldots (10)$$

Substituting the value of r given by (10) into the first equation of the system, we find:

$$[1 - b\,(1 - t_1)]\,Y + I_1 \left[\frac{M_0 - M^S/P}{M_2} + \frac{M_1 Y}{M_2} \right]$$

To solve for the endogenous variable Y in terms of the exogenous variables to obtain:

$$Y = \frac{1}{1 - b\,(1 - t_1) + Io\,\dfrac{M_1{}^r}{M_2}}$$

$$\left[a + Io + bto + G - \frac{Io}{M_2}\,Mo + \frac{I_1}{M_2}\,\frac{M^S}{P} \right] \dots\dots\dots(11)$$

We substitute (11) in (10) to find the corresponding reduced form for the rate of interest.

This gives

$$r = -\frac{M^s/P - Mo}{M_2} + \frac{M1}{M_2}\quad \frac{1}{(1\text{-}b)\,(1\text{-}t_1) + l_1\,{}^{M1}/_{M2}}$$

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$$a + Io + bto + G - \underline{Io} \quad Mo + \underline{I_1} \quad \underline{M^S}$$
$$M_2 \qquad M_2 \quad P$$

Which can be further simplified to read

$$r = \left\{ M_1 [a+I_O + bt_O +G] \right.$$

$$+ (1 - b (1 - t_1)) (Mo - \underline{M^S} \left. \vphantom{\Big|} \right\}$$
$$P$$

$$+ \left\{ M_2 \left[1 - b (1 - t_1) + I_O \underline{M_1} \right] \right\} \ldots\ldots\ldots(12)$$
$$M_2$$

2.2.7vii   **The Monetarist's View of Interest Rates**: Though the monetarists accept that interest rate is a monetary phenomenon, they reject the Keynesian analysis that it is determined by money supply and

money demand. They add and in fact emphasize another factor: the price expectation/anticipations factor.

To the monetarists led by Milton Freidman, an interest in money stock has three major effects; Liquidity effect, income effect, and the price expectation/anticipations effect. To them, an increase in money supply initially (immediate observational impact) the interest rate falls, ie the Keynesian liquidity preference effect. Due to this increase in liquidity position, people go into the market to increase demand, resulting in the expansion of the economy (the incomes effect). This increase in income will put pressure on goods and services and hence prices will rise. As prices increase due to expectations effect people will build up an inflationary psychology, i.e. they expect more inflationary effects in future. Suppliers will expand their investment outlet to supply more and this expansionary investment demand will make prices to rise more. Also financial institutions expect price to rise more and, therefore, increase interest rate on their liabilities.

Even among consumers, they want to spend more now because they expect higher prices in future hence for durable materials they

would demand for more credit and this will lead to an increase in interest rate (price expectations/anticipations effect).

Thus, because of these three effects and more so, because of the price expectations effect, when money supply is increased, the ultimate result is an increase in interest rate rather than the Keynesian decrease in interest rate. This is what Freidman (1976) linked with the Gibson Paradox since prices and interest rates move together from empirical evidence.

To them, therefore, interest rate is not only determined by money supply and money demand but also by price expectation/anticipations factors.

This is illustrated below, thus:

Monetarist's Theory of Interest Rate
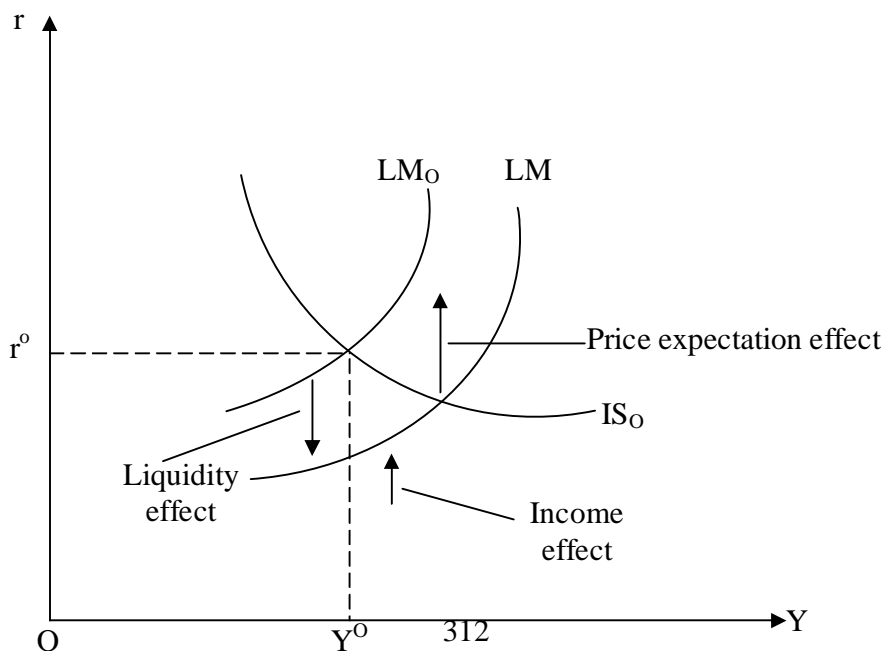
Figure 2.2.7aviii

2.2.8   *FACTORS DETERMINING INTEREST RATES*

a)   The investment Demand – the higher the level of investment demand the higher the level of interest rates. On the other hand, the lower the investment demand, the lower the level of interest rate.

b)   The level of saving (or conversely, the level of consumption) the higher the level of saving the lower the interest rate while, the lower the level of savings, the higher the level of interest rate.

c)   Demand for money or the liquidity preference. The higher the money demand, the lower the interest rates while, the lower the money demand the higher the interest rates.

d)   The quantity of money or money supply. In the Keynesian parlance, as we saw in the analysis above, increase in money supply lowers interest rates. But in the monetarists (a La Freidman) world the ultimate result of an increase in money supply is an increase in interest rates.

e)   Price anticipation/expectations or inflationary expectations – Inflationary expectations increase interest rates since the market rate of interest is made up of real interest rate and the rate of inflation. However, we must note that unexpected change in the rate of inflation cause the real rate of interest on contracts already drawn up to vary in the unexpected ways. An unexpected fall in the inflation rate is beneficial to borrowers (Lipsey, 1983).

f)   Accumulation of capital – A growing stock of capital or increase in capital accumulation tends to lower the interest rate while a fall in capital stock increases the interest rate.

g)   Technical knowledge – The growth of technical knowledge tends to increase the interest rate. This is because the growth of technical knowledge provide new productive uses for capital.

h)   Time preference term or Duration of Loan Uncertainty – the length of the period of time that must elapse before a loan is repaid is an important cause of variations in the rate of interest at a particular moment (Hanson, 1974). Thus, the rate of interest differs systematically with the term (or duration) of the loan, for reasons that are ultimately related to uncertainty since the longer the maturity of a

loan or investment the riskier (risk premium) it becomes. Therefore, Ceteris Paribus, the shorter the term of a loan, the lower the interest rate, while the longer the term of a loan, the higher the interest rate.

i)   The price of an income producing asset – the price of perpetuities (or consoles) and bonds vary inversely with the rate of interest. That is, any action of investors that bids up the market price of console and or existing bonds means that the rate of interest lenders are prepared to accept has fallen. Also the closer to the present the redemption date of a bond, the less its value changes with a change in the interest rate.

j)   Differences in the cost of administering credits. Generally, the larger the loan, and the fewer payments, the less the cost per naira of servicing the loan. Thus, the higher the cost of administering a loan, the higher the interest rate.

k)   Change in the demand to borrow money. An increase in the demand to borrow money on the part of households or control authorities increases interest rates, while a fall in such demand lowers the interest rates.

l)   Change in Federal Governments Deficit – sharp increases in Federal Governments deficit means an increase in the demand for

borrowing by the Federal Government hence interest rates will rise. Therefore, fall in Federal Government Deficit leads to fall in interest rates.

m)   The influence of the Central Bank or monetary authorities – The Central Bank often intervenes in the market for bonds in am attempt to influence the yield of those bonds and hence influences the interest rates. In fact by its management of the national debt, the Central Bank, acting as the Governments agent, intervenes both in the discount market and the stock (capital) market to influence the short term and long – term rates of interest respectively.

n)   Bank administration of interest rates through credit rationing. During periods of "tight" money, banks resort to credit rationing thus raising interest rates. The reserves tend to be true during periods of 'easy' money.

2.3.0   ***<u>MARKETING STRATEGIES OF THE PRODUCT –</u>***
          <u>"SAVING DEPOSITS"</u>

<u>Introduction:</u> No company can win if its product and offering resembles every other product and offering. Today, most companies are

guilty of strategy convergence – namely, undifferentiated strategies. Companies must pursue meaningfully, and relevantly positioning and differentiating their products. Each company and offering must represent a distinctive big idea in the mind of the target market; and each company must dream up new features, services and guarantees, special rewards for loyal users, and new conveniences and enjoyments.

Yet even when a company succeeds in distinguishing itself, the differences are short lived. Competitors are quicker than ever in good ideas; therefore, companies constantly need to think up new value – adding features and benefits to win the attention and interest of choice – rich, price – prone consumers.

Companies normally reformulate their marketing strategies and offerings several times. Economic condition change, competitors launch new assaults, and product passes through new stages of buyer interest and requirements. Consequently, strategies appropriate to each stage in the product's life cycle must be developed. The goal is to extend the product's life and profitability, keeping in mind that the product will not last for ever. We are going to take a critical look at the ways this product can be effectively positioned and differentiated and

its offerings to achieve competitive advantage throughout the life cycle of the product or an offering.

2.3.01 *Developing and Communicating a Positioning Strategy*

It is believed that, all marketing strategies are built on STP – Segmentation, Targeting and Positioning. A company discovers different needs and groups in the market place, targets those needs and groups that it can satisfy in a superior way, and then positions its offering so that the target market recognizes company's distinctive offering and image. If a company does a poor job of positioning, the market will be confused as to what to expect. If a company does an excellent job of positioning, then it can work out the rest of its marketing planning and differentiation from its positioning strategy.

Therefore, positioning means, the act of designing the company's offering and image to occupy a distinctive place in the mind of the target market. The end result of positioning is the successful creation of a customer – focused value proposition, a cogent reason why the target market should buy the product.

Positioning according to Ries and Trout. The word positioning was popularised by two advertising executives, Al Ries and Jack Trout. They see positioning as a creative exercise done with an existing product. (Al Ries and Tack Trout, positioning: The battle for Your Mind (New York: Warner Book, 1982).

Positioning starts with a product. A piece of merchandise, a service, a company, an institution, or even a person ……. But positioning is not what you do to a product. Positioning is what you do to the mind of the prospect. That is, you position the product in the mind of the prospect.

Ries and Trout argue that well – known products generally hold a distinctive position in customer's minds. Hertz is thought of as the world's largest auto-rental agency, coca – cola as the world's largest soft-drink company, and porche as one of the world's best sports cars. These brands own these positions, and it would be hard for a competitor to claim them.

A competitor has three strategic alternatives; The first is to strengthen its current position in the consumers' mind. Avis acknowledged its second position in the rental car business and

claimed: "we are number two. We try harder" 7up capitalized on not being a cola drink by advertising itself as "the uncola."

The second strategy is to grab an unoccupied position. Three musketeer chocolate bow advertised itself as having 45 percent less fat than other chocolate bars. United Jersey Bank, nothing that gaint banks were usually slower in arranging loans, positioned itself as "the fast-moving bank."

The third strategy is to de-position or reposition the competition in the customers' mind. Most U.S. buyers of dinnerware thought that Lenox and Royal Doulton China but came from England. Royal Doulton de-positioned Lenox China by showing that it is made in New Jersey. BMW attempt to de-position Mercedes Benz with the comparison: "the ultimate sitting machine versus the ultimate driving machine" Popeye Cajunstyle fried chicken aims to "save America from bland chicken" (implying an attack on KFC). Wendy's famous commercial, in which a 70 year – old woman named Clara looked at a competitor's hamburger and said "where's the beef?" showing how an attack could destabilized consumer confidence in the leader.

Ries and Trout argue that, in an over advertised society, the mind often knows brands in the form of product ladders, such as Coke –Pepsi – Rc Cola or Hertz –Avis – National. The top firm is remembered best. For example, when asked "who was the first person to fly alone across the Atlantic Ocean successfully? "we answer" Charles Lind-Bergh. When asked, "who was second person to do so?" we draw a blank. This is why companies fight for the number one position. The "Largest firm" position can be held by only one brand. The second brand should invent and lead in a new category. Thus, 7up is the number-one uncola, Porche is the number one small sports car, and Dial is the number – one deodorant soap. A fourth strategy is the exclusive – club strategy. For example, a company can promote the idea that it is one of the big three. The big three idea was invented by the largest U.S. auto firm, Chrysler. (The market leader never invent this concept). The implication is that, those in the club are the "best."

Ries and Trout essentially deal with communication strategies for positioning or repositioning a brand in the consumer's mind. Yet they acknowledge that positioning requires every tangible aspect of product,

price, place, and promotion to support the chosen to positioning strategy.

Positioning according to Treacy and Wiersema: - Two consultants, Michael Treacy and Fred Wiresema, proposed a positioning framework called value disciplines. <u>(Michael Treacy and Fred Wiresema, The Disciplines of Market Leader, (Reading, M. A. Addison Wesley, 1994).</u> Within its industry, a firm could aspire to be the product leader, the operationally excellent firm, or the customer intimate firm. This is based on the notion that in every market there is a mix of three types of customers. Some customers favour the firm that is advancing on the technological frontier (Product leadership); other customers want highly reliable performance (operational excellence), and still others want high responsiveness in meeting their individual needs (customer intimacy).

Treacy and Wiresema observed that a firm can not normally be best in all three ways, or even in two ways. It lacks sufficient funds, and each value discipline requires different managerial mind-sets and investment that often conflict. Thus, McDonald's excels at operational excellence, but could not afford a slow down its services to prepare

hamburgers differently for each customer. Nor could McDonald's lead in new products because each addition would disrupt the smooth functioning of its normal operations. Even within a large company, such as GE, each division might follow a different value discipline: GE's major appliance division pursues operational excellence, its engineered plastics division pursues customer intimacy, and its jet engine division pursues product leadership.

Treacy and Wiresema propose that a business should follow four rules for success:

❖ Become best at one of the three value disciplines.

❖ Achieve adequate performance level in the other two disciplines.

❖ Keep improving ones superior position in the chosen discipline so as not to lose out to a competitor.

❖ Keep becoming more adequate in the other two disciplines, because competitors keep raising customers' expectations.

2.3.02   *Positioning: How Many Products to Promote?*

A company must decide how many ideas (e.g., benefits, features) to convey in its positioning to its target customers. Many marketers advocate promoting only one central benefit. Rosser Reeves believes a company should develop a <u>unique selling proposition</u> (USP) for each brand and stick to it. <u>(Rosser Reeves "Reality in Advertising" (New York: Alfred A. Knopf, 1960)</u>. Crest toothpaste consistently promotes its anticavity protection, and Mercedes promotes its great engineering. Ries and Trout favour one consistent positioning message. This makes easier communication to the target market, it results in employees being clearer about what counts; and it makes it easier to align the whole organization with the central positioning.

Which positioning to promote? Suppose a company has identified four alternative positioning platforms: Technology, Cost, Quality and Service. It has one major competitor. Both companies stand at 8 at technology (1= low score, 10 = high score), which means they both have good technology. The competitor has a better standing on cost (8 instead of 6). The company offers higher quality than its competitor (8 compared to 6). Finally, both companies provide below average service.

It would seem that the company should go after cost or service to improve its market appeal. However, other considerations arise. The first is how target customers feel about improvements in each of these attributes. The best possible way the company would act is to improve its services and promote this improvement.

2.3.03 Communicating the Company's Positioning

To communicate a company or brand positioning a marketing plan should include a <u>Positioning statement.</u> The statement should follow the form: To (target group and need) our (Brand) is (concept) that (Point-of-difference) <u>(Bobby J. Calder and Steven J. Reagar, "Brand Design," in Kellogy on Marketing, ed. Dawn Iacobucci (New York: John Wiley and Sons, 2001), P. 54)</u> For example, "To busy professionals who need to stay organized, Palm Pilot is an electronic organizer that allows you to back up files on your PC more easily and reliably than competitive products." Sometimes the positioning statement is more detailed:

> *Mountain Dew: To young, active soft drink consumers*

who have little time for sleep, Mountain Dew is the soft

drink that gives you more energy than any other brand

because it has the highest level of Caffeine. With

 Mountain Dew, you can stay alert and keep going

even when you haven't been able to get a good night's

sleep. (The Palm Pilot and Mountain Dew examples

are taken from Alice M. Tybout and Brian Sternthal,

 "Brand Positioning," in Kellogs on Marketing, ed.

Dawn lacobucci (New York: John Wiley & Sons, 2001),

P. 54).

Note that, the positioning first states the product's membership in a category (e.g Mountain Dew is a soft drink) and then shows its point-of-difference from other members of the group (eg. has more caffeine). The product's membership in the category suggests the point-of-parity that it might have with other products in the category, but the case for the product rests on its points-of-difference. Sometimes the marketer will put the product in a surprisingly different category before indicating the points of difference.

Once a company has developed a clear positioning statement, it must communicate that positioning effectively through all the elements of the marketing mix. Suppose a company chooses the "best quality" positioning. Quality is communicated by choosing those physical signs and cues that people normally use to judge quality.

Quality is also communicated through other marketing elements. A high price usually signals a premium quality product. The products quality image is also affected by packaging, distribution, advertising, and promotion.

A manufacture's reputation also contributes to the perception of quality. Certain companies are sticklers for quality; consumers expect Nestle and IBM products to be well-made.

Smart companies communicate their quality to buyers and guarantee "Customers Satisfaction or your money back."

As important as positioning is to a company's success, most ads fail to communicate the company or the brand's positioning. Kevin Clancy, CEO of Copernicus, a marketing strategy consulting firm, examined 340 commercials and found that only 7 percent communicated any sort of positioning; and only 50 percent mentioned product features. Not only is this waste of advertising money, but unpositioned brands in over-crowded categories tend to devolve into price-driven brands. (Kevin Clancy, Copernicus Newsletter, May, 2001).

2.3.04 Differentiation:

The task of positioning is to deliver a central idea about a company or an offering to the target market. Positioning simplifies what we think of the entity. Differentiation goes beyond positioning

to spin a complex web of differences characterizing that entity. We therefore define "differentiation as the process of adding a set of meaningful and valued differences to distinguish the company's offering from competitors' offerings."

All products can be differentiated to some extent, but not all brand differences are meaningful or worthwhile. (Theodore Levitt, "Marketing success through Differentiation: of anything," Harvard Business Review (January-February 1980). A difference will be stronger to the extent that it satisfies the following criteria:

- **Important:** The difference delivers a highly valued benefit to a sufficient number of buyers.

- **Distinctive: -** The difference is delivered in a distinctive way.

- **Superior: -** The difference is superior to other ways of obtaining the benefit.

- **Preemptive:** - The difference can not be easily copied by competitors.

- **Affordable:** - The buyer can afford to pay for the difference

- **Profitable:** - The Company will fit it profitable to introduce the difference.

Many companies have introduced differentiations that failed on one or more of these tests. The Westin Stamford hotel in Singapore advertises that it is the world's tallest hotel, but a hotel's height is not important to many tourists, Polaroid's Polarvision, although distinctive and preemptive, was inferior to another way of capturing motion – namely, Video cameras. When the Turner Broadcasting system installed TV Monitors to beam cable News Network (CNN) to bored shoppers in store checkout lines, it did not pass the "Superior" test. Customers were not looking for a new source of entertainment in supermarkets, and Turner took a $ 16 million task write – down.

Carpenter, Glazer, and Nakamoto posit that brands can sometimes be successfully differentiated on irrelevant attributes. (Gregory Carpenter, Rashi Glazer, and Kent Nakamoto, "Meaningful Brands from meaningless Differentiation: The Dependence on Irrelevant Attributes," Journal of Marketing Research (August 1994): 339-50). Procter and Gamble differentiates its Folger's instant coffee by its "flaked coffee crystals," created through a "Unique patented

Process." In reality, the coffee particles' shape is irrelevant because the crystal immediately dissolves in the hot water. Saying that a brand of coffee is "Mountain grown" is irrelevant because most coffee is mountain grown. Alberto Culver's Alberto Natural silk shampoo is advertised with the slogan "We put silk in a bottle." However, a company spokesman conceded that silk does not really do anything for hair.

2.3.05 Differentiation Tools –

The number of differentiation opportunities varies with the type of industry. The Boston Consulting Group (BCG) has distinguished four types of industries based on the number of available competitive advantages and their size.

a)   **Volume Industry:** One in which companies can gain only a far, but rather large, competitive advantages. In the construction – equipments industry, a company can strive for the low-cost position or

the highly differentiated position and win big on either basis. Profitability is correlated with company size and market share.

b) **Stalemated industry:** One in which there are few potential competitive advantages and each is small. In the steel industry, it is hard to differentiate the product or decrease manufacturing costs. Companies can try to hire better salespeople, entertain more lavishly, and the like but these are small advantages. Profitability is unrelated to company market share.

c) **Fragmented industry:** One in which companies face many opportunities for differentiation, but each opportunity for competitive advantage is small. A restaurant can differentiate in many ways but end up not gaining a large market share. Both small and large restaurants can be profitable or unprofitable.

d) **Specialised Industry:** One in which companies face may differentiation opportunities, and each differentiation can have a high payoff. Among companies making specialized machinery for selected Market segments, some small companies can be as profitable as some large companies.

Miland Lele observed that companies differ in their potential maneuverarability along five dimensions: Target Market, Product, Place (channels), Promotion and Price. (Miland M. Lele, Creating Strategic Leverage (New York: John Wiley, 1992). The companies freedom of Maneuver is affected by the companies structure and the firm's position in the industry. For each potential maneuver, the company needs to estimate the return. Those Maneuvers that promise the highest return define the company's Strategic Leverage. Companies in a stalemated industry have very little maneuver ability and strategic Leverage, and those in specialized industries enjoy great Maneuverability and Strategic Leverage.

Yet even in stalemated, commodity type industries, some real or image differentiation is possible. Commodities such as bananas, salt, chicken, and milk can be differentiated. Shoppers look for the Chiquita label on bananas, the Dole label on pine apples, and the Green Giant on frozen vegetables; these brands give them an assurance of quality. Most people buy Morton salt and pay a little more, and they prefer frank Perdue's chicken because "it takes tough man to make a tender chicken". There are now several varieties of milk – calcium fortified,

lactose free, soymilk, and so on. The marketer must start with the belief that you can differentiate anything."

2. 3.06 ***Product Differentiation***

Physical products vary in their potential for differentiation. At one extreme we find products that allow little variation: chicken, steel, aspirin. Yet even here, some differentiation is possible. Procter and Gamble makes several brands of laundry detergent, each with a separate brand identity. At the other extreme, are products capable of high differentiation such as automobiles, commercial building, and furniture. Here the seller faces an abundance of design parameters, including form, features, performance quality, conformance quality, durability, reparability style, and design."

Form: Many products can be differentiated in form – the size, shape, or physical structure of a product. Consider the many possible forms taken by products such as aspirin. Although aspirin is essentially a commodity, it can be differentiated by dosage, size, shape, color, coating, or action time.

Features: Most products can be offered with varying features, that supplement products basic function. Being the first to introduce valued new features, is one of the most effective ways to compete. Oral – B managed to differentiate its tooth brush by introducing a blue dye in the centre bristles that fades and tells customers when they need a new toothbrush.

Can a company identify and select appropriate new features? It can ask recent buyers: How do you like the product? Are there any features we could add that would improve your satisfaction? How much would you pay for each? How do you feel about the following features that other customers have suggested?

The next task is to decide which features are worth adding. For each potential feature, the company should calculate customer value versus company cost. Suppose an auto manufacturer is considering the three possible improvements. The company has to cost the real costs of improving the automobile, the customers' satisfaction to be derived from it. How many customers would like the improvements, how much on average would they pay. How long would it take the manufacturer to introduce the modifications and at what rate? What would be the cost

benefits to the company? Whether the competitors could easily copy the feature.

Companies must think in terms of feature bundle or packages. Auto company/companies often manufacture cars at several "trim levels". This lowers manufacturing and inventory costs. Each company must decide whether to offer feature customization at a higher cost or few standard packages at a lower cost.

Performance quality – most products are established at one of four performance levels: low, average, high or superior. Performance quality is the level at which the products primary characteristic operate. The important question here is: Does offering higher product performance produce higher profitability? The strategic Planning Institute, Studied the impact of higher relative product quality and found a significantly positive correlation between relative product quality and return on investment (ROI). High quality business units earned more because premium quality allowed them to charge a premium price, they benefited from more repeat purchasing, consumer loyalty, and positive word of mouth; and their costs of delivering more

quality were not much higher than for business units producing low quality.

Quality's link to profitability does not mean that the firm should design the highest performance level possible. The manufacturer must design a performance level appropriate to the target market and competitors' performance levels. A company must also manage performance quality through time. Continuously improving the product often produces the highest return and market share. The second strategy is to maintain product quality unaltered after its initial formulation unless glaring faults or opportunities occur. The third strategy is to reduce product quality through time. Some companies cut quality to offset rising costs; others reduce quality in order to increase current profits, although this course of action often hurts long run profitability.

Conformance Quality – Buyers expect products to have a high conformance quality, which is the degree to which all the produced units are identical and meet the promised specifications. Suppose a Porsche 944 is designed to accelerate

to 60miles per hour within 10 seconds. If any Posche 944 coming off the assembly line does this, the model is said to have high conformance quality. The problem with low conformance quality is that the product will disappoint some buyers.

Durability – is a measure of the product's expected operating life under natural or stressful conditions, is a valued attribute for certain products. Buyers will generally pay more for vehicles and kitchen appliances that have a reputation for being long lasting. However, this rule is subject to some qualifications. The extra price must not be excessive. Furthermore, the product must not be subject to rapid technological obsolescence, as is the case with personal computers and video cameras.

Reliability – Buyers normally will pay a premium for more reliable products. Reliability is a measure of the probability that a product will not malfunction or fail within a specified time period. Maytag, which manufacturers major home appliances, has an outstanding reputation for creating reliable appliances.

Reparability – Buyers prefer products that are easy to repair. Reparability is a measure of the ease of fixing a product

when it malfunctions or fails. An automobile made with standard parts that are easily replaced has high reparability. Ideal reparability would exist if users could fix the product themselves with little costs in money or time. Some products include a diagnostic feature that allows service people to correct a problem over the telephone or advise the user how to correct it. Many computer hardware and software companies offer technical support over the phone, or by fax or e-mail.

Design – The integrating force – As competition intensifies, design offers a potent way to differentiate and position a company's products and services. **(Philip Kotler, "Design: A powerful but Neglected strategic Tool," Journal of Business strategy (Fall 1984): 16-21. Also see Christopher Lorenz, "The Design Dimension" (New York: Basic Blackwell, 1986).** In increasingly fast – paced markets, price and technology are not enough. Design is the factor that will often give a company its competitive edge. Design is the totality of features that affect how a product looks and functions in terms of customer requirements.

Design is particularly important in making and marketing retail services, apparel, packaged goods, and durable equipment. All the qualities we have discussed are design parameters. The designer has to figure out how much to invest in form, feature, development, performance, conformance, durability, reliability, reparability and style. To the company, a well-designed product is one that is pleasant to look at and easy to open, install, use, repair and dispose of. The designer has to take all these factors into account.

Certain countries are winning on design: Italian design in apparel and furniture; Scandinavian design for functionality, aesthetics, and environmental consciousness. Braun, a German division of Gillette, has elevated design to a high art in its electric shavers, coffeemakers, hairdryers, and food processors. The company's design department enjoys equal status with engineering and manufacturing. The Danish firm Bang and Olufsen has received many kudos for the design of its stereos, TV equipment, and Telephones.

2.3.07   Service Differentiation

When the physical product cannot easily be differentiated, the key to competitive success may lie in adding services and improving their quality. The main service differentiators are ordering ease, delivery, installation, customer training, customer consulting, and maintenance and repair.

Ordering Ease – This refers to how easy it is for the customer to place an order with the company. Baxter Healthcare has eased the ordering process by supplying hospitals with computer terminals through which they send orders directly to Baxter. Many banks now provide home banking (services) software to help customers get information and do transactions more efficiently. Consumers are now even able to order and receive groceries without going to the Supermarket.

Delivery – this refers to how well the product or service is delivered to the consumer. It includes speed, accuracy, and care attending the delivery process. Today's consumers have grown to expect delivery speed: Pizza delivered in half an hour, film

developed in one hour, eyeglasses made in one hour, cars lubricated in 15 minutes. A company such as Deluxe check printers, Inc, has built an impressive reputation for shipping out its checks one day after receiving an order – without being late once in 18 years. Levi Strauss, Benetton, and limited have adopted computerized quick response systems (QRS) that link information systems of their suppliers, manufacturing plants, distribution centres, and refilling outlets. Buyers will often choose a supplier with a better reputation for speedy or on-line delivery. (Further reading, George Stalk Jr. and Thomas U. Hout, "Competing Against Time" (New York: The Free Press, 1990); Joseph D. Blackbum, Time-Based Competition (Homewood, IL: Irwin, 1991); Christopher Mayer, Fast Cycle Time (New York: The Free Press, 1993); "The Computer Liked Us." U.S. News & World Report, August14, 1995, PP. 71-72)

Installation – refers to the work done to make a product operational in its planned location. Buyers of heavy equipment expect good installation service. Differentiating at this point in the consumption chain is particularly important for companies with

complex products. Ease of installation becomes a time selling point, especially when the target market is technology novices who are notoriously intolerant of onscreen messages such as "Disk Error 23."

Customer Training – refers to training the customer's employee to use the vendor's equipment properly and efficiently. General Electric not only sells and installs expensive X-ray equipment in hospitals; it also gives extensive training to users of this equipment. McDonald's requires its new franchisees to attend Hamburger University in Oakbrook, Illinois, for two weeks, to learn how to manage their franchise properly.

Customer Consulting – refers to data, information systems, and advice services that the seller offers to buyers. One of the best producers of values adding consulting service is Milliken and Company.

Maintenance and Repairs – describes the service programne for helping customers keep purchased products in good working order.

Miscellaneous Services – Companies can find other ways to differentiate consumer services. They can offer an improved product warranty or maintenance contract. They can offer rewards.

2.3.08   <u>Personnel Differentiation</u>

Companies can gain a strong competitive advantage through having better-trained people. Singapore Airlines enjoys an excellent reputation in large part because of its flight attendants. The McDonald's people are courteous, the IBM people are professional, and the Disney people are upbeat. The sales forces of such companies as General Electric, Cisco, Frito-Lay, Northwestern Mutual Life, and Pfizer enjoy an excellent reputation. <u>("The 25 Best Sales Forces", Sales & Marketing Management (July 1998): 32 – 50).</u> Better-trained personnel exhibit six characteristics: Competence: They possess the required skill and knowledge; courtesy; they are friendly, respectful, and considerate; Credibility: They are trustworthy: Reliability: They perform the service consistently and accurately:

Responsiveness: They respond quickly to customers' requests and problems: and communication: They make an effort to understand the customer and communicate clearly. (For a similar list, See Leonard T. Berry and A. Parasuraman, Marketing Services: "Competing Through Quality" (New York: The Free Press, 1991), P. 16).

In an age when competitors can knock off products or services in an instant, some savvy companies are marketing their employees' unique know-how.

2.3.09   Channel Differentiation

Companies can achieve competitive advantage through the way they design their distribution channels' coverage, expertise, and performance. Caterpillar's success in the construction – equipment industry is based partly on superior channel development. Its dealers are found in more locations than competitors' dealers, and they are typically better trained and perform more reliably. Dell in computers and Avon in cosmetics distinguish themselves by developing and managing high quality

direct marketing channels. Iams Pet Food provides an instructive case on how developing a different channel can pay off.

2.3.10   Image Differentiation

Buyers respond differently to company and brand images. The primary way to account for Marlboro's extraordinary world-wide market share (around 30 percent) is that, Marlboro's "Macho Cowboy" image has struck a responsive chord with much of the cigarette-smoking public. Wine and Liquor companies also had to develop distinctive images for their brands.

Identity and image need to be distinguished. Identity comprises the ways that a company aims to identify or position itself or its product. Image is the way the public perceives the company or its products. Image is affected by many factors beyond the company's control, as the case of Vans' counterculture marketing versus Nike, Reebok, and Adidas shows.

