



**NATIONAL OPEN UNIVERSITY OF NIGERIA**

**SCHOOL OF BUSINESS AND HUMAN RESOURCE  
MANAGEMENT**

**COURSE CODE:MBF731**

**COURSE TITLE:MONETARY ECONOMICS AND POLICY**







## **NATIONAL OPEN UNIVERSITY OF NIGERIA**

National Open University of Nigeria  
Headquarters  
14/16 Ahmadu Bello Way  
Victoria Island  
Lagos

Abuja Office  
No. 5 Dar es Salaam Street  
Off Aminu Kano Crescent  
Wuse II, Abuja  
Nigeria

e-mail: [centralinfo@nou.edu.ng](mailto:centralinfo@nou.edu.ng)  
URL: [www.nou.edu.ng](http://www.nou.edu.ng)

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## **Introduction**

The importance of monetary economics has been increasing in recent times. Part of the reason can be seen from the global trends in inflation, capital mobility, and monetary policy problems. In this course, we attempt to document the theoretical aspects of money, monetary policy and control. The practical aspects of the theories will be presented with reference to the Nigerian economy and its policy objectives.

The course will also present some issues of critical importance in the implementation of monetary policies in Nigeria, with a view to exposing students and business decision makers to an important aspect of the Nigerian business environment. Some of these issues relate to the management of foreign exchange in Nigeria, as well as problems associated with them.

There are two major reasons for studying monetary economics. First is the interesting nature of the subject. Monetary economics enables us gain insight into the mechanics of money, interest rates, financial markets and institutions, monetary policy, and balance-of-payments adjustments.

## Course Aim

The course is aimed at acquainting students with the theories of money and the different schools of thought in monetary economics. It is also aimed at exposing students to monetary policies in general and specifically, the administration of monetary policies in Nigeria and how these policies affect business decisions. To ensure that the aims are achieved, some important background information will be provided and discussed, including:

- i. the evolution of monetary economics and policy,
- ii. the definitions and value of money,
- iii. theories of demand for and supply of money.

## Course Objectives

On completion of the requirements of this course, students and managers alike will be able to:

- demonstrate the uses and importance of monetary theory in business decision making;
- describe how the application of the monetary theories can aid in business and investment decisions;
- be equipped with the knowledge of the monetary policy decisions and how they affect foreign and domestic investment decisions in Nigeria;
- categorise the tools necessary in strategic management of foreign-exchange reserves;
- extrapolate the theories of demand for and supply of money and how the evolving models can be used in the analysis of monetary policy effects on investment decisions; and,
- explain the critical issues in monetary policies and control.

## Composition of the Course Material

The course material package is composed of:

- i. the course guide
- ii. the study units
- iii. self-assessment exercises
- iv. tutor-marked assignments
- v. references/further reading

## Study Units

The study units are as listed below:

### **Module 1**

- Unit 1 Concepts and Evolution of Monetary Economics and Policies
- Unit 2 Nature, Definitions, and Value of Money
- Unit 3 Theories of Demand and Supply of Money
- Unit 4 The Money Supply Model
- Unit 5 Money and Capital Markets

### **Module 2**

- Unit 1 Structure and Features of the Nigerian Money Market
- Unit 2 The Nigerian Capital Market
- Unit 3 Money, Financial Market and the Real Economy I
- Unit 4 Money, Financial Market and the Real Economy II
- Unit 5 The Central Bank of Nigeria

### **Module 3**

- Unit 1 Monetary Policy and Control
- Unit 2 Goals, Instruments, and Problems of Monetary Policy
- Unit 3 Bank Consolidation Policies in Nigeria
- Unit 4 Bank Consolidation Policies in Nigeria
- Unit 5 Foreign Exchange Reserve Management Policies

### **Assignments**

Each unit of the course has a Self Assessment Exercise. You will be expected to attempt them as this will enable you understand the content of the unit.

### **Tutor-Marked Assignment**

The Tutor-Marked Assignments at the end of each unit are designed to test your understanding and application of the concepts learned. It is important that these assignments are submitted to your facilitators for assessments. They make up 30 percent of the total grading score for the course.

## **Final Examination and Grading**

At the end of the course, you will be expected to participate in the final examinations as scheduled. The final examination constitutes 70 percent of the total grading score for the course.

## **Summary**

This course, MBF731: Monetary Economics and Policy, is ideal for today's business manager faced with the current global business environment. It will enable you apply monetary economic principles in such business functions as planning, implementing, controlling, forecasting, and evaluating. Having successfully completed the course, you will be equipped with the latest global knowledge on monetary policy effects on business decisions. I bet you will enjoy the course. Good luck.

Course Code MBF-731  
Course Title Monetary Economics and Policy

Course Team Onyemaechi J. Onwe, PhD (Developer/Writer) - NOUN  
Onyemaechi J. Onwe, PhD (Programme Leader) - NOUN  
Ibrahim Idrisu, PhD (Coordinator) - NOUN



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National Open University of Nigeria  
Headquarters  
14/16 Ahmadu Bello Way  
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Abuja Office  
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**MODULE 1**

Unit 1	Concepts and Evolution of Monetary Economics and Policies
Unit 2	Nature, Definitions, and Value of Money
Unit 3	Theories of Demand and Supply of Money
Unit 4	The Money Supply Model
Unit 5	Money and Capital Markets

**UNIT 1      CONCEPTS AND EVOLUTION OF  
MONETARY ECONOMICS AND POLICIES****CONTENTS**

1.0	Introduction
2.0	Objectives
3.0	Main Content
	3.1 Concepts of Monetary Economics
	3.2 Evolution of Monetary Economics
	3.3 Monetary Policy
4.0	Conclusion
5.0	Summary
6.0	Tutor-Marked Assignment
7.0	References/Further Reading

**1.0 INTRODUCTION**

The importance of monetary economics has been increasing in recent times. Part of the reason can be seen from the global trends in inflation, capital mobility, and monetary policy problems. This unit exposes you to the basic background in monetary economics and monetary policies.

**2.0 OBJECTIVES**

At the end of this unit, you should be able to:

- describe the important concepts of monetary economics
- outline the evolution of monetary economics
- grasp what monetary policy is all about.

### 3.0 MAIN CONTENT

#### 3.1 Concepts of Monetary Economics

Monetary Economics is concerned with the nature, function, and influence of money and credit on economic activity.

An economic activity in itself is broadly defined to represent the level of employment, output, prices, and international economic relationships between a country and the rest of the world.

Specifically, monetary economics deals with:

- i. the role and functions of money in the economic system,
- ii. the financial institutions that influence the total amount of money and credit,
- iii. the influence of money and credit on economic activity,
- iv. the structure and function of the Central Bank and the use of its control over the supply of money and credit to achieve such goals as full employment, price stability, economic growth, and balance-of-payments and exchange rate stability.

There are two major reasons for studying monetary economics. First is the interesting nature of the subject. Monetary economics enables us gain insight into the mechanics of money, interest rates, financial markets and institutions, monetary policy, and balance-of-payments adjustments.

#### 3.2 Evolution of Monetary Economics

Three distinct evolutionary periods in attitudes about the importance of money and monetary policy have been noted.

1. **The period prior to 1929**, when money was seen as an important determinant of economic activity and stable growth of the money supply was a pre-requisite for stable and continuous economic growth.
2. **The period from 1929 through the early 1960s**, when money and monetary policy were regarded as relatively unimportant in terms of understanding the economy and how government could achieve economic stability.
3. **The period from early 1960s to the present**, when money and monetary policy have again been viewed as important determinants of the level of economic activity.

During the first period, 1929, monetary economics was regarded as a necessary foundation for understanding the macroeconomic relationships among prices, employment, output, exchange rates, balance of payments, and economic growth. The widely accepted approach to monetary economics was known as the *quantity theory of money*, used as part of a broader approach to micro and macro issues referred to as *classical economics*.

The quantity theory of money was not only a theory about the influence of money on the economy and how a Central Bank should manage the economy's money supply, but it represented a specific view of the private market economy and the role of government. The market system was inherently stable, and, as long as competitive conditions could be maintained, the market system would automatically achieve an efficient allocation of resources, full employment and economic growth. The private market provided the best framework for achieving socially desired outcomes. The role of government in the private sector was limited to providing a system of laws and security to protect private property, as well as providing a stable financial and monetary framework. The economic depression of the 1930s drastically changed attitudes about the role of money and monetary policy as a tool of economic stabilisation. Monetary policy was then viewed as an ineffective method of fighting depressions, and the belief in a self-regulating market that reached socially desirable results was destroyed.

In 1936, John Maynard Keynes published his "General Theory of Employment, Interest and Money" and initiated the *Keynesian Revolution*. The Keynesian economics argued that the market system by itself was not likely to maintain economic growth and full employment over long periods of time. Aggregate demand and total spending are the primary determinants of income and employment, and there was no guarantee that private spending would be sufficient enough to generate full employment and economic growth. Government had the responsibility to undertake actions to stabilise the economy and maintain full employment and economic growth, using fiscal monetary policies.