An effective identity does three things. First, it establishes the product's character and value proposition. Second, it conveys this character in a distinctive way. Third, it delivers emotional power beyond a mental image. For the identity to work, it must be conveyed through every available communication vehicle and brand contact. It must be worked into ads and media that convey a story, a mood, a claim something distinctive. It should be diffused in annual reports, brochures, catalogues, packaging, company stationery, and business cards. "If IBM means service," this message must be expressed in symbols, colour, and slogans, atmosphere, events, and employee behaviour.

Symbols, Colours, Slogans, Special Attributes:-Identity can be built by strong symbols. The company can choose a symbol such as lion (Harris Bank), apple (Apple Computers), or doughboy (Pillsbury). A brand can be built around a famous person, as with Elizabeth Taylor Perfumes. Companies may choose a colour identified such as blue (IBM),

yellow (Kodak), or red (Campbell Soup), or a specific piece of sound or music.

Every company would benefit by adopting and repeating a short slogan or "tag line" after every mention of its name. AT & T called itself "The right choice," Ford said "Quality is Our Number One Job", and Dupont described its output as "Better Living Through Chemistry". The slogan must be chosen carefully, however. Holiday Inns once described itself as the "No Surprise" hotel. After several embarrassments, it quickly withdrew this slogan. Philips, the large Dutch electronics firm, used the slogan "From Sand to Chips" in an effort to convey that it made light bulbs and silicon chips, all from sand. People not only did not understand this, but the slogan was about the company, not the consumer.

A company can further differentiate its image using its special attributes, such as the company's heritage, its being the first to enter the field, its being the largest or oldest company in its industry, or its being the most preferred according to opinion

polls. <u>(Jack Trout and Steve Rivkin, "Differentiate or die" (New York: Wiley, 2000).</u>

Events and Sponsorships – A company can build its brand image through creating or sponsoring various events. Event Marketers have favoured Sports events and are now using other avenues such as art museums, zoos, or ice shows to entertain clients and employees. AT & T and IBM sponsor symphony performances and art exhibits; Visa is an active sponsor of the Olympics; Harley Davidson sponsors annual motorcycle rallies; and Perrier sponsors Sports events. Companies are searching for better ways to quantify the benefits of sponsorships and they are demanding greater accountability from event owners and organizers.

Companies can also create events designed to surprise the public and create a buzz. Many amount to "guerrilla marketing tactics". Examples of some of them are:

- Driver 2, a new car-chase video game, arranged for a convoy of 20 cars wrecks with smoke pouring from

their engines to crawl through Manhattan and Los Angeles to attract attention to the new game.

- Ask Jeeves, the internet search engine, sent 35 actors in British butler's outfits to guide visitors to their seats and answer tennis trivia questions at the U.S. Open tennis tournament.

- Kibu.Com pays hundreds of school girls to do "Peer Marketing" by hanging around with their peers, handing out free lip gloss, and talking up kibu's cosmetic site. ("Guerrillas in our midst", The economist, October 14, 2000, pp. 80 – 81).

The increased use of attention – getting events is a response to the fragmentation of media: Consumers can turn to hundreds of cable channels, thousands of magazine titles, and millions of internet pages. Events can create attention, although whether they have a lasting effect on brand awareness, knowledge, or preference will vary considerably, depending on

the quality of the product, the product, the event itself, and its executive.

2.4.0 MARKET SEGMENTS AND SELECTING TARGET MARKETS.

A Company cannot serve all customers in a broad market such as computers or soft drinks. The customers are too numerous and diverse in their buying requirements. A company needs to identify the market segments it can serve effectively. In this parlance, we shall examine levels of segmentation, patterns of segmentation, Market Segmentation procedures, bases for segmenting consumers and business markets, and requirements for effective segmentation.

Many companies are embracing target marketing. Here sellers distinguish the major market segments, target one or more of these segments, and develop products and marketing programs tailored to each. Instead of scattering their market efforts (a 'short-gun' approach), they focus on the buyers they have the greatest choice of satisfying (a "rifle" approach).

Target marketing requires marketers to take three major steps:

i)   Identify and profile distinct groups of buyers who differ in their needs and preferences (Market Segmentation).

ii) Select one or more market segments to enter (market targeting).

iii) For each target, establish and communicate the key distinctive benefit (s) of the company market offering (market positioning).

2.4.01   **Levels of Market Segmentation**

It is said that the starting point of discussing segmentation for proper understanding, is with Mass Marketing. In Mass Marketing, the seller engages in the mass production, mass distribution, and mass promotion of one product for all buyers. Henry Ford epitomized this marketing strategy when he offered the Model-T Ford "in any colour, as long as it is black".

Coca-Cola also practiced mass marketing when it sold one kind of Coke in a 6.5 ounce bottle.

The argument is that it creates the largest potential market, which leads to the lowest costs, which in turn can lead to lower prices or higher margins. However, many critics point to the increasing splintering of the market, which makes mass marketing more difficult. According to Regis McKenna, [Consumers] have more ways to shop: at giant malls, Specialty shops, and Superstores; through mail order catalogues, home shopping networks, and virtual stores on the internet. And they are bombarded with messages pitched through a growing number of channels: broadcast and narrow cast television, radio, on-line computer networks, the internet, telephone services such as fax and telemarketing, and niche magazines and other print media. (Regis McKenna, "Real-Time Marketing", Harvard Business Review (July – August 1995): 87).

The proliferation of advertising media and distribution channels is making it difficult and increasingly expensive to reach a mass audience. Some claim that mass marketing is

dying. Not surprisingly, many companies are turning to <u>Micromarketing</u> at one of four levels: Segments, Niche, Local areas and individuals.

2.4.01a   <u>**Segment Marketing**</u>

A Market Segment consists of a group of customers who share a similar set of wants. Thus, we would distinguish between car buyers who are primarily seeking low-cost basic transportation and those seeking a luxurious driving experience. We must be careful not to confuse a segment and a sector. A car company might say it will target young, middle-income car buyers. The problem is that, young, middle-income car buyers will differ about what they want in a car. Some will want a low-cost car and others will want an expensive car. Young, middle-income car buyers is a sector, not a segment.

The marketer does not create the segments; the marketer's task is to identify the segments and decide which one(s) to target. Segment marketing offers several benefits over mass marketing. The company can create a more fine-tuned

product or service offering and price it appropriately for the target segment. The company can more easily select the best distribution and communications channels, and it will also have a clearer picture of its competitors, which are competing with the companies going after the same segment.

However, even a segment is partly a fiction, in that, not everyone wants exactly the same thing. Anderson and Nams have urged marketers to present flexible market offerings instead of a standard offering to all members of a segment. (James C. Anderson and James A. Nams, "Capturing the Value of Supplementary Services", Haevad Business Review (January – February 1995): 75 – 83). A flexible market offering consists of two parts: a naked solution containing the product and service elements that all segment members' value, and discretionary options that some segment members value. Each option might carry additional charge. For example, Delta Airlines offers all economy passengers extra for alcoholic beverages and earphones. Seimens sells metal-clad boxes whose price

includes free delivery and a warranty, but also offers installation, tests, and communication peripherals as extra-cost options.

2.4.01b __Niche Marketing__

A Niche marketing is a more narrowly named or defined group seeking a distinctive mix of benefits. Marketers usually identify niche by dividing a segment into subsegments. For example, the segment of heavy smokers includes two niches: Those who are trying to stop smoking and those who do not care.

An attractive niche is characterized as follows: the Customers in the niche have a distinct set of needs; they will pay a premium to the firm that best satisfies their needs; the niche is not likely to attract other competitors; the nicher gains certain economies through specialization; and the niche has size, profit, and growth potential.

Whereas segments are fairly large and normally attract several competitors, niches are fairly small and normally attracts only one or two. Larger companies, such as IBM, lose

pieces of their markets to niches: Dalgic and Leeun labeled this confrontation, "guerrillas against guerrillas." <u>(Terfik Dalgic and Maarten Leeun, "Niche Marketing Revisited: Concept, Applications and Some European Cases", European Journal of Marketing 28, No 4 (1994): 39 – 55.)</u>. Even some large companies have turned to niche marketing. Johnson and Johnson, for example, consists of 170 affiliates (business units). Many of which dominate niche markets.

2.4.01c **Local Marketing**

Target Marketing is leading to marketing programs tailored to the needs and wants of local customer groups (trading areas, neighbourhoods, even individual stores). Citibank provides different mixes of banking services in its branches, depending on neighbourhood demographics. Kraft helps supermarket chains identify the cheese assortment and shelf positioning that will optimize cheese sales in low-, middle-, and high-income stores, and in different ethnic neighbourhoods.

Those favouring localizing a company's marketing, see national advertising as wasteful because it fails to address

local needs. Those against local marketing argue that it drives up manufacturing and marketing costs by reducing economies of scale. Logistical problems become magnified when companies try to meet local requirements. A brand's overall image be diluted if the product and message differ in different localities.

2.4.01d   **Individual Customer Marketing**

The ultimate level of segmentation leads to "Segments of one," "customized marketing," or "One-to-one marketing." <u>(Don peppers and Martha Rogers, The One - To – One Future: Building Relationships One Customer at a Time (New York: Currency/ Doubleday, 1993</u>). Ultimately, every individual has a unique set of wants and preference. In past centuries, producers customized their offerings to each customer: The tailor fitted a suit and a cobbler made shoes for each individual. The Industrial Revolution ushered in an era of mass production: Now companies made standard goods in advance of order and left it to individual to fit into whatever was available. Producers moved from built – to - order marketing to build – to – stock marketing. Today the Information Revolution is enabling a growing of number

of companies to mass customise their offerings. Mass – customization is the ability of a company to prepare on a mass basis individually designed products, services, programs, and communications, to meet each customers requirements, (B. Joseph Pine II, "Mass Customization" (Boston: Harvad Business school Press, 1993); B. Joseph Pine II, Don Peppers, and Martha Rogers, "Do you want to keep your customers forever?" Harvard Business Review (March – April 1995) 103 – 14) For examples of Mass – customized goods, see "Marketing for the New economy: Segments of one: Mass – customization comes of Age".

Today customers are taking more individual initiative in determining what and how to buy. They log onto the internet; look up information and evaluations of product or service offering; dialogue with suppliers, users, and product critics, and in many cases, design the product they want. Slywotsky and Morrison noted that more online companies today are offering customers a choice board which is an interactive online system that allows individual customers to design their own products and services by choosing from a menu of attributes, components,

price and delivery options. The customers selections send signals to the suppliers manufacturing system that set in motion the wheels of procurement, assembly, and delivery, (Adrian J. Slywotsky and David J Morrison, "How Digital is your business?" (New York: Crown Business, 2000), P. 39).

Although not every company can use this approach some companies can achieve an early competitive advantage with it, Here are some of the advantages: -

a) The choice board facilitates upselling, and repeat business by opening customers eyes to further possibilities and by satisfying their preferences.

b) The choice board provides real – time market research and insight into customers' current preferences.

c) The choice board reduces cost for manufacturers and suppliers by avoiding the production of unwanted goods and discounting to get rid of them. Wind and Rangaswany see the choice board as a movement toward "customerising" the firm. (Jerry Wind and A.

Rangaswany, "customeisation: The Second Revolution in Mass Customization", Wharton School Working Paper, June 1999). Customerisation combines operationally driven mass customization with customized marketing in a way that empowers consumers to design the product and service offering of their choice – the firm no longer requires prior information about the customer, no does the firm need to own tools and "rents" out to customers the means to design their own products. Each business unit will have to decide whether it would gain more by designing its business system to create offering for segments or for individuals. Companies that favour segmentation see it as more efficient, requiring less customer information, and permitting more standardization of market offerings. Those who favour individual marketing claim that segments are a fiction, that individuals within so-called segment differ greatly,

and that marketers can achieve much more precision and effectiveness by addressing individual needs.

2.4.02   Patterns of market segmentation.

Hereunder, segment centered – marketing will be considered. That is to say that, market segments can be build up in many ways. One way is to identify <u>preference segments.</u> Suppose ice cream buyers are asked how much they value sweetness and creaminess as two product attributes. Three different patterns can emerge.

i) **Homogeneous preferences:** A market where all the customers have roughly the same preferences, the market shows no natural segments. We would predict that existing brands would be similar and cluster around the middle of the scale in both sweetness and creaminess.

ii) **Diffused Preferences:** At the other extreme, consumer preferences may be scattered throughout the space, indicating that consumers vary greatly in their preferences. The first brand to enter the market is likely to position in the centre to appeal to the most people. A second competitor could locate next to the first brand and fight for

market share, or it could locate in a corner to attract a customer group that was not satisfied with the center brand. If several brands are in the market, they are likely to position throughout the space and show real differences to match consumer – preference differences.

iii) **Clustered Preferences:** The market might reveal distinct preference clusters, called <u>natural market segments.</u> The first firm in this market has three options. It might position in the center, hoping to appeal to all groups. It might position in the largest market segment (<u>concentrated Marketing</u>). It might developed several brands, each positioned in a different segment. If the first firm developed only one brand, competitors would enter and introduce brands in the other segments.

2.4.03 <u>Market Segmentation Procedures.</u>

How can we identify market segment? One approach would be to classify consumers demographically. A bank, for example, may decide to group its customers by wealth annual income and age. Suppose it

distinguishes five wealth classes, seven income classes, and six age classes. This alone would create 210 market segments, (5x7x6). The real question, however, is whether the customers in any one segment really have the same needs, attitudes and preferences. Probably not!!! This has led market researcher to advocate <u>a needs – based market segmentation approach.</u> Market segmentation must be done periodically because segments change. At one time the personal computer industry segmented its products purely on speed and power. Later, PC Marketers recognized an emerging "Sotto" market, named for, "Small office and Home office." Mail – order companies such as Dell and Gateway appealed to this market's requirements for high performance coupled with low price and user – friendliness. Shortly there after, PC makers began to see Soho as comprised of smaller segments. "Small office needs might be very different from house office needs, "says one Dell executive. (<u>Cathrine Arms</u>, "<u>PC makers Head for "Soho", Business Week, September 28,1992, PP.125-26; Gerry Khermouch, "The marketers Take over", Brandweek, September 27,1993, PP. 29-35</u>).

One way to discover new segment is to investigate the hierarchy of attributes consumers examine in choosing a brand. This process is called <u>Market Partitioning.</u> Years ago, most car buyers first decide on the manufacturer and then on one of its car divisions (brand-dominant hierarchy). A buyer might favor General Motors cars and, within this set, Pontiac. Today, many buyers decide first on the nation from which they want to buy a car (nation – dominant hierarchy). Buyers may first decide they want to buy a Japanese car, then Toyota, and then the Corolla model of Toyota. Companies must monitor Potential shifts in the consumers' hierarchy of attributes and adjust to changing priorities.

The hierarchy of attributes can reveal customer segments. Buyers who first decide on price are price dominant; those who first decide on the type of car (eg. Sports, Passenger, station Wagon) are type dominant; those who first decide on the car brand are brand dominant. One can identify those who are type/Price/brand dominant as making up a segment; those who are quality/service/type dominant as making up another segment. Each segment may have distinct demographics, Psychographics, and Media graphics.

2.5.0. <u>**THE PRICING CONCEPT**</u>

Meaning and Role of Pricing- Price be defined as the value of Product attributes expressed in monetary terms which a consumer pays or is expected to pay in exchange and anticipation of the expected or offered utility. Price is, therefore, a link that binds. Consumers and the company. It helps to establish a mutually advantageous economic relationship and facilitates the transfer of ownership of goods and services from the company to buyers. However, price is not synonymous with value and utility. It differs from both. Value is a quantitative measure of the exchange power of a product relative to other product(s), for example, two soap cakes are equal to one tube of toothpaste. Utility, on the other hand refers to the consumer need-satisfying attribute of a product usually expressed in qualitative terms: it is also referred to as the consumer desiredness of a product. Both value and utility concepts are essential to the determination of price.

While price is the value of product attributes expressed in monetary terms, say, for instance Naira for a tube of toothpaste or two cakes of toilet soap, pricing is a function of determine product value in

monetary terms by the marketing management of a company before it is offered to the target consumers for sale. The managerial skills tasks involved in product pricing include establishing the pricing objectives, identifying the price governing factors, ascertaining their relevance and relative importance, determine product value in monetary terms and formulation of price policies and strategies so as to effectively employ price as a strategic instrument in marketing a company's product(s).

This dissertation, will attempt to look into some of these tasks. However, before we proceed, it will be very important to understand the role of pricing and the economist's perspective of it. This would help us in developing the appropriate backdrop for further analyses of pricing, whether or not it might have an impact on the banking product "Saving Deposit".

The Role – Pricing as a marketing function has an important role to play both at the macro-and micro levels. In the economic development of a nation, the major contribution of pricing may be discemed in the allocation and reallocation of scare resources in ventures which are profitable or commanding. According to Khera, "Pricing policy no doubt it a potential weapon especially in a planned

economy like ours where it can be used in such a way as to bring about a proper allocation of resources according to the planned priorities." (Khera, S.S. Government in Business, New Dhha: National Publishing House, 1977, P.330). In an economy, resources may be allocated and reallocated by a process of price reduction and increase. For instance, when supply of goods exceeds demand, a reduction in price encourages consumption and discourage production leading to transfer of resources to other profitable ventures. This transfer process is facilitated by flexibility of prices. Such a "Competitive system characterized by flexible price leads, in principles, to maximum economic efficiency", (Henderson, J. N. and R. E. Quandt, Microeconomic theory, New York: MC Graw-Hill, 1958, P. 202).

However, the contribution of pricing at the level of a firm, with which we shall largely be concerned in this dissertation, is more relavant and tangible. It plays a far greater role in the marketing – mix of a company i.e. bank and significantly contributes to the effectiveness and success of the marketing strategy. A recent research study revealed that, a very large number of companies i.e. bank (83 Percent) ranked

pricing as the most important variable, next only to product, which affected the success of failure of the enterprises <u>(Kapoor, M.C and S. Kumar, Pricing Management in Indian Companies: Oct. 1978, P.12).</u> Its contributions may be fact in various ways including:-

(i) Demand Regulator- Marketing Management may regulate demand for its product(s) by employing price as an instrument. For instance, when there is need for promoting demand, say, an account of surplus production capacity, product price may be reduced. Or when there is need for discouraging demand, say, on account of hampered input availability, product price may be increased. In a developing country such as Nigeria, where marginal value of money is relatively more than developed countries, price is a more potent instrument of regulating demand. It is also more relevant in implementing the de-marketing strategy to cope with the rising demand for products.

(ii) Competitive Weapon – Price happens to be an important competitive weapon in the marketing among of an organization. Whenever a competitor launches or reduces its prices to enlarge its market share, it is not unusual to find the organization been

placed in a disadvantageous position. The organization often looses its markets to competitors. In such a situation a reduction in price or suitable change in the price structure coupled with other strategic moves, considerably helps the organization in successfully meeting competitive manoeuvres.

(iii) Profitability Determinant – Price determines the profitability of an organization by shaping the level of its sales revenues. Other kings being constant, a rise or fall in the price of product(s) brings about a rise or fall in the profitability by increasing or decreasing sales revenue. It is difficult to imagine a firm whose profitability is unaffected by the prices it charges, when there are rivals, small changes in price could often result in major charges in profitability Oxenfellt, A. R., Pricing Strategy, New York: Amacom. 1975, P17).

(iv) Important Decision Input – Price serves as an important decision input in a variety of management. An examples, when product planning or modification programmes are undertaken, the price that the product would fetch relative to the cost provides an important decision base to approve or discard a product idea.

"Price should be seen as a design variable in planning the product, as one of several critical performance attributes." (Shapiro, B.P and B.B. Jackson, "Industrial Pricing to Meet Customer Needs", Harvard Business Review, Nov – Dec, 1978. P.124). Relative to developed countries, organizations of developing countries. On account of the higher marginal value of money, consumer response to price changes is more tangible and faster. Non price differentiation in terms of branding and promotion is less pronounced and effective than price differentiation. The major issues in consumerlism centre around price levels incompatible with product attributes and rise in prices (Ghandi, J. C. Consumerism in India: Need for Corporate Action Programme, Indian Management, Jan. 1977) All the above, make pricing an important managerial function of marketing a product.

2.5.1. PRICING IN THEORY AND PRACTICE

Pricing in Theory – Price as an economic factor and pricing as an economic mechanism have received considerable attention at the hands of economists. Prominent among those who have attended to

pricing problems at the marco-level include; Marshal, . Principles of Economics.

- Robinson J. Economics of imperfect competition New York: Macmillan 1993.

- Chamberlin, E. H. Theory of Monopolistic Competition Cambridge: Harvard University Press, 1938.

- Robinson, E. A. G., Monopoly, Loudon: James Nisbet & Co. 1941

- Stigler, George J., The Theory of Price, New York Macmillan, 1952.

- Leftwitch, R. H., The Price System and Resources Allocation, New York: Holt, Rinechart and Winston, 1963,

Infact, their thinking provide us an insight into the price determination in ffiderent competitive situations in which an organization may possibly operate, as can also be seen in the competitive situation in the banking industry. This thinking is enshrimed in pricing theories propounded by them which the researcher intends to describe hereunder briefly:-

As Basic Concepts – According to these theories, price is a conceptually determined in all competitive situations by two sets of forces, namely, cost and demand. Cost is internal to the organization and largely controllable where as demand is external to the organization and, although not controllable, is subject to the influence of various, some of the cost and demand concepts relevant to price determination include the followings:-

a)   Average Total Cost (ATC), It represents total cost per unit. It is amived al by dividing total cost by the number of units sold.

b)   Marginal Cost (MC).   It indicates the change in total cost resulting from producing an additional unit.

c)   Average Revenue (AR).   It represents average revenue per unit sold. It is amired at by dividing total revenue by the number of units sold.

d)   Marginal Revenue .(MR)   It indicates the change in total revenue resulting from the sale of an additional unit.

e)   Price Elasticity of Demand. It is a measure of the responsiveness of the quantity sold to price charges. Demand is elastic when total

revenue increases in response to price reduction demand is inelastic when total revenue decreases in response to price reduction

_ Price Determination under Different Competitive Situation.

Using these concepts, Price may be determined under different competitive situations as follows:-

- Pricing under pure Competition – Pure competition is a competitive market situation which is characterized by the followings:

- There are a large number of buyer and sellers and none of them is big enough to significantly influence them supply of goods and price.

- The products sold are homogenous or identical

- There is complete freedom for firms to enter and leave the industry.

Pricing Under Pure Competition
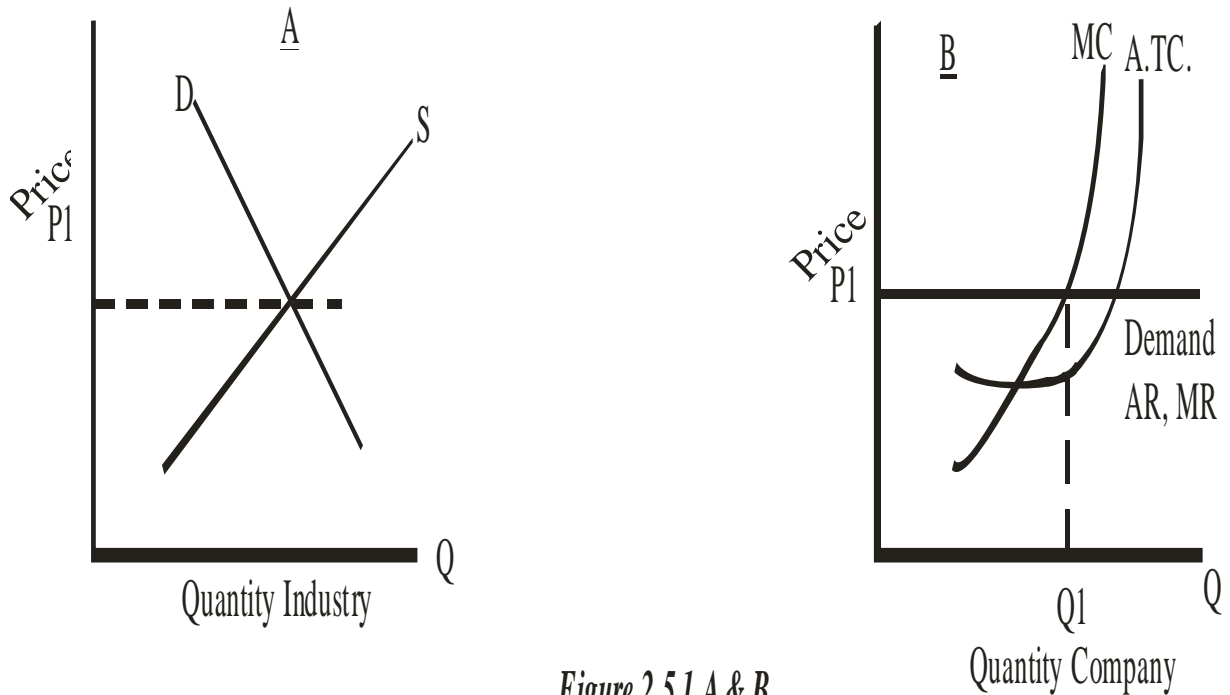
Figure 2.5.1 A & B

In such a competitive market situation, demand is perfectly elastic and price is determined at the point where demand equates supply (Fig. 2.5.1 A). The individual company must sell products at this price over which it has no control. The only choice is to sell, then hour much to sell. In Fig. 2.5.1B, this illustrates price determination under a pure competition.

The price is determined at P1 where industry demand and supply equates. This is given price and is the highest price at which a company can sell its products. Assuming that, a company wishes to maximize profits in the short-run, it may offer to sell quantity Q1 at the ,market price of P1, the point at which the company's MR equals MC, UP to this point an increase in the quantity sold adds to the company's total revenue than to the total cost; beyond it, however additional sales would add more to the total cost than to the total revenue. In such a situation a company has no pricing problem. As the price is always given, it simply has to make quantity adjustment to the market price that maximizes profits. However, occurrence of such competitive situation is rare in real life.

Pricing Under Monopoly
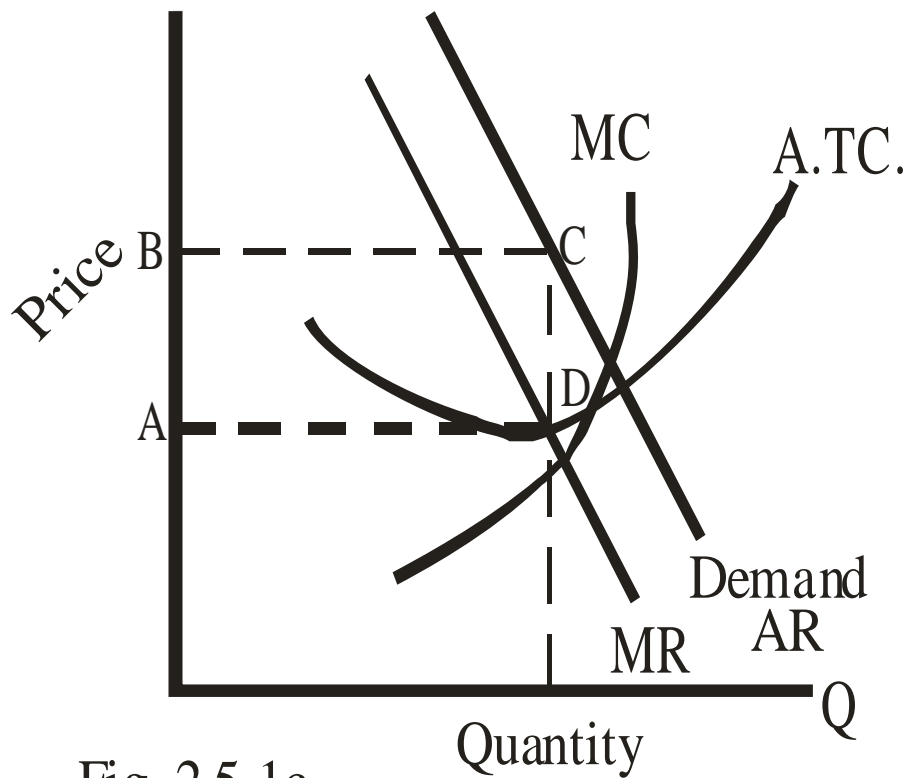
Fig. 2.5.1c

Pricing under monopoly-   The reverse of purely competitive market situation is monopoly. It is characterized by the followings:-

a)   A company has complete control over the entire supply of a unique product; there are a large number of buyers but only one seller.

b)   Product is unique with no close substitute.

c)   There is no freedom for competitors to enter the industry.

In such a market situation, monopolist is like and industry whose demand curve slopes to the right; when demand curve is vertical, monopoly exists in its pure form. In the monopoly situation, a company would seek to establish the combination of price total profit. Figure 2.5.1c above, illustrates the application of the profit maximizing principle of offering that quantity for sales which equates MR and MC.

Accordingly, a company would offer quantity E for sale at a price of B. Thus, the pricing problem in monopoly is to determine the best combination of price and quantity to achieve the company objectives. But like pure competition, the monopoly situation is also rare in real like, because a company must still compete for a share of disposable income of consumers notwithstanding absolute control over supply of a product.

Pricing under Monopolistic Competition- It is an imperfect version of both monopoly and pure competition and is also referred to as imperfect competition. It is characterized by the followings:-

a)   There are a large number of buyers and sellers

b)	Each seller produces a product which is unique and differentiable from that of its competitor; each seller is in a way a small monopolist.

c)	There is freedom for competitors to enter the industry.

The monopolist competition is monopolistic to the extent where substitution takes place and competitive beyond that point. It, therefore, resembles both up to a point. In such a market situation, the demand curve for each company slopes to the right but is not nearly as steep as in the case of pure monopoly. In this situation also, a company would seek to establish the combination of price and output that provinces it with the maximum total profits. It will sell that quantity at which MC equals MR and set the price at the AR for that quantity. To offer less than this quantity would be foregoing the opportunity to reap additional profits on additional units sold. To offer a greater quantity would mean loss on each unit sold beyond the point at which MC equals MR. A graphic presentation of pricing under monopolistic competition very closely resembles figure 2.5.1c, except that the demand curve would reflect the position of a company rather than the entire industry. The pricing under monopolistic competition, however, closely parallels the real life situation under which managerial decisions are taken. It

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recognizes that a company's demand curve may be moved upwards and to the right leading to increased profits by improved marketing effort or downward and to the left by more effective marketing effort by competitors.

Pricing Under Oligopoly-   Oligopoly is a competitive market situation characterized by the presence of a few larger sellers who compete amongst themselves for the larger share of market. In this kind of market situation differences in prices are tied to the product differences; in the absence of product differences, price has the tendency to be uniform. The demand curve is usually kinked, and the price is given OB. Any change in price shall be a joint decision because, for example, an increase in (OE) by a company would invite competitors to follow suit and as a result all might end up sharing the same market at lower total revenue. On the other hand, a decrease (OC) by an individual company would make company lose its share of market if others refuse to follow suit. As such price changes only over a time and that, too, as a result of collective decision.

Pricing Under Oligapoly
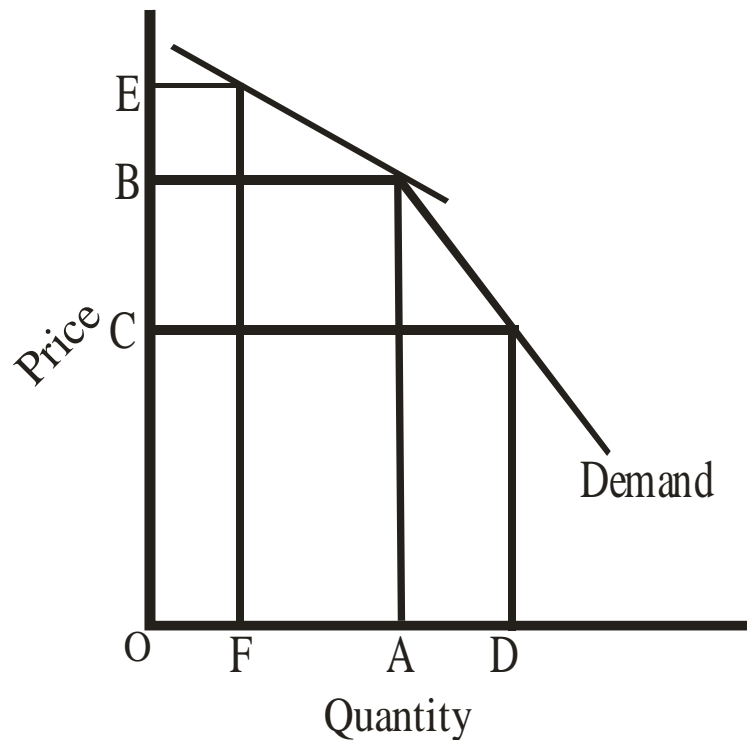
Fig. 2.5.1d

The price theories described above provide conceptional strength to the managerial thinking. the most tangible contribution is to show the manner in which the interrelationships between different price determiners such as demand, cost, and competitors' reactions influence the price of a product. They make businessmen help to understand that a profitable price is determined not by demand or cost alone, but by a combination of both.