The Keynesian view differed from the quantity theory of money in two ways.

**First**, the self-equilibrating market system view was replaced by a view emphasising the inherent stability of the market system, the possibility of unemployment equilibrium, and the long periods of time required for self-equilibrating mechanisms to work. Keynesian economics emphasised the need for government to manage aggregate demand to achieve economic stability; hence the origin of *demand-side economics*.

The quantity theory on the other hand argued that aggregate demand will always be sufficient enough to achieve full employment and economic growth, given the self-equilibrating nature of the market system. It also argued that emphasis should be placed on establishing an environment that encouraged the supply of goods and services with a given resource base; hence the origin of *supply-side economics*.

**Secondly**, until the early 1960s, the Keynesian view had downplayed the role of money and monetary policy as determinants of economic activity. According to the quantity theory, the behaviour of the money supply was critically important to the performance of the economy.

The third period in the evolution of monetary economics reflects increasing criticism of the Keynesian views by monetarism, rational expectations, and supply-side economics. The original Keynesian view that emerged from the Great Depression was challenged on two fronts. First, the early view that money and monetary policy were relatively unimportant was judged incorrect. Second, the basic premise of the Keynesian model was the inherent instability of the market system and the right and responsibility of the government to conduct an active stabilisation policy.

Some economists questioned this premise and argued that efforts to stabilise the economy through active monetary and fiscal policies were not likely to generate long-run improvement in the real performance of the economy, but were more likely to generate instability.

### 3.3 Monetary Policy

Monetary Policy involves actions by the monetary authority (Central Bank) to influence the amount and availability of credit and money, which in turn influences the overall level of economic activity. Monetary authorities attempt to influence some measures of the money supply or the level of interest rate in their monetary policy decisions. As you will learn from unit 4, there are several monetary policy instruments used by Central Banks or Federal Reserve System to control the behaviour of money in a given economic system.

You should note however, that in the modern financial system, where a large proportion of the money supply is created by the banking industry, it may not be possible for the monetary authorities to control both the money supply and interest rates simultaneously, using extremely restrictive monetary control measures. It follows that if the monetary authorities can influence the total supply of money in a given economy, the broad policy choices open to them are obvious. The authorities may decide to set the available quantity of money in the economy, but it is

the nature of the demand for money to hold by the private sector that will determine the level and structure of the interest rates. The authority may in the alternative, attempt to peg the level or structure of the interest rates, in which case the authorities must be willing to allow the money supply to adjust accordingly in order to meet the demand for money.

### **SELF ASSESSMENT EXERCISE**

Explain why it is important for a manager to be familiar with monetary policy issues

## **4.0 CONCLUSION**

The knowledge of monetary economics and theory is vital to the understanding and practice of monetary policies. Monetary economics deals with:

- i. the role and functions of money in the economic system,
- ii. the financial institutions that influence the total amount of money and credit,
- iii. the influence of money and credit on economic activity,
- iv. the structure and function of the Central Bank and the use of its control over the supply of money and credit to achieve such goals as full employment, price stability, economic growth, and balance-of-payments and exchange rate stability.

Monetary policy in itself involves actions by the monetary authority (Central Bank) to influence the amount and availability of credit and money, which in turn influences the overall level of economic activity.

## **5.0 SUMMARY**

You must have learned from this unit, that, Monetary Economics is concerned with the nature, function, and influence of money and credit on economic activity. There are two major reasons for studying monetary economics. First is the interesting nature of the subject. Monetary economics enables us gain insight into the mechanics of money, interest rates, financial markets and institutions, monetary policy, and balance-of-payments adjustments.

You noted three important distinct evolutionary periods in attitudes about the importance of money and monetary policy.

1. **The period prior to 1929**, when money was seen as an important determinant of economic activity and stable growth of the money

supply was a pre-requisite for stable and continuous economic growth.

2. **The period from 1929 through the early 1960s**, when money and monetary policy were regarded as relatively unimportant in terms of understanding the economy and how government could achieve economic stability.
3. **The period from early 1960s to the present**, when money and monetary policy have again been viewed as important determinants of the level of economic activity.

Monetary policy generally involves actions by the monetary authority (Central Bank or the Federal Reserve System) to influence the amount and availability of credit and money, which in turn influences the overall level of economic activity.

## **6.0 TUTOR-MARKED ASSIGNMENT**

Explain what monetary policy is all about, and why, as a policy maker, it is important to understand monetary economics.

## **7.0 REFERENCES/FURTHER READING**

Goacher David, J. (1986). *An Introduction to Monetary Economics*. London: Financial Training Publications Ltd.

## **UNIT 2 NATURE, DEFINITIONS AND VALUE OF MONEY**

### **CONTENTS**

- 1.0 Introduction
- 2.0 Objectives
- 3.0 Main Content
  - 3.1 Nature and Definitions of Money
  - 3.2 Types and Sources of Money
  - 3.3 The Desirable Properties of Money
  - 3.4 The Concept of Liquidity
- 4.0 Conclusion
- 5.0 Summary
- 6.0 Tutor-Marked Assignment
- 7.0 References/Further Reading

### **1.0 INTRODUCTION**

We think it is extremely important and useful to understand the nature of money and know how money is generally defined in economics. The value of money is another important concept that is often misunderstood by students of business and economics. In this unit, you will attempt to fill the gaps in your understanding of the concept of money

### **2.0 OBJECTIVES**

At the end of this unit, you should be able to:

- define money in economic terms
- identify the different types and sources of money
- describe the desirable properties of money
- state the functions of money
- describe the Concept of Liquidity.

### **3.0 MAIN CONTENT**

#### **3.1 Nature and Definitions of Money**

The introduction of a generally acceptable trading commodity, referred to as 'money', greatly reduces transaction costs, facilitates trade, and reduces the risks involved with dependence upon ability to sell producers' outputs. This encourages greater specialisation, leading to efficient use of economic resources.

It is necessary for an economy to have a good proportion of the population that is willing to accept a particular substance or trading commodity for their goods and services. In this way, there will be a widespread confidence in the money substance established.

The precise form of money has evolved over the decades, often in reaction to economic events. Many different substances have, in the past, been used as money throughout the world, ranging from cattle to axes and arrows. The general trend today is the use of metallic coins and paper bank notes, forming the stock of money in the economy.

Money is generally defined as a medium of exchange. It represents anything people are willing to accept for exchange of goods and services. Money can also be defined in terms of the general functions it performs in an economic system:

- money serves as a unit of account,
- money serves as a medium of exchange,
- money serves as a store of wealth or value,
- money serves as a standard for deferred payments.

With these functional roles of money, the definition and measurement of money supply is relatively easy. Those who emphasise the medium of exchange function define money supply more narrowly than do those who emphasise the store of wealth or liquidity function. It follows that there is no single measure or definition of the money supply which all economists agree. As a result, the monetary authorities provide three measures of the money supply, one measure of liquidity,  $L$ , and measure of debt. The three measures of money supply include:

- i.  $M - 1$ : This includes coin, currency, traveler's cheques, demand deposits, and other chequable deposits.
- ii.  $M - 2$ :  $M_2 = M_1 + \text{Savings deposits} + \text{Small-denomination time deposits}$ .
- iii.  $M - 3$ :  $M_3 = M_2 + \text{Large CD}_s$
- iv.  $L = M_3 + \text{other liquid assets such as short-term Treasury Securities, Bankers' acceptances, Commercial Paper, and Federal Savings Bonds}$ .
- v.  $\text{Debt} = \text{Debt of domestic non-financial sectors consisting of outstanding debt obligations of the Federal, State, and Local governments, and private non-financial sectors}$ .

### 3.2 Types and Sources of Money

The major types of money are:

- i. **commodity money:** an economy that uses commodities (such as gold, silver, or copper) as money is said to be operating a commodity money system. If the commodity has equal value as a medium of exchange, the system is said to be full-bodied commodity system, whereas, if the commodity has greater value as a medium of exchange than a commodity, the system is said to be a token commodity system.
- ii. **representative commodity money:** a representative full bodied commodity system exists when paper money circulates rather than commodities but the paper money can be redeemed in full value for a specific commodity.
- iii. **credit money:** credit money exists when the money supply does not have value as a commodity and cannot be redeemed for a commodity such as gold and silver. Credit money characterises the type of money used in the Nigerian economy.

The sources or determinants of the amount of money in the economy include:

- i. the public;
- ii. depository and financial institutions; and,
- iii. the Central Bank.

### 3.3 The Desirable Properties of Money

Any medium of exchange in the form of money must be generally acceptable by the society. Such money or medium of exchange must possess the following properties:

- i. **portability:** it should be easily transportable in large sums.
- ii. **divisibility:** to be sure that all transactions of all values will be undertaken, it is required that money should be divisible into very small units of purchasing power.
- iii. **durability:** for a substance to be acceptable as money, it must maintain its physical characteristics. The less durable the money substance, the greater will be the resource costs borne by society in order to maintain the money stock.