Notwithstanding considerable conceptual strengths, these theories are, nevertheless, difficult to apply in the real life situations on the account of a number of reasons. For example, these theories highlight only price tendencies; they are not optimizing, perspectives tools for management decision making (Harper, D.V., Price Policy Procedure; New York: Harcourt Brace Jovanovich, 1966, P.11). It is difficult to gather relevant and precise information at a company level about costs, demand and competitors for price determination sellers have beauty knowledge of the demand schedule for their products than is assumed by theory. Likewise, information as to their average and marginal cost schedules is incomplete and subject to substantial errors to estimation. They present problem of measuring elasticity of demand for company's products. Besides, the complexity of modem economy makes it impossible for an individual buyer to be thoroughly knowledgeable about products and their prices as to make rational purchase decisions as is assumed by these theories. Therefore, "many price setters who looked for help in a study of price theory and the literature on pricing have not found the effort too rewarding. "(Oxenfeldt, A.R., Pricing Strategies, New York: Amacom, 1975, P10.)

Pricing in Practice:

i)   Administered Price -   In real life business situations, therefore, product price is not determined as envisaged in the price theory, but it administered or administrative price is set by a company official in contrast to the competitive market prices described "Supra" in theory. Administered Price may, therefore, be defined as the price resulting from managerial decisions and maintained as the posted price at which a company sells the products and buyers decide to buyer or not to buy. From this, the following characteristics of the administered price emerge:

a)   Price determination is a conscious and a deliberate administrative action rather than as a result of the demand and supply interaction.

b)   Administered price is fixed for a period of time or for a series of sale transactions; it does not frequently change.

c)   This price is usually not subject to negotiation; price structure incorporating different variations may, however, be developed to meet specific customer needs.

The administrative price is set by management after considering all relevant factors impinging on it, namely, cost, demand and competitors' reactions. Since all companies set administrative prices on move or less identical considerations, the prices in respect of similar products available in the market tend to be uniform. The competitions, therefore, is based on non-price differentiation through branding, packaging, and advertising, etc. It is with this administrative natural corollary; the researcher's concern may also lunge on the administrative price.

ii) Regulated Price - The concept of administrative price may possibly impart a notion that a company is free to fix whatever price it deems fit and buyers have but one choice – either to buy or not to buy. But in real life situation, it is not like this. For fear of damage to consumer and national interests, administrative prices are subject to state regulation. Therefore, whenever the administered price is set and managed within the state regulation, it is termed as regulated price. This may assume two dimensions. First, the price may be set by some state agency, say the Bureau of Industrial cost and prices or the Tariff commission and the company just accepts it an given. Second, the price

may be set by a company within the framework or on the basis of a formula given by the state. In India, companies, for example the fertilizer, aluminum and steel industries sell their products at prices fixed by the Government, while companies, for example, in cotton textile industry sell products at the price fixed on the basis of a given formula.

2.5.2   **PRICING OBJECTIVES**

The first and most important managerial task in the management of the pricing function, is to set the relevant pricing objectives, pricing objectives are the bench marks against which management attempts to fix prices and formulate policies and strategies. These objective help the company in integrating price with other marketing inputs so as to develop a synergic effect in the marketing and corporate strategies of the company. It is for this purpose also that pricing objectives are set within the frame work of markets and corporate objectives. These objectives also serve as standards against which managerial performance in this crucial and sensitive are may be measured. Table

2.5.2a gives a list of potential pricing objectives. However, some of the common pricing objectives may be briefly discussed hereunder.

Potential Pricing Objectives

1. Maximum long-run profits

2. Maximum short-run profits

3. Growth

4. Stabilise Market

5. Desensitise Customers to price

6. Maintain price leadership a management

7. Discourage entrants

8. Speed exit of marginal firms

9. Avoid government investigation and control

10. Maintain loyalty of middlemen and get their sales support.

11. Avoid demands for 'more' from supplier – labour in particular

12. Enhance image of firm and its offerings

13. be regarded as fair by customers (Ultimate)

14. Create interest and excitement about the item

15. Be considered trustworthy and reliable by rivals

16.   Help in the sale of weak items in the line.

17.   Discourage others from cutting prices

18.   Make product 'Visible'

19.   "Spoil market" to bottom high price for sale of business

20.   Build traffic.

Profit maximization- is the most common pricing objective in companies. It means in a given set of market conditions, management attempts to maximize profits through the instrument of price. While setting these objectives, management usually have a long-range perspective. It is also set in respect of the whole product-line and not for a single product. However, this objective is more of an ideal than a practically attainable goal, because, "long-run profit maximizing is elusive and perhaps immeasurable". (Lynn, R. A., Price policies and marketing management

iii.   Richard D. Irwin, 1967. P. 99).

Target Return on investment (ROI) As a practical, quantifiable and targetable, Return on investment as a pricing objective envisages expectation of a certain rate of return on the capital employed over a

period of time- usually a financial period. In working towards this objective, pricing decisions are so made that the total sales revenue (from all products) exceeds the cost by enough to provide the desired return on the total investment. This objective is particularly relevant for companies that are industry leaders because they are in a position to set industry standards. It is also relevant for companies selling in "protected" or "sellers" Markets in which currently there is no tangible competition. The fifth plan called upon all public sector enterprises to adopt "appropriate pricing policies in order to achieve a satisfactory rate of return on investment" According to a recent research study, companies ranked "Return on Investment" as the first pricing objective, followed by "Competitive parity."

Market Share- A Company may aim to secure a target market share by employing price as an input. Target market share means that share of the industry sale which a company aspires to attain. It is usually expressed as percentage. The market share as a pricing objective is particularly relevant or companies in developing countries like Nigeria, where market expansion is a phenomenon of economic

development. In a way it is better than return on investment because in an expanding market, ROl may look quite satisfactory, but may, infant, too small in the context of market potential. It is also an important objective when a company chooses to reduce its market share in order not to become a 'dominant undertaking under the monopolies and Restrictive Trade Practices (MRTP) Act 1969.

Meet or prevent competition- This pricing objective may be to meet or prevent competition. The objective to meet competition is relevant when a company is not a price leader and does not want to initiate price changes. In such a situation it only aims to neutralize the impact of competitive maroeuvres by appropriate pricing moves. The objective to prevent competition is, however, relevant when a company is a price leader and wishes to initiate price changes in such a way so as to discourage competitors from entering into the industry. Since prevention of competition is restrictive of Trade, it usually attracts the provisions of the MRTP Act. As such companies do not explicitly lay it down as pricing objectives. However, it may be discerned by a careful analysis of their pricing strategies.

Price stabilization- The objective may be to stabilise product prices. It is usually a long-range at preventing frequent and violent fluctuations in prices. It also aims to prevent price wars amongst competitors. This objective may be attained by designing prices in such a manner that during business slump, prices are not allowed to fall below a point white during boom, these are not allowed to rise beyond a point. May public sector companies aim to achieve this objective so as to impart a sort of stability to economic conditions?

Besides the pricing objectives outlines above, may companies, particularly those operating in the public sector of the Nigeria economic, may also have some of the objectives described below.

Expedite Cash Collection- The pricing objective of a company may be to expedite cash collection in respect of products sold. This may be necessary to accelerate cash in flow for development projects or for debt servicing and repayment. The price structure may be so designed as to encourage cash sales and discourage credit sales on the

one hand, and expedite realization of bills receivables. In times of credit squeeze, this pricing objective is particularly relevant.

Resource Mobilisation- As a pricing objective, envisage pricing of a company's products in such a manner that sufficient resources are made available either for its own expansion or for the development investment elsewhere in the economy.

Promotion of Developmental Activity- A company may set pricing objectives so as to promote developmental activity in those sectors/areas of the economy which are weaker. For this purpose, price may be so designed as may favour the weakest and be affordable by the weaker in such a situation, Government subsidy is usually available to prevent company losses. In Nigeria for instance, NASSIMA provides an example of a organization having adopted such an objective to assist small scale-firms and Nigeria entrepreneurs to grow by availing of its nominally priced services.

Influence prices of others- In designing its own price structure, a company may aim to exert impact on the prices charged by other companies so as to benefit the ultimate consumer. This may be achieved, for example, by forcing other companies to sell similar products at equally, low prices as charged by it, say, by augmenting market supply at low prices from its own stocks. Or when the company is a supplier of some basic input it may force buying companies to agree to sell the end product at an agreed or reasonable price to customers.

2.5.3   Pricing Procedure

Having set the pricing objectives, the subsequent managerial tasks involve determination of the basic price and formulation of price policies and strategies. The basic price is the list price which a company initially sets and quotes to its customers/consumers. It may subsequently be varied within the framework of pricing policies and strategies to meet specific market situations and consumer needs. The pricing procedure usually involves the following steps:

2.5.3i.   *Development of Information Base*

The first step in determining the basic price of a company's product(s) is to develop an adequate and up-to-date information base on which price decisions can be based. It is composed of decision-inputs such as cost of production, consumer demand, industry prices and practices, government regulations, and tying agreements impinging on the price decisions. The relevance of each one of them may be briefly described as follows:

2.5.3ia.   *Cost of Production*:

The cost of production is the first important decision input in product pricing. It indicates the expenses incurred in manufacturing the product, and often prescribes the floor level below which fixing product price would mean loss to the company. Although a brief idea of the different types of production cost could be obtained during the discussion about the price theory, a relatively more detailed treatment of it may be found in the cost-plus pricing method discussed in the following pages.

2.5.3ib *Demand*:

Demand is the quantum of products which consumers are willing to buy at a level of sacrifice. It indicates the utility perception and price expectations by target consumers in respect of product(s). in order to build this decision input management should attempt to assess and evaluate utility perceptions formed by target consumers in terms of product benefits visualized by them, and also estimate demand at different price levels. For assessing the number of benefits visualized and the price expectations, a number of research methods may be used. For example, intermediaries, jury consumer panels, or a sample of target consumers may be asked to indicate the number of benefits visualized by them and the prices at which they would be prepared to buy different quantities of products. The data generated by such research would indicate the possible demand at different price levels on the basis of which demand schedules may be built up to serve as a decision input.

2.5.3ic *Industry Prices and Practices*:

The next step may be to gather information about the pricing methods and practices followed by other members in the industry. It considerably helps in developing starting points and in sizing up the different dimensions of the task. For example, in one company manufacturing machines as an import substitute, the landed price of imported machines served as the referring point in price fixing because another unit in the industry had also adopted this practice. The collective wisdom of an industry's members may be a great asset to the company in product pricing.

2.5.3id   *Government Regulation*:

The steadily growing government interest in consumer problems necessitates collection of appropriate and up-to-date information about different government measures impinging on price decisions. These measures mostly relate to price control aimed at prescribing price ceilings. This is an important decision input in product pricing in India.

(a) **Tying Arrangements**: Certain provisions in the agreements entered into with foreign collaborators and input suppliers also serve as

important inputs in the pricing decision. The agreements with foreign collaborators, for example, sometimes provide for minimum floor prices for export sales so that collaborators are not put to price disadvantage in the international markets owing to the labour-intensive cost structure of Indian products. Likewise, agreements with production input suppliers, for example, like suppliers of scarce imported raw material such as the Mineral and Metals Trading Corporation (MMTC), provide for ceiling price for sale of end products to certain types of consumers.

2.5.3ii   *Estimating Sales and Profits*

Having developed the information base, management should develop a profile of sales and profits at different price levels in order to ascertain the level assuring maximum sales and profits in a given set of situation. When this information is matched against pricing objectives, management gets the preview of the possible range of the achievement of objectives through price component in the marketing-mix.

### 2.5.3iii.	*Anticipation of Competitive Reaction*

Pricing in the competitive environment necessitates anticipation of competitive reaction to the price being set. The competition for company's product(s) may arise from similar products, close substitutes, or even from absolutely dissimilar product vying for consumers' disposable income. Nevertheless, effective competition is usually offered by similar products and close substitutes. Competitive reactions have time and intensity dimensions also. In terms of intensity, reaction may be violent or subdued or even none. As opposed to subdued reaction, violent reaction may be indicated by a substantial price reduction or change in the price structure to retain market share. In terms of time, the reaction may be instant and fast or delayed. In instant reaction competitor immediately changes the price and its structure so as to be at par with the company or to slice away a relatively bigger market share. In delayed reaction, competitor may wait and watch the market reaction to the company's price and then react if threatened or sees a lurking opportunity. In order to anticipate such a variety of reactions it is necessary to collect information about

competitors in respect of their production capacity, cost structure, market share, and target consumers.

2.5.3iv. *Scanning the Internal Environment*

Before determining the product price it is also necessary to scan and understand the internal environment of the company. In relation to price the important factors to be considered relate to the production capacity sanctioned, installed and used the ease of expansion, contracting facilities, input supplies, and the state of labour relations. All these factors influence pricing decisions. For example, when production capacity cannot be fully or optimally utilized for want of input, say power or harmonious labour relations, the increased cost of production per unit (owing to larger overheads) would defy all price calculations arrived at in anticipation of a comfortable internal environment.

2.5.3v. *Consideration of Marketing-mix Components*

Another step in the pricing procedure is to consider the role of other components of the marketing-mix and weigh them in relation to

price. Itself being a component of the marketing-mix, price only serves a broader marketing purpose. It is, therefore, important to consider the interactive role of price and other components of the marketing-mix, particularly, product, distribution channels and advertising. In respect of product, the degree of perishability and shelf-life shape the price and its structure: faster the perishability lower is likely to be the price. An indirect channel word require a lower list price so as to leave a sufficient retailer margin. Likewise, aggressive advertising goes well with higher price as it pulls the product out of the channel.

2.5.3vi. *Selection of Price Policies and Strategies*

The next important step in the pricing procedure is the selection of relevant pricing policies and strategies. These policies and strategies provide consistent guidelines and framework for setting as well as varying prices to suit specific market and customer needs. A company has a number of policy options available, some of which have been described in the forthcoming pages.

2.5.3vii. *Price Determination*

Having taken the above-referred to steps, management may now be poised for the task of price determination. For determination of price, management will now have to work on the decision inputs provided by the information base and develop the floor and ceiling price levels. Subsequently, these prices should be matched against the pricing objectives so as to narrow down their difference. Having done so, the tentative price shall have to be also matched against possible competitive reactions, government regulations, environmental constraints, marketing-mix requirements, and the pricing policies and strategies, so as to arrive at the price at which product(s) should be offered. However, it is always advisable to test the market validity of this price during test-marketing so as to ascertain its match with consumer expectations. The method of price determination described in subsequent paragraphs gives us an insight into the ways in which product price may be fixed.

2.5.3viii. *Developing a Feedback System*

Having determined the product price but before quoting it as the list price to consumer, it is always appropriate to build up a feedback system so as to monitor market reactions. These may be indicated in terms of price-volume relationship, intermediary reactions, and competitive moves. The feedback received enables management to evaluate the effectiveness of price in attaining pricing objectives and the role it played in implementing the marketing strategy of the company. The wisdom provided by such evaluation results is often invaluable for future actions of management.

2.5.4 Methods of Price Determination

In determining administered prices, a company has more than one method to choose from. The choice of method, however, would depend on the pricing need and decision input constraints faced by management. Some of the important price determinates methods are described below.

2.5.4a.   *Cost Based*

The cost based method of price determination is one in which the cost of manufacturing a product serves as the base for price fixation. However, in order to cover an anticipated profession on the product being sold, management usually adds to this cost some amount referred to as *mark-up* often as a certain percent of the cost. It is for this reason that this method is called *Cost-plus* or *target* pricing method. The cost based price provides the floor below which any sale would mean loss to the company. It is for this reason that the cost based price is also referred to as the 'floor price' when actual price determination is left to the market forces. It is a very simple and commonly used pricing method. In India it is followed by a large number of companies such as the *Hindustan Cables Ltd, Hindustan Aeronautics Ltd, Indian Telephone Industries Ltd, Heavy Electricals (India) Ltd and Neyveli Lignite Corporation Ltd.*

2.5.4b.   Kinds of Cost:

For the purpose of price determination, management may consider different types of production costs. However, the costs considered in administrative price differ from those considered by

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economists. Whereas economists consider average and marginal cost in price determination, in the real life business manager considers accounting costs, also referred to as *decision costs,* which emerge out of accounting records. The accounting costs may be broadly classified as Total cost. Overhead or fixed cost and Variable cost. The *total cost* is composed of fixed and variable costs of production. *Fixed or overhead costs* are those which are fixed in nature and do not vary with the level of output; they are there, sunk, incurred irrespective of whether production takes place or not and cannot be directly allocated to a product. They get more and more distributed amongst products as production rises. The examples of fixed cost include depreciation, salary and wages of permanent employees, interest on term loans, and rent, rates and taxes, etc. *Variable costs,* on the other hand, are those which vary in proportion to the level of output and include such costs as on raw materials, salary and wages of non-permanent employees, salesmen's and distributors' commissions, costs of packaging, ware-housing, etc. however, in respect of variable cost, the principle of diminishing cost applies in which after an initial rise up to an optimum

level, cost has the tendency to increase per unit of production with the rise of output.

For the purposes of pricing, management may consider the total cost or the incremental cost. Price determined on the basis of total cost is referred to as *full-cost pricing* whereas price determined on the basis of incremental cost is referred to as *contribution pricing*. *Incremental costs* are those costs which are incurred in changing the level or nature of activity. This change may be on account of addition of a new product, distribution channel, new machinery, etc. However, incremental cost should not be confused with marginal cost, the concept used by economists. Marginal cost refers to the cost of an added unit of output only. Incremental cost, on the other hand, covers a broad spectrum of additional cost including marginal cost. The production cost has time dimension also. The cost may be actual cost available for the latest time period which is also referred to as *historical cost*. It reflects recent wages and material price and overhead loading at the then current output rate. Also, the cost may be expected or standard cost. *Expected cost* is a forecast of actual cost for the pricing period on

the basis of expected prices, output rates and efficiency. While *standard cost* is a conjecture of cost under assumed standard conjecture of cost under assumed standard conditions of output/volume.

2.5.4c.   *Mark-up Decision:*

Having determined the cost base for pricing, management attempts to decide the mark-up to be added to it by way of return/ profit. It may be determined arbitrarily on the basis of some vague notion of a 'just' profit and may vary from company to company and from product to product within a company depending on differences in the competitive intensity, cost base (e.g. the degree to which profit has already been included by padding of overhead) and investment turnover rate and risk.   Alternatively, management may determine the average mark-up on cost essential to product a desired rate of return on company's investment. The mark-up may be computed by using the following formula:

(a)	(b)	(c)
$\dfrac{\text{Invested capital}}{\text{Standard cost}}$ x	$\dfrac{\text{Earning}}{\text{Invested capital}}$ —	$\dfrac{\text{Earnings}}{\text{Standard cost}}$

For instance, if the capital turnover (a) is 0.6 and the target rate of return is 20 per cent on invested capital, the mark-up on standard cost is 12 per cent.

In India, the Government has determined steel prices by adding a pre-determined rate of return on net-capital employed at the time of price fixation, varying from 8 to 10 percent, to the cost of production after making full provision for depreciation, cost and contingencies (full cost).

However, according to Dean, 'within the cost-plus framework, perhaps the most sensible standard is a recent average return of companies that are comparable in products, processes and risks. Such a standard provides some measure of the competitive return that is allowable in the industry without loss of market shares or invasion of markets". In *India,* such information may be found in the inter-firm comparisons in respect of industry whose member the company is. Such comparisons are available regarding many industries, for

example, engineering, cotton textiles, etc., and are being published by their respective associations.

Illustration: Once the cost base has been decided upon, price may be determined by adding mark-up in the manner described as follows:

		Amount (Rs.)
Overhead or Fixed Cost		25
Factory	15	
Office and Administration	7	
Selling and Distribution	3	
	—	
Variable Cost		55
Material	30	
Labour	20	
Expenses	5	
	—	—
Total or Full cost		80
Add: Mark-up @ 15%		12

2.5.4d.   Strengths and Weaknesses:

While the cost based pricing method has been relatively popular with companies it has also raised doubts the managerial wisdom in using it on account of its many deficiencies. The method has both strengths and weaknesses. Some of these are described here:

STRENGTHS

2.5.5a. *Simple:*

It is a simple and unobtrusive method. Unlike demand, cost is more certain, relatively stable and comparatively easy to estimate.

2.5.5b. *Competitive harmony:*

There is greater competitive harmony and less of price wars amongst competitors when all units in the industry base their prices more or less on similar cost and add uniform mark-up. When the products and production processes of rivals are highly similar, cost-plus pricing may offer a source of competitive stability by setting a price

that is more likely to yield acceptable profits to most other members of the industry.

2.5.5c. *Social fair:*

Relative to demand-based and other methods, cost-plus pricing is also socially fair. It does not take advantage of the rising demand. Even in a favourable and rising demand, company remains content with a fair return. In a developing country such as India where demand exceeds supply this method is, therefore, more acceptable. Many public sector companies use this method for the same reason.

2.5.5d. *Safe:*

From the company's standpoint, cost based price is safe. It guarantees recovery of cost of production and does not allow management to play with seasonal and cyclical shifts in business. Under certain circumstances, it may be viewed as the safest way to cope with unforeseeable cyclical shifts in demand. "It has features of political safety as a guide to inflation pricing, particularly for large firms whose prices are pivotal and whose profits are conspicuous.

2.5.5e.   *New Technology*:

When a company is interface with new technology, as most Indian firms are, where production problems and long-term cost conditions cannot be predicted easily, it is reasonable to opt for cost based pricing.

WEAKNESS

2.5.6a   **Ignores Demand:**

One of the major weaknesses of cost-based method is that it ignores influence on price and sales volume.

2.5.6b.   **Inadequate Reflection of Competition:**

Cost based pricing fails to take into consideration both current and potential competitive reactions. It makes management passive in price determination and complacent in counter-competitive reactions.

2.5.6c.   **Imprecise Cost Allocation:**

The methods used for joint cost allocation are far form being precise owing to the arbitrariness involved therein. As a result, prices based on cost also tend to become imprecise in a multi-product company where joint costs are allocated on the product portfolio.

2.5.6d.   ***Irrelevant Cost:***

Often, prices are based on cost which is not always relevant to the pricing situation. In certain situations, incremental or opportunity cost is more relevant relative to the full cost. In an inflationary economy, future cost. All these types of costs are not always reflected in the accounting records of a company.

2.5.6e.   ***Circular reasoning:***

Cost, particularly full cost, always does not determine price because of the circular reasoning. It is so because price, to some extent, also determines the sales volume, which determines output, which influence cost and which in turn determines price.

2.5.6f.   ***New Products:***

Cost-based pricing poses problems in respect of new products on account of lack of cost experience. Until market is tested and some idea about the volume is obtained, it is difficult to determine the unit cost with any accuracy. In India, many companies having foreign

collaboration for this reason borrow cost profile from their collaborators and use it with some relevant changes particularly regarding direct labour cost. (The author has experience of one of such companies.

2.5.6g. *Premium on Inefficiency:*

It does not penalize inefficiency for whatever the cost the price will be sufficient to cover it. In fact, it tends to place a premium on inefficiency. For examples, if the cost shoots up due to work stoppages, material wastages, or for any other reason, the 'plus' also rises shrouding inefficiency in profit margin.

2.5.6h. *Less than Optimum product-mix:*

Since it makes every product profitable, no item enterprises cease to exercise initiatives in optimizing product-mix. The experience of Hindustan Cables Ltd is a pointer in this direction.

2.5.7a **Demand Based**

One way to overcome the weaknesses of cost-based pricing is to determine price on a basis of demand. In this method is reflected in the sales volume/revenue which a product may generate at a given price. The demand, however, is subject to manipulation. The price may be determined on the basis of demand in any of the following manner.

2.5.7ai. *Charge what the Traffic will Bear:*

In this manner, management does not fix the basic price of a product(s) but charges what the buyer can or may be made to pay the maximum depending on the demand intensity and the skill and adroitness of the seller. Thus, there is no list price- the price varies form consumer to consumer. The continuous trial and error with different prices helps management to arrive at a price which may be, by and large, acceptable to consumers.

2.5.7aii. *Test-marketing:*

In order to determine the basis price management may test- market different prices in different market segment under relatively controlled conditions and reflected in volume/ revenue at different prices.

Management may select the price, which ensures maximum revenue/profit. Test-marketing provides a rough approximating of the demand curve, which is more reliable presentation on account of formalized experimentation technique.

2.5.7aiii. Forecasting:

Instead of experimenting different price under controlled condition, management may forecast price on the basis of historical demand data available in company records or elsewhere. The demand schedules so prepared may indicate the price the company may charge.

The pricing based on demand takes into account consumers' price elasticity and preferences. It penalizes inefficiency, optimizes product-mix and facilitates new product pricing. It also obviates the difficult of joint cost allocation. However, demand based is not safe from a company's standpoint. It is also not socially fair because it fully exploits the swings in demand to the consumer disadvantage. By and large, the weaknesses of cost- based pricing constitute the strengths of demand-based pricing and vice versa. However, both are imperfect

insofar as they are based on only account both cost and demand, with the former serving as the floor and the later as the ceiling. The actual price may be determined somewhere in between these two extremes.

Break – Even Pricing
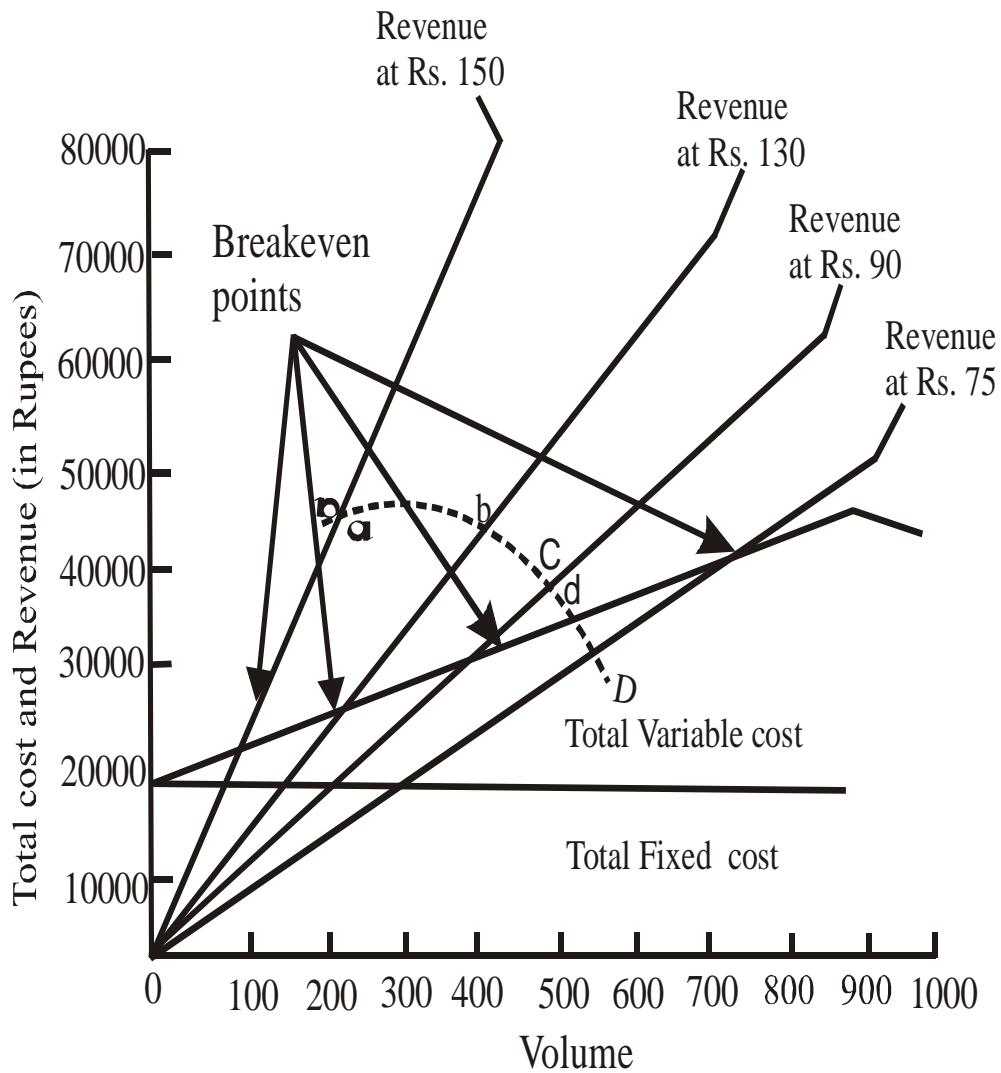
2.5.7b   Cost-Demand Based

The cost-demand method of determining basic price entails

consideration of both the cost and demand factors in relation to the

product being priced. It, thus, overcomes the deficiencies of both cost-

based and demand-based pricing and determines price realistically. For this purpose, management draws out relevant cost data from the accounting records and builds up demand schedules. The former indicates the overhead and variable costs, while the letter indicates the consumer demand and revenue generation at different price levels. In order to determine the basis price at which a company may maximize profits, the cost and volume data may be conjoined so as to develop the break-even analysis. It is, therefore, also referred to as break-even pricing. Companies in India also use this method of pricing. 26 The manner in which the price may be actual determined by this method is explained in the following illustration:

Price per unit Rs.	Variable cost per unit Rs.	Contribution per unit (1-2) Rs.	Total Fixed Cost Rs.	Break-even point (4÷3) Units	Market demand units	Total revenue (1-6) Rs.	Total cost [4+(2x6) Rs.	Total profit (7-8) Rs.
75	50	25	20000	800	700	52500	55000	2500

90	50	40	20000	500	600	54000	50000	+4000
130	50	80	20000	250	400	52000	40000	+20000
150	50	100	20000	200	300	45000	35000	+10000

Note: Variable and fixed cost data from accounting records of company or project on this basis. Demand and price data to be experimented or forecasted.

Table 2.5.1 exhibits the cost and column data of a company. The cost data indicate a fixed cost of Rs. 20,000 and a variable cost of Rs. 50 per unit (in real life, variable cost varies with output, here it has been shown as constant for reason of simplicity). Demand data, on the other hand, indicates the demand for products and the total revenue at different prices (column 6 and 7). Column 5 indicates the break-even point at which the company is profit and loss balance. These data have been graphically represented in Fig. 8.4 so as to show the price at which the company maximizes its profits and as such becomes qualified to be selected as the basic/list price. The profit is always maximum at a price at which the vertical distance between the total

demand curve (DD) and the total coat is the maximum. In Table 8.2 the profit is maximum (Rs. 12,000) at the price of Rs. 130 at which the vertical distance between the total Demand Curve (DD) and the total cost Curve is also the maximum. (Total Revenue Rs. 52,000-Total Cost Rs. 40,000= Total Profits Rs. 12,000.) In this case, therefore, Rs. 130 price per Unit (point 'b' on the demand curve) qualifies for selection. This method of price determination is more realistic stable. However, to cope with variations in cost structures and demand, a more sophisticated break-even analysis may be undertaken so as to determine the price. Nonetheless, third method may pose problems when cost fluctuates frequently, product-mix vary considerably, and demand estimates are not reliable.

2.5.7c   **Competition Based**

A company also has the option to determine its price its price on the basis of what its competitors are charging for the similar products. Competition-based pricing may, therefore, be described as a method of pricing in which a company attempts to maintain its price more or less at per with its competitors irrespective of it individual cost and demand

situations. In other words, company maintains parity price charged by its competitors. It thus reposes faith in the collective wisdom (or stupidity) of competitors companies and anchors and its price to this wisdom.