- iv. **homogeneity:** the individual components of the money stock must be of the same physical form. Perceived differences in the quality of moneys in circulation is likely to undermine the general acceptability of money.
- v. **recognisability:** since money has to be used by all members of the society, irrespective of the personal intellect and skills, it is important that it should be easily recognised. The advantages arising from the use of money would be diminished if considerable time or expertise was required in order to establish its authenticity at the point of a sale.
- vi. **stability of purchasing power:** if the amount of goods or services which can be purchased with a given sum of money alters over time, there would be some risks associated with holding money. A loss in the purchasing power of money may result in its general unacceptability as a medium of exchange. The stability of purchasing power of any money generally depends on the surrounding economic environment.

### 3.4 The Concept of Liquidity

The term liquidity is usually an attribute of a financial asset. A liquid asset is one which can be realised or turned into cash quickly without any capital loss. However, the fact that a financial asset may be readily sold in an active market does not necessarily imply that the asset is liquid, since the sale of the asset may involve a financial loss. The length of time taken to obtain the full nominal value of the asset is crucial to the strict liquidity concept.

The financial assets that are usually classified as liquid assets include:

- i. time deposits at banks
- ii. shares and building society deposits
- iii. treasury bills
- iv. certificates of deposits
- v. call monies
- vi. commercial bills.

Any financial asset which is close to maturity can be regarded as being liquid, irrespective of its original maturity date.

### SELF ASSESSMENT EXERCISE

List what you think can serve as a medium of exchange and a measure of purchasing power, different from the Nigerian naira.

## 4.0 CONCLUSION

You have learned that any commodity or thing which can be used as a medium of exchange, a measure of purchasing power, and a store of value can be regarded as money. Three major types of money are:

- i. commodity money;
- ii. representative commodity money; and,
- iii. credit money.

The major determinants of the amount of money in circulation include:

- i. the public;
- ii. depository and financial institutions; and,
- iii. the Central Bank.

The six desirable properties of money are:

- i. portability
- ii. divisibility
- iii. durability
- iv. homogeneity
- v. recognisability
- vi. stability of purchasing power

The financial assets that are usually classified as liquid assets include:

- i. time deposits at banks
- ii. shares and building society deposits
- iii. treasury bills
- iv. certificates of deposits
- v. call monies
- vi. commercial bills.

## 5.0 SUMMARY

The term money is generally defined as a medium of exchange. It represents anything people are willing to accept for exchange of goods and services.

There is however, no single measure or definition of the money supply. As a result, the monetary authorities provide three measures of the money supply, one measure of liquidity, L, and measure of debt. The three measures of money supply include:

- i. M - 1: This includes coin, currency, traveler's cheques, demand deposits, and other chequable deposits.
- ii. M - 2:  $M_2 = M_1 + \text{Savings deposits} + \text{Small-denomination time deposits}$ .

- iii.  $M - 3: M_3 = M_2 + \text{Large CDs}$
- iv.  $L = M_3 + \text{other liquid assets such as short-term Treasury Securities, Bankers' acceptances, Commercial Paper, and Federal Savings Bonds.}$
- v. Debt = Debt of domestic non-financial sectors consisting of outstanding debt obligations of the Federal, State, and Local governments, and private non-financial sectors.

The unit emphasises various forms of money including: commodity money; representative commodity money; and, credit money. The important properties of money was outlined as follows: *Portability*, it should be easily transportable in large sums; *Divisibility*, to be sure that all transactions of all values will be undertaken, it is required that money should be divisible into very small units of purchasing power; *Durability*, for a substance to be acceptable as money, it must maintain its physical characteristics.; *Homogeneity*, the individual components of the money stock must be of the same physical form.; *Recognisability*, since money has to be used by all members of the society, irrespective of the personal intellect and skills, it is important that it should be easily recognised. The advantages arising from the use of money would be diminished if considerable time or expertise was required in order to establish its authenticity at the point of a sale; and, *Stability of Purchasing Power*, if the amount of goods or services which can be purchased with a given sum of money alters over time, there would be some risks associated with holding money. A loss in the purchasing power of money may result in its general unacceptability as a medium of exchange. The stability of purchasing power of any money generally depends on the surrounding economic environment.

The term *liquidity* is usually an attribute of a financial asset. A liquid asset is one which can be turned into cash quickly without any capital loss. However, the fact that a financial asset may be readily sold in an active market does not necessarily imply that the asset is liquid, since the sale of the asset may involve a financial loss. The length of time taken to obtain the full nominal value of the asset is crucial to the strict liquidity concept.

## 6.0 TUTOR-MARKED ASSIGNMENT

In your personal opinion, would you agree that the Nigerian naira has the desirable properties of money? Please explain.

## 7.0 REFERENCES/FURTHER READING

Goacher David, J. (1986). *An Introduction to Monetary Economics*.  
London: Financial Training Publications Ltd.

## **UNIT 3 THEORIES OF DEMAND FOR AND SUPPLY OF MONEY**

### **CONTENTS**

- 1.0 Introduction
- 2.0 Objectives
- 3.0 Main Content
  - 3.1 The Liquidity Preference Theories
    - 3.1.1 The Liquidity Preference Theory of Demand for Money
    - 3.1.2 The Total Demand for Money
  - 3.2 The Money Market and Determination of the Rate of Interest
  - 3.3 Friedman's Modern Quantity Theory of Money
- 4.0 Conclusion
- 5.0 Summary
- 6.0 Tutor-Marked Assignment
- 7.0 References/Further Reading

### **1.0 INTRODUCTION**

There is a theoretical uniqueness in the demand for money compared to other commodities. You are being introduced to the theory of demand for money so that you will be familiar with this uniqueness. In addition, you may find it difficult understanding the monetary policy effects on money market unless you understand the money demand mechanisms. This unit will make a worthwhile reading in preparation to the understanding of monetary theory and policies.

### **2.0 OBJECTIVES**

At the end of this unit, you should be able to:

- describe the theories of demand
- state the reasons for various demands for money
- deduce how market interest rates are determined
- discuss of monetary policy effects.

### **3.0 MAIN CONTENT**

#### **3.1 The Liquidity Preference Theories**

The monetary theory generally accepted at the time John Maynard Keynes wrote *The General Theory* was some variant of the quantity theory. The central assumption of the quantity theory is that people hold

a certain amount of cash balances for transactions but do not hold idle balances that could be used for the production of income. Under the quantity theory, money functions as a medium of exchange, merely facilitating trade. No one holds idle money. This assumption originates from the “Says Law” stipulating that “supply creates its own demand,” according to which all income is spent.

Keynes was interested in demonstrating that there is a probability of an insufficiency of aggregate demand, and therefore, attacked the classical model. He showed that it might be rational for people to hold money balances in excess of those needed for exchange purposes. It follows then that not all income return to the producers and suppliers of goods and services. To further demonstrate this possibility, Keynes formulated the liquidity preference theory of the demand for money and interest rate determination.

### 3.1.1 The Liquidity Preference Theory of Demand for Money

Keynes laid emphasis on the demand for money to hold as cash balances (or for liquidity). He ascribes the demand for money to three motives: the transaction, the precautionary, and the speculative motives.

1. **The Transaction Demand for Money:** anyone who has ever received a pay cheque will notice that some of his or her pay is spent immediately and the rest is spent as the bills are received. In between, some portion of income is held idle in the form of cash balances against these future transactions.

If we select some time period and assume that disbursements are made fairly evenly throughout the period, we can get an average of how much cash is held for transaction purposes. Symbolically, the transaction demand for money can be written as:

$$L_t = KY \quad (3.1)$$

Where  $L_t$  = demand for money for transaction purposes

$K$  = the proportion or fraction of income held as cash balances, which is assumed to be constant.

$Y$  = the level of income.

Post-Keynesian economists have questioned the constancy of the proportion,  $K$ , as the rate of interest increases. Transaction balances, being idle, do not yield returns. At some rate of interest people will likely want to economise on the use of cash balances, including those held for transaction purposes. As interest rates rises, it becomes reasonable to cut down on the amount of cash balances held for

transaction purposes. In effect, the demand for transaction balances becomes:

$$L_t = f(Y, r) \quad (3.2)$$

Where  $r$  = rate of interest

$$\text{And } \frac{\partial L_t}{\partial Y} > 0; \quad \frac{\partial L_t}{\partial r} < 0$$

2. **The Precautionary Demand for Money:** the precautionary motive for holding money is based on the need to hold cash in excess of transaction balances in order to meet contingencies of all kinds and to take advantage of unusual buying opportunities. It is made a function of the level of income according to the following:

$$L_p = f(Y) \quad (3.3)$$

Where  $L_p$  = precautionary demand for money,

$$\text{And } \frac{dL_p}{dY} > 0,$$

so that as the level of income increases, there will be business activity, more traveling, and so on, and therefore more demand for money to hold to meet unforeseen contingencies. The precautionary demand for money is often included as part of the transaction demands for money, so that:

$$L_t + L_p = f(Y) \text{ or } L_t = f(Y) = KY \quad (3.4)$$

3. **The Speculative Demand for Money:** the speculative demand for money, over and above that needed for transaction purposes, implies that there are times when it is rational to hold money idle as an asset rather to seek for rate of return, however small. If money is held as an asset:

- i. it will not be spent or lent to others, and therefore there will be insufficient aggregate demand,
- ii. the velocity of money,  $V$ , will no longer be constant but will be subject to fluctuation as the demand for money fluctuates,
- iii. money must be a more complicated variable than envisioned by the classical economists and must be functionally related to other variables in the system.

These issues become clear as the speculative demand for money is examined in a little more detail. To refute the classical premise that it is irrational to hold money idle, Keynes supplied an explanation that would justify such behaviour. He maintained that in the act of investing

in securities an individual is automatically speculating, whether he or she wants to or not; there must therefore be times when the speculation involves a loss. Keynes, therefore, views the “some return, however small” attitude of the classical economist with regard to excess cash balances as somewhat naïve. He then explained the conditions under which it is more rational to prefer *Liquidity* than an interest-bearing security. The highest form of liquidity is cash, so that the demand for money to hold is translated into the speculative demand for money as an asset.

Money held as an asset over and beyond that needed for exchange purposes can be made a function of the rate of interest and referred to as the speculative demand for money. The speculative demand for money can then be written as:

$$L_s = L(r) \quad (3.5)$$

The speculative demand for money,  $L_s$ , varies inversely with the market rate of interest,  $r$ . It is written as a function of the *expected rate* of interest, and any changes in the speculative demand are regarded as expected changes.

### 3.1.2 The Total Demand for Money

According to the liquidity preference theory, combining the three motives for demanding money, we get the following expression for the total demand for money:

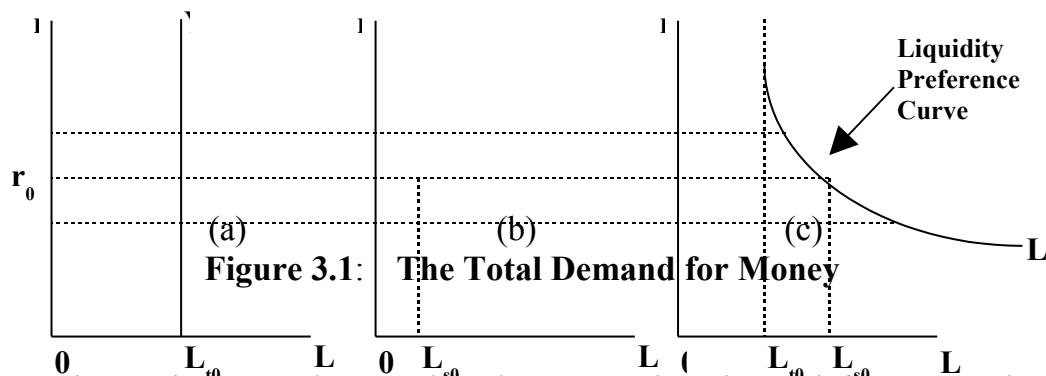
$$L_t + L_s = KY + L(r) \quad (6.6)$$

Where some portion of the demand,  $L_t$ , depends on the level of income,  $Y$ , and the speculative portion depends on the rate of interest,  $r$ . This expression can be written more directly as:

$$L = KY + L(r) \quad (3.7)$$

where  $L$  represents the total demand for money.

Figure 3.1 below illustrates the total demand for money. It represents the derivation of the so-called *Liquidity Preference Curve*.



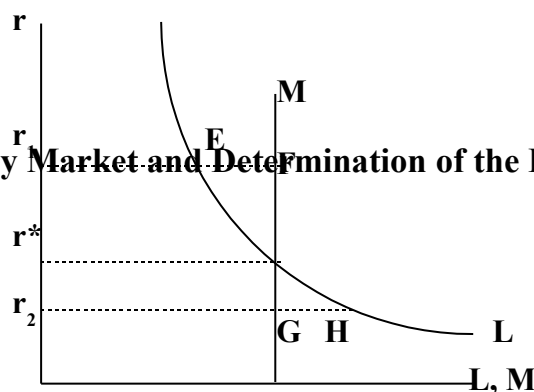
By inspection, we observe that the transaction demand for money is represented by the horizontal distance:  $OL_{t_0}$  at the interest rate,  $r_0$  in panel (a) of figure 3.1. The speculative demand for money is represented by the horizontal distance:  $OL_{s_0}$  in panel (b). In panel (c), the total demand for money is represented by:

$$L = OL_{s_0} = OL_{t_0} + L_{t_0}L_{s_0}$$

### 3.2 The Money Market and Determination of the Rate of Interest

Assuming that the monetary authorities can control the money supply, we analyse the market for supply and demand for money to ascertain the determination of the rate of interest. Figure 3.2 depicts the supply and demand for money, assuming that the supply of money is autonomous and not influenced by the rate of interest. The amount of money in supply is determined by the monetary authorities.

**Figure 3.2: The Money Market and Determination of the Rate of Interest**



The equilibrium rate of interest,  $r^*$ , is determined by the intersection of the supply of money,  $M$ , and the demand for money,  $L$ . At the equilibrium rate of interest,  $r^*$

$$M = L = KY + L(r),$$

and the demand for money equals the supply of money.

At the interest rate,  $r_1$ , the supply of money exceeds the demand,  $M > L$ , by the distance  $EF$ . As in all markets, the inequality between supply and demand sets in motion the forces necessary to correct the disequilibrium situation. At the interest rate,  $r_1$ , people will prefer to hold bonds and reduce their cash holdings. People expect that, the rate of interest will fall and bond prices will rise, a situation favourable to the holding of bonds. Thus, the excess money supply will not remain idle for long as people buy bonds with these balances. As the demand for bonds increases, the price of bonds is driven up, given rise to the fall in market rate of interest. In the long run, the equilibrium in market will be restored.

If the market rate of interest declines to  $r_2$ , the demand for money would exceed the supply, that is,  $L > M$ , by the distance  $GH$ . At this lower rate of interest, people will prefer cash to bonds, since they expect interest rate to rise in the future. People will tend to get rid of their bonds and hold cash until interest rates had recovered. So they sell bonds, but in the process, bond prices will fall as the supply of bonds increases, and interest rates rise. This process continues until bond prices have fallen sufficiently enough, and the interest rate has risen, so that there is no longer any excess demand for money balances. Equilibrium is thus restored and the demand for money has adjusted to the supply.

### 3.3 Friedman's Modern Quantity Theory of Money

The quantity theory of money was reformulated by Milton Friedman in the 1950s in order to make the theory more acceptable to modern day analysis. Like the Keynesians, Friedman treats the demand for money as a result of the choice of assets. He simply regards all money holdings as an asset that yields a stream of services to the holder.

As in the case with any asset, Friedman asserts that the quantity of money demanded is also influenced by the opportunity cost of holding it, and that cost is determined by the rate of interest and the rate of change in the general price level (or inflationary rate). By holding money, an individual foregoes the interest earnings that will be provided by securities (example bonds). The higher the rate of interest, the higher the loss of earnings and the smaller the demand for money. Hence, the demand for money is an inverse function of the rate of interest.

Friedman's modern quantity theory of the demand for money takes the following form:

$$M_d = f(W, r, \Delta P_e/P) \quad (3.8)$$

So that,

$$\frac{\partial M_d}{\partial W} > 0; \quad \frac{\partial M_d}{\partial r} < 0; \quad \frac{\partial M_d}{\partial (P_e/P)} < 0,$$

Where  $W$  = individual's total wealth  
 $\Delta P_e/P$  = expected rate of inflation  
 $r$  = the interest rate  
 $M_d$  = the demand for money

Due to the general lack of reliable data on wealth,  $W$ , equation (2.8) can be rewritten as:

$$M_d = f(Y_p, r, \Delta P_e/P) \quad (3.9)$$

Where  $Y_p$  = permanent income, which is employed as a proxy for wealth.

For the sake of research, estimate of  $Y_p$  can be obtained from the observed measures of income. The aggregate demand for money,  $M_d$ , is obtained by summing the entire individual money demand schedule for the wealth holders in the economy.