This method is usually adopted when market is highly competitive and products are homogeneous and not capable of differentiation. Such pricing is also referred to as customary or going rate pricing. For the purpose of pricing, management ascertains this out the middlemen's markup, deducts it from the customary price and thereby, arrives at the price ceiling which it can touch irrespective of its cost/demand constrains. For instance. When the customary price of a product is Rs. 20 and the middleman's markup is 40 percent (Rs. 8) the company can sell a Rs. 12. This is then given price and the company has no option except to reduce cost so as to increase the profit margin. The major challenge facing such a firm is good cost control. Since promotion and personal selling are not in the picture, the

major marketing costs arise in physical distribution, and here is where cost efficiency may be critical.

When price is determined exclusively on the basic of competition, the company can neither increase nor decrease it unilaterally for fear r of adverse impact on it profit position on account of kinked demand. A unilateral increase will lead to a fall in market share significantly to justify it. A reference to such a situation was made while discussing pricing under oligopoly (Fig. 8.3).

2.5.7b   **Import Price Based**

Developing countries and India in particular who have adopted new technology and pr conduct import substitutes. Since such companies lack relevant cost data. They refer to the landed cost from abroad for the purpose of determining product price. Such a price usually provides the ceiling for pricing purposes beyond, which price is usually not fixed for fear of encouraging imports unless these are altogether banned or severely restricted. This price is determined by charges (CIF price) of product being imported, converting it into

equivalent of India currency on the basis of the most recent relevant exchange rate and adding to it the custom duties in force at time of pricing. This computation may be illustrated as follows:

CIF Price	$	100
Conversion in Rupees, say, @7/- per $	Rs.	700
Add. Import Duty, say, @ 50%	Rs.	350

	Rs.	1050

In India many public and private sector companies use this method. Among the important public sector companies using this method include Heavy Engineering Corp. Ltd, Heavy Electrical (1) Ltd, Hindustan Photo Films Manufacturing Co. Ltd 28 and Hindustan Machine Tools Ltd. 29 However, this cannot be certain that the imported product, w hose price is the point of reference, exactly approximates in quality and technical composition the product being manufactured at home. Second, the prices of import ed product may be particularly low on account of dumping policy of the foreign export price not realistic unless quality weights are assigned and cost structure of the exporters is known.

Externally Determined Prices

All pricing methods described hitherto presumed pricing autonomy to companies. However, in our mixed economy it may not be so always. The price for company's product(s) may be determined externally by a Government agency, say, the Bureau of Cost and Prices, and given to companies so as to quote. For example, the prices of drugs, steel and fertiliser are determined by the Government and companies manufacturing them are asked to sell their products at these prices. Prices are usually determined externally in respect of those products which constitute an essential component of the consumer's consumption basket or which are inputs of consideration significance to the national economy. Usually, theses price are determined by reference to the marginal is put to any loss Alternatively Government subsidies the marginal unit when price reference is to optimum or representative firm so as to ward off losses accruing from unremunerative prices. When the marginal firm is the point reference this method places premium on inefficiency and allows abnormal

profits to efficient firms. A relatively detailed reference to government price regulation may be found in the subsequent pages.

Utility of Value Pricing

Recently it has been suggested that price should be based on the consumer' perceptions of the value of the product. 30 The basis ideal behind this suggestion is that consumers balance the benefits of a purchase against its cost to them. When the benefits outweigh the cost and when the particular product under consideration has the best relationship of benefit to cost, the consumer buys the product. The benefits perceived may be function (utilitarian), operational (reliability/duration), financial (credit) or even personal (psychological). Costs, on the other hand, may include price, freight, installation, and handing; in other words the cost of acquiring the product. Under this concept, while setting prices, management should understand the total use of the product, analysis the cost-benefit trade-offs. It should also study the end use of the product, tangible, and

intangible cost to the consumer. For making cost benefit analysis, 'performance-space' may be used*. However, the meaningful assessment of the cost-benefits related to a product, requires a great deal of out; the marketer should keep an eye on consumers and their perceptions.

CHAPTER III

3.0.0 <u>METHODOLOGY AND RESEARCH DESIGN</u>

This section of the dissertation aims at providing information on the techniques and procedures for the collection and analysis of the data used in the study. It will also highlight the types of data used by the researcher and their sources.

Furthermore, this section of the dissertation will provide useful insight on how the sample sizes were selected, where the researcher used as the study area and those that make –up the sample size.

3.0.01 <u>RESEARCH DESIGN</u>

A research design gives details on the most suitable methods of investigating the nature of the research instruments, the sampling plan, and the type of data to be used (Chismall, 1981)

Chismall(1981), further posits that, " a research design forms the framework of the entire research process." Therefore, if it is a good design, it will thus ensure that the information obtained is important to the researcher's problem and that objectives are economical and the procedures in collecting it.

In developing and designing this research plan, the researcher will consider the sources of data collection and the sample sizes.

3.0.02 <u>SOURCES OF DATA</u>

It is of outmost importance that the researcher takes proper care of the sources of his data, knowing fully well that, it reflects on the final result of the work. And if the data is faulty, certainly, the result will be faulty, Osuala (1991).

Hence, in carrying out this research study, two kinds of data will be needed – Primary and Secondary data. The nature of each of these two types of data is as given below:-

3.0.02a   <u>PRIMARY DATA</u>

This consists of original information for the specific purpose at hand (Fraund and William, 1984).

The answers given by respondents to questionnaires administered will constitute one type of Primary data.

Further, interpersonal interview and personal observation is another type of Primary data. Each of the data is briefly discussed thus:-

i.   Questionnaires: This serves as one of the major Research Instruments adopted by the researcher to retrieve information needed. It has become expedient for the researcher to use questionnaires because of the large sample size and the type of data needed.

The questionnaires contain multiple choice questions with a range of possible answers which are designed to

reflect different shades of opinion. Open-ended questions which allow respondents to express views in more precisely a manner have employed.

ii. Observation: Some of the explanatory procedures are based on the researcher's experience as a professional and seasoned banker, head of Policy Making group, a Professional Management Consultant, a reader of articles and publisher.

iii. Interviews: This means Personal Contact with the personnel that are selected to be part of the sample by the researcher.

The researcher posits that, there will be an investigation conducted to determine if an increase in price (Interest Rate) payable can lead to an increase in the Market Share for savings deposit as a Banking Product in Nigeria.

To this end, a wide population of not less than 450 (four hundred and fifty) people is considered for the study. Of the 450 population size considered questionnaires will be administered on 400 people. The breakdown will include 200 people who currently have savings deposits with Nigerian Banks.

The other fifty people will be orally interviewed and they will be mostly Bankers who are desk Managers on Savings Accounts Products in Banks.

On the 200 Savings Accounts Customers, the questionnaires will attempt to find out from them if the reason for them holding Savings deposits is primarily because of the interest rate or returns and also to find out if they could be further motivated to do more Savings Deposits in their various Banks if the interest rate is reviewed upwards. In addition, the questionnaires will seek to know what other factors can influence their Patronage of the Savings deposits if not interest rate.

Of the 200 population non Savings Customers, the questionnaire will seek to find out why they do not have Savings deposit. Whether it is because the rates payable by Bankers are not too attractive. Will they, if given the opportunity, invest in Savings deposits and what will be their Primary Motives if they were to undertake such investment.

The questionnaires will have demographic Contents e.g. Educational Qualification, Age, Income bracket, Sex, Status, Job disposition etc.

These will be used to uncover more issues in the study. The questionnaires are intended to be administered in the following towns and semi-towns in Nigeria. They include:- Aba, Abuja, Benin, Calabar, Eket, Ikot-Abasi, Ikom, Kaduna, Kano, Lagos, Onitsha, Port-Harcourt, Uyo, Warri and Yenagoa.

In Lagos, because of the discriminatory demographic arrangement existing in the town, (Some areas could constitute a town by themselves).

The questionnaires will be distributed in the following areas, (i) Apapa (ii) Ikeja (iii) Lagos Central (iv) Idumota (v) Victoria Island/Ikoyi. For instance, Victoria Island/Ikoyi is dominated by Senior Corporate Executives mostly of Service Companies like Banks, Insurance and Oil Companies and is also the residential area for the top elites in Lagos State. Ikeja on the other hand is where there are large numbers of factory Executives and Civil Servants. It is a residential area for a mixed class, the middle group and the upper lower group.

Apapa has large population of Shipping Company workers because of the presence of major seaports.

Lagos Central is largely populated by non-residence wholesale traders of imported goods including Motor Spare Parts, Electronics etc.

The other towns outside Lagos were selected taking into consideration the differences in Culture, Urbanization or otherwise, level of developments in such towns. North-South

syndrome in the Country, these all taken together, and the towns chosen randomly to give a very wide spread.

Oral interviews will be conducted randomly too, on Savings Account Product Managers, Marketing Managers and Business Development Managers in Banks. The idea will be to receive first hand information on the behaviour of the products in their Banks. Furthermore, it will help to know from them what strategies they have been using to mobilize, with a view increasing the Portfolio of this product.

3.0.02b   SECONDARY DATA:

The Secondary Data consists of information that already exists somewhere, having been collected for another purpose (Kotler 1997).

This may consist of published articles, textbooks, Magazines, Journals, Newspapers, Seminar Papers Previous Project works carried out in such areas of study, and other relevant materials in the subject matter, including materials from Internet.

In order to collect information, visits will also be made to the following places:-

a.   British Council Library, Lagos.

b.   National Library, Lagos

c.   Lagos State Library

d.   University of Lagos and Lagos State University Libraries

e.   Industrial Training Funds Library

f.   Federal College of Education Akoka Library

g.   The use of Internet downloaded and Printed Materials.

3.1.0 <u>RESEARCH INSTRUMENTS</u>

The choice of research instruments is based on the nature of the study. This study used both Survey and documentary research approaches.

Therefore, questionnaires, which is a flexible method of conducting survey, and the secondary data collection methods; are used in this study.

Also, Oral interviews and Observations are used.

3.1.1 <u>SAMPLE SIZE DETERMINATION</u>

The sample size of 450 (four hundred and fifty) people is considered. Of the 450 population size-considered, questionnaires will be administered on 400 persons. The breakdown which will include 200 people who currently have savings deposit with Nigerian Banks, 200 who do not have savings deposit with Nigerian Banks. The sample size will be determined by employing the formular given by David J. Luck and Ronald S. Rubin in their book "Marketing Research".

$$n = \frac{(Z^2)}{Sx^2} \quad i.e \quad \frac{Z^2.P.Q}{SX^2}$$

n = Sample Size

$Z^2 =$ Z – Score value which has the total value 1.96

SX = Standard error to be tolerated i.e those that successfully completed and returned their questionnaires.

i.e $\quad = \quad \dfrac{1.96^2 \text{ x } .8 \text{ x } .2}{.0025}$

$\quad = \quad \dfrac{3.8416 \text{ x } .8 \text{ x } .2}{.0025}$

$\quad = \quad \dfrac{0.614656}{.0025} = 245.86$

= 250 (Approximately)

3.1.2 <u>METHOD OF DATA ANALYSIS</u>

In any study that involves field data collection, the collected data must be analyzed. The question however is, what method of data analysis will be employed? The researcher intends and will use the "Chi-Square Statistical Method" in this study. The Chi-square formular is presented below:-

$$X^2 = \frac{(Fo - Fe)^2}{Fe}$$

Where X^2 = Chi square

∑ = Summation Sign

Fo = Observed Frequency

Fe = Expected Frequency in the distribution.

3.2.0 <u>**BANKING INSTITUTION SELECTED**</u>

Two Banks were selected for the study. The Banks selected were considered because though being Universal Banks, they are not really operating in the same market. The Banks are Union Bank – the biggest licensed Universal Bank. Because they operate in different Markets, apparently with different strategy, it will be appropriate to observe the behaviour of the product to see whether the result will be different or otherwise.

After considering the Primary data, the researcher will then proceed to draw results from the records in the Banks. The records will help to prove or otherwise of the hypothesis.

Records that will be considered will be the Annual Financial Statements, the Management Accounts etc.

3.2.1   PROFILE OF SELECTED BANKING INSTITUTIONS

a. Union Bank of Nigeria Plc.

Union Bank of Nigeria was incorporated in 1917 and commenced Banking business same year. The Bank's previous names were Barclays Bank and Co. and Barclays Bank Nigeria Limited. The Bank operates on an over 300 branch network with total Assets of N299,753 billion as at 31st March, 2004 (The result for 2003/2004 not yet published).

Union Bank also boast of the following subsidiaries

    i.   Union Homes Savings and Loans Limited

    ii.   Union Merchant Bank Ltd

    iii.   Union Trustees Ltd

    iv.   Union Assurances

v.   Union Stock Brokers

As at 2003, the Bank's employees were in excess of Eight Thousand with registered head office at Stallion Plaza – 36 Marina, Lagos.

b. <u>Co-operative Development Bank Plc.</u>

Co-operative Development Bank Plc. Was incorporated in 1979 and commenced Banking operations in 1986. The Bank has its registered head-office in Uyo, Akwa Ibom State, but further has its business/Corporate head office at No. 1A, Ligali Ayorinde Avenue, Victoria Island, Lagos. The Bank operates on a22 branch network and has total Assets of about N8.0 billion. It operates more in the middle market of the Industry.

3.3.0   <u>RELIABILITY OF DATA</u>

In analysis of the data collected, it will be assumed that our data are consistent, testable and reliable. But this is subject to the various limitations a researcher normally has in terms to carryout a research study, including time factor, Financial and logistic problems, aggravated by Lack of Modem and up-to-date

books in our Local Libraries and Bookshops. The validity will be tested with the Chi-square Statistical Method.

<u>REFERENCES:</u>

1.   Philip Kotler: *Marketing   Management,*
     Analysis,   *Planning,   Implementation*
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     and   *Management* (USA 1981) Pg.
     423.

3.   Osuala, E.C: *Introduction to Research*

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Pg.   118

4.   Fraund, E.J. and William F.J.   *Modem Business Statistics*

                                       (USA 1989) Pg. 170

CHAPTER IV

Data presentation, Analysis and Hypothesis Testing

4.0.0   <u>INTRODUCTION</u>

In this Chapter, Primary data collected for this study from

the questionnaires issued/administered to Savings Accounts

holders in Nigerian Banks, Prospective Savings Account Customers in Nigerian Banks, Patronage of Savings Account Based on Income Distribution and Oral interviews with some decision Makers and Operators, will be presented. The analysis of the data and the testing of the application of various statistical tools will also be presented.

Furthermore, in order to reduce the bulkiness of data, the data presented and analysis are those that are considered relevant to the problems, Objectives and Hypothesis of this research work.

4.0.01   Allocation of questionnaires and rate of return

The data obtained in the field examination and or investigation is presented herein below:-

DISTRIBUTION OF QUESTIONNAIRES AMONG A/C HOLDERS, PROSPECTIVE A/C HOLDERS AND RATE OF RETURN

S/No	Areas	Allocation	Returns	%
1.	Savings A/C Holders	200	200	100
2	Prospective A/C Holders	200	197	98.5
3.	Oral Interviews	40	40	100

Tables 4.0.01

From the Table (4.0.01) above, it can be seen that, the total 397 responses are returned valid questionnaires, representing 99.25% as against 100% expected. The remaining 3 questionnaires or .75% questionnaires were either not returned or inappropriately completed.

4.1.0   ANALYSIS OF DATA

It is pertinent to point out here that, the researcher would use the data that are directly relevant to the various hypothesis stated

This will help to reduce the bulkiness of the data. Based on this; the most important data are to be used in the analysis of this study.

4.1.1 <u>RESPONSE OF SAMPLE OF SAVINGS ACCOUNTS HOLDERS IN NIGERIA BANKS</u>

Hereunder, Two Hundred (200) savings Accounts holders completed the questionnaires, among them 162 or 81% of respondents Maintained that they patronized the product primarily to have something set aside for the rainy day or set aside towards a particular project/purpose. 30 or 15% of respondents maintained that their primary reason for patronizing the product is for the interest paid. In which case they usually check through to find out where the rate is better before they make the decision to open a savings Account.

Furthermore, when the interest drops they can take a decision to go elsewhere, Eight (8) or 4% of respondents maintained that they are indifferent, as they cannot determine which one takes priority over the other, as both are equally important to them.

Responses from Savings Accounts Holders

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Furthermore, among the 200 people who are savings Accounts Customers of Nigerian Banks, 184 respondents or 92% of the population maintained that the key issues in making a choice of Bank to operate savings

Account is <u>the Stability of the Bank</u>. Any adverse information about the Bank will affect the patronage of the product in that Bank. Sixteen (16) respondents representing 8% maintained that though

stability is important, they always prefer a Bank with efficient service delivery.

Response from Savings Account Holders
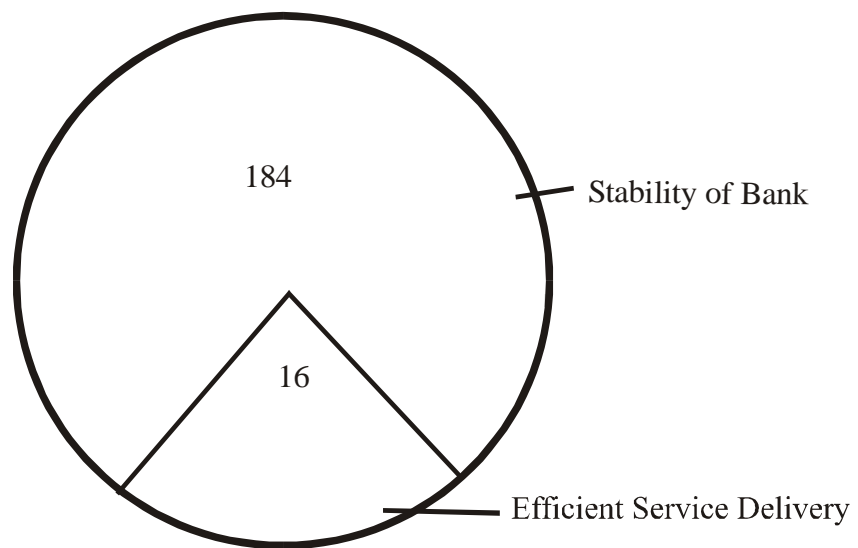
Figure 4.1.1b

Figure 4.1.1b

4.1.2 <u>RESPONSES OF PROSPECTIVE SAVING ACCOUNT CUSTOMERS IN NIGERIA BANKS</u>

Another set of questionnaires were administered on prospective savings Deposits Customers. One hundred and Seventy – nine (179) or 89.5% respondents will, given the opportunity patronize the Savings

446

Account just to set aside something (among) for tomorrow ie to meet future needs. 18 respondents or 9% will consider interest rate first in making a decision to open a savings account. 3(three) respondents or 1.5% will not patronize savings account at all. They have not considered it. Refer to figure 4.1.29a below.

Responses from Prospective Savings Account Holders
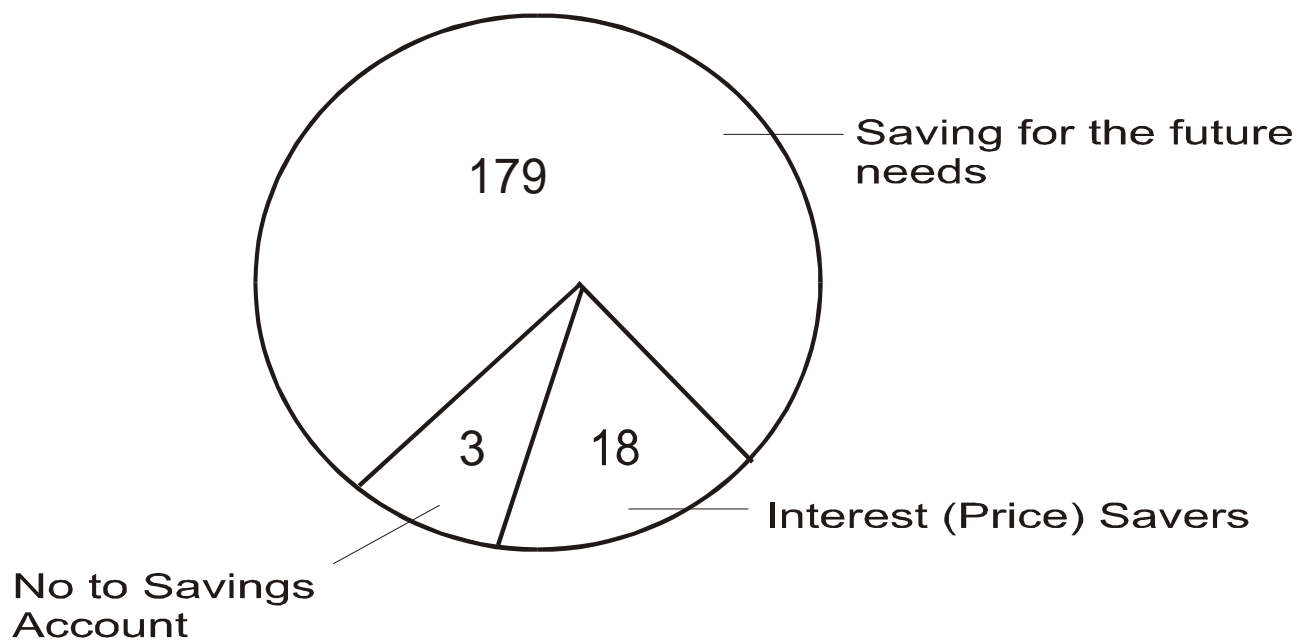
Figure 4.1.2a

The responses from the Prospective customers on the type of Bank were as follows; One hundred and Sixty Eight (168) or 84% of

the respondents will route for a Bank that is very stable if they have the opportunity to open a savings account.

This year of course is real, considering the spate of distress that the Banking Industry has suffered since the early nineties. Between 1994 and 2003, a total of 36 Banks became distressed and were liquidated by the Central Bank of Nigeria (CBN) and Nigeria Deposit Insurance Corporation (NDIC). They also believe it is good to have a saving account.

Responses from prospective savings Account Holders

Figure 4.1 2b

32 or 16% maintained they will go for a Bank with efficient service delivery.

4.1.3 PATRONAGE OF SAVINGS ACCOUNT BASED ON INCOME DISTRIBUTION

The distribution of savings Account patronage on the basis of income spread between N0 – N500,000 and above N500,000 was as follows:

Income Group (N)				Percentage
A	-	0	50,000	40%
B	-	501000	and Above	15%
C	-	51000	100,000	13%
D	-	101000	200,000	9.9%
E	-	301000	500,000	7.9%
F	-	201000	300,000	6.5%
G	-	No Response		7.7%

Table 4.1.3

Patronage of Savings Account Based on income Distribution
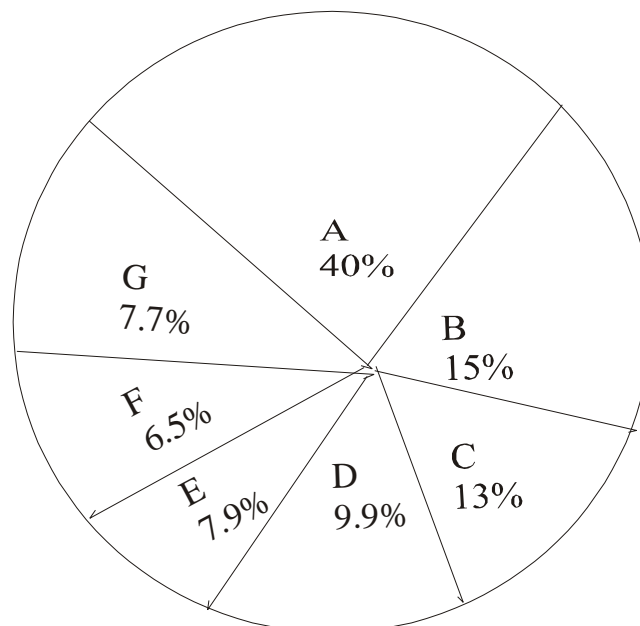
Figure 4.1.3

Figure 4.1.3

40% of those with savings account fell between the lower income groups. Most of them are junior workers of government, factories and petty traders. Those on annual income of N501 000 and above were largely found in towns of Kaduna and Lagos.

4.1.4   ORAL   INTERVIEWS   WITH   SOME   DECISION MAKERS AND OPERATORS.

On the oral interview with some Bank workers, Business development Managers etc. 80% of those spoken to, believe an increase in price of the product can lead to greater patronage. Confronted with

issues that seem to suggest otherwise ie (that price may not be a motivator) they were in agreement that the situation could have been worse

However, this oral interviews were limited to Bankers in the new generation Banks, who have been trying to use pricing as a strategic tool to mobilizing savings deposits. Only 20% believe otherwise.

Responses from Decision Makers and Operators

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4.2.0 <u>**REVIEW OF INTEREST RATES ON SAVINGS ACCOUNT UNION BANK**</u>

Year	Rates
2001	2.5%
2002	2.5%
2003	2.5%

REVIEW OF INTEREST RATES ON SAVINGS ACCOUNT BY CORPORATIVE DEVELOPMENT BANK PLC

Year	Rates
2001	5%
2002	8%
2003	6%

Table 4.1. 4a

4.2.1 MOVEMENTS IN SAVINGS ACCOUNT DURING PERIOD UNDER REVIEW IN THE BANKS SELECTED:

a)   Union Banks Plc:

b)   Below is the amount mobilized by Union Bank for Savings Account during the period under review as follows:-

Year	Amount (N)
March 2001	46338 billion
March 2002	54,084 billion
March 2003	62,584 billion

Table 4.2.01a

MOVEMENT IN SAVING ACCOUNT DURING PERIOD UNDER REVIEW IN THE BANK

Figure 4.2.1a

During the period under review, union Bank Maintained interest rate of 2.5% through out and had a 16% positive growth between 2001 and 2002. They also enjoyed a growth of 15% between 2002 and 2003.

The growth rate appeared even throughout the period despite the low rate they paid to customers.

The account for year 2004 is not yet ready

B) **Co-operative development Bank Plc:**

Below is the amount mobilized by co-operative Development Bank for savings account during the period under review as follows

Year	Amount (N)
December 2001	617.2 million
December 2002	**644.2 million**
December 2003	712.6 million

Source: Co-operative development Bank Plc Annual Report and Accounts

Figure 4.2.1b

There was only a 4% increase between funds mobilized in 2001 and 2002. And between 2002 and 2003 the percentage growth increased to 10%. The Managers of te product said more Savings account drivers were recruited to go out and market for this deposit and this resulted in this increase even when the interest rate was reduced.

CHAPTER 5

5.0.1 DISCUSSION OF THE RESULTS

a) Are your findings consistent with existing knowledge and view?

b) Any new findings in the course of your investigations?

c) Roof of Hypothesis

- The data form the administration and return of questionnaires; show that, the completion and return were impressive. 99.25% as against 100% were completed and returned in good condition.

-      Going by the relevant information obtained from the returned questionnaires, and based on the oral interviews held with the concerned parties, various results were obtained.

-      Responses from savings account holders in Nigerian banks prove that 81% of them maintain that, the patronage of savings Deposit is to set aside "something" from their income for future usage. Meanwhile, 15% patronize the product because of the interest paid. It has also been uncovered that 4% had no definite answer as regards same.

-      In the same vain, 92% of the savings account holders posited that, the key issue in the making a choice of Bank to operate savings account is the stability of the Bank. In this regard, it is as if any adverse information about the Bank will affect the Patronage of the product in the Bank.

Infact, about 8% of the account holders maintain that, though stability is important, they always would prefer a Bank with efficient service delivery.

-       Also, from the 200 questionnaires administered on prospective savings account holders, it was discovered that, 89.5% of the prospective savings account holders said, given the opportunity, their purpose for setting aside their hard earned income, that is, to patronize the savings Deposit account, would be for the purpose of meeting future needs, while 9% would consider interest rate first 1.5% will not at all, patronize savings account. That they have not even given consideration to it.

-       Still, on the prospective savings account holders, it has been interesting to discover that, it has been interesting to discover that, even if they have such opportunities, 84% of the respondents would route for a bank that is very stable. Stability therefore, becomes an issues, because, the customers believe they would want their monies returned to them when the "rainy day" course.

-       Infact, their fear, is of course, real, considering the spate distress that the banking industry has suffered since the early nineties. Between 1994 and 2003, it has been reported that 36 Banks have become

distressed and liquidated by the Central Bank of Nigeria (CBN) and Nigerian Deposit Insurance Company (NDIC0. (Refer to the Appendices on the failed banks). To such customers, they believe that, it is good to have a savings account, while, 16% maintain that, they will go for a Bank with efficient service delivery.

- Meanwhile, those who patronize savings account classified on the income basis 4% of those with savings account fall between the lower income group. Most of them are junior workers of government, factories and petty traders, infact, those an annual income of N501,000 and above are largely in Lagos and Kaduna towns.

- Though the oral interviews held with some decision makers and operators in the industry, it has revealed that, 80% of those spoken to, believe an increase in price of the product can lead to greater patronage. But pressed further on the issue that may suggest otherwise, that is, using price as a non motivating factor, they were in agreement that, the situation would have been worse. However, these oral interviews were limited to Bankers in

the new generation Bankers, who have been trying to use pricing as a strategic tool to mobilizing savings Deposits. It was also discovered that, only 20% believed otherwise.

This has gone a long way to prove that pricing a lone does not motivate or serve as a dominant factor in mobilizing savings Deposits.

CHAPTER 6

6.0.0   SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

From the investigations carried out by the researcher, the study has been able to prone that:-

-       Most people who patronize savings accounts are low-income earners and these include junior workers in Government, Factories and petty traders. 40% of respondents taken during the field examination of those who patronize savings account are from this group.

-       Most of those who patronize saving A/c still consider the account not because of the returns it offers but to enable them save some money out of their regular incomes to meet future needs. They believe it is not good to consume everything but some part should be saved. Some of the respondents do not really have any particular purpose in mind, they just believe they should have some savings, and that the need will come in future.

- That interest rate alone is not a sufficient motivator which can be used to increase the patronage of the product, indeed an uncontrolled increase in the rate can become a de-marketing exercise as this can give wrong signal concerning the health of the Bank.

- Banks that are perceived by the Banking public to be strong and very stable institutions can win patronages of the product. <u>Stability rather than pricing is considered to be a key factor in making a choice of Bank to be selected for patronage.</u>

- Among Banks, savings accounts are used largely to dilute the cost of funds. However, most Bankers admit that investment in savings account brings negative returns because the rate payable by most Banks are lower than the inflation rate.

- Others still believe that, efficiency and prompt service delivery are not key factors for consideration in making a choice of Bank to patronize for saving accounts.

- Infact, ignorance and lack of exposure to alternative investment opportunities are some of the reasons why most customers patronize the saving account. Else people could still achieve high level interest rate and low risk from alternative investments in such instruments like the Treasury Bills or the National Savings Certificates.

- It is appreciated that, Banks can achieve quantum leap in savings account portfolio if they promote stability and strength as opposed to price increases, as proved, "Supra".

- The researcher strongly believes that, there are likely to be increases in patronages from savings account in Banks if the incidence of distress is eliminated from the system for a very long-time. According to the CBN Report on activities in the economy, (CBN Annual Report 2003, there are about N400bm outside the Banking system, Researcher believes that the public is yet to recover from losses suffered due to distress in the system in the last decade.

- The research would at this juncture, wish to submit that from the research work carried out so far, saving account should be packaged, marketed and promoted more on the ingredients of strength and stability of the Bank, that is not going to be distressed as opposed to higher interest rate and efficient service delivery.

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APPENDICES

RESEARCH QUESTIONAIRE

NAME:- Mr./Mrs./Miss

………………………………………

(tick title but name is optional)

SEX:- ……………………………………………………

AGE:- …….. 0 – 30yrs ☐ 31-40yrs ☐ 41 – 50yrs ☐

51 – 60yrs ☐ 61yrs and Above ☐

INCOME GROUP:- ₦ 0   -   ₦ 50, 000

₦ 51,000 - ₦ 100,000

₦ 101,000 - ₦ 200,000

₦ 201, 000 - ₦ 300,0000

₦ 301,000 - ₦ 500,000

₦ 501,000 and Above

- Do you maintain a Saving Deposit Account with any Bank in Nigeria?

- Do you wish to open and maintain a Saving Deposit Account with any Nigerian Bank (for those who do not have any savings account at the moment)

- In choosing to open a Savings Account, which of the underlisted was of paramount consideration to you:-

    (a) Interest rate

    (b) Saving for tomorrow.