The modern quantity theory of money assumes that the demand for money is the demand for real purchasing power, so that the Friedman's demand for money can be rewritten as:

$$M_d = P \cdot f(Y_p, r, \Delta P_e/P)$$

$$\text{Or } \frac{M_d}{P} = f(Y_p, r, \Delta P_e/P) \quad (3.10)$$

Where  $Y_p$  = real value of permanent income  
 $P$  = the general price level

It can be observed that the Friedman's formulation of the modern quantity theory of money is a portfolio balance model which has been generalised to take account of nonzero rates of expected inflation and extended income horizons. Friedman views money and bonds as poor substitutes for one another, so that, in his model, changes in interest rate have only a weak effect on the demand for money.

## SELF ASSESSMENT EXERCISE

As a business decision maker, explain why it is extremely important for you to be familiar with the theories of demand for money

### 4.0 CONCLUSION

Unit 3 has sensitised you to the basic theories and reasons for the demand for money. The three most important reasons for the demand for money are:

- i. for transaction purposes,
- ii. for precautionary purposes,
- iii. for speculative purposes.

The liquidity preference curve can be derived by combining the demand for money arising from the above different motives for the demand for money. This curve is an important instrument in the determination of the market equilibrium rate of interest.

### 5.0 SUMMARY

The theory of demand for money was propagated by John Maynard Keynes who was interested in demonstrating that there is a probability of an insufficiency of aggregate demand, and therefore, attacked the classical model. Keynes showed that it might be rational for people to hold money balances in excess of those needed for exchange purposes. It follows then that not all income return to the suppliers or producers of goods and services. To further demonstrate this possibility, Keynes formulated the liquidity preference theory of the demand for money and interest rate determination. The liquidity preference theory combines the demand arising from Keynes' three motives for demand for money: transaction motive, precautionary motive, and speculative motive, to ascertain the total demand for money in a given economy.

The liquidity preference curve is used in conjunction with the money supply line in the determination of the market rate of interest. The quantity theory of money was reformulated by Milton Friedman in the 1950s in order to make the theory more acceptable to modern day analysis.

Friedman asserts that the quantity of money demanded is also influenced by the opportunity cost of holding it, and that cost is determined by the rate of interest and the rate of change in the general price level (or inflationary rate). By holding money, an individual foregoes the interest earnings that will be provided by securities (example bonds). The

higher the rate of interest, the higher the loss of earnings and the smaller the demand for money. Hence, the demand for money is an inverse function of the rate of interest

## **6.0 TUTOR-MARKED ASSIGNMENT**

Discuss in detail the major assumptions of the Keynesian liquidity preference theory. Apart from the Keynes' motives for the demand for money, can you think of other possible motives for the demand for holding money?

## **7.0 REFERENCES/FURTHER READING**

Halistones, Thomas J. (1980). *Basic Economics*. Cincinnati: South-Western Publishing Co.

## **UNIT 4 THE MONEY SUPPLY MODEL**

### **CONTENTS**

- 1.0 Introduction
- 2.0 Objectives
- 3.0 Main Content
  - 3.1 Derivation of the Model of Money Supply
  - 3.2 Factors Influencing the Money Supply
- 4.0 Conclusion
- 5.0 Summary
- 6.0 Tutor-Marked Assignment
- 7.0 References/Further Reading

### **1.0 INTRODUCTION**

Having developed the demand for money model in its simplest form, and to complete the money market equations, we now turn to the model of money supply. The model must be understood for a successful application of the behaviour of money market in business policy decisions.

### **2.0 OBJECTIVES**

At the end of this unit, you should be able to:

- identify the development of the money supply model
- categorise the basic money market instruments
- state the factors influencing the supply of money
- make business decisions with regard to monetary policy issues.

### **3.0 MAIN CONTENT**

#### **3.1 Derivation of the Model of Money Supply**

Recognising that the narrowly defined money supply consists of the sum of demand deposits and currency, that society can hold demand deposit claims against banks on which reserves are required, that banks can choose to hold some cushion of reserves in excess of reserve requirements, and that the required reserve ratio is different for different kinds of deposits and for different banks, a money supply model can be constructed that is widely accepted as a rough approximation of the real-world money supply process. Such money supply model is based on the following definitions and assumptions:

#### **Definitions**

- vi. The narrowly defined money,  $M_1$ , is the sum of currency,  $C$ , and demand deposits,  $D$ , held by the non-bank public. Thus,

$$M_1 = C + D \quad (3.1)$$

- vii. The monetary base,  $B$ , is the sum of all reserves,  $R$ , held by member banks and the currency,  $C$ , held by non-bank public. Thus,

$$B = R + C \quad (3.2)$$

- viii. The total deposit obligations of commercial banks consist of private demand deposit,  $D$ , private time deposits,  $T$ , and Federal government or treasury deposits in commercial banks,  $G$ .

### Assumptions

- i. The overall required reserve ratio,  $r$ , against deposit obligations is a weighted average of the ratios for different categories of deposit obligations. Thus, the value of the overall required reserve ratio is total required reserves,  $RR$ , divided by total deposit obligations:

$$r = \frac{RR}{D + T + G}, \quad (3.3)$$

And,  $RR = r (D + T + G) =$  Total volume of required reserves.

- ii. To guard against the possibility of reserve deficiency due to deposit withdrawals exceeding deposit inflows, banks can hold a safety cushion of excess reserves,  $E$ . Assuming that excess reserves rise in proportion to demand deposits, total excess reserves are given by:

$$E = e \cdot D, \quad (3.4)$$

where  $e$  is proportionally constant.

- iii. The non-bank public decides what proportion of its liquid wealth it prefers to hold in the form of demand deposits, time deposits and currency. With the assumption that these proportions are constant, the volumes of currency and time deposits held are proportional to the volume of demand deposits. Algebraically, the volume of time deposits can be represented by:

$$T = tD, \quad (3.5)$$

and the volume of the currency is:

$$C = cD, \quad (3.6)$$

where  $t$  and  $c$  are proportionally constants.

- iv. The volume of government deposits in commercial banks may be expressed as a fraction of demand deposits. Thus,

$$G = gD, \quad (3.7)$$

where  $g$  is a proportionally constant.

With these assumptions, the realistic money supply model can be constructed, after recognising three major absorbers of the monetary base, including the required reserves, excess reserves, and privately held currency. Thus, definitionally, the monetary base,  $B$ , is exhausted as follows:

$$B = r(D + T + G) + E + C \quad (3.8)$$

Substituting the expressions developed for  $T$ ,  $G$ ,  $E$ , and  $C$  above, we get:

$$\begin{aligned} B &= r[D + tD + gD] + eD + CD \\ &= rD + rtD + rgD + eD + cD \\ &= D[r(1 + t + g) + e + c] \end{aligned}$$

Solving for  $D$  we get:

$$D = \frac{1}{r(1 + t + g) + e + c} B \quad (3.9)$$

Equation (3.9) represents the equilibrium volume of demand deposits existing when the entire available monetary base is absorbed in private currency hoards, required reserves, and excess reserve voluntarily held by the commercial banks. Recall that the narrowly defined total money stock is:

$$\begin{aligned} M_1 &= D + C \\ &= D + cD \\ &= D(1 + c) \end{aligned}$$

Using equation (3.9), we get:

$$M_1 = \left[ \frac{1 + c}{r(1 + t + g) + e + c} \right] B \quad (3.10)$$

Equation (3.10) represents the realistic money supply model. The term in brackets can be referred to as the money multiplier,  $M$ . The multiplier can be used to predict the change in the money supply that results from a specified change in the monetary base. It follows that the absolute value of the narrow money supply is:

$$M_1 = mB \quad (3.11)$$

The money multiplier,  $m$ , can be viewed as the rate at which money supply changes with respect to unit changes in the monetary base. Thus,

$$\frac{dM_1}{dB} = m$$

### 3.2 Factors Influencing the Money Supply

Any economic event or policy that changes the monetary base,  $B$ , or the money multiplier,  $m$ , will also produce changes in the supply of money; a decrease in the monetary base or the money multiplier reduces the supply of money, and an increase in the money base or money multiplier increases the money supply. The important factors that influence the money supply do so by altering the money multiplier or by changing the monetary base or by altering both the money base and the money multiplier.

In this discussion, we outline the major factors affecting the money supply in a given economy with special emphasis on those that impinge directly on the money multiplier, that is, the composition of the public's portfolio of liquid assets, and bank demand for excess reserves. These factors include:

- i. **Shifts between demand deposits and currency:** assume that the non-bank public decides to hold a larger fraction of its money in currency and a smaller fraction in demand deposits. The owners of demand deposit accounts will then draw checks on those accounts, draining currency out of the vault-cash reserves of commercial banks. If member commercial banks' vault-cash inventories decline below desired level, they will replenish them with currency shipments from the Central Bank. The recipient bank's reserve account at the Central Bank will decline by the amount of the currency shipped.

This conversion from demand deposits to currency will drain reserves (vault cash or excess deposits) out of the possession of banks, where a multiple volume of demand deposit money can be supported. Hence, a given monetary base provides a reduced money stock if the non-bank public absorbs a larger proportion of that base in currency.

In terms of the money supply equation (3.11), an increase in the currency ratio,  $c$ , due to the shift, increases both the numerator and the denominator. But since, in absolute terms, the numerator of the money multiplier is larger than the denominator, any increase in  $c$  will raise the value of the denominator by a larger proportion than it raises the numerator. Hence the value of money multiplier is reduced by a rise in the currency ratio.

On the other hand, a reduction in the currency ratio increases the money multiplier.

- ii. **Shifts between demand deposits and time deposits:** a shift in demand deposits in favour of time deposits reduces the narrowly defined money stock,  $M_1$ , because with more of the monetary base absorbed in required reserves against time deposits, less is available for private currency stocks and reserves against demand deposits.

In terms of the money supply equation (3.11), a shift from demand deposits into time deposits raises the time deposit,  $t$ ; it also lowers the required reserve ratio,  $r$ , since this ratio is an average of percentage requirements on both demand and savings – type accounts.

Conversely, if the non-bank public decides to hold more funds in demand deposits and fewer funds in time deposits, the money stock will increase, since, with less of the monetary base required as reserves against time deposits, more is available for private currency stocks and reserves against demand deposits.

- iii. **Excess reserves:** the act of retiring maturing loans without issuing a comparable volume of new loans, or by selling securities to the non-bank public by the commercial banking system enlarges the stock of excess reserves, and simultaneously reduces the money stock. Conversely, the banking system reduces its reserves by extending additional loans and makes investments. It can in this process create demand deposits and hence increase the money stock.

### SELF ASSESSMENT EXERCISE

List and briefly discuss the relevant variables in the formulation of the money supply model.

## 4.0 CONCLUSION

This unit has exposed you to the derivation of the money supply model. This model uses effectively the different components in the definition of money, including currency, demand deposits, and the monetary base.

The important factors that influence the money supply does so by altering the money multiplier or by changing the monetary base or by altering both the money base and the money multiplier. These factors include, among others: shifts between demand deposits and currency; shifts between Demand deposits and Time deposits; and, Excess Reserves.

## 5.0 SUMMARY

The basic assumptions in the derivation of the money supply model are that:

1. the overall required reserve ratio,  $r$ , against deposit obligations is a weighted average of the ratios for different categories of deposit obligations.
2. to guide against the possibility of reserve deficiency due to deposit withdrawals exceeding deposit inflows, banks can hold a safety cushion of excess reserves.

The non-bank public decides what proportion of its liquid wealth it prefers to hold in the form of demand deposits, time deposits and currency. With the assumption that these proportions are constant, the volumes of currency and time deposits held are proportional to the volume of demand deposits.

3. the volume of government deposits in commercial banks may be expressed as a fraction of demand deposits.

The factors affecting the supply of money in an economy are: shifts between demand deposits and currency; shifts between Demand deposits and Time deposits; and, Excess Reserves.

## 6.0 TUTOR-MARKED ASSIGNMENT

State the realistic money supply equation as presented in this unit and, discuss briefly the effect on money supply of a decrease in an economy's monetary base.

## 7.0 REFERENCES/FURTHER READING

Goacher David, J. (1986). *An Introduction to Monetary Economics*. London: Financial Training Publications Ltd.

Halistones, Thomas J. (1980). *Basic Economics*. Cincinnati: South-Western Publishing Co.

## UNIT 5 MONEY AND CAPITAL MARKETS

### CONTENTS

- 1.0 Introduction
- 2.0 Objectives
- 3.0 Main Content

- 3.1 The Money Market
  - 3.1.1 Evolution of the Nigerian Money Market.
  - 3.1.2 Functions of the Money Market
  - 3.1.3 The Money Market Participants
  - 3.1.4 Money Market Instruments
- 3.2 The Capital Market
  - 3.2.1 The Major Participants in the Capital Market
  - 3.2.2 Capital Market Instruments
- 4.0 Conclusion
- 5.0 Summary
- 6.0 Tutor-Marked Assignment
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## **1.0 INTRODUCTION**

In this unit, you will examine two important markets as far as financial instruments are concerned; the money market, which deals with short-term instruments, and the capital market, which deals with long-term instruments. Financial instruments are claims to future stream of benefits and, as such, are transferred from one economic unit (the borrower, demander of funds) to another economic unit (the lender, supplier of funds). A financial liability to one economic unit is simultaneously a financial asset to another.

## **2.0 OBJECTIVES**

At the end of this unit, you should be able to:

- describe money and capital markets
- identify the major participants in the Nigerian money and capital markets
- enumerate and explain the money and capital market instruments
- participate effectively in the money and capital markets.

## **3.0 MAIN CONTENT**

### **3.1 The Money Market**

A market refers possibly to a place where goods or services are bought and sold. But in this context, the money market refers to a group of financial institutions however named or described that are set up to deal

in short term credit instruments. The short term instruments may refer to money, treasury bills, treasury certificates, commercial paper as well as foreign exchange.

The money market is a market for short-term claims. It does not refer to the *market for money* in the Keynesian liquidity preference theory or interest rate determination. The term, money market, is used loosely to denote a set of related markets in which similar financial instruments are traded. These instruments have short maturity periods, are very liquid, and are relatively without risks. They are reasonably close substitutes for money.

The primary function of the money market in any economy is to optimise the use of financial claims, that is:

- i. to permit those who need short-term funds to raise them quickly and efficiently by the issuance of financial liabilities; and
- ii. to provide saving surplus units with a ready outlet for the investment of idle cash.

The money market performs a valuable function for an economy. It encourages financial activity, since its existence assures borrowers (lenders) of the availability of short-term funds (returns). The money market performs a very essential function for the Central Bank of Nigeria. It provides the channel for the injection of cash into the financial system and facilitates the operation of what is known as the “open market operation”.

### **3.1.1 Evolution of the Nigerian Money Market**

When the Central Bank of Nigeria was established in 1959, there was no organised money market and the implication was that Nigerian businessmen had no markets where they could raise short term funds for their immediate needs.

Also, those businessmen and individuals who equally had surplus funds at their disposal had no place or market where they could go to invest their funds. Apparently they had no option than to invest their surplus funds oversea to places like London.

Also, at that period of about 1959, all the focus of the Nigerians was how to acquire Independence from our colonial masters – Britain. A key reason for the establishment of the Nigerian money market is the need to provide local medium for the Nigerianisation of the credit system in Nigeria. So that even with the acquisition of Independence for Nigeria in 1960, policy implementation of broad monetary objectives could not be carried out in the absence of a money market. Another major reason that

favoured the quick development of the Nigerian money market at the time was the need by the government to provide machinery for financing its short term financing requirements. Finally the establishment of a Nigerian Money market was seen then by our founding fathers as a demonstration of independence both politically and financially. There was the need to establish a Nigerian money market that would be like other money markets in London or New York.

### **3.1.2 Functions of the Money Market**

From our discussions so far, we have seen that the money market is a market for short term funds. Let us go further to see what the functions of the money market are:

To provide the machinery needed for government short-term financing needs. Frequently the Government needs to raise short-term funds for expenditure purposes. The monies so raised are used for developmental purposes and are usually repaid from revenues. The money market provides government with such a medium for realisation of its financing plans.

To provide the mechanism for monetary policy and control: when there is shortage of funds in the market, the Central Bank of Nigeria injects funds into the system through the money market.

Also, when there are excess funds in the system, the Central Bank of Nigeria intervenes in the system through the money market. What it does is to mop up funds in the market. This operation is known as open market operations (OMO).

It provides individuals and business the mechanism for realisation of their short-term financial requirements. In the economy, there are businesses that have surplus funds which they need to invest and earn interest. Also there are units in the economy which have need for funds. We shall call them “deficit units”. The function of the money market is to bring these two groups together – i.e. owners of surplus funds and the deficit units.

It provides banks the essential medium and mechanism for the management of their resources. When banks are awash with funds, they have the options to invest in various diversified assets like treasury bills or certificates. Also when banks are short of cash, they could equally trade their assets for cash. Some of the assets they can trade are treasury bills and certificates.

### **3.1.3 The Money Market Participants**

The major participants in the money market include:

- i. **The Federal and State government Treasury:** the treasury is one of the largest borrowers; it is the greatest demander of funds in the money market.
- ii. **The Central Bank:** unlike the Treasury, the Central Bank is a major supplier of funds in the money market, as it purchases large quantities of money market instruments, primarily Treasury issues.
- iii. **Commercial Banks** are both suppliers and demanders of short-term funds. As suppliers, they hold large amounts of money market instruments because of their need for liquidity. As demanders, banks are very aggressive in seeking out funds for investment purposes. Negotiable certificates of deposits are the prime example of a money market instrument designed by banks to raise short-term funds.
- iv. **Non financial Corporate Business** is both a supplier and demander of funds in the money market. Their usual and most important means of short-term financing are trade credit and bank loans, but they do often sell commercial paper to raise funds.
- v. **Financial Corporation**, such as finance companies, are heavy demanders of funds. They typically sell sizable quantities of commercial paper to finance their operations.
- vi. **Foreign Central Banks** and related financial entities are also major suppliers of funds in the money market.