- If you wish to open a Savings Account, what is the paramount consideration in your decision to maintain the account:-

    (a) Interest rate

    (b) Purpose Savings

- In choosing the Bank to open the Savings Account, which factor influenced your decision:-

    (a) Proximity of the Bank

(b)   Stability of the Bank

(c)   Efficiency and prompt service delivery

• When you decide to open Savings Account, what factors will be of paramount consideration in deciding on the Bank to open the account:-

(a)   Proximity of the Bank

(b)   Stability of the Bank

(c)   Efficiency and prompt service delivery

Write any other information/factors, which influenced your decision to operate a Savings Account OR which will influence your decision in the future when you take a decision to open a Savings Deposit Account.

GENERAL BANK OF NIGERIA DECREE 1991
DECREE 24

SECTION

PART-ESTABLISHMENT AND GENERAL PROVISIONS RELATING TO THE CENTRAL BANK OF NIGERIA

PART IX-MISCELLANEOUS   413

SCHEDULE

BANKS AND OTHER FINANCIAL INSTITUTIONS DECREE 1991

THE FEDERAL MILITARY GOVERNMENT hereby decrees as follows

PART - ESTABLISHMENT AND GENERAL PROVISIONS RELATING

TO THE CENTRAL BANK OF NIGERIA

1.- (1) There shall continue to be for Nigeria a body known as the Central Bank of Nigeria (hereafter in this Decree referred to as "the bank").

(2) The Bank shall continue to be a body corporate with perpetual
succession and a common seal and may sue and be
sued in its corporate name.

(3) Subject to the limitations in this decree, the Bank may acquire, hold and dispose of movable and immovable property for the purpose of its
functions.

2. The principal objects of the Bank shall be to -

(a) issue legal tender currency in Nigeria;

(b) maintain external reserves to safeguard the international value of the legal tender currency;

(c) promote monetary stability and a sound financial system in Nigeria; and

(d) act as banker and financial adviser to the Federal Government.

3. The Bank shall have its head office in any location which is by law the capital of the Federal Republic of Nigeria, and may open branches in any part of Nigeria and appoint agents and correspondent abroad in accordance with the Decisions of the Board.

PART II – CAPITAL AND RESERVE

4.- (1) The authorized capital of the Bank shall be three hundred million naira.

(2) All the capital of the Bank shall be subscribed and held only by the

Federal Government.

(3) The paid-up capital may be increased by such amount as the Board may, from time to time, resolve with the approval of the President, and shall be subscribed by the Federal Government and paid up at pa

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Commence-
ment

Continuance of the Central Bank of Nigeria.

Objects of the Bank.

Head office and branches.

Capital.

5.-(1)   The Bank shall –

   (a)   in respect of each financial year, determine its operating surplus which shall be the remaining sum from its income and other receipts after meeting all current expenditures;

(b)   as approved by the Board for that year, make provision for the contribution staff superannuation fund and for any other purpose specifically approved by the president.

(2)   The Bank shall establish a general reserve fund and shall allocate thereto at the end of each financial year one-sixth of its operating surplus for the year.

(3)   The balance of the operating surplus shall be paid to the Federal Government half-year.

PART III – ADMINISTRATION

6.-   (1)   There shall be for the Bank, a Board of Directors (hereafter in this Decree referred to as "the Board") which shall be responsible for the policy and general administration of the affairs and business of the Bank.

      (2)   The Board shall consist of a Governor, five Deputy Governors and five Directors.

7.-   (1)   The Governor or in his absence, one of the Deputy Governors nominated by him, shall be in charge of the day-to-day management of the Bank and shall be answerable to the Board for his acts and decisions.

      (2)   The provisions of Subsection(1) of section 6 of this Decree shall apply in relation to the general policy pursued or intended to be pursued on any administrative matters, including staff pensions, salaries, allowances and any other similar matters.

8.-(1)   The Governor shall keep the President informed of the monetary and banking policy pursued or intended to be pursued and the directive expedient to give effect thereto.

9.- (1)   The Governor and Deputy Governors shall be persons of recognized financial experience and shall be appointed by the President by instrument

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under the public seal and on such terms and conditions as may be set out in their respective letters of appointment.

Operating surplus and general reserve fund Board of Directors Management of the Bank. Monetary and Banking policy

Appointment of Governor and Deputy Governors.

(2) The Governor and Deputy Governors shall be appointed in the first instance for a team of five years and shall each be eligible for re-appointment for another term not exceeding 5 years.

(3)   Notwithstanding Subsection (1) or (2) of this section, the President may extend the tenure of office of the Governor, any Deputy Governor or any other Director of the Bank whose

term of office has expired until a successor to such Governor, Deputy Governor or Director is appointed.

10. The Governor and the Deputy Governor shall devote the whole of their time to the service of the Bank and while holding office shall not occupy any other office or employment whether remunerated or not:

        Provided that the Governors or any of the Deputy Governors may by

Virtue of his office be appointed with the approval of the Board to –

  (a) act as member of any commission established by the Federal Government to enquire into any matter affecting currency or banking in Nigeria;

  (b) become Governor, Director or member of the Board or by whatever name called, of any international bank or international monetary institution to which the Federal Government shall have interest or given support or approval;

(c) become Director of any corporation in Nigeria in which the Bank may participate under paragraph (i) of Subsection(1) of section 27 of this Decree.

11. – (1) The five Directors of the Bank shall be appointed by the president

(2) A Director appointed pursuant to this section shall be a person of

recognized standing and experience in financial or banking affairs, but whilst a Director of the Bank, he shall not be regarded or act a delegate on the board of any Federal, State or Local Government or of any commercial,

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financial, agricultural, industrial, or other interest with which he may have been connected before his appointment as a Director of the Bank.

(2)   A Director appointed pursuant to this section shall –

(a)   hold office for three years and shall be eligible for re-appointment for another terms of three years only;

Governor and Deputy Governor Appointment of other Directors.

(b)   be entitled to such fees and allowances as may be prescribed by rules made in   that behalf by the Board and approved by the President.

12.- (1)   No person shall be appointed or shall remain Governor, Deputy Governor or Director of the Bank if he is-

(a)   a member of any Federal or State Legislative House;

(b)   a Director, officer or employee of any bank licensed under the Banks and   other Financial Institutions Decree 1991.

(2)   The Governor, any Deputy Governor or any Director shall cease to hold office in the Bank if he -

(a)   becomes of unsound mind or, owing to ill health, is incapable of carrying out his duties;

(b)   is convicted of any offence involving dishonesty or any other offence the maximum penalty of which exceeds imprisonment for sic months;

(c)   is guilty of a serious misconduct in relation to his duties under this Decree;

(d)   is disqualified or suspended from practicing his profession in Nigeria by order of a competent authority made in respect of his personally;

(e)   becomes Bankrupt or suspends payments or compounds with his creditors.

(3)   The Governor or any Deputy Governor may resign his office by giving at least three months notice in writing to the President of his intention to do so; and any Director may similarly resign by giving at least one month's notice in writing to the President of his intention to do so.

(3)   If the governor, any deputy Governor or any Director of the Bank disc, resigns or otherwise vacates his office before the expiry of the term for

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which he has been appointed, there shall be appointed fit and proper person to take his place on the board for the unexpired period of the term of appointment in the first instance

(a) If the vacancy is that of the Governor or a Deputy Governor, the appointment shall be made in the manner prescribed by Section 9 (1) of this Decree; and

(c) If the vacancy is that of any Director, the appointment shall be made in the manner prescribed by Section 11 (1) of this Decree.

Disqualification and cessation of
appointment.

13.- (1) Meetings of the Board shall take place as often as may be required, but not less than six times in every financial year of the Bank

(2) The Governor shall preside at every meeting of the board and in his absence, a Deputy Governor designated by him shall preside at such meeting.

(3) Five member of the Board, two of whom shall be Directors other than the Governor or the Deputy Governors shall form a quorum at any meeting.

(4) unless otherwise provided in this Decree, decisions shall be by a simple majority of the votes of the members present, but in case of any equality of votes, the person presiding shall have a casting vote.

14. – (1) Appointment of employees of the Bank shall only be to positions created by decisions of the Board and on such terms and conditions as may be laid down by the Board.

PART IV – CURRENCY

15.- The unit of currency in Nigeria shall be the naira which shall be divided into one hundred kobo.

16. The exchange rate of the naira shall be determined, from time to time, by a suitable mechanism devised by the Bank for that purpose.

17. The Bank shall have the sole right of issuing currency notes and coins throughout Nigeria and neither the Federal Government nor any State Government notes, bank notes or coins or any documents or tokens payable

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to bearer on demand being documents or taken which are likely to pass as legal tender.

18.   The Bank shall

(a)   arrange for the printing of currency notes and the minting of coins;

(b)   issue, re-issue and exchange currency notes and coins at the Bank's offices and at such agencies as it may, from time to time, establish or appoint;

(c)   arrange for the safe custody of un-issued stocks of currency notes and for the preparation, safe custody and

destruction of plates and paper for the printing of currency notes and disc for the minting of coins;

Meeting of the Board Appointment of employee Currency of Nigeria
Determination of exchange rate of the Naira. Sole right of issuing notes and coins. Power to print notes and mint coins, etc.

(d)   arrange for the destruction of currency notes and coins withdrawn from circulation under the provision of Section 20(3) of this Decree or otherwise found by the Bank to be unfit for use.

19.-(1) Currency notes and coins issued by the Bank shall be –

(a)   in such denominations of the naira or fractions thereof as shall be approved by the President on the recommendation of the Board.

(b)   Of such forms and designs and bear such device as shall be approved by the President on the recommendation of the Board

(2)   The standard weight and composition of coins issued by the bank and the amount of remedy and variation shall be determined by the president on the recommendation of the Board.

20.-(1) Currency notes issued by the Bank shall be legal tender in Nigeria at their face value for the payment of any amount.

(2) Coins issued by the Bank shall, if such coins have not been tampered with, be legal tender in Nigeria at their face value up to

(a)   an amount not exceeding forty naira in the case of coins of denominations of 10k or less;

(b)   an amount not exceeding one hundred naira in the case of coins of denominations above 10k but not more than 50k;

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(c)   an amount not exceeding two hundred naira in the case of coins of denominations above 50k but not more than N1.

(3)   Notwithstanding subsection (1) and (2) of this section, the Bank shall have power, if directed to do so by the President and after giving reasonable notice in that behalf, to call in any of its notes or coins on payment of the face value thereof and any notes of coins with respect to which a notice has been given under this subsection, shall, on the expiration of the notice, cease to be legal tender, but, subject to section 22 of this Decree, shall be redeemed by the Bank upon demand.

(4)   It shall be an offence punishable under the provisions of Subsection (1) and (2) of Section 1 of the Counterfeit Currency (Special Provisions) Decree 1984 for any person to falsify, make or counterfeit any bank note or coin issued by the Bank which is legal tender in Nigeria.

Denomination and form of currency notes and coins.
Bank's currency notes and coins to be legal tender, etc1984 No 22

21.   A coin shall be deemed to have been tampered with if the coin has been impaired, diminished or lightened otherwise than by fair wear and tear or has been defaced by stamping, engraving, mutilating or piercing whether the coin had or has not been thereby diminished or lightened.

22.- (1) No person shall be entitled to recover from the Bank the value of any lost, stolen, mutilated or imperfect note or coin.

(2)   The circumstances in which and the conditions and limitations subject to which the value of the lost, stolen, mutilated or imperfect notes or coins may be refunded ex gratia shall be within the absolute discretion of the Bank.

23. The Bank shall not be liable for the payment of any stamp duty under the Stamp Duties Act in respect of its notes issued as currency.

24. The Bank shall at all times maintain a reserve of external assets consisting of any of the following -

(a)   gold coin or bullion;

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(b) balance at any bank note outside Nigeria where the currency is freely convertible and in such currency, notes, coins, money at call and any bill of exchange bearing at least two valid and authorized signatures and having a maturity not exceeding ninety days exclusive of days of grace;

(b) treasury bills having a maturity not exceeding one year issued by the Government of any country outside Nigeria whose currency is freely convertible;

(c) security for or guarantees by, a government of any country outside Nigeria whose currency is freely convertible and securities shall mature in a period not exceeding ten years from the date of acquisition;

(d) securities of, or guarantees by, international financial institutions of which Nigeria is a member if such securities are expressed in currency freely convertible and maturity of the securities shall not exceed five years;

(e) Nigeria's gold tranche in the International Monetary Fund;

(f) Allocation of Special Drawing Rights made to Nigeria by the International Monetary Fund.
Tampering with coins.

Lost and damaged notes and coins.
Exemption from stamp duty. External reserves.

25. The Bank shall use its best endeavour to maintain external reserves at levels considered by the Bank to be appropriate for the monetary system of Nigeria.

26. Unless otherwise prohibited by law relating to the control of exchange, the Bank shall issue and redeem on demand at its head office, Nigerian currency against other

currencies eligible for inclusion in the reserve of external assets under this Decree.

<div align="center">PART V – OPERATIONS</div>

27. –(1) The Bank may –

(a)   issued demand drafts and effect other kinds of remittance payable at its own office or at the offices of agencies or correspondents;

(b)   purchase and sell gold coin or bullion

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open accounts for and accept deposits from the Federal, State and Local Governments, and from funds, institutions and corporations of all such Governments Banks and other credit or financial institutions;

(c) purchase, sell, discount and rediscount inland bills of exchange and promissory notes arising out of bona fide commercial transactions bearing two or more valid and authorized signatures and maturing within ninety days, exclusive of days of grace, from the date of acquisition;

(d) purchase, sell, discount and rediscount inland bills of exchange and promissory notes bearing two or more valid and authorized signature drawn or issued for the purpose of financing seasonal agricultural operation or the marketing of crops, semi-manufacturing or manufacturing operation designed for export or the marketing of these products and maturing within 180 days, exclusive of days of grace, from the date of acquisition;

(e) (i) purchase, sell, discount or rediscount treasury bills of the Federal Government which have been publicly offered for sale and are to mature within 184 days;

(ii) purchase, sell, discount or rediscount treasury certificates maturing within such a period as may be determined by the Federal Government and specified by an instrument made by the Federal Government;

(iii) discount and rediscount project-tied bonds issued by State Governments, Local Governments, corporations owned by the Federal or

Maintenance of external reserves.Power to buy and sell Nigerian currency.

General powers of the Bank.

State Government, being bonds which have been publicly offered for sale and with maturity not exceeding three years;

(f) purchase and sell securities of the Federal Government maturing in not more than twenty-five years which have been publicly offered for sale or from part of an issue which is being made to the public at time of acquisition, so however that the total   amount of such securities or maturity exceeding two years in the ownership of the Bank other than securities held in terms of paragraph (h) or held by the Banks as collateral under sub-

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paragraph (ii) of paragraph (k) of this subsection shall not together at any time exceed seventy-five per cent of the total demand liabilities of the Bank;

(g)　　invest in securities of the Federal Government for any amount; and to mature at any time, on behalf of staff superannuation funds and other internal funds of the Bank;

(h)　　subscribe to, hold and sell shares of any corporation or company or debentures thereof set up with the approval of or under the authority of the Federal Government for the purposes of –

(i) promoting the development of money or capital markets in Nigeria or of stimulating financial or economic development;

(ii) promoting or undertaking financial, industrial, agricultural and public utility enterprised, so however that in any such case, the total value of the holdings of shares or, as the case may be, debentures to which this paragraph applies shallnot at any time exceed ten times the aggregate of the Bank's paid-up capital and the general reserve fund of the Bank;

(i) grant advances for fixed periods not exceeding three months against publicly issued treasury bills of the Federal Government;

(j) grant advances for fixed periods not exceeding one year at a minimum rate of interest of at least one per cent above the Bank's minimum rediscount rate against-

(i) gold coin or bullion;

(ii) securities of the Federal Government which have been publicly offered for sale and are to mature within a period of twenty-five years;

Provide that no advance so secured shall at any time exceed seventy-five per cent of the market value of the security pledge and that the total of such
securities held by the Bank is within the limitation imposed by paragraph (g) of this subsection;

(iii) such bills of exchange and promissory notes as are eligible for purchase, discount or rediscount by the Bank up to seventy-five per cent of their nominal value;

(iv) warehouse warrants or their equivalent (securing possession of goods), in respect of staple commodities or other goods duly insured and with a letter of hypothecation from the owner;

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Provide that no such advances shall exceed seventy-five per cent of the current market value of the commodities in question;

(v) treasury certificates issued by the Federal Government:

Provide that no advance so secured shall at any time exceed seventy-five per cent of the market value of the certificates pledge;

(i) purchase and sell foreign currencies and purchase, sell, discount and rediscount bills of exchange and treasury bills drawn in or on places abroad maturing within 184 days exclusive of days of grace from the date of acquisition;

(m) borrow specifically under the provisions of a refinancing agreement or for any other purpose;

(n)   issue naira-denomited notes or other forms of securities or make any arrangement in respect of outstanding foreign obligations of the Federal Government in the course of rescheduling and restructuring such obligations and for this purpose naira-denominated notes issued by the Bank shall bear the signature of the Governor of the Bank and shall, when issued bind the Federal Government to pay the principal sum mentioned in that note and the interests thereon;

(o) maintain accounts with central banks and other banks outside Nigeria;

(p) purchase and sell securities of or guaranteed by any Government whose currency is freely convertible or securities issued by international financial institutions, of which Nigeria is a member, which are also expressed in currencies which are freely convertible;

(q)   act as correspondent, banker or agent for any central bank or other monetary authority established under government auspices;

(r) undertake the issue and management of loans publicly issued in Nigeria by the Federal or State Governments or by Federal or State public bodies;

(s)   accept from customers, for custody, securities and other article of value;

(t) undertake on behalf of customers and correspondents, the purchase, sale, collection and payment of securities, currencies and credit instruments

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in Nigeria or abroad, and the purchase or sale of gold or silver;

(u)   promote the establishment of bank clearing and provide facilities for the conduct of clearing business in premises belonging to the Bank;

(v)   notwithstanding paragraph (d) of Section 29 of this Decree, grant temporary advances to Commercial Banks within the meaning of the Banks and other Financial

Institutions Decree 1991 which participate in bank clearing in respect of temporary debit balances on their accounts at such rate of interest and under such terms as the Bank may, from time to time, determine;

(w)   hold redeemable bonds for the purpose of regularizing any currency exchange exercise;

(x)   subject as is expressly provided in this Decree, generally conduct business as a bank, and do all such things as are incidental to or consequential upon the exercise of its power or the discharge of its duties under this Decree.

(2)   The Governor may, at any time in his direction and by previous notice in writing lodged with the Board, decide that the powers conferred by Subsection (1) of this section in accordance with the provisions of paragraph (f), (g), (h), (j) or sub-paragraph (ii) of paragraph (k) of that subsection be extended to the treasury bills and treasury certificates or the securities, as the case may be, of any State Government with which the Bank appears substantially to have established relationship of banker, or to any specified treasury bills and treasury certificates or securities of such a State Government subject to the same conditions as specified in those paragraphs and subject to limitations specified in paragraph (g) of Subsection (1) of this section which limitations shall then apply to the aggregate value of the Federal and State Government securities so dealt with.

(3)   The Bank shall have power-

(a) to carry out open market operations for the purpose of maintaining monetary stability in the economy of the country, and without prejudice to the generally of the foregoing, the Bank may also for that purpose issue, place, sell, repurchase, amortize or redeem securities to be known as "stabilization securities" (which shall constitute its obligations) and the

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securities shall be issued at such rate of interest and under such conditions of maturity, amortisation, negotiability and redemption as the Bank may deem appropriate;

(b)   to issue other forms of securities as it deems necessary for open market operations.

(4)   The Bank shall have power -

(a)   to sell or place by allocation to each bank any stabilization securities issued under subsection (3) of this section;

(b)   to repurchase, amortise or redeem in such manner as the Bank may deem appropriate, any such stabilization securities, and may stabilization securities repurchased by the Bank shall be extinguished and shall not constitute the assets of the Bank.

(5)   Without prejudice to Subsections (1) to (4) of this section as relates to the powers of the Bank to grant advances and make provisions for securities , the Bank may, without the exclusion of other banks, grant advances to any authority –

(a)   for fixed periods not exceeding one year at a rate of interest which shall be at least one per cent above the Bank's minimum rediscount rate; and

(b)   except as prescribed in Subsection (6) of this section, upon such conditions as the Bank may specify or as prescribed to ensure payment thereof with interest.

(6)   The advances referred to in subsection (5) of this section may be granted in any particular case where a guarantee in writing is given by the Federal Government to the Bank on behalf of any such authority so however that –

(a)   the total advances which may, subject to the provisions of this section, be granted shall not exceed an amount considered by the Bank to be
adequate for the authority to commence its operations at the beginning of the crop or produce season;

(b)   any such advances shall be secured so soon after the advances have been granted as may be agreed by the Bank (either in part or in whole) as prescribed in paragraph (j) or (k) of this subsection and the said provisions shall be so construed.

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(7)   Any advances which may be granted by virtue of the provisions of subsections (5) and (6) of this section shall be used for the purpose of financing-

(a)   the purchasing and marketing operations authorized to be undertaken by any such authority by the law under which the authority was established or as may be approved by the Bank; and

(b)   with the approval of the Bank, other operations as may be incidental thereto:

Provide that any such authority may, if it so wishes, make advances to any licensed buying agent (within the meaning of any law under which the authority was established) for the purchase of produce for sale to the said authority, and provided also that the quantity of produce to be so purchased is included in the estimate tonnage of crops against which total advances are to be made by the Bank.

(8)   Subsection (5) to (8) of this section relate to any authority of the Federal Government or State Government or two or more State Governments including an interim authority established for such purpose by any law in operation in Nigeria.

(9)   The reference in Subsections (5) to (8) of this section to the granting of advances includes a reference to the provision of credit facilities.

28.-(1) In addition to any of its powers under this Decree, the Bank may

(a)   require persons having access thereto, at all reasonable times, to supply, in such forms as the Bank may from time to time direct, information relating to or touching or concerning matters affecting the economy of Nigeria;

(b)   issue guidelines to any person and any institution that engages in the provision of financial services, including operators of bureaux de change,

Power to require certain information development banks, community banks, discount houses and insurance companies.

(2)   The Bank shall take account of matters of confidential nature supplied to the Bank under this section, but where the Bank is satisfied that it is in the national interest and that the person supplying the information

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development banks, community banks, discount houses and insurance companies.does not object to a proposal to publish it within a reasonable time ofbecoming aware of it, the Bank may, from any information in its possession, compile and publish statistical data, and anything relevant thereto, on the national economy.

(3)   Where any person lawfully required to supply information for the purpose of this section-

(a)   supplies information which he knows to be false or supplies the information recklessly as to its truth or falsity; or

(b) without reasonable excuse (the proof of the reasonableness to lie on him) fails to comply with any requirement of the Bank under paragraph (a) of subsection (1) of this section.

He supply or failure to supply, as the case may be, as therein provided, shall be an offence under this section.

(4)   An offence under this section is punishable on conviction by-

(a)   imprisonment not exceeding three years or with a fine not less than N50,000 or more than N100,000 for every false information or with both such imprisonment and fine;

(b)   a fine or not less than N500 or more than N2,000 for every day during which the failure to comply with any requirement of the Bank continues.

(5)　　Where any person or institution fails to comply with any guideline issued under paragraph (b) of section (1) of this section, he shall be guilty of an offence or to a fine nor less than N50,000 or more than N100,000 or to both such imprisonment and fine.

29.　　The Bank shall not -

(a) engage in trade or otherwise have a direct interest in any commercial agricultural or industrial undertaking, except as provided in Subsection (1) of Section 27 of this Decree, or in any other undertaking, except such interest which the Banks　may in any way acquire in the course of the Prohibited activities.

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satisfaction of debts due to it, and provided that all such interests so acquired shall be disposed off at the earliest suitable time;

(b)   except as provided in paragraph (i) of Subsection (1) of section 27 of this Decree, purchase the shares of any corporation including the shares of any banking institution;

(c)   grant loan upon the security of any shares;

(d)   subject to the provisions of section 33 of this Decree, grant unsecured advances or advances secured otherwise than as laid down in paragraphs (j) and (k) of Subsection(1) of Section 27 of this Decree.

Provide that in the event of any debts due to the Bank becoming in the opinion of the Bank endangered, the Bank may secure such debts on any real or other property of the debtor and may acquire such property which shall be re-sold at the earliest suitable time.

(e)   purchase, acquire or lease real property except in accordance with the provision of paragraph (d) of this section and except so far as the Bank shall consider necessary or expedient for the provision or future provision of business premises for the Bank and its agencies and any clearing houses set up as provided in Section 41 of this

Decree and residences for the Governor, Deputy Governors and officers and other employees of the Bank;

(f) draw or accept bills payable otherwise than on demand;

(g)   pay interest on deposits except deposits in respect of cash reserve and special deposits as stipulated in paragraphs (a) and (c) of Subsection (1) of section 39 of this Decree;

(h)   accepts for discount or as security for an advance made by the Bank, bills or notes signed by members of the Board or by offices and other employees of the Bank;

(i) open accounts for or accept deposits from persons other than as provided in paragraph (c) and   (o) of Subsection (1) of section 27 of this Decree.

30.   The Bank shall make public at all times its minimum rediscount rate.

PART VI – RELATIONS WITH THE FEDERAL GOVERNMENT

31.   **-** (1) The Bank shall be entrusted with Federal Government banking and foreign exchange transactions.

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Publications of the minimum rediscount rate. Certain services to

(2)   The Bank shall receive and disburse Federal Government moneys and keep account thereof without remuneration for such services.

(3)   In any place where the Bank has no branch, it may appoint another bank to act as its agent for the collection and payment of Federal Government moneys.

32. Notwithstanding the provisions of section 31 of this Decree, the Federal Government may-

(a) maintain accounts in Nigeria with other banks in such cases and on such conditions as the Federal Government may determine;

(b)   use the services of the State Treasuries for the collection and payment of Federal Government moneys in places where it may be appropriate or convenient to do so.

33.- (1) Notwithstanding the provisions of paragraph (d) of Section 29 of this Decree, the Bank may grant temporary advances to the Federal Government in respect of temporary deficiency of budget revenue as such rate of interest as the Bank may determine.

(2)   The total amount of such advances outstanding shall not at any time exceed twelve and a half per cent of the estimated recurrent budget revenue of the Federal Government for the year in which the advances are granted.

(3)   All advances made pursuant to this section shall be repaid as soon as possible and shall in any event be repayable by the end of the Federal Government financial year in which they are granted and if such advances remain unpaid at the end of the year, the power of the Bank to grant such further advances in any subsequent year shall not be exercisable, unless and until the outstanding advances have been repaid.

34.-(1) The Bank shall be entrusted with the issue and management of Federal Government loans publicly issued in Nigeria, upon such items and conditions as may be agreed between the Federal Government and the Bank

(2)   Notwithstanding the provisions of this section, the Bank may appoint agents for the issue and management of Federal Government loans publicly issued in Nigeria.

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(3)   The Bank shall have power to perform functions relating to the management of the external debts of the Federal Government as may be directed by the President. the Federal Government.

Federal Government right to use other banks and State Treasuries.Advances to Federal Government Issue and management of Federal Government loans

(4)   For the purpose of this section, the Bank shall have power to issue, from time to time, guidelines for the smooth operation of the Debt Conversation Programme of the Federal Government.

35. The Bank may act as banker to States and Local Governments and to funds, institutions or corporations established by Federal, State and Local Governments.

36. The Bank may act generally as agent for the Federal Government, State Government or a Local Government -

(a) where the Bank can do so appropriately and consistently with the provisions of this Decree and with its duties and functions as a Central Bank; and

(b) on such terms and conditions as may be agreed between the Bank and the Government concerned.

PART VII – RELATIONS WITH OTHER BANKS

37. The Bank may act as banker to other banks in Nigeria and outside Nigeria

38. The Bank shall wherever necessary seek the co-operation of and co-operation
with other banks in Nigeria –

(a) to promote and maintain adequate and reasonable financial service for the public;

(c) to ensure high standards of conduct and management throughout the banking system;

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Power to act as banker to States and Local Governments, and funds, institutions and corporations, etc, and established by such Government.

Power to act as agent for Federal, State or Local Government

Banker to other banks. Co-operation with banks in Nigeria.

(c)   to further such policies not inconsistent which with this Decree as shall in the opinion of the Bank be in the national interest.

39.-(1) The Bank may, from time to time, issue directives by circular requiring each bank to –

(a)   maintain at all times in the form of cash reserves with the Bank, at its office, a sum equal to a prescribed ratio of the bank's deposit liabilities;

(b)   hold a minimum amount of specified liquid assets which shall be expressed as a ratio of deposit liabilities of the bank;

(d)   maintain as special deposits with the Bank at its head office a percentage of the bank's deposit liabilities or a percentage of an increase or the absolute increase in such deposit liabilities over an amount outstanding on a date, and for a period as shall be specified by the Bank.

(2)   For the purpose of paragraph (a) of subsection (1) of this section, the Bank shall specify-

(a)   the class of deposit liabilities against which the cash reserves mentioned in that paragraph shall be held;

(b)   the ratio of cash reserve which a bank shall so maintain and the banks may be classified into such categories as the Bank may, from time to time, specify in the circular to every bank.

(3)   For the purpose of paragraph (a) of Subsection (1) of this section the cash reserves of a bank shall be determined within such period as the Bank may, from time to time, specify, on the basis of the periodic balances of the bank's deposit liabilities and the Bank shall have power-

(a)   to prescribe different cash reserve ratios to be maintained by cash category of banks;

(b)   to require each bank from time to time to prepare and deliver to the Bank in such period as the Bank may specify, a true and correct statement showing the position of the deposit liabilities of the bank and the Bank may

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require such statement to be made at such intervals as it may specify;

(c) to require any bank to furnish to it such information and statistics in such form and as often as the Bank may deem necessary for the purpose and satisfying itself that the bank concerned has complied or is complying with the provisions of subsection (1) of this section

Power to issue directives on cash reserves.

(4)   For the purpose of paragraph (b) of Subsection (1) of this section, the Bank shall have power, in respect of the specified assets which may, from time to time, be held by a bank, to vary the composition and proportion of each category thereof.

(5)   The Bank shall have power-

(a)   to require that all applications to any bank for loans exceeding such amount as the Bank may specify shall be submitted by the bank to the Bank for approval and no such loans shall be made without such approval;

(b)   to fix a ceiling on the volume of loans, advances and discount outstanding at each bank and it may fix different ceilings for different categories of each such loans, advances and discounts;

(c) to fix ceiling on the aggregate amount of loans, advances and discounts granted by any bank and outstanding at any time and the Bank may place limits on the rate of increase in the aggregate amount of such loans, advances and discounts within a specified future period of time.

(6)   For the purpose of paragraph (c) of Subsection (1) of this section, the Bank shall have power to specify the class of deposits to which the provisions of that subsection shall apply and any special deposits held in accordance with that subsection shall not count as specified liquid assets for the purposes of paragraph (b) of subsection (1) of this section; and subject to the provisions of this subsection the Bank may, at its discretion, pay interest on such special deposits held by it.

(7)   The Bank shall have power to prohibit any bank which fails to comply with any directive issued under this section, from extending new loans and advances and from undertaking new investments, until the bank complies with the directives to the satisfaction of the Bank; and may, in addition, levy fines as appropriate under the

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Provisions of section 15 (5) of the Banks and other Financial Institutions Decree 1991.

(8)   Any bank which furnishes false information to the Bank for any purpose under this section shall be guilty of an offence and liable on conviction to a fine of not less than N100,000 for the first offence and to a fine N200,000 for a second or each subsequent offence.

40.   The Bank may appoint as its agent any bank in Nigeria on such terms as may be agreed between the Bank and the bank concerned for the issue, re-issue exchange and withdrawal of currency notes and coins, or for any other purpose pertaining to the Bank's functions under this Decree.

41.   It shall be the duty of the Bank to facilitate the clearing of cheques and credit instruments for banks carrying on business in Nigeria and for this purpose, the Bank shall at any appropriate time and in conjunction with other banks establish clearing houses in premises provided by the Bank in such places as the Bank may Consider necessary;

Provided that a bank may be barred from participating in clearing for such period as the Bank may deem fit for non-compliance with directives of the Bank

PART VIII – ACCOUNTS AND STATEMENTS

42.   The financial year of the Bank shall begin on 1st January and end in 31st December.

43.-(1) The accounts of the Bank shall be audited by an auditor or auditors appointed by the Board.