### 3.1.4 Money Market Instruments

The money market instruments include:

- i. **Treasury Bills:** these are bills issued by the Treasury in order to generate the funds needed for their financial obligations. Monetary policy is also carried out through open-market operations using Treasury Securities. These securities have recently occupied a prominent place in the financial system.

- ii. **Federal Sponsored Agency Securities:** several government agencies issue non-guaranteed securities in order to generate funds. A typical example of this agency is the Nigerian Bank of Industry (BOI).
- iii. **Banker's Acceptances:** a banker's acceptance is a debt instrument created by non-financial business firms and guaranteed by a bank. The market for banker's acceptances is, however, relatively small in Nigeria.
- iv. **Negotiable Certificates of Deposits (CDs):** a CD is a receipt for a deposit of funds in the bank, which, when presented at maturity, entitles the holder to receive the deposit plus the accrued interest. It represents borrowing by a bank through the issuance of short-term notes.
- v. **Commercial Paper:** this is simply promissory notes issued by large firms with high credit standings. Firms use it to borrow short-term funds on the open market, and hence it provides an alternative to borrowing from a bank.

### 3.2 The Capital Market

By definition, capital markets are markets in which long-term funds are exchanged for long-term claims. Like the money market, the capital markets include lenders (investors) with excess funds on which they wish to earn a return and borrowers (issuers) who wish to borrow funds for the long-term.

The capital market performs a valuable economic function. Permanent assets and some current assets of business firms are financed by permanent capital which can be obtained from the capital market.

#### 3.2.1 The Major Participants in the Capital Market

The major participants in the capital market include:

- i. **Financial Intermediaries** which are the main purchasers of capital market assets.
- ii. **Individuals** who serve as purchasers – as opposed to issuers – of capital market assets. Individuals purchase stocks, bonds, and

government securities of all types from the capital market. Individual do, however, issue mortgages.

- iii. **Business Firms** who issue the stocks and non-governmental bonds that exists in the capital market. Firms are net borrowers in the capital market.
- iv. **The Federal, State, and Local Governments** who raise large amounts through the sale of debt issues in the capital market.

### 3.2.2 Capital Market Instruments

The capital market instruments include:

- i. **Federal Government Securities:** these include long-term marketable federal government debts (notes and bonds).
- ii. **Federal Sponsored Agency Securities:** federal sponsored agency securities are quite safe because it is backed by the Treasury.
- iii. **Mortgages:** mortgages from the largest category of long-term capital instruments. They represent financial claims on real assets (that is, on property or real estate).
- iv. **Corporate Bonds:** these are fixed-principal securities, which have definite maturity dates, and which carry specified coupon interest payments. Business firms borrow money by selling bonds. The proceeds are used for capital expansion and other business purposes.
- v. **Common Stock:** this is another significant method of financing a business firm. The stock market is a well-developed component of the capital market.

### SELF ASSESSMENT EXERCISE

Discuss briefly what you understand by money market instruments.

## 4.0 CONCLUSION

You were informed the money market is a market for short-term claims in this unit. The money market does not refer to the *market for money* in the Keynesian liquidity preference theory or interest rate determination. The term, money market, is used loosely to denote a set of related markets in which similar financial instruments are traded.

The money market provides the machinery needed for government short-term financing needs. The Government sometimes needs to raise short-term funds for expenditure purposes. It also provides a mechanism for monetary policy and control.

The major participants in the money market are: the Federal and State government treasury; the Central Bank; the Commercial banks; financial corporations; non-financial corporate businesses; and foreign Central Banks.

Capital markets are markets in which long-term funds are exchanged for long-term claims. The major participants include: individuals, business firms, financial intermediaries, the federal, state, and local governments.

## **5.0 SUMMARY**

Apart from the fact that money market is a market for short-term funds, it performs the following functions:

- i. provision of the machinery needed for government short-term financing needs.
- ii. provision of a mechanism for monetary policy and control. When there is shortage of funds in the market, the Central Bank of Nigeria injects funds into the system through the money market,
- iii. it provides individuals and business the mechanism for realisation of their short-term financial requirements,
- iv. it provides banks the essential medium and mechanism for the management of their resources.

Capital markets are markets in which long-term funds are exchanged for long-term claims. Like the money market, the capital markets include lenders (investors) with excess funds on which they wish to earn a return and borrowers (issuers) who wish to borrow funds for the long-term. The capital market instruments include: federal government securities, federal-sponsored agency securities, mortgages, corporate bonds, and common stock.

## **6.0 TUTOR-MARKED ASSIGNMENT**

Are there differences between money market instruments and capital market instruments? If so, please explain.

## **7.0 REFERENCES/FURTHER READING**

Ekezie, E.S. (2006). *The Elements of Banking*. Onitsha: Africana First Publishers Limited.

Nwankwo, G.O. (1985). *The Nigerian Financial System*. London: Macmillan Publishers Ltd.

## **MODULE 2**

- Unit 1 Structures and Features of the Nigerian Money Market
- Unit 2 The Nigerian Capital Market
- Unit 3 Money, Financial Market and the Real Economy I
- Unit 4 Money, Financial Market and the Real Economy II
- Unit 5 The Central Bank of Nigeria

### **UNIT 1 STRUCTURES AND FEATURES OF THE NIGERIAN MONEY MARKET**

## CONTENTS

- 1.0 Introduction
- 2.0 Objectives
- 3.0 Main Content
  - 3.1 The Features of a Developed Money Market
  - 3.2 Instruments of the Nigerian Money Market
    - 3.2.1 Treasury Bills (TB)
    - 3.2.2 Treasury Certificates
    - 3.2.3 The Call Money Market
    - 3.2.4 Ways and Means Advances
    - 3.2.5 Certificates of Deposits
    - 3.2.6 Bankers Unit Fund
    - 3.2.7 Commercial Bills
- 4.0 Conclusion
- 5.0 Summary
- 6.0 Tutor-Marked Assignment
- 7.0 References/Further Reading

### 1.0 INTRODUCTION

In Unit 5, we discussed at length the basics of the money and capital markets. In unit 6, we pay attention to the important features of the Nigerian money market. This will be an important discussion as profitable investment decisions are based on the money market environment.

### 2.0 OBJECTIVES

At the end of this unit, you should be able to:

- explain the characteristics of the Nigerian Money Market
- discuss the workings of the Nigerian money market
- distinguish the instruments of the Nigerian money market
- make investment decisions based on the characteristics of the Nigerian money market.

### 3.0 MAIN CONTENT

#### 3.1 The Features of a Developed Money Market

You can define a developed money market as one which is *efficient*. An efficient market is one that is responsive to market forces of demand and supply. In an efficient market, changes in demand and supply

immediately reflect without much time lag. In money market dynamics, a developed market should possess the following features:

1. There should be a *visibly effective Central Bank*. It is not enough to have a Central Bank. The Central bank should be effective. The Central Bank should have the required skills in terms of human resources. These human resources should have adequate technical skills in monetary policy and management. Again, the Central Bank should have the powers to operate freely and without interference from politics and other unhealthy manipulations that will threaten its ability to operate efficiently.
2. There should be a *well developed banking system* especially in the area of retail banking. Commercial banks are very crucial in any developed money market because they serve as mediums through which monetary policy could be implemented. Apart from the banks, the public should have the banking habit that is developed.
3. There should be *adequate supply of financial instruments*. Adequate supplies of financial assets mean that the various institutional players in the market will not have any problem in buying the assets that they require.
4. There should be *adequate legislation* to guide the various operators in the market. In the absence of legislation, the market will be subject to abuse, thereby destroying the confidence that should be the foundation of any financial market.

Figure 3.1 below gives you a picture of the structure of the Nigerian Money Market.

<b>THE MONEY MARKET</b>
<b>Treasury Bills</b>
<b>Treasury Certificates</b>
<b>Call Money</b>
<b>Ways and means advances</b>
<b>Certificates of Deposit</b>
<b>Bankers Unit Fund</b>
<b>Commercial Bills</b>

### **Figure 3.1: The Nigerian Money Market**

## **3.2 Instruments of the Nigerian Money Market**

In this section of our study, we shall now discuss the various instruments of the Nigerian Money Market. Understanding the instruments is a necessary foundation for understanding the entire course. Let us briefly examine each of the identified instruments.

### **3.2.1 Treasury Bills (TB)**

The origin of Treasury Bills in Nigeria is that they were mere 10Us which the government of Nigeria uses to borrow money on short term basis of about 3 months, pending when revenues will be collected. Technically, we can define Treasury Bills as short term money market instruments issued by the Federal Government of Nigeria. The instruments provide Government with Flexible means of borrowing. They were issued for the first time in 1960 in accordance with the provisions of the Treasury Bill Ordinance of 1959. Treasury Bills mainly are issued at a discount and for preliminary period of 91 days.