(2)Without prejudice to the provisions of Subsection (1) of this section, the President may direct the Auditor-General of the Federation to conduct an examination of the accounts of the Bank, and submit a report thereon relating to the issue, re-issue, exchange and withdrawal of currency notes and coins by the Bank and the Bank shall provide all necessary facilities for the purpose of the examination.

44.-(1) The Bank shall, within two months after the close of each financial year, transmit to the President, a copy of its annual accounts certified by the auditor.

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(2)   The Bank shall, within four months from the close of each financial year, submit to the President a report on its operations during the year

(3)   Any report required to be submitted to the President shall be published by the Bank in such manner as the Governor may direct.

(4)   The Board shall ensure that accounts submitted pursuant to this section shall as soon as possible be published in the Gazette.

Appointment of other banks as agents. Clearing house. Financial year. Audit. Publication of annual accounts and reports.

(5) The Bank shall as soon as may be practicable after the last day of each months, make up and publish a return of its assets and liabilities as at the close of business on that day, or if that day is a holiday, as at the close of business on the last preceding business day.

(6)   A copy of the return referred to in Subsection (5) of this section shall be forwarded to the President and shall be published in the Gazette.

(7)   In the application of this section, the gold tranche position at the International Monetary Fund shall form part of the external reserve assets of the Bank.

PART IX – MISCELLANEOUS

45. There shall be a Secretary to the Board to be appointed by the Governor.

46.-(1) The Bank may, with the approval of the President, make regulations for the better carrying out of the objects and purpose of this Decree.

(2) The Board shall have power to make and alter rules and regulations for the good order and management of the Bank.

47. The Bank shall be exempted from the payment of tax under the Companies Income Tax Act 1979.

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48. The provisions contained in the Schedule to this Decree shall have effect with respect to the proceedings of the Board and the other matter contained therein and the Board shall have the power to amend the provisions of the Schedule as it may deem necessary.

49. The provision of the Companies and Allied Matters Decree 1990 shall not apply to the Bank.

Appointment of Secretary to the Board Power of the Bank to make regulations.

Exemption of the Bank

from the payment of tax. 1979 No. 28. Proceedings of the Board.

Companies and Allied Matters Decree 1990, No. 1.

50. Except with the written consent of the Governor, no bank shall hereafter be registered under the provision of any Federal legislation by a

name which includes any of the words "Central" "Federal", "Federation", "National", "Nigerian", "Reserve", "State", "Christian", "Islamic", "Moslem", "Quranic" or "Biblical".

51. The Bank shall not be placed in liquidation except pursuant to legislation enacted in that behalf and then only in the manner directed by that legislation.

52. In furtherance of the provisions of paragraph (c) of section 2 of this Decree the Bank shall have power to compile and circulate to all banks in Nigeria, a list of debtors whose outstanding debts to any bank has been classified by bank examiners under the bad debt category.

53. In this Decree, unless the context otherwise requires -

"Bank" means the Central Bank of Nigeria continues in being by this Decree;

"Bank" means a bank licensed under the Banks and other Financial Institutions Decree 1991;

"Bank examiner" has the meaning assigned to it in section 30 of the Banks and Other Financial Institutions Decree 1991;

"Board" means the Board of Director of the Bank;

"Governor" and "the Deputy Governor" means respectively the

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Governor and Deputy Governors of the Bank as appointed under this Decree; Officers" or "Officers of the Bank" means officers of the Central Bank of Nigeria;

"President" means the president, Commander-in-Chief of the Armed Forces of the Federal Republic of Nigeria;

"States" means States within the Federal Republic of Nigeria.

54.- (1) This Decree may be cited as the Central Bank of Nigeria Decree 1991.

(2) The Central Bank of Nigeria Act 1958, the Central Bank of Nigeria

(Currency Conversion) Act 1967 and the Federal Act 1969 are hereby

repealed.

Prohibited Banking names. Liquidation List of Debtors
Interpretation Citation, repeal, etc Cap 30.
1967 No. 23 1969 No.

(3)   The under mentioned amendment enactments are hereby consequentially repealed, that is –
(a) Central Bank of Nigeria (Amendment) Act 1962;
(b) Central Bank of Nigeria (Amendment) Act 1967;
(c) Central Bank of Nigeria (Amendment) (No.2) Act 1967;
(d) Central Bank of Nigeria (Amendment) Act 1969;
(e) Central Bank of Nigeria (Amendment) Act 1968;
(f) Central Bank of Nigeria (Amendment) (No. 2) Act;
(g)   Central   Bank   of   Nigeria   (Currency Conversion)(Amendment) Act 1969;
(h) Central Bank of Nigeria (Amendment) Act 1969;
(i) Central Bank of Nigeria (Amendment) Act 1970;
(j)   Central Bank of Nigeria (Amendment) (No. 2) Act
       1960;
(k) Central Bank of Nigeria (Amendment) Act 1976;
(l) Central Bank of Nigeria (Amendment) Act 1976;
(m) Central Bank of Nigeria (Amendment) Decree 1987; and
(n)   Government Promissory Notes (Amendment) Decree 1989.

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(4)   Without prejudice to Section 6 of the Interpretation Act of 1964, the
repeal of the enactments referred to in Subsection (3) of this section shall not affect anything done under or pursuant to those enactments.

(5)   The rights, interest, obligations and liabilities of the Bank existing before the commencement of this Decree under any contract or instruments, or in law or in equity apart from any contract or instrument, shall by virtue of this Decree be assigned to and vested in the Bank.

(6)   Any such contract or instrument as is mentioned is subsection (5) of this Section shall be of the same force and

effect against or in favour of the Bank and shall be enforceable fully and effectively.

SCHEDULE   Section 48
PROCEEDING OF THE BOARD, ETC.

1.- (1) Not less than three weeks notice shall be given of each meeting of the Board and such notice shall be sent to every Director at his registered

1962 No. 17
1967 No. 35
1967 No. 50.
1968 No. 4.
1968 No. 17.
1968 No. 28.
1968 No. 50.

1970 No. 40.
1970 No 59
1972 No. 46
1976 No. 38
1987 No. 36
1989 No. 10

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address, but where it is necessary to convene an emergency meeting, all reasonable steps shall be taken to give notice to every Director who is at the time in Nigeria.

(2)   No person other than the Directors and the Secretary shall attend meetings of the Board but the chairman may request the presence of officers of the Bank when technical matters are under consideration.

2- (1) The Board shall cause minutes to be duly entered in a book provided for that purpose –

(a)   of all appointments of officers made by the Board;

(b)   of the names of all Directors present at each meeting of the Board;

(c)   of all resolutions and proceedings of each meeting

(2) A copy of the minutes shall be circulated at that or succeeding meeting and and after approval by the Board, signed by the Chairman.

(3)   The Common seal of the Bank shall be affixed under such conditions as may be determined, from time to time, by a resolution of the Board

(4)   Every Director shall, on appointment or re-appointment, sign a declaration as in Form 1 in the Annex to this Schedule affirming his allegiance and service to the Bank and pledging himself to observe strict secrecy respecting all transaction of The Bank.

(5)   Any Director having any interest, directly or indirectly in any dealing or business in which the Bank is concerned shall disclose such interest at the meeting of the Board at which the dealing or business is discussed and in no circumstances shall he vote no the matter. If required by the Board to do so, he shall withdraw from the meeting.

6.-(1) Every Director, officer and other employee of the bank shall be
indemnified by the Bank against all losses, costs and expenses incurred by him by reason of any contract entered into or act or deed done in the proper and careful discharges of this duties. The Bank shall pay all such costs, losses and expenses.

(2) No Director, officer or other employee of the Bank shall be liable to the Bank for any losses, costs or expenses incurred by the Bank by the insufficiency or deficiency of value of, or title to, any property or security acquired or taken on behalf of the Bank or by the insolvency,

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bankruptcy or wrongful act of any customer or debtor of the Bank, unless due to willful default in the execution of his duties.

7. In consultation with the Board, the Governor and Deputy Governors shall be responsible for-

(a)   the formulation and execution of the Monetary and Credit Policy for Nigeria;

(b)   fixing the rate or rates of discount or rediscount and the rate or rates of interest on advances to Government and to other customers of the Bank;

(c)   devising suitable mechanism to determine rates of exchange at which the Bank shall buy and sell foreign currencies under section 16 of this Decree;

(d)   the appointment of auditors in accordance with section 43 of this Decree, the provision of the necessary facilities and the rates of remuneration.

(e)   the establishment and closing of Zonal Offices, Branches and Currency Officers;

(f) the appointment of Zonal Controllers, Branch Controllers and Currency Officers;

(g)   the appointment of officers and other employees:

Provided that the Governor shall have authority to make such appointment as he deems appropriate without consultation with the Board in relation to officers and employees whose salaries do not exceed Central Bank Service Scale 06.

8.- (1) The Governor and Deputy Governors shall have special responsibility for-

(a)   the organization of the management of the Bank at its Head Office, Zonal Offices, Branches and Currency Centres;

(b)   causing –

   (i) true accounts to be kept of all transactions entered into by the Bank and of the assets and liabilities of the Bank and of all valuable entrusted to the Bank;

   (ii) the compilation, form and publication of accounts in accordance with Section 44 (2) of this Decree;

(c) the safe-keeping of all the assets of the Bank and the valuables entrusted to the Bank;

(c) the discharge by officers and other employees of the Bank of the duties placed upon them;

(d) the supervision of arrangements relating to the issue and redemption of currency notes and coins and all matters connected with the forms, design and composition of currency notes and coins; provided that the Director of Currency Operations shall be charged with the direct responsibility under the Governor for specific matters under this sub-paragraph.

(2) It shall be the duty of the Governor to work out the detailed responsibilities of each of the Deputy Governors; and may assign any of his duties during his absence from duty or at such other time to any of the Deputy Governors as he deems fit.

(3) Without prejudice to sub-paragraph (2) of his paragraph the Governor shall have power to assign or re-assign the Deputy Governors, from time to time, as may be expedient for the performance of the Bank's function under or pursuant to this Decree.

9. The books of the Bank shall be kept at the Head Office of the Bank or at such other places as the Board may, from time to time, determine.

10. The Governor shall formulate, for the approval of the Board, general rules and any subsequent amendments thereto, providing for-

(a) the safe keeping of the common seal of the Bank;

(b) the safe keeping of assets of the Bank and of valuables entrusted to the Bank;

(c) the safe keeping of stocks of unissued or redeemed currency and the preparation, safe custody and destruction of plates and paper for the printing of currency notes and disc for the minting of coins;

(d) the protection of bank notes and coins in transit;

(e)   the conditions under which any Zonal Controller, Branch Controller and Currency Officer may be appointed;

(f) the conditions governing discounts and advances;

(g)   the exercise of dual control and general security throughout the Bank;

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(h)   such additional arrangements which may be made to ensure the efficient working of the Bank, through proper observance of security and the accuracy of the accounts of the Bank.

11.-(1) The Board shall, from time to time, as it deems fit delegates some of its responsibilities to the Committee of Governors.

(2)   Formal meetings of the Committee of Governors shall take place as often as may be required but not less than once a month.

(3)   The Committee of Governors shall cause minutes to be dully entered in books provided for that purpose during each of its formal meetings.

(4)   The Governors shall preside over every meeting but in his absence a Deputy Governor designated by him shall act in his place, and in the absence of both the Governor and any such designated Deputy Governor, one of that other Deputy Governors present shall act as Chairman.

12.   The Board by resolution shall, for such purposed as it may, from time to time, decide, authorize the Governor, the Deputy Governors or any officer of the Bank to sign documents relating to all aspects of the Bank's business: provided that such documents are not required by law or common practice to be given under seal. Any such authorizations shall forthwith be notified in the Gazette.

13.-(1) No offer or other employee of the Bank shall occupy any other office or hold any other employment whether remunerated or not except with the approval of the

Board embodied in a resolution and only in the following capacities, that is to say-

(a)   as member of any economic research institution or of any commission established by the Federal Government to enquire into any matter affecting currency or banking in Nigeria or into such other subjects relating to the functions of the Bank under this Decree;

(c)   as director or member of the Board or by whatever name called, of any international bank, international monetary authority or economic institution to which the Federal Government shall have interest or given support or approval;

(d)   member of other, agency of the Federal, State and Local Government.

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(2) Any remuneration to which any officer or other employee of the Bank is entitled in respect of any appointment made by virtue of the provisions of this Schedule shall be paid direct to the Bank.

(3) This Schedule shall not prevent the Bank from employing, at the Board's discretion and subject to such terms and conditions as shall be laid down by the Board, part-time advisers for particular purposes and for specific periods of time.

14. All officers and employees of the Bank shall be required to sign declarations as in Form 2 in the Annex to this Schedule affirming their allegiance and service to the Bank and pledging themselves to observe strict secrecy respecting all transactions of the Bank.

15.– (1) The appointment of a legal practitioner to the Bank and changes in that appointment shall be made by the Board on the recommendation of the Governor.

(2) Plaints, written statements, affidavits and all other documents connected with legal proceedings may be signed and verified on behalf of the Bank by any officer empowered by or under paragraph 12 of this Schedule.

16. The Board may require any officer or other employee to give the Bank, in such manner as it may require, such security as it may regard reasonable for the faithful discharge of his duty.

17. In this Schedule, unless the context otherwise requires-

"Committee of Governors" means a committee of the Governor and the Deputy Governors of the Central Bank of Nigeria;

"Director" means a member of the Board of Directors of the Central Bank of Nigeria.

Annexe

FORM 1   *Paragraph*
(4)
FORM OF DECLARATION OF ALLEGIANCE AND SECRECY BY DIRECTORS

I, …………………………….….. Being appointed a Director of the Central Bank of Nigeria, do solemnly declare that I will faithfully perform the duties of Director and that I will to the best of my ability uphold

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the interests of the Central Bank of Nigeria and that I will observe strict secrecy respecting all transactions of the Bank and all matters relating thereto and that I will not directly or indirectly reveal any of the matters or any information which may come to my knowledge in the discharge of my duties except when required or authorized to do so by the Board of the Bank or by law.

Signed…………………………..
Paragraph (14)

FORM 2
FORM OF DECLARATION OF ALLEGIANCE AND SECRECY BY OFFICERS AND EMPLOYEES

I, ………………………….. Being appointed a member of the staff of the Central Bank of Nigeria, do solemnly declare that I will faithfully perform the duties assigned to me and that I will do the best of my ability uphold the interest of the Central Bank of Nigeria and that I will observe strict secrecy respecting all transactions of the Bank and all matters relating thereto and that I will not directly or indirectly reveal any of the matters or any information which may come to my knowledge in the discharge of my duties except when required or authorized to do so by the Board of the Bank or by law.

Signed…………………………..
MADE at Lagos this 20th day of June, 1991
GENERAL I. B. BABANGIDA,
President, Commander-in-Chief
Of the Armed Forces,
Federal Republic of Nigeria

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EXPLANATORY NOTE
(This note does not form part of the above Decree but
is intended to explain its purport
The Decree makes provisions for the continuance of the Central Bank of Nigeria with the Board of Directors consisting of the Governor, Deputy Governors and five Directors, and charges the Bank with the overall control and administration of the monetary and banking policies of the Federal Government both within and outside Nigeria.

Decree No. 25

THE FEDERAL MILITARY GOVERNMENT hereby decrees as follows---

PART 1 ---- BANKS

ESTABLISHMENT OF BANKS, ETC.

1. --- (1) The Central Bank of Nigeria (hereafter in this Decree referred to as "The Bank") shall have all the functions and powers conferred and the duties imposed on it by this Decree

(2) The Bank shall in addition to the functions and powers conferred on it by this Decree, have the functions and powers conferred and the duties imposed on the Bank by the Central Bank of Nigeria Decree 1991.

(3) The Bank may authorize or instruct any officer or employee of the Bank to perform any of the functions, exercise any powers, or discharge any of its duties under this Decree.

(4) The Bank may, either generally or in any particular case, appoint any person who is not an officer or employee of the Bank, to render such assistance as it may specify in the exercise of its powers, the performance of its functions, or the discharge of its duties under this decree, or to exercise, perform or discharge the functions and duties on behalf of and in the name of the Bank.

(5) For the purposes of this Decree, a person shall be deemed to be receiving money as deposits---

(a) If the person accepts deposits from the general public as a feature of its business or if issues an advertisement or solicits for such deposit;

(b) notwithstanding that it receives moneys as deposits which are limited to fixed amounts or that certificates or other instruments are issued in respect of any such amounts providing for the repayment to the holder thereof either conditionally or unconditionally of the amount of the deposits at specified or unspecified dates or for the payment of interest or dividend on the amounts deposited at specified intervals or otherwise, or that such certificates are transferable.

(6) Notwithstanding anything contained in this section to the contrary, the receiving of moneys against any issue of shares and debentures offered to the public in accordance with any enactment in force within the

Functions,
Powers and duties of the Central Bank of Nigeria.

Federation shall not be deemed to constitute receiving moneys as deposits for the purpose of this Decree.

2 --- (1) No person shall carry on any banking business in Nigeria except it is a company duly incorporated in Nigeria and holds a valid licence issued under this Decree.

(2) Any person who transacts banking business without a valid issued under this Decree is guilty of an offence and liable on conviction to a term of imprisonment not exceeding 10 years or a fine not exceeding N5000,000 or to both such imprisonment and fine.

3.- (1) Any person desiring to undertake banking business in Nigeria shall apply in writing to the Government for the grant of a licence and shall accompany the application with the following---

(a) a feasibility report of the proposed bank;

(b) a draft copy of the memorandum and articles of association of the proposed bank;

(c) a list of the shareholders, directors and principal officers of the proposed bank and their particulars;

(d) the prescribed application fee; and

(e) such other information, documents and reports as the Bank may, from time to time, specify.

(2) After the applicant has provided all such information, documents and report as the Bank may require under subsection (1) of this section, the shareholders of the proposed bank shall deposit with the Bank a sum equal to the minimum paid-up share capital that may be applicable under section 9 of this Decree.

(3) Upon the payment of the sum referred to in Subsection (2) of this section, the Governor may issue a licence with or without conditions or refuse to issue a licence and the Governor need not give any reasons for the refusal.

(4) Where an application for a licence is granted, the Bank shall give written notice of that fact` to the applicant and the licence fee shall be paid.

4. The Bank may invest any amount deposited with it pursuant to section 3 (2) of this Decree in treasury bills or such other securities until such a time as the Governor shall decide whether or not to grant a licence, and where the

Banking   448

business.

Application
for grant of licence

Investment

of release of

license is not granted the Bank shall repay the sum deposited

to the applicant, together with the investment income after

deducting administrative expense and tax on the income.

5 .- (1) Except as provided in section 9 (2) of this Decree, the Governor may vary or revoke any condition subject to which a license was granted or may impose fresh or additional conditions to the grant of a license.

(2) Where the grant of a license is subject to conditions, the bank shall comply with those conditions to the satisfaction of the Bank within such period as the Bank may deem appropriate in the circumstances.

(3) Any bank which fails to comply with any of the conditions of its licence is guilty of an offence under this section and shall be liable on conviction to a fine not exceeding N1, 000 for each day during which the condition is not complied with.

(4) Where the Governor proposes to vary, revoke or impose fresh or additional conditions on a licence, he shall, before exercising such power, give notice of his intention to the bank concerned and give the bank an opportunity to make representation to him thereon.

(5) Any bank which fails to comply with any fresh or additional condition imposed in relation to its licence is guilty of an offence and liable on conviction to a fine of N100, 000 and where the offence continues, to an additional fine of N1,000 for each day during which the offence continues

6. No bank may open or close any branch office anywhere within or outside Nigeria except with the prior consent in writing of the Bank.

7. Except with the prior consent of the Governor, no bank shall enter into an agreement or arrangement---

(a) which results in a change in the control of the bank;

(b) for the sale, disposal or transfer howsoever, of the whole or any part of the business of the bank;

(c) for the amalgamation or merger of the bank with any other person;

(d) for the reconstruction of the bank;

(e) to employ a management agent or to transfer its business to any such agent.

prescribed minimum paid
-up share capital.

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Power to revoke or vary conditions of license.

Opening and closing of branches.

Restructuring, re-organisation, mergers and
disposal etc. of bank

8. --- (1) Except with the approval of the Bank, no foreign bank shall operate a representative office in Nigeria.

(2) Any person who contravenes subsection (1) of this section or section 7 of this Decree is guilty of an offence and liable on conviction to a fine of N1000, 000 and in the case of a continuing offence to an additional fine of N10, 000 for each day during which the offence continues.

9. --- (1) The President on the recommendation of the Bank shall, from time to time, determine, as he may deem appropriate, the minimum paid-up share capital of each category of banks.

(2) Subject to subsection (1) of this section, the minimum paid-up share capital of a bank shall in respect of---

(a) a commercial bank, be N50,000,000;

(b) a profit and loss sharing bank, be N50,000,000;

(c) a merchant bank, be N40,000,000;

(d) a community bank, be N250,000.

(3) Any failure to comply with the provisions of this section within 12 months from the date of this Decree shall be a ground for the revocation of any licence issued pursuant to the provisions of this Decree or any other Act repealed by it.

10. Notwithstanding the provisions of the Companies and Allied Matters Decree 1990 or any agreement or contract, the voting rights of every share holder in a bank shall be proportional to his contribution to the paid-up share capital of the bank.

11. Notwithstanding anything contained in any law or in any contract or instrument, no suit or other proceeding shall be maintained against any person registered as the holder of a share in a bank on the ground that the title to the said share vest in any person other than the registered holder:

Provided that nothing in this section shall bar a suit or other proceeding on behalf of a minor or person suffering from any mental illness on the ground that the registered holder hold the share on behalf of the minor or person suffering from the mental illness.

Operation of foreign banks
in Nigeria

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Minimum
paid-up share
capital of
banks and
compliance,
with minimum
paid-up share

capital

requirement.

Share holder's voting rights to be proportional to share-holding.

1990 No. 1 Restriction of legal proceedings
in respect of shares held in the name of another.

12. The Governor may, with the approval of the President by notice published in the *Gazette* revoke any license granted under this Decree if a bank---

(a) ceases to carry on in Nigeria the type of banking business for which the license was issued for any continuous period of 6 months or for which any period aggregating 6 months during a continuous period of 12 months;

(b) goes into liquidation or is wound up or otherwise dissolved;

(c) fails to comply with any obligation imposed upon it by or under this Decree or the Central Bank of Nigeria Decree 1991.

13.---(1) A bank shall maintain, at all times, capital funds unimpaired by losses, in such ratio to all or any assets or to all or any liabilities or to both such assets and liabilities of the bank and all its offices in and outside Nigeria as may be specified by the bank.

(2) Any bank which fails to observe any such specified ratios may be prohibited by the Bank from---

(a) advertising for or accepting new deposits;

(b) granting credit and making investment;

(c) paying cash dividend to shareholders.

(3) In addition, the bank may be required to draw up within a specified time a capital reconstitution plan acceptable to the Bank.

14. --- (1) Failure to comply with the provisions of section 13 of this Decree may constitute a ground for the revocation of the license of the bank under this Decree.

(2) Where the Bank proposes to recommend to the president, the revocation of the license of any bank pursuant to subsection (1) of this section, the Bank shall give notice of its intention to the bank and the bank may within 30 days make representation (if any) in respect thereof.

(3) Any bank dissatisfied with the decision of the Bank to recommend the revocation of its license under this section may, within 14 days of the decision being communicated to it, appeal against such decision through the Bank to the President.

(4) The President may reject or approve the recommendation of the Bank with such modification as he may deem fit.

Revocation
of license.

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Minimum
capital ratio.

Non
compliance
with capital
ratio
requirement.

15.---(1) Every bank shall maintain with the Bank cash reserves, and special deposits and hold specified liquid assets or stabilization securities, as the case may be, not less in amount than as may, from time to time, be prescribed by the Bank by virtue of section 39 of the Central Bank of Nigeria Decree 1991.

(2) Where both assets and liabilities are due from and to other banks, they shall be offset accordingly, and any surplus of assets or liabilities shall be included or deducted, as the case may be, in computing specified liquid assets.

(3) In the case of the long-term advances to a bank or by an overseas branch or office of a bank, the advances may, with the approval of the Bank, be excluded from the demand liabilities of the bank.

(4) Every bank shall---

(a) furnish within a reasonable time any information required by the Bank to satisfy the Bank that the bank is observing the requirements of subsection (1) of this section;

(b) not allow its holding of cash reserves, specified liquid assets, special deposits and stabilization securities to be less than the amount which may, from time to me, be prescribed by the Bank;

(c) not during the period of any deficiency, grant or permit increases in advances, loans or credit facilities to any person without the prior approval in writing of the Bank.

(5) Any bank which fails to comply with any of the provisions of subsection (4) of this section is guilty of an offence and liable on conviction to a fine of---

(a) in the case of paragraph (a) N50,000 for every day during which a default under that paragraph (a) exists;

(b) in the case of paragraph (b), one per sent of the shortfall for each day during which the deficiency under that paragraph exists;

(c) in the case of paragraph (c), N500,000 for every offence under that paragraph;

and the Bank may also, during the period when the fails to comply with any of the requirements of subsection (4) as aforesaid, withdraw any privileges or facilities that are normally accorded to the bank.

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Minimum holding of cash reserves, specified liquid assets, special

deposits and stabilization securities.

(6) For the purposes of this section, specified liquid assets provided they are freely transferable and free from any lien or charge of any kind shall,

without prejudice to the provisions of section 39 of the Central Bank of Nigeria Decree 1991, consist of all or any of the following, that is---

(a) currency notes and coins which are legal tender in Nigeria;

(b) balances at the Bank;

(c) net balances at any licensed bank (excluding uncleared effects) and money at call in Nigeria

(d) Treasury Bills and Treasury Certificates issued by the federal government;

(e) inland bills of exchange and promissory notes rediscountable at the Bank;

(f) stocks issued by the Federal Government with such dates of maturity as may be approved by the Bank;

(g) negotiable certificates of deposit approved by the Bank and

(h) such other negotiable instruments as may, from time to time, be approved by the Bank for the purpose of this subsection.

DUTIES OF BANKS

16. --- (1) Every Bank shall maintain a reserve fund and shall, out of its not profits or each year (after due provisions made for taxation) and before any dividend is declared, where the amount of the reserve fund is---

(a) less than the paid-up share capital, transfer to the reserve fund a sum equal to not less than thirty per cent of the net profits; or

(b) equal to or in excess of the paid-up share capital, transfer to the reserve fund a sum equal to not less than thirty per cent of the net profit:

Provided that no transfer under this subsection shall be made until all identifiable losses have been made good.

(2) Any bank which fails to comply with the provisions of Subsection (1) of this section is guilty of an offence and liable on conviction to a fine of N500, 000.

(3) Notwithstanding paragraphs (a) and (b) of Subsection (1) of this section, the Bank may, from time to time, specify a different proportion of

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the net profits of each year being either less or greater than the proportion specified in paragraphs (a) and (b) to be transferred to the reserve fund of a Maintenance of reserve fund bank for the purpose of ensuring that the amount of the reserve fund of such bank is sufficient for the purpose of its business and adequate in relation to its liabilities.

17. No bank shall pay dividend on its shares until---

(a) all its preliminary expenses, organizational expenses, shares selling commission, brokerage, amount of losses incurred and other capitalized

expenses not represented by tangible assets have been completely written off;

(b) adequate provisions have been made to the satisfaction of the bank for actual and contingent losses on risk assets, liabilities, off balance sheet commitments and such unearned incomes as are derivable there from;

(c) it has complied with any capital ratio requirement as specified by the bank pursuant to section 3 (1) of this Decree.

18. --- (1) No manager or any other officer of a bank shall;

(a) in any manner whatsoever, whether directly or indirectly have personal interest in any advance, loan or credit facility; and if he has any such personal interest, he shall declare the nature of his interest to the bank;

(b) grant any advance, loan or credit facility to any person, unless it is authorized in accordance with the rules and regulations of the bank; and where adequate security is required by such rules and regulations, such security shall, prior to the grant, be obtained for the advance, loan or credit facility and shall be deposited with the bank;

(c) benefit as a result of any advance, loan or credit facility granted by the bank.

(2) Any manager or officer who contravenes or fails to comply with any of the provisions of subsection (1) of this section is guilty of an offence under this section and liable on conviction to a fine of N100,000 or to imprisonment for a term of 3 years, and in addition, any gains or benefits, accruing to any person convicted under this section by reason of such contravention, shall be forfeited to the Federal Government, and the gains or benefit shall vest accordingly in that directors.

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Restriction on dividend Disclaims of interest by directors, managers and officers.

(4) The provisions of subsection (3) of this section shall not apply in any case-

(a) where the interest of the director consist of the director consists only of being a member holding less that five per cent of the shares of a company which is seeking an advance, loan or credit facility from the bank; or

(b) if the interest of the director may properly be regarded by the Bank as not being material.

(5) For the purpose of subsection (3) of this section, a general notice given to the board of directors of a bank by a director of such bank to the effect that he is---

(a) an officer or member holding five per cent or more of the shares of a company or firm specified in the notice; and

(b) to be regarded as having personal interest in any advance, loan or credit facility which may after the date of the notice, be made to that company or firm;

shall be deemed to be a sufficient declaration of interest in relation to any such advance, loan or credit facility, if---

(i) the notice specifies the nature and extent of his interest in the company or firm;

(ii) the interest is not different in nature to or greater in extent than the nature and extent specified in the notice at the time the advance, loan or and credit facility is made; and

(iii) the notice is given at the meeting of the board of directors or the director takes reasonable steps to ensure that it is brought up and read at the next meeting of the board of directors after it is given.

(6) Every director of a bank who holds any office or possesses any property whereby, whether directly or indirectly, duties or interests might be created in conflict with his duties or interest as a director of a bank, shall declare at a meeting of the board of directors of the bank, the fact and the nature, character and extent of the interest

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(7) The declaration referred to in Subsection (6) of this section shall be made at

(a) after he became a director of the bank ; or

(b) if already a director, after he came into possession of the property.

(8)   The secretary of the bank shall cause to be brought up and read, any declaration made under Subsection (3) or (6) of this section at the next meeting of the

board of directors after it is made, and shall record any declaration made under this section in the minutes of the meeting at which it was made or at the meeting in which it was brought up and read.

(9)   Any director who contravenes Subsection (3) or (6) of this section is guilty of an offence under this section and liable on conviction to a fine of N100,000 or to imprisonment foe a term of 3 years or to both such fine and imprisonment.

19.-(1) No bank shall –

(a) employ or continue the employment of any person who is or at any time has been adjudged bankrupt or has suspended payment to or has compounded with his creditors or who is or has been convicted by a court for an offence Involving fraud or dishonesty, or professional misconduct;

(b) be managed by a management agent except as may be approved by the Bank.

(2) Except with the approval of the Bank, no bank shall have as a director any person who is a director of –

(a) any other Bank;

(b) companies which among themselves are entitled to exercise voting rights in excess of ten per cent of the total voting rights of all the shareholders of the bank.

(3) No bank shall be managed by a person who is -

(a)   a director of any other company not being a subsidiary of the bank; or

(b)   engaged in any other business or vocation.

(4) Every director of a bank shall sign a code of conduct in such form or manner as the Bank may, from time to time, prescribe.

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(5)   The chief executive of a bank shall cause all the officers of the bank to sign a code of conduct as may be approved by the board of directors.

20. (1)   A bank shall not, without the prior approval in writing of that Bank, grant-
Prohibition of employment of certain persons and inter-banking

directorship, etc .Restriction on certain

(a) to any person any advance, loan or credit facility or give any financial guarantee or incur any other liability on behalf of any person so that the total value of the advance, loan, credit facility, financial guarantee or any other liability in respect of the person is at any time more than twenty per cent of the shareholders fund unimpaired by losses or in the case of a merchant bank not more than fifty per cent of its shareholders fund unimpaired by losses; and for the purpose of this paragraph all advances, loans or credit facilities extended to any person shall be aggregated and shall

include all advances, loans or credit facilities extended to any subsidiaries or associates of a body corporate:

Provided that the provisions of this paragraph shall not apply to transactions between banks or between branches of a bank or to the purchase of clean or documentary bills of exchangem telegraphic transfers or documents of title to goods the holder of which is entitled to payment for exports from Nigeria or to advance made against such bills, transfers

or documents;

(a) any advances, loans or credit facilities against the security of its own shares or any unsecured advances, loans or credit facilities unless authorized in accordance with the bank's rules and regulations and where any such rules and regulations require adequate security, such security shall be provided or, as the case may require, deposited with the bank.

(2) A Bank shall not, without the prior approval in writing of the Bank –

(a) permit to be outstanding, unsecured advances, loans or unsecured credit facilities, of an aggregate amount in excess of N50,000 –

(i) to its directors or any of them whether such advances, loans or credit facilities are obtained by its directors jointly or severally;

(ii) to any firm, partnership or private company in which it or any one

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or more of its directors is interested as director, partner, manager or

agent or any individual firm, partnership or private company of which any of its directors is a guarantor;

(iii)   to any public company or private company in which it or any one or more of its directors jointly or severally maintains shareholding of not less that five per cent either directly or indirectly;

banking activities.

(b) permit to be outstanding to its officers and employees, unsecured advances, loans, or unsecured credit facilities, which in the aggregate for any one officer or employee, is an amount which exceeds one year's emolument to such officer or employee;

(c) engage, whether on its own account or on a commission basis, in wholesale or retail trade, include the import or export trade, except in so far as may exceptionally be necessary in the course of the banking operations and services of that bank or in the course of the satisfaction of debts due to it; so however that nothing in this paragraph shall of the satisfaction of debts due to it; so however that nothing in this paragraph shall be construed as precluding that the foregoing provisions of this paragraph shall not apply to a bank in the circumstance permitted under Section 21 of this Decree;

(d) without prejudice to the provisions of section 21 of this Decree, acquire or hold any part of the share capital of any financial or commercial or other undertaking, except –

(i)   any shareholding approved by the Bank in any company set up for the purpose of promoting the development of the money market or capital market in Nigeria or of improving the financial machinery for financing economic development;

(ii)   any shareholding approved by the Bank pursuant to sub-paragraph (i) of this paragraph, the aggregate value of which does not at any time exceed twenty-five per cent of the sum of paid-up share capital and statutory reserves of that bank;

(iii)   all shareholding acquired by a merchant bank while managing an equity issues:

Provided that the aggregate value of such acquisition does not at any

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time exceed the sum of the paid-up share capital of that merchant bank or ten per cent of its total assets, excluding contract items whichever is higher and that is paragraph shall not apply to any nominee company of a bank which deals in stock and shares for or on behalf of the bank's customers or clients or majority interest acquired by a merchant bank in a company while managing an equity issue;

(e) remit, either in whole or in part, the debts owned to it by any of its directors or part directors

(f) purchase, acquire or lease real estate except as may be necessary for the purpose of conducting its business including provisions for foreseeable future expansion or housing of its staff or other exceptional circumstances, where the agreement of the bank is obtained;

(g) sell, dispose or lease out any real estate.

(3) Notwithstanding the foregoing provisions of this section, a bank may secure debt, on any real or other property, and in default or repayment, may acquire such property and exercise any powder of sale, as may be provided for in any instrument or, by law prescribed, immediately upon such default or soon thereafter as may be deemed proper.

(4) In paragraphs (a) and (b) of Subsection (2) of this section, the expressions "unsecured advances and loans" or "unsecured credit facilities," mean advances loans or credit facilities made without security, or, in respect of any advances, loans or credit facilities made with security, any part thereof which at any time exceeds the market value of the assets constituting the security, or where the bank is satisfied that there is no established market value, the value of the assets as determined on the basis of a valuation approved by the bank.

(5) In paragraphs (a) and (e) of subsection (2) of this section, the expression " "director", includes director's wife, husband, father, mother brother, sister, son, daughter and their spouses.

(6) All the directors of a bank shall be liable jointly and severally to indemnity the bank against any loss arising from any unsecured advances,

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loans or credit facilities under paragraph (a) of Subsection (2) of this section.

(7) Any bank which, after the commencement of this Decree, enter into any transaction, inconsistent with any of the provisions of subsections (1) and (2) of this section is guilty of an offence and liable on conviction to a fine of N1,000 for each day during which any such transaction continues.

21.– (1) A bank may acquire or hold part of the share capital of any agricultural industrial of venture capital company subject to the following conditions, that is Acquisition of share in small and

(a) the venture capital company is set up for the purpose of promoting the development of indigenous technology or a new venture in Nigeria;

(b) the shareholding by the bank is in small or medium-scale industries and agricultural enterprise as defined by the bank;

(c) the shareholding by the bank in any medium scale industry, agricultural enterprises or venture company or any other business approved by the Bank shall not be more than ten per cent of the bank's

shareholders fund unimpaired by losses and shall not exceed forty per cent of the paid-up share capital of the company, the shares of which are acquired or held;

(d) the aggregate value of the equity participation of the bank in all enterprises pursuant to this section does not, at any time, exceed in the case of a commercial bank, twenty per cent of its shareholders fund unimpaired by losses or in the case of a merchant bank, not more than fifty per cent of its shareholders fund unimpaired by losses;

Provided that a bank may hold shares acquired in the course of the satisfaction of any debt owed to it.

(2) Without prejudice to the provisions of subsection (1) of this section a bank may hold or acquire share capital of any other business, subject to the approval of the bank.

(3) Every bank shall, within 21 days of the acquisition of any shareholding pursuant to subsection (1) of this section, give full particulars thereof to the bank.

(4)   Any bank which fails to comply with the provisions of subsection (3) of this section is guilty of an offence and liable on conviction to a fine of N1,000 for each day during which the offence continues.

22 .– (a) A merchant bank shall not

(a) accept any deposit withdraw able by cheque;

(b) accept any deposit below an amount which shall be prescribed, from time to time by the Bank:

(c) hold for more than six months any equity interest acquired in a company while managing an equity issue except as stipulated in section 21 of this Decree. medium-scale industries, agricultural enterprise and venture capital

companies Restrictions an operations of merchant banks.

    (2) any merchant bank which acts in contravention of or fails to comply with any of the provisions of this section is guilty of an offence and liable on conviction to a fine of N10,000 for each day during which the offence continues.

    23. –(1) Every bank shall display at its office its lending and deposit

interest rates shall render to the bank information on such rates as may be specified, from time to time, by the Bank;

Provided that the provisions of this subsection shall not apply to profit loss sharing banks.

    (2)   Any bank found in breach of any of the provisions of this section is guilty of an offence and liable on conviction to a fine of N1,000 for every day during which the offence continue.

BOOKS OF ACCOUNT

    24.- (1) Every bank shall cause to be kept proper books of account with respect to all the transactions of the bank.

    (2)   For the purpose of subsection (1) of this section, proper books or account shall be deemed to be kept with respect to all transactions if such books as are necessary

to explain such transactions and give a true fail view of the state of affairs of a bank are kept by the bank and are in compliance with the accounting standard as may be prescribed for banks.

(3)   The books of account shall be kept at the principle administrative office of a bank and at the branches of each bank in the

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English Language or any other language approved by the Federal Government.

(4)   Where the books of account, kept by a bank with respect to all its transaction, are prepared and kept in such a manner that, in the opinion of the Bank, have not been properly prepared and kept, or where a bank renders returns in accordance with the provisions of section 25 of this Decree, which in the opinion of the Bank are inaccurate, the Bank may appoint a firm of qualified accountants to prepare proper books of account or render accurate returns, as the case may be, for the bank and the cost of preparing the accounts and rendering the returns shall be borne by the bank.

(5)   If any person being a director, manager or officer of a bank-
Display of Interest rates. Proper books of account

(a)   fails to take all reasonable steps to secure compliance with any of the provisions of this section;

(b)   has by his willful act been the cause of any default thereof by the bank, he is guilty of any offence and liable on conviction, in respect of paragraph (a) of his subsection, to a fine of N10,000 or to imprisonment; and, in respect of paragraph (b) of this section, to a fine of N50,000 or to imprisonment for a term not exceeding 10 years or to both such fine and imprisonment.

25.-(1) Every bank shall submit to the Bank not later than 28 days after the last day of each month or such other interval as the Bank may specify, a statement showing-

(a)   the assets and liabilities of the bank; and

(b)   an analysis of advances and other assets, at its head office and branches in and outside Nigeria in such form as the Bank may specify, form time to time.

(2) Every bank shall submit such that information, documents, statistics or returns as the Bank may deem necessary for the proper

understanding of the statements supplied under subsection (1) of this section.

(3) Any bank which fails to comply with any of the requirements of subsection (1) or (2) of this section is in respect of each

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such failure, guilty of an offence under this Decree and liable on conviction to a fine of N5,000 for each day during which the offence continue.

26.-(1) The statement and information submitted by each bank under section 25 of this Decree shall be regarded as confidential;

Provided that the Bank shall furnish any such statement or information to any agency of Government as required law.

(2) Notwithstanding anything in this section, the Bank may prepare and publish consolidated statements aggregating the statements furnished under section 25 of this Decree for each category of banks.

27.-(1) Subject to the prior approval in writing of the Bank, a bank shall not later than 4 months after the end of its financial year- Returns by

banks Publication of consolidated statements.
Publication of annual

(a)   cause to be published in a daily newspaper printed in and circulating in Nigeria and approved by the Bank;

(b)   exhibit in a conspicuous position in each of its offices and branches in Nigeria; and

(c)   forward to the Bank, copies of the bank's balance sheet and profit and loss account duly signed and containing the full and correct names of the directors of the bank.

(2) Every published account of a bank, under subsection (1) of this section, shall disclose in detail penalties paid as a result of contravention of the provisions of this

Decree and provisions of any policy guidelines in force during the financial year in question and the auditor's report shall reflect such contravention.

(3)   The balance sheet and profit and loss account of a bank shall bear on their face the report of an approved auditor and shall contain statements on such matters as may be specified by the Bank from time to time.

(4)   For the purpose of subsection (3) of this section, an "approved auditor" shall be an auditor approved for the purpose of Section 29 of this Decree.

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(5)   Any bank which fails to comply with any of the requirements of this section is in respect of each such failure guilty of an offence and liable on conviction to a fine of N100,000.

28.-(1) Every balance sheet and every profit and loss account of a bank shall give a true and fair view of the state of affairs of the bank as at the end of the reporting period.

(2) Every balance sheet and every profit and loss account of a bank forwarded to the bank in accordance with the provisions of Subsection (1) of this section and which has been issued by the Bank thereon.

(2)   Any person being a director of any bank who fails to take all reasonable steps to secure compliance with any of the provisions of this section in respect of any accounts is guilty of an offence and liable on conviction to a fine of N10,000 or to imprisonment for a term of 5 years or to both such fine and imprisonment. accounts of banks.

Contents and Form of accounts.

29.-(1) Every bank shall appoint annually a person approved by the Bank, in this section referred to as "the approved auditor", whose duties shall be to make to the shareholders a report upon the annual balance sheet and profit and loss account of the bank and every such report shall contain statements as to the matters and such other information as may be prescribed, form time to time, by the Bank.

(2) For the purpose of this section, the approved audition shall be an auditor who is-

(a) a member of one of the professional bodies recognized in Nigeria;

(b) approved by the Bank;

(c) resident in Nigeria; and

(d) carrying on in Nigeria professional practice as accountant and auditor.

(3) Any person-

(a) having any interest in a bank otherwise than as a depositor, or

(b) who is a director, officer or agent of a bank; or

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(c) which is a firm in which a director or a bank has any interest as partner or director; or

(d) who is indebted to a bank;

shall not be eligible for appointment as the approved auditor for any   bank.

(3)   And a person appointed as such auditor who subsequently-

(i)   acquires such interest; or

(ii)   becomes a director, officer or agent of that bank; or

(iii)   becomes indebted to a partner in a firm in which a director of a bank is interested as partner or director, shall cease to be such auditor.

(4)   If any bank-

(a) fails to appoint an approved auditor under Subsection (1) of this section; or

(b) at anytime, fials to fill a vacancy for such person, the Bank shall appoint a suitable person for that purpose and shall fix the remuneration to be paid by the bank to such auditor.

(5) Every auditor of a bank shall have a right of access at all times to the books, accounts and vouchers of the bank, and shall be

Appointment, power and report of approved auditor.

entitled to require from directors, managers and officers of the bank such information and explanation as he thinks necessary for the performance of his duties under this Decree.

(6)   The report of the approved auditor shall be read together with the report of the board of directors at the annual general meeting of the shareholders of the bank and two copies of each report together with the auditor's analysis of bad and doubtful advances in a form specified, form time to time, by the Bank shall be sent to the Bank.

(7)   If an auditor appointed under this section, in the course of his duties as an auditor of a bank, is satisfied that-

(a) there has been a contravention of this Decree, or that an offence under any other law has been committed by the bank or any other person; or

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(b) losses have been incurred by the bank which substantially reduce its capital funds; or

(c) any irregularity which jeopardizes the interest of depositors or creditors of the bank, or any other irregularity has occurred; or

(d) he is unable to confirm that the claims of depositors or creditors are covered by the assets of the bank, he shall immediately report the matter to the bank.

(8) The approved auditor shall forward to the Bank two copies of the domestic reports on the bank's financial year.

Any approved auditor under this Section who acts in contravention of or fails deliberately or negligently to comply with any of the provisions of this section is guilty of an offence and liable on conviction to a fine of not less than N50,000 and the Bank may, in addition, take other appropriate actions against such an auditor as it deems necessary.

(9) The appointment of an approved auditor shall not be determined without prior approval of the Bank.

SUPERVISION

30.-(1) There shall be an officer of the Bank who shall be appointed by the Governor to be known as the Director of Banking Supervision or by such other title as the Governor may specify.

Appointment

and power of

Director of

(2) The Director of Banking Supervision shall have power to carry out supervisory duties in respect of banks and for that purpose shall-

(a) under conditions of confidentiality, examine periodically the books and affairs of each bank;

(b) have a right of access at all times to the books, accounts and vouchers of banks;

(c) have power to require from directors, managers and officers of banks such information and explanation as he deems necessary for the performance of his duties under this section.

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(3) The Governor shall appoint to assist the Director of Banking Supervision such other officers of the Bank as the Governor may, from time to time, decide.

(4)   The officers may be designated examiners or have such other titles as the Governor may specify.

(5)   For the purpose of this section, references to examiners are references to the Director of Banking Supervision and any officer of the

Bank appointed pursuant to Subsection (3) of this section.

(6) In examining the affairs of any bank under this Decree, it shall be the duty of an examiner at all times to avoid unreasonable hindrances to the daily business of the bank.

(7) Every bank shall produce to the examiners at such times as the examiners may specify,

all books, accounts, documents and information which they may require.

(8) If any nook, documents or information is not produced in accordance with the requirement of an examiner under this section or what is produced or furnished to an examiner is false in any material particular, the bank is guilty of an offence and liable on conviction to a fine of N50,000 and in addition, to a fine of N1,000 for each day during which the offence continues.

(31).-(1) The Governor shall, in the case of routine examination, forward a copy of the report arising from the examination together with the recommendations of the Bank, to the bank concerned with instruction that it be placed before the meeting of the board of directors of the bank specially

Banking Supervision and other examiner Routine examination and report thereon convened for the purpose of considering the report and there commendations thereon.

(2) The bank shall within 2 weeks convey to the Governor the board of directors' reactions to the report and its proposal for implementing the recommendations of the Bank.

(3) Any bank which fails to comply with the provisions of Subsection (1) or (2) of this section is guilty of an offence and liable on conviction to a fine of N500 for each day during which the offence continues and if the offence

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continues for more than 60 days, the Bank may in addition to the fine, withdraw any privilege or facility to that bank by the bank.

(32).- (1) The Governor shall have power to order a special examination or investigation of the banks and affairs of a bank where is satisfied that:-

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

   (b)   the bank has been carrying on its business in a manner detrimental to the interest of its of its depositors and creditors ; or

(c) the bank has "insufficient" assets to cover its liabilities to the public; or

   (d) the bank has been contravening the provisions of this Decree ; or

(e) an application is made therefore by –

    (i) a director or shareholder of the bank ; or

    (ii) a depositor or creditor of the bank :

Provided that in the case of paragraph (a) of this subsection, the Governor may not order a special examination or investigation of the books and affairs of a bank if he is satisfied that it is not necessary to do so.

(2) For the purpose of subsection (1) of this section, the Governor shall have power to appoint one or more qualified persons other than the officers of the Bank to conduct special examination or investigations or investigation, under conditions of confidentially of the books and affairs of the bank.

(4)   Nothing in this section or in any other section of this Decree shall be construed as precluding the Governor from appointing one or more officers of the Bank as examiner apart from those mentioned in Section 30 of this Decree and ascribing to such officers designations as he deems fit, and from

Special examinations directing or requiring all or ant of the officers to exercise all or any of the powers of the Directors of Banking Supervision under this Decree.

(4)   The Governor shall power to order all expenses of or incidental to an examination or investigation be paid by the Bank examined or investigated.

    (33).- (1) Where a bank informs the Bank are---

(a) It is likely to become unable to meet is obligation under this Decree or

(b) It is about to suspend payment to any extent; or

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(c) It is insolvent; or

(d) where, after an examination under this Section 32 of this Decree or otherwise however, the Bank is satisfied that the bank is in a grave situation as regards the matter referred to in Section 32 (1) of this Decree, the Governor may by order in writing exercise any one or more of the powers,

specified in Subsection (2) of this section.

(2)   The Governor may by order in writing under Subsection (1) of this Section –

(a)   prohibit the bank from extending any further credit facility for such period as may be set out in the order, and make the prohibition subject to as may be set out in the order, and from time to time, by further order similarly made, extend the aforesaid period ;

 (b) require the bank to take any steps or any action or to do or not to do any act or thing whatsoever, in relation to the bank or its business or its directors or officers which the

Bank may consider necessary and which is set out in the order, within such time as may be

Stipulated therein ;

(c) with approval of the President, remove for reasons to be recorded in writing with effect from such date as may be set out in the order, any manager or officer of the Bank, notwithstanding anything in any written law, or any limitations contained in the memorandum and articles of association of the bank ;

(d) in respect of a bank, notwithstanding anything in any written law or any limitations contained in the memorandum and articles of

Failing Bank. association of the Bank, and in particular, notwithstanding any limitation therein as to the minimum or maximum number of directors, for reasons to be recorded in writing ---

(i) remove from office, with effect from such date as may be set out in the order, any director of the bank; or

(ii) appoint any person or persons as a director or directors of the bank, and provide in the order for the person or persons so appointed to be paid by

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the bank such remuneration as may be set out in the order.

(e) appoint any person to advise the bank in relation to the proper conduct of its business, and provide for the person so appointed to be paid by the bank such remuneration as may be set out in the order.

(34).-(1) If, after taking such of the steps stipulated in Section 33 of this Decree as in the opinion of the Governor may be appropriate in the circumstance, the state of affairs of the bank concerned does not improve the significantly, the Bank may, with the approval of the President, assume control of the whole

property and affairs of the bank, carry on the whole of the property, business and affairs or assume control such part of its property, business and affairs as the Bank considers necessary or appoint persons to do so on behalf of the Bank.

(2) Where the Bank or an appointed person has assumed control of the business of a bank in pursuance of Subsection (1) of this section, the bank shall submit its business to the control of the bank and shall provide the Bank or appointed person with such facilities as the Bank or the appointed person may require to carry one the business of the Bank and notwithstanding the provisions of this section, all banks shall cooperate with the Bank at all times.

(3) Any bank which fails to comply with the provisions of Subsection (2) of this section or with any requirements of the Bank or an appointed person under Subsection (1) of this section, is guilty of an offence and liable on conviction to a fine of N50,000 and, in addition, to a fine not exceeding N500 for each day during which the default continues.

35.-(1) Where the Bank or an appointed person has assumed control of the bank business of a bank in pursuance of Section 34 of this Decree, the

Control of failing bank.

Management of failing bank or an appointed person shall remain in control of and continue to carry on the business of the bank in the name and on behalf of the Bank until such time as-

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(a) the bank is satisfied that adequate provision has been made for the repayment of deposit.

(b) in the opinion of the Bank, it is no longer necessary for the Bank to remain in control of the business of the bank

(2) The cost and expenses of the bank or the remuneration of an appointed person, as the case may be, shall be payable from the funds and

properties of the banks as a first charge on the funds of the bank.

36. Notwithstanding anything contained in any law or memorandum and articles of association of a bank, where the Bank or an appointed person has, pursuant to an order under Section 34 of this Decree, assumed control of a bank whose paid-up capital is lost or unrepresented by available assets, the Bank may, with the approval of the President-

(a) apply to the Federal High Court for an order for the Bank or a person nominated by the Bank to purchase or acquire the bank for a nominal fee for the purpose of its restructuring and subsequent sale ;

(b) make an order revoking the bank's license and requiring its business to be wound –up.

37.-(1) No order under Section 33 and 36 of this Decree shall be made unless the bank

in respect of which the order is to be made, and in the case of and order under paragraph (c) or (d) or Subsection (2) of Section 33 of this Decree, the Director, Manager or Officer who is to be removed from the office, has been given a reasonable opportunity of making representation against or otherwise in respect of the proposed order.

(2) The Bank shall not make an order under Subsection (1) of this section if in its opinion any delay would be detrimental of the interest of the bank, its depositors, creditors or the public generally.

(3) An order made in consequence of a representation may either be confirmed, modified, altered, varied or replaced by the President.

38.-(1) Where the Governor makes an order revoking the license of a bank and requiring the business of that bank to be wound-up, the bank shall,

Bank. Power of the Banks to revoke license or apply to the Court

Duty to notify bank or person to be affected Application to the Federal

within 14 days of the date of the order, apply to the Federal

High Court for an order winding-up the affairs of the bank and

the Federal High Court shall hear the application in priority to

all other matters.

(2) If the bank fails to apply to the Federal High Court within the period specified as Subsection (1) of this Section, the Governor may apply to the
Federal High Court for the winding-up of the bank.

(3) If the Governor is satisfied that it is in the public interest to do so, he may, without waiting for the period in Subsection (1) of this Section to elapse, appoint the Nigerian Deposit Insurance Corporation or any other person as the official receiver or as a provisional liquidator and the Corporation or such other person shall have the power conferred by or under the Companies and Allied Matters Decree 1990 and shall be deemed to have been appointed a provisional liquidator by the Federal High Court for the purpose of that Decree.

(4) This section shall have effect and Section 408 of the Companies and Allied Matters Decree 1990n shall be construed as if the revocation of the license of a bank under this Decree had been included as a ground for winding up by the Federal High Court under that section.

(5) The liquidator of a licensed bank shall forward to the Bank copies of any returns which he is required to make under the Companies and Allied Matters Decree 1990 and reference to liquidator in this subsection shall include a reference to the Nigerian Deposit Insurance Corporation or and other person so appointed.

GENERAL AND SUPPLEMENTAL

39.-(1) Except with the written consent of the Governor

(a) no bank shall, as from the commencement of this Decree be registered or incorporated with a name which includes the words "Central", "Federal", "Federation", "National", "Nigeria", "Reserve", State", "Christian", "Islamic", "Moslem", "Quaranic", or "Bibilica" ;

(b) no person other than a bank licensed under this Decree shall use or continue to use the word "bank" or any of its derivatives, either in English

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or in any other language in the description or title under which the person is carrying on business in Nigeria:

High Court for winding–up Restriction on the use of certain names.

Provided that paragraph (b) of this subsection shall not apply to banking institution referred to in Sections 51 and 53 of this Decree.

(2) Every bank shall use part of its description or title the word "bank" or any one more of its derivatives, either in English or in some other language.

(3) Subsection (1) of this section shall not apply to any registered association of banks, bankers or bank employees formed for the protection of their mutual interest or in furtherance or promotion of education and training of personnel for financial institution in Nigeria.

(4) Any person who acts in contravention of this section is guilty of an offence and liable on conviction to a fine of N1,000 for each day during which the offence continues.

(40).-(1) No person other than a bank or any person authorized to take deposit shall issue any advertisement inviting the public to deposit money with it.

(2) Any person who issues an advertisement in contravention of the provisions of Subsection (1) of this section is guilty of an offence and liable on conviction to a fine of N100,000 or to imprisonment of 10 years or both such fine and imprisonment.

(3) Where any bank proposes to issue any advertisement, the bank shall deliver to the Bank the text of the proposed advertisement together with bank's latest published accounts, and shall thereafter comply with such directives and conditions as the Bank may prescribe and such text shall be regarded as confidential information.

(4) Any bank which fails to comply with the provisions of Subsection (3) of this Section is guilty of an offence and liable on conviction to a fine N50,000 and the bank in addition play a fine of N1,000 for everyday during which an advertisement issued in contravention of Subsection (3) of this section continues.

(5) In this Decree, "advertisement" includes any form of advertising whether in publication or by the display of notice or by means of circular or

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other documents or by any exhibition of photographs or cinematograph or by address systems and references to the issuing of an advertisement shall be construed accordingly; and for the purpose of this Decree, an General restriction on advertisement for deposit.advertisement issued by any person by way of display or exhibition in a public place shall be treated by him on everyday on which he caused or permits to be so displayed or exhibited.

(6) An advertisement which contains information calculated to lead directly or indirectly to the deposit of money by the public shall be treated as an advertisement inviting public to deposit money.

(7) An advertisement issued by any person on behalf of or to the order of another person shall be treated as an advertisement issued by that order and for the purpose of any proceedings under this Decree an advertisement inviting the public to deposit money with a person specified in the advertisement shall be presumed, unless the contrary is proved, to have been issued by the person.

41.-(1) If the President is satisfied that any trace union , the members of which are employed in a bank has been engaged in acts calculated to disrupt the economic of Nigeria, he may order published in the Gazette proscribe that union (hereafter in this section referred to as "a proscribed union") union which shall, as from the date of order , cease to exist.

(2) A proscribed union shall, not later than 14 days from the date of the order under subsection (1) of this section, surrender its certificate of registration to the Registrar who shall take such steps in relation to the distribution of the assets of the Union as he deems necessary or in accordance with the registered rules of the union.

(3)   No person who immediately before the date of an order under this section was anofficer of a proscribed union shall at any after that date been an offer of any trade union any of the members of which were employed by a bank.

(4)   If the certificate of registration of a proscribed union is not delivered to the Registrar as required under Subsection (2) of this section, every person who immediately before the proscription of the union was an officer thereof is guilty of an offence and, liable on conviction to a fine of

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N5,000 or to imprisonment for 6 months or to both such fine and imprisonment. Power to the President to prescribe the trade union

(5) Any person who contravenes Subsection (3) of this section is guilty of an offence and liable on conviction to imprisonment for a term of 5years without an option of a fine.

(6) In this Section---

"officer" in relation to a union, means any person holding official position in that trade union and, accordingly, includes in particular, any president, secretary or treasurer and every member of the committee of management however described.

"Registrar" means the Registrar of Trade Union is appointed under Section 45 of Trade Union Act.

42.-(1)   No bank shall incur any liability to any of its customers by reason only to failure on the part of the bank to open for business during strike.

(2)   If as a result of a strike, a bank fails to open for business, the bank shall within 24 hours of the beginning the closure, obtain the approval of the Bank for any continued closure of the bank.

43.-(1)   Any director, manager, officer or employee of a bank or any other person receiving remuneration from the bank, who asks for, receives, consents or agrees to receive any gift, commission, employment, service, gratuity, money property or thing of value for

his own personal benefit or advantages or for that any of his relations, from any person---

(a) for procuring or endeavouring to procure for any person any advances, loans, or credit facility from the bank ' or

(b) for the purpose of discount of any draft, note, cheque, bill of exchange or other obligations by that bank;

(c) for permitting any person to overdraw any account with that bank without proper
   authority or compliance with rules and guidelines for that purpose,

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Cap/ 43 LFN Closure of bank during strike. Prohibition of the receipt of commissions etc. by staff of banks is guilty of an offence and liable on conviction to a fine of N10,000 or to imprisonment for 3 years or to both such fine and imprisonment and in addition any such gift or any other commission shall be forfeited to the Federal Government.

(2) The provisions of Subsection (1) of this section shall not in any manner derogate from, and shall be without prejudice to any other written law relating to corruption or illegal gratification.

44.-(1) Every bank shall, before appointing any director or Chief executive, seek and obtain the Bank's written approval for the proposed appointment.

(2) No person shall be appointed or shall remain a director, secretary or an officer of a bank who-

(a) is of unsound mind or as a result of ill health is incapable of carrying out his duties; or

(b) is declared bankrupt or suspends payments or compounds with his creditors including his bankers; or

(c)   is convicted of any offence involving dishonesty or fraud; or

(d)   is guilty of serious misconduct in relation to his duties; or

(e)   in the case of a person possessed of professional qualification, is disqualified or suspended (otherwise than of his own request) from practising his profession in Nigeria by the order of any competent authority made in respect of him personally.

(3) No person who has been a director of or directly concerned in the management of a bank which has been wound-up by the Federal High Court shall, without the express authority of the Governor, act or continue to act as a director of, or be directly concerned in the management of any other bank.

(4) Any person whose appointment with a bank has been terminated or who has been dismissed for reasons of fraud, dishonesty or conviction for an offence involving dishonesty or fraud shall not be employed by any bank in Nigeria.

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(5)   Any bank which knowingly acts in contravention of Subsection (1), (2), (3) or (4) of this section is guilty of an offence and liable on conviction to, a fine of N100,000. Disqualification and exclusion of certain individuals

from management of banks.

(6)Where an offence committed by a bank under Subsection (4) of this section is proved to have been committed with the knowledge or connivance of any director, manager or any other officer of the bank, he, as well as the bank is guilty of an offence and the director, manager or any other officer of the bank shall on conviction be liable to imprisonment for a term not less than five years or to a fine of N50,000 or to both such imprisonment and fine.

It shall not be a defence for any director, manger or officer of a bank to claim that he is not aware of the provisions of Subsection (4) of this section, except he can prove that he had obtained prior clearance of such a person from the Secretary of the Banker's Committee who maintains a register of terminated, dismissed or convicted staff of banks on the ground of fraud or dishonesty.

45.-(1)   Where any offence against any provision of this Decree has been committed by a body corporate or firm, any person who was a Director, Manager, Secretary or other corporate or firm purporting to act in such capacity shall, in addition to the body corporate or firm, be deemed to be guilty of that offence unless he proves that the offence was committed without his consent or connivance and that he exercised having regard to the nature of his functions in that capacity and to all the circumstances.

(2) Where any person should be liable under this Decree to any punishment or penalty for any act, omission, neglect or default, he shall be liable to the same punishment or penalty for every such act, omission, neglect or default of any clerk, servant or agent of the clerk or servant of such agent:

Provided that such act, omission, neglect or default was committed by the clerk or servant in the course of his employment or by the agent when

acting in the course of his employment in such circumstances that had the

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act, omission, neglect or default been committed by the agent, his principal would have been liable under this section.

46. Any person, being a director or manager of a bank, who fails to-

(a) take all reasonable steps to secure compliance by the bank with the requirements of this Decree; or Offences by Companies, etc. and by

servants and agents Offences by directors and managers of banks.

(b) take all reasonable steps to secure the correctness of any statement submitted under the provisions of this Decree;

is guilty of an offence and liable on conviction to a fine of N5,000 or to imprisonment for 5 years or to both such fine and imprisonment.

47. Any bank which contravenes or fails to comply with any of the provisions of this Decree or any regulations made thereunder for which an offence or penalty is not expressly provided is guilty of an offence and liable on conviction to a fine of N2,000

48. Notwithstanding the provisions of this Decree or of any law, the Federal High Court or tribunal constituted under any enactment shall have jurisdiction to try any offence under this Decree and to impose the full penalty prescribed therefore.

49.-(1) Neither the Federal Government nor any officer of that Government or Bank, shall be subject to any action, claim or demand by or liability to any person in respect of anything done or omitted to be done in good faith in pursuance or in execution of, or in connection with the execution or intended execution of any power conferred upon that Government, the Bank or such officer, by this Decree.

(2) For the purpose of this section, the Minister or any officer duly acting on his behalf shall be deemed to be an officer of the Bank or other employee thereof or any person holding any office therein or appointed by the Bank under Subsection (2) of Section 32 of this Decree shall be deemed to be an officer of the Bank.

50. Where a bank is unable to meet its obligations or suspends payment, the assets of the bank in the Federation shall be available to meet all the deposit liability of the bank.

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51.-(1) Except as provided in Section 28 of the Central Bank of Nigeria Decree 1991, the provisions of this Decree shall not apply to-

    (a) the fund established under the National Provident Fund Act;

    (b) the Nigerian Industrial Development Bank Limited;

    (c) the Federal Mortgage Bank;

    (d) the Nigerian Bank for Commerce and Industry;

    (e) the Nigerian Agricultural and Co-operative Bank Limited:

Penalties for offences not otherwise provided for jurisdiction of the Federal

High Court, etc. Protection against adverse claims. Priority of Local deposit

liabilities Exemption

Provided that the Governor may in the interest of the economy of Nigeria, by order in writing, appoint examiners under this Decree to carry out special examinations into the books and affairs of any institutions under this Section and may issue directives to any

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such institution and failure to comply with such directives shall be an offence punishable with a fine of N50,000.

(2) The list of exemptions in Subsection (1) of this section may be amended by such addition or delection as may be deemed necessary by the Governor by order published in the *Gazette.*

52. The Governor may exempt community banks or profit and loss sharing banks from the provisions of this Decree.

53.- (1)   The provisions of this Decree shall apply without prejudice to the provisions of the Companies and Allied Matters Decree 1990 in so far as they relate to banks and to winding-up by the Federal High Court.

(2) Where any of the provisions of the Companies and Allied Matters Decree 1990 are inconsistent with the provisions of this Decree, the provisions of this Decree shall prevail.

54. The provisions of this Decree shall without prejudice to the provisions of the Nigeria Deposit Insurance Corporation Decree 1988 and where any of the provisions of this Decree are inconsistent with any provisions of that Decree, the provisions of this Decree shall prevail.

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55- (1) The Governor may make regulations, published in the *Gazette*, to give full effect to the objects and objectives of this Decree.

(2) Without prejudice to the generality of the provisions of Subsection (1) of this section, the Governor may make rules and regulations for the operation and control of the institutions exempted by Sections 51 of this Decree.

<center>PART II-OTHER FINANCIAL INSTITUTIONS</center>

56.-(1)   Without prejudice to the provisions of part 1 of this Decree, no person shall carry on other financial business in Nigeria other than insurance and stock broking

except it is a company duly incorporate in Nigeria and holds a valid licence granted under Section 57 of this Decree.

Exemption of community banks, etc Application of Companies and Allied

Matters Decree 1990.

Application to Nigeria Deposit Insurance Corporation Decree 1988.

Power to make regulations. Prohibition of unlicenced financial
institutions.

(2) Any person or institution which, before the commencement of this Decree was carrying on such other financial business as are referred to

under Subsection (1) of this section shall apply in writing to the bank for a licence within six months from the date of commencement of this Decree.

(3) Any person or institution which fails to apply as provided in Subsection (2) of this section shall cease to carry on such financial business business.

57.- (1)   Any person wishing to carry on other financial business other than insurance and stock broking in Nigeria shall apply in writing to the Bank for the grant of a licence and shall accompany the application with the following-

(a) a draft copy of the Memorandum and Articles of Association of the proposed financial business;

(b) such other information, documents and reports as the Bank may, from time to time, specify; and

(c) the prescribed application fee.

(2) After the applicant has provided all such information, documents

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and reports as the Bank may require under Subsection (1) of this section, the Bank may grant the licence with or without conditions or refuse to grant the licence

(3) Where an applicant for a licence is granted, the Bank shall give written notice of that fact to the applicant and the licence fee shall be paid.

(4) The Bank may vary or revoke any conditions subject to which a licence was granted or may impose fresh or additional conditions to the grant of a licence.

(5) Where the Bank proposes to vary, revoke or impose fresh or additional conditions, the Bank shall before exercising such power, give notice of its intention to the person or institution concerned and give such a person or institution an opportunity to make representation to the Bank thereon.

(6) Any person who transacts business without a valid licence under Sections 56 of this Decree of Subsection (2) of this section is guilty of an office and liable on conviction to imprisonment, in the case of an individual, for a term not exceeding 10 years or a fine not exceeding N5000,000 or to

Application of licence. both such imprisonment and fine and, in the case of a body corporate, to a fine of N5000,000.

58.-(1)   Any person who fails to comply with any of the conditions of its licence is guilty of an offence and liable on conviction to a fine not exceeding N5000 for each day during which condition is not complied with

(2) Every person of institution carrying on such financial business as are referred to in Section 56 of this Decree shall-

(a) comply with the Monetary Policy Guidelines and other directives as the Bank may, from time to time, specify;

(c) furnish within the stipulated time, any statistical and other return as the Bank may, from time to time, require.

(3) Any person who fails to comply with paragraph (a) or (b) of Subsection (2) of this section is guilty of an offence and liable on conviction to imprisonment for a term not less than two years and not

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exceeding three years or to a fine of N500 for each day during which such failure occurs.

(4) Persistent failure to comply with the guidelines or other directives of the Bank or persistent refusal supply returns in the prescribed form may be a ground for the revocation of a licence.

59.-(1) The bank shall have power to supervise and regulate the activities of other financial institutions.

(2) The Bank may appoint examiners and any other person to carry out regular or routine examination of the books and affairs of other financial institutions.

(3) Where the Governor is satisfied that it is in the public interest so to do he may, in addition to the routine or regular examination, order a special examination or investigation of the books and affairs of any other financial institution and for what purpose, the Governor shall have power to appoint one or more qualified persons other than the officers of the Bank to conduct special examination or investigation, under conditions of confidentiality, of the books and affairs of such other financial institution.

Failure to comply with conditions of licence, etc.Supervisor

power of the Bank.

(4) The cost and expenses of the Bank or the remuneration of the person so appointed, as the case may be, shall be payable from the fund and property of the financial institution.

PART III-MISCELLANEOUS AND SUPPLEMENTARY

60.-(1) Notwithstanding any of the provisions of this Decree, the Governor may impose a penalty not exceeding N100,000 on a bank or any other financial institution for the bank's or other financial institution's failure to comply with any rules, regulations, guideline or administrative directives made, given or issued to it by the Bank under this Decree.

(2) The Governor may suspend any licence issued or given to any bank or any other financial institutions which fails to comply with any rules, regulations, guideline or administrative directives made, given or issued to it by the Bank under this Decree.

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61. In this Decree, unless the context otherwise requires-

"associate" means a company in which another company owns not less than twenty per cent of the share;

"bank" means a bank licensed under this Decree;

"Bank means the Central Bank of Nigeria;

"banking business" means the business of receiving deposits on current account, savings account or other similar account, paying or collecting cheques, drawn by or paid in by customers; provision of finance or such other business as the Governor may, by order published in the *Gazette,* designate as banking business;

"chief executive" in relation to a bank means a person, by whatever name called, who either individually or jointly with one or more other persons, is responsible, subject to the authority of the board of directors, for the conduct of the business and administration of the bank;

"commercial bank" means any bank in Nigeria whose business includes the acceptance of deposits withdrawable by cheques;

"community bank" means a bank whose business is restricted to a specified geographical area in Nigeria;

Failure to comply with rules, etc. Interpretation "deposit" means money lodged with any person whether or not for the purpose of any interest or dividend and whether or not such money is repayable upon demand upon a given period of notice or upon a fixed date;

"Deputy Governor" means a Deputy Governor of the Central Bank of Nigeria;

"director" includes any person by whatever name he may be referred to carry out or empowered to carry out substantially the same functions of a director in relation to the affairs of a company incorporated under the Companies and Allied Matters Decree 1990;

"factoring" means the business of acquiring debts due to any person;

"Federation" means the Federal Republic of Nigeria;

"Governor" means the Governor or any of the Deputy Governors of the Central Bank of Nigeria;

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"leasing" means the business of letting or sub-letting movable property on hire for the purpose of the use of such property by the hirer or any other person in any business whatsoever and where the lessor is the owner of the property regardless of whether the letting is with or without an option to purchase the property;

"licence" means a licence issued under this Decree;

"merchant bank" means a bank whose business include receiving deposits on deposit account, provision of finance, consultancy and advisory services relating to corporate and investment matters, making or managing investments on behalf of any person;

"Minister" means the Minister charged with the responsibility for finance;

"other financial institution" means any individual, body, association or group of persons, whether corporate or unincorporated, other than the banks licensed under this Decree and other institution execmpted under Section 51 of this Decree which carries on the business of discount house finance company and money brokerage and whose principal object include factoring, project financing, equipment leasing, debt administration, fund management, private ledger services, investment management, Local Purchases Order financing, export finance, project

consultancy, financial consultancy, pension fund management and such other business as the Bank may, from time to time, designate;

"President" means the President, Commander-in-Chief of the Armed Forces of the Federal Republic of Nigeria;

"profit and loss sharing bank" means a bank which transacts investment or commercial banking business and maintain profit and loss sharing account;

"relation of person" includes father, mother child, brother sister, uncle, aunt and cousins where applicable, and their spouses;

"shareholders funds" means the aggregate of paid-up share capital, statutory and all other reserves;

"State" means any of the States of the Federation.

62.-(1) This Decree may be cited as the Banks and Other Financial Institutions Decree 1991.

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(2) The Banking Act, 1969 is hereby repealed; and-

(a) the Banking (Amendment) Act 1970;

(b) the Banking (Amendment) Act 1972;

(c) the Banking (Amendment) Act 1975; and

(d) the Banking (Amendment) Act 1979;

are consequently repealed.

MADE at Lagos this 20th day of June, 1991.

GENERAL .I. B. BABANGIDA,

President, commander-in-Chief

of the Armed Forces,

Federal Republic of Nigeria

Citation and repeal. EXPLANATORY NOTE

(This note does not form part of the above Decree but is intended to explain its purpose)

This Decree, among other things, regulates banking and other financial institutions by prohibiting the carrying on of such businesses in Nigeria except under licence and by a company incorporated in Nigeria. Adequate provisions, have been made regarding the proper supervision of such institutions by the Central Bank of Nigeria.

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APPENDICES

APPENDIX 1

REF: BSD/DO/23/VOL.1/11   7th   November 1990

PRUDENTIAL GUIDELINES FOR LICENSED BANKS

Without prejudice to the requirements of the Statement of Accounting Standard on Accounting by Banks and Non-Bank Financial Institutions (Part I) to be issued by the Nigerian Accounting Standards Board (NASB) in the near future, all licensed banks shall be required to adhere to the prudential guideline enunciated in this circular for reviewing and reporting their performances, with immediate effect. In view of the international nature of banking, the guidelines are based on practices endorsed by reputable international financial institutions and regulatory authorities. These guidelines should be regarded as minimum requirements and licensed banks, which already have more stringent policies and practice in place, are encouraged to continue with them.

2.   **Credit Portfolio Classification System**

2.1 licensed banks should review their credit portfolio continuously (at least once in a quarter) with a view to recognizing any deterioration in credit quality. Such reviews should systematically and realistically classify banks' credit exposures based on the perceived risks of default. In order to facilitate comparability of banks' classification of their credit portfolios, the assessment of risk of default should be based on criteria which should

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include, but are limited to, repayment performance,

borrower's repayment capacity on the basis of current financial condition and net realizable value of collateral.

2.2 Credit facilities (which include loans, advances, overdrafts, commercial papers, bankers' acceptances, bills discounted, with a bank's credit risks) should be classified as either "performing" or "non-performing" as defined below:

(a) a credit facility is deemed to be performing if payments of both principal and interest are up to date in accordance with the agreed repayment terms.

(b) a credit facility should be deemed as non-performing when any of the following conditions exists:

(i) interest on principal is and unpaid for 90 days or more

(ii) interest payments equal to 90 days interest or more have been capitalized, rescheduled or rolled over into a new loan (except where facilities have been reclassified in 2.3 below)

2.3 The practice whereby some licensed banks merely renew, reschedule or roll-over non-performing credit facilities without taking into

consideration the repayment capacity of the borrower is objectionable and unacceptable. Consequently, before a credit facility already classified as "non-performing" can be reclassified as "performing", the borrower must effect cash payment such that outstanding unpaid interest does not exceed days.

2.4   Non-performing credit facilities should be classified into three categories namely, sub-standard, doubtful or lost on 487

the basis of the criteria specified below:

(a) **Sub-standard**

> The following objective and subjective criteria should be used to identify sub-standard credit facilities:

(i) *Objective criteria:* facilities as defined in 2.2 (b) on which unpaid principal and/or interest remain outstanding for more than 90 days but less than 180 days.

(ii) *Subjective criteria:* credit facilities which display well defined weaknesses which could affect the ability of borrowers to repay such as inadequate cash flow to service, under-capitalization or insufficient working capital, absence of adequate financial information or collateral documentation, irregular payment of principal and/or interest, and inactive accounts where withdrawals exceed repayments or where repayments can hardly cover interest charges.

(b) **Doubtful**

> The following objective and subjective criteria should be used to identify doubtful credit facilities:

(i)   *Objective criteria:* facilities on which unpaid principal and/or interest remain outstanding for at least 180 days but less than 360 days and are not secured by legal title to leased assets or perfected realizable collateral in the process of collection or realization.

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(ii) *Subjective criteria:* which in addition to the weaknesses associated with sub-standard credit

facilities reflect that full repayment of the debt is not certain or that realizable collateral values will be insufficient to cover bank's exposure.

(c) **Lost Credit Facilities**

The following objective and subjective criteria should be used to identify lost credit facilities:

(i) *Objective criteria:* facilities on which unpaid principal and/or interest remain outstanding for 360 days or more and are not secured by legal little to leased assets or perfected realizable collateral in the course of collection or realization.

(ii) *Subjective criteria:* facilities which in addition to the weaknesses associated with doubtful credit facilities are considered uncollectible and are of such little value that continuation as a bankable asset is unrealistic such as facilities that have been abandoned, facilities secured with unmarketable

and unrealizable securities and facilities extended to judgment debtors with no means of foreclosable collateral to settle debts.

2.5 Banks are required to adopt the criteria specified in paragraphs 2.1 to 2.4 to classify their credit portfolios in order to reflect the true accounting values of their credit facilities. Licensed banks should note that the Central Bank of Nigeria reserves the right to object to the

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classification of any credit facilities and to prescribe the
classification it considers appropriate for such credit facility.

3.   **Provision for Non-performing Facilities**

3.1   Licensed banks are required to make adequate provisions for
        perceived losses based on the credit portfolio classification system
        prescribed in paragraph 2 in order or reflect their true financial
        condition. Two types of provisions (that is specific and general) are
        considered adequate to achieve this objective. Specific provisions are
        made on the basis of perceived risk of default on specific credit
        facilities while general provisions are made in recognition of the fact
        that even performing credit facilities harbour some risk of loss no
        matter how small. Consequently, all licensed banks shall be required
        to make specific provisions for non-performing credits as specified
        below:

        (i)   For facilities classified as Sub-standard, Doubtful or Lost:

        -       Interest overdue by more than 90 days should be suspended and

recognized on cash basis only.

- Principal requirements that are overdue by more than 90 days should be fully provided for and recognized on cash basis only.

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1. For principal repayments not yet due on non-performing credit facilities, provision should be made as follows:

    a. *Sub-standard Credit Facilities:* 10.0 percent of the outstanding balance.

    b. *Doubtful Credit Facilities:* 50.0 percent of the outstanding balance.

    c. *Lost Credit Facilities:* 100.0 percent of the outstanding balance.

3.2 For prudential purpose, provisioning as prescribed in 3.1 should only take cognizance of realizable tangible security (with perfected legal title) in the course of collection or realization. Consequently, collateral values should be recognized on the following basis:

    (i) For credit exposure where the principal repayment is in arrears by more than six months, the outstanding unprovided principal should not exceed 50.0 percent of the estimated net realizable value of the collateral security.

    (ii) For credit exposure where the principal repayment is in arrears by more than one year, there should be no outstanding unprovided portion of the credit facility irrespective of the estimated net realizable value of the security held.

(iii)   For a credit exposure secured by a floating charge or by an unperfected or equitable charge over tangible security, it should be treated as an unsecured credit and no account should be taken of such security

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held in determining the provision for loss to be made.

3.3 **General Provision**

Each licensed bank is required to make a general provision of at least 1.0 percent of risk assets not specifically provided for.

4. **Credit Portfolio Disclosure requirement**

(i) Each licensed bank is required to provide in its audited fin ancial statements, an analysis of its credit portfolio into "performing" and "Non-performing as defined in paragraphs 2.2 and 2.4

(ii) The amount of provision for determination in credit quality (that is, losses) should be segregated between principal and interest.

(iii) A maturity profile of credit facilities based on contracted repayment programme, should be provided along with the maturity profile of deposit liabilities in the financial statement.

5. **Interest Accrual**

5.1 It is the responsibility of bank management to recognize revenues when they are earned or realized and make provision for all losses as soon as they can be reasonably estimated. However, experience

revealed a wide diversity amongst licensed banks on income recognition. While few banks cease accruing interest on non-performing credit facilities after three months, some after six months or one

year, some do not appreciate the need to suspend interest on such facilities.

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5.2   In order to ensure the reliability of published operating results, the following criteria should be adopted by all licensed banks for the treatment of interest on nonperforming credit facilities:

(i)   All categories of nonperforming credit facilities should automatically be placed on no non-accrual status, that is, interest due thereon should not be recognized as income.

(ii)   All interest previously accrual and uncollected but taken into revenue should be reversed and credited into suspense account specifically created for this purpose which should be called "interest in suspense account" unless paid cash by the borrower. Future interest charges should also be credited into same account until such facilities begin to perform.

(iv)   Once the facilities begin to perform, interest previously suspended and provisions previously made against principal debts should be recognized on cash basis only. Before "non-performing facility "can be re-classified as "performing", unpaid interest outstanding should not exceed 90 days.

6.0   Classification of Other Assets

6.1   The term "Other Assets" relate to those asset items not shown separately in the balance sheet of a bank. Those items include Impersonal Accounts (of various descriptions), Suspense Purposed, Uncleared Effects and Inter-branch Items. More often than not, the accounts

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usually grouped together as "Other Assets" contain fictitious or intangible assets. The accounts could contain many long outstanding items, the origins of which had been long forgotten, untraceable as well as unreconciliable. In situation like these, the items if not material should be written off and where material (i.e. at least 10.0 per cent of aggregate balance of other assets) should be classified as below. It should be noted that items enumerated below are by no means exhaustive:

(a)   **Sub -standard**

- Cheques purchased and uncleared effects outstanding after the permissible clearing period.

- Fraud cases of up to 6 months old and under police investigation regardless of the likely outcome of the cases.

- Inter – branch items of between 2 months to 3 months

- All other intangible suspense accounts existing in the books for up to 3 months.

A minimum provision of 10.0 per cent should be made for "Other Assets" items classified as substandard.

(b)   **Doubtful**

The above listed features must have been aggravated and are likely to result in losses higher than recommended for sub-standard items. Items for doubtful classification should include, but are not limited to the following:

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- Cheques purchased of between 3 to 6 months old but which had been withdraw or cancelled and substituted with new ones. Similar treatment should be accorded to uncleared effects for which values had been given.

- Outstanding fraud cases of 6 to 12 months old and with slim chances of full recoveries.

- Inter-branch items outstanding for between 3 to 6 months.

- All other intangible suspense accounts outstanding for between 6 months and 12 months.

- A minimum of 50.0 percent provision should be made for "Other Assets" items classified as doubtful.

(c) **Lost**

Items for lost classification should include, but are not limited to following:

- Cheques purchased and uncleared effects over 6 months old and for which values had been given.
- Outstanding fraud cases over 12 months and involving protracted litigations.
- Inter-branch items over 6 months old whether or not the origins are known.
- All other intangible suspense accounts over 12 months old.

Full provision (i.e. 100.0 percent) should be accorded to items classified lost.

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7.0 **Off-balance Sheet Engagements**

7.1 A proper appraisal of off-balance sheet engagements should be undertaken with a view to determining the extent of loss a bank may likely sustain. Of-balance sheet items include letters of Credit, Bonds, Guarantees, Indemnities, Acceptances, and Pending or Protracted Litigations (the outcome of which could not be easily determined).

7.2 The following factors should be taken into consideration in recognizing losses on off-balance sheet engagements:

- Date liability was incurred

- Expiry date

- Security pledged

- Performance of other facilities being enjoyed by the customer, e.g. loans and advances.

Full provisions must be made for any loss that may arise from off balance sheet transactions.

7.3 Off-balance sheet engagement should not form part of balance sheet totals while their disclosure in note form should distinguish between:

- direct credit substitutes, such as guarantees, acceptances and standby letters of credit serving as guarantees;

- transaction-related contingencies, such as bid bonds, performance guarantees and standby letters of credit related to particular transaction;

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- short-term self-liquidating trade related contingencies resulting from the movements of goods; and
- other contingencies

APPENDIX II
BANK RETURNS

(a)   Monthly Returns

    i. Profit on Interest Rates;

    ii. Statement of Assets and Liabilities;

    iii. Break-down of "Other" Liabilities;

    iv. Break-down of "Other" Assets;

    v. Report on External Assets and Liabilities;

    vi. Schedule of Placement with Other Banks;

vii. Schedule of Takings with Other Banks;

viii. Schedule of Negotiable Certificates of Deposit (NCDs) Held;

ix. Schedule of Negotiable Certificates of Deposit (NCDs) Issued;

x. Statement of Maturity Profit of Assets and Liabilities;

xi. Report on Total Credit Granted;

xii. Report Credit Allocation by Sectors, Borrowers and Interest Rates;

xiii. Report on Cost of Funds;

xiv. Report on Deposit Ownership;

xv. Report on Lending Above the Statutory Limit;

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xvi   Schedule of Foreign Exchange Purposes from Other Banks;

xvii   Schedule of Foreign Exchange Sales to Other Banks; Profit and Loss Account

(b)   **Quarterly Returns**

  xvi. Report on Total Credit Granted;

  xvii. Report Non-Performing Credits;

 xviii. Report on Non-Performing "Other" Assets;

  xix. Report on Non-Performing Off-Balance Sheet engagements;

   xx. Report on Non-Performing Credit by Sector:

  xxi. Report on Credit to Officers, Directors, Principal Shareholders and their related interests;

  xxii. Report on top Users of Funds;

xxiii. Foreign Exchange Interest Repatriation and Distribution;

xxiv. Report on Distribution of Naira Proceeds of Interest Repatriation;

xxv. Foreign Exchange Holdings by Authorised Dealers.

(c) **Semi-Annual Returns**

xxvi. Report on Investment in Shares;

xxvii. Report on Corporate Profile

xxviii. Report on Branch Network;

xxix. Report on Bank's Directors;

xxx. Report on Bank's shareholders; and

xxxi. Report on Management and Top Officers

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APPENDIX III

MID-MONTH RETURNS ON ASSETS AND LIABILITIES FORM

MMBR 100   BANK NAME: BANK CODE:

AS AT CODE	DETAILS	₦'000	₦'000
92000	**TOTAL LIQUID ASSETS** (as in Liquidity Ratio)		
92100	Vault Cash		
92200	Total Valances at CBN		
92210	Cash Reserve Requirement		
92220	Shortfall/Excess Credit		
92230	Other Balance with CBN		
92300	Other Liquid Assets		
92400	**TOTAL DEPOSIT LIABILITIES**		
92410	Private Sector Deposits		
92411	Demand		
92412	Savings		
92413	Time		
92414	Others (including Deposit Certificates, Notes etc.)		
92420	Government Sector Deposit		
92421	Demand Deposit of:		
92422	Federal Government		

APPENDIX III (Cont'd)

AS AT CODE	DETAILS	₦'000	₦'000

92423   State Governments

92424   Local Governments

92425   Time and Savings Deposits of:

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92426	Federal Government
92427	State Governments
92428	Local Governments
92429	Domiciliary Deposit
92430	Demand
92431	Others
92510	**TOTAL LOANS & ADVANCES**
92520	Bills Discounted
92530	Investment
92531	Treasury Bills
92532	Treasury Certificates
92533	Eligible Developments Stocks
92534	Other Investments
92540	Money at Call Outside Banks. Term loan, Leases & Overdrafts
92600	**FOREIGN ASSETS & LIABILITIES POSITION**
92610	Foreign Assets (Gross)
92620	Foreign Liabilities (Gross)

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APPENDIX IV

MID-MONTH REPORT ON INTEREST RATES FORM MMBR 200

BANK NAME: **BANK CODE:**

AS AT:

Details

Prime Lending Rate

Maximum Lending Rate

Deposits Rates

Savings

Call

Time/Term

7 Days Notice

30 Days Maturity

3 months Maturity

6 Months Maturity

12 Months Maturity

Over 12 Months Maturity

Demand Deposits (Current Account)

Other Deposit Certificate/Notes

7 Days Notice

30 Days Maturity

3 Months Maturity

6 Months Maturity

12 Months Maturity

Over 12 Months Maturity

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APPENDIX 1:

FAILED BANKS IN NIGERIA (1930 – 1960)

S/No	Commercial Bank	Year	Year failed
1.	The Industrial Commerce Bank	1929	1930
2.	The Nigerian Mercantile Bank	1931	1936
3.	Nigerian Penny Bank	1945	1946
4.	The Nigerian & Commercial Bank	1947	1953
5.	Pan Nigeria Bank	1951	1954
6.	Standard Bank of Nigeria	1951	1954
7.	Premier Bank	1951	1954
8.	Nigerian Trust Bank	1951	1954
9.	Afro Seas Credit Bank	1951	1954
10.	Onward Bank of Nigeria	1951	1954
11.	Central Bank of Nigerian	1951	1954
12.	Merchants Banks	1952	1950
13.	Metropolitan Bank of Nigeria	1952	1954
14.	Provincial Bank of Nigeria	1952	1954
15.	Union Bank of British Africa	1952	1954
16.	United Commercial (credit) Bank	1952	1954
17.	Cosmopolitan Credit Bank	1952	1954
18.	Mainland Bank	1952	1954
19.	Group Credit & Agricultural Bank	1952	1954
20.	Industrial Bank	1952	1954
21.	West Africa Bank	1952	1954

This bank is no way connected with the Central Bank of Nigeria

Source: Umoh P.N (2002) Bank Depositor Protection: The Nigerian Experience, NDIC Quarterly Vol. 12 June, 2002.

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APPENDIX 2

LIST OF FAILED BANKS: 1994 – 2003

S/NO	BANKS	YEAR FAILED
1.	Abacus Merchant Banks Ltd	Jan 16, 1998
2.	ABC Merchant Bank Ltd	Jan 16, 1998
3.	Allied Bank of Nigeria	Jan 16, 1998
4.	Alpha Merchant Bank	Sept. 08,1998
5.	Amicable Bank of Nigeria Ltd	Jan 16, 1998
6.	Century Merchant Bank Ltd	Jan 16, 1998
7.	Commerce Bank Ltd	Jan 16, 1998
8.	Commerce Trust Bank	Jan 16, 1998
9.	Continental Merchant Bank Ltd	Jan 16, 1998
10.	Co-operative & Commerce Bank	Jan 16, 1998
11.	Credit Bank Nigeria Ltd	Jan 16, 1998
12.	Crown Merchant Bank Ltd	Jan 16, 1998
13.	Financial Merchant Bank Ltd	Jan 21, 1994
14.	Great Merchant Bank Ltd	Jan 16, 1998
15.	Group Merchant Bank Ltd	Jan 16, 1998
16.	Highland Bank Nigeria Plc	Jan 16, 1998
17.	Icon Ltd. (Merchant Bankers)	Jan 16, 1998
18.	Ivory Merchant Bank Ltd.	Dec 22, 2000
19.	Capital Merchant bank Ltd	Jan 21, 1994
20.	Lobi Bank of Nigeria Ltd	Jan 16, 1998
21.	Merchant Bank of Nigeria Plc	Jan 16, 1998

22.   Merchant Bank of Africa Ltd   Jan 16, 1998

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23.	Nigeria Merchant Bank Ltd	Jan 16, 1998
24.	North-South Bank Nigeria Ltd	Jan 16, 1998
25.	Pan Africa Bank Ltd	Jan 16, 1998
26.	Pinnacle Commercial Bank Ltd	Jan 16, 1998
27.	Premier Commercial Bank Ltd	Dec 22, 2000
28.	Prime Merchant Bank Ltd	Jan 16, 1998
29.	Progress Bank of Nigeria Plc	Jan 16, 1998
30.	Republic bank Ltd	June 29, 1995
31,	Rims Merchant Bank Ltd"	Dec 22, 2000
32.	Royal Merchant Bank Ltd	Jan 16, 1998
33.	United Commercial Bank Ltd	Sept. 8, 1994
34.	Victory Merchant Bank Ltd	Jan 16, 1998
35.	Savannah Bank Plc	Fed. 15 2002
36.	Peak Merchant Bank	Fed. 28, 2003

**Liquidation suspended following Court injunction

Source:

1. *NDIC (2001) Annual Report & Statement of Accounts, P. 38 & 39*

2. *FGN: Official Gazettes of 15/2/02 and 28/2/03*

3. *Source NDIC Quarterly: June 2002 Volume 12 No 2, P.27*

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1994 pp. 20-21

APPENDIX 4

SOURCES OF INFORMATION ON BANKS

There are many sources of information about banks in Nigeria. The following are some of them:

1. Central Bank of Nigeria

   - Annual Report and Statement of Accounts

   - Banking Supervision Annual Report

   - Statistical Bulletin

   - Economic and Financial Review

   - Website: www.cenbank .org

2. Nigeria Deposit Insurance Corporation

   - Annual Report and Statement of Accounts

   - NDIC Quarterly

3. The Nigerian Stock Exchange

   - Daily Official List

4. Others

   - Banking Financial and Investment Consultants/Experts

   - Financial/Business Magazines and Newspapers

   - Banks' Annual Report and Statement of Account

   - Banks' In-house Economic and Financial Journals

   - Banks' Websites

   - Bank Rating Agencies' Report

   - Daily Newspapers

   - Television Business and Financial News

   - Seminar/Workshop/Conference papers

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APPENDIX 5

**PREQUALIFICATION FOR APPOINTMENT TO BOARD
AND TOP MANAGEMENT POSITION IN NIGERIAN BANKS**

1. In its determination to ensure that only sound management teams are installed in banks for a sound financial system, the Central Bank of Nigeria hereby informs the banks that henceforth, it will approve only qualified and experienced staff for executive positions in the banks. This has become very necessary, in view of the increasing number of banks and the expansion of the old ones, as well as the serious staff poaching going on in the industry. In the light of the above, the following minimum qualifications will be required of candidates intending to occupy the following top management and Board positions in Nigerian banks.

(a) **Managing Director**

    Must possess a minimum of first degree in disciplines like Economics, Accountancy, Banking, Finance or in any other field backed by a Masters in Business Administration (MBA) or an acceptable professional qualification in Banking or Accountancy. The candidate must also have a minimum of 20 years post qualification experience, 15 of which at least must have been in the banking industry and at least 10 at top/senior management level. In addition, the candidate must demonstrate evidence of experience in several areas of banking operation

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(b)   **Executive Director**

Same academic or professional qualifications as in (a) above with a minimum of 18 years post qualification experience, 13 of which, at least, must have been in the banking industry and at least 7 at top/senior management level. In addition, the candidate must demonstrate evidence of experience in several areas of banking operations.

(c)   **Deputy Management Direct (where applicable)**

The same requirements Executive Director but must have served as an Executive Director in a bank for a minimum period of two years.

(d)   **General Manager**

First degree in Economics, Accountancy, Finance and Banking or Business Administration or an acceptable professional qualification in Banking or Accountancy. The candidate must have acquired a minimum of 15years post qualification experience 10 of which at least, must have been in the banking industry. There must be evidence of experience in more than three major areas of banking operation.

(e)   **Deputy/Assistant General Manager**

The same academic/professional qualification as in (d) above and a minimum of 12years post qualification experience 8 of which, at least, must have been in the banking industry. There must be evidence of experience in more than two major areas of operations in banks.

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(f)   **Nominal (Non Executive) Directors**

In view of the fact that bank directors (executive and non-executive) are jointly responsible for the acts of commission and omission of their colleagues, nominal directors must have the ability to interpret and appreciate reports and make meaningful contributions to board deliberations. In view of the above, banks are encouraged to consider seriously among other factors:

- Candidates with first degrees or their equivalent and appreciable experience/exposure

- Candidates with lower qualification but with evidence of efficient Management/directorship in well-run organizations supported by the organizations' audited/published accounts.

2. The Bank will conduct a thorough enquiry on all top management candidates and proposed directors to determine their suitability. In addition, there must be good references from at least (3) three top management staff of any bank in Nigeria/abroad or previous employers to vouch for the integrity of proposed appointees. Finally, it should be noted that "top/senior management" for this purpose starts from the grade of Assistant General Management in a bank.

The above requirements take immediate effect.

Signed

Director, Banking Supervision Department

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