When the Government requires money, it issues Treasury Bills. The purchasers of the Treasury Bills provide government with cash. In effect Treasury Bills are exchanged for cash. Also, when there is excess money in the system, government through the Central bank of Nigeria intervenes in the market and sells Treasury Bills. This reduces money supply in the system.

Similarly, when there is shortage of cash in the system, the Central Bank of Nigeria buys Treasury Bills thereby injecting money into the financial system.

This system of buying and selling of Treasury Bills (TB) by the Central Bank of Nigeria is known as Open Market Operations (OMO). Open market operations provide the Central Bank with tools of monetary policy control. It is to be noted that the main investors in Treasury Bills

market are the banks. This is so because Treasury Bills form part of the statutory assets of a bank especially in the computation of a bank's liquidity ratio.

Also, with the liberalisation of the financial markets, individuals and other corporate players are also allowed to buy Treasury Bills.

### **3.2.2 Treasury Certificates**

The Treasury Certificate is a medium term government security which has a maturity period of one or two years. The difference between the Treasury Certificate and the Treasury Bills (TB) is essentially that of duration. They also carry coupon rates. The Treasury Certificate just like the Treasury Bills are eligible for discounting at the Central Bank of Nigeria.

It is easy to see that the Treasury Certificate is a medium term government security which matures after a period of one or two years and are therefore intended to bridge the gap between the Treasury Bills and other long term government securities like the Government Bonds. In terms of holding, the greatest investors in the Treasury Certificate market are the banks which invest in them as they try to diversify and manage their investment portfolio.

### **3.2.3 The Call Money Market**

Another important instrument that is widely used in the money market is call money. Call money is an arrangement whereby banks and other financial institutions invest their surplus funds on an overnight basis with interest. The funds are withdrawable on demand.

The primary rationale for the establishment of call money market is to provide financial players with investment outlets where immediate surplus funds could be invested on an overnight basis.

For example if at the close of business on a Friday, a bank discovers that it has a cash deficit. The easiest place the bank could go to cover the deficit is the call money market. In the call money market, another bank that is closing on the same Friday with a cash surplus will lend the deficit bank money to cover its temporary liquidity. In the Nigerian context, discount houses are active players in the call money market.

### **3.2.4 Ways and Means Advances**

A ways and means advance is a way through which the Federal Government of Nigeria raises money temporarily from the Central Bank

of Nigeria. Section 34 of the Central bank of Nigeria Act 1958 (Cap. 30 as amended 1962 – 1969) empowers the Central bank of Nigeria to grant temporary advances in the form of “Ways and Means” to the Federal Government up to 25% of estimated recurrent budget revenue.

Our observation is that the ways and means has been subjected to gross abuse by various governments thereby generating monetary instability and reckless use of funds.

### **3.2.5 Certificates of Deposit**

Certificates of deposit are basically inter-bank debt instruments that provide outlets for the surplus funds of banks. It was introduced in Nigeria by the Central Bank of Nigeria in 1975. Then there was a distinction between Commercial and Merchant Banks. The commercial banks were engaged in retail banking activities and therefore had access to cheap funds. Merchant banks had no such access to cheap funds as they were only limited to Merchant Banking activities. The merchant banks issued certificates of deposits. Basically they are claims to specified sums of money deposited with a merchant bank. The merchant banks issued the certificates of deposit by issuing them and acquiring deposits that have specific maturity periods of between 3 months to 36 months. Certificates of deposits can be either negotiable or non-negotiable.

### **3.2.6 Bankers Unit Fund**

The Bankers Unit Fund was introduced by the Central Bank of Nigeria in 1975 and was designed to mop up excess liquidity in the banking system. It was also designed to assist the Federal Government to raise money through issue of Federal Government Stock. Under the Bankers Unit Fund Scheme, Federal Government stocks of not exceeding 3 years to maturity were designated eligible development stock for the purpose of meeting the banks specified liquid assets requirements. Primarily therefore, the Bankers Unit Fund was designed to provide avenue for banks and other financial institutions to invest their surplus funds in a money market asset linked to the Federal Government Stocks.

### **3.2.7 Commercial Bills**

Another major money market instrument widely in use is the Commercial bill of exchange. Commercial bills of exchange are basically short term promissory notes issued by major companies to obtain finance. However the promissory notes are not backed by any collateral. Rather the investor relies on the reputation of the company that issued the bill.

In the commercial bill market only those bills issued by blue chips can be easily traded.

### **SELF ASSESSMENT EXERCISE**

What are the main features of the Nigerian Money Market?

### **4.0 CONCLUSION**

In this unit, we have discussed generally the Nigerian money market. The definition of what money market was all about was presented in the previous units. The features of the Nigerian money market and the various money market instruments were also discussed. All these helped to strengthen our knowledge of money markets.

### **5.0 SUMMARY**

The money market is a very important segment of the Nigerian financial system. The money market is very important to monetary authorities and also the various investors in the economy – banks, discount houses, financial institutions etc. In the next unit, we shall discuss the meanings and functions of the capital market.

### **6.0 TUTOR MARKED ASSIGNMENT**

What are the features of a developed money market?

### **7.0 REFERENCES/FURTHER READING**

Ekezie, E.S. (2006). *The Elements of Banking*. Onitsha: Africana First Publishers Limited.

Nwankwo, G.O. (1985). *The Nigerian Financial System*. London: Macmillan Publishers Ltd.

## **UNIT 2 THE NIGERIAN CAPITAL MARKET**

### **CONTENTS**

- 1.0 Introduction
- 2.0 Objectives
- 3.0 Main Content
  - 3.1 Meaning and Functions of the Capital Market
    - 3.1.1 Evolution of the Nigerian Capital Market
    - 3.1.2 Reasons for the Establishment of the Capital Market
  - 3.2 The Composition of the Nigerian Capital Market

3.2.1	The Central Bank of Nigeria and Institutions in the Nigerian Capital Market
3.2.2	The Nigerian Stock Exchange
3.2.3	The Bank of Industry Limited (BOI)
3.2.4	The Securities and Exchange Commission
3.2.5	Nigerian Agricultural, Cooperative and Rural Development Bank (NACRDB) Ltd
3.3	Growth of the Nigerian Capital Market
4.0	Conclusion
5.0	Summary
6.0	Tutor-Marked Assignment
7.0	References/Further Reading

## **1.0 INTRODUCTION**

In unit 6, we discussed the Money Market. There we discussed the evolution of the Money Market. We also discussed the functions of the money market. Here we saw the diverse functions of the money market as a mechanism for monetary policy and control. We also examined the features of a developed money market. Finally we discussed the instruments of the money market. In summary, the money market as we said is the short term end of the market.

In this unit, we shall discuss the meaning and functions of the capital market.

## **2.0 OBJECTIVES**

At the end of this unit, you should be able to:

- define the Nigerian Capital Market
- discuss the features of the Capital Market.

## **3.0 MAIN CONTENT**

### **3.1 Meaning and Functions of the Capital Market**

In the last unit (unit 6) we discussed the money market. We referred to the money market as the market for short-term funds. It is in contrast with the capital market.

The capital market is the long-term end of the Nigerian Financial system. It is the market for long-term capital. People and institutions that require funds for long term will, as a matter of fact, go to the capital market for the funds. Similarly those people and institutions that have

surplus funds that they want to lend, on a long term basis, also go to the capital market. The capital market provides the framework through which owners of surplus long-term funds are able to meet those that require long-term funds. Basically therefore, the capital market is the best source from which industry obtains long-term funds. Also state governments and federal government borrow from the capital market long term for developmental purposes.

The Nigerian capital market offers access to a wide range of assets which investors are free to price and invest in.

The types of securities offered in the capital market include but are not limited to the following:

- i. equities,
- ii. industrial loans,
- iii. preference shares,
- iv. state government bonds,
- v. federal government stocks,
- vi. debentures.

The participants in the capital market include the following:

- i. commercial banks,
- ii. development banks e.g. the bank of industry limited,
- iii. finance companies,
- iv. insurance companies,
- v. pension funds,
- vi. individuals and
- vii. corporate bodies.

### **3.1.1 Evolution of the Nigerian Capital Market**

At the time of Nigeria's independence in 1960, there was no capital market in Nigeria. What existed was a financial system designed and operated by the British colonial masters. Nigerians, who had interest in investing their surplus funds, were then forced to invest them in London or other financial cities outside Lagos. The absence of a capital market was a huge draw back. At the same time, Independence came in 1960, and with it, is the desire by Nigerians to be both politically and financially independent. They wanted to take their national destiny in their hands. Pressure by the Nigerian Nationalists led to events that gradually led to the establishment of the Nigerian Capital Market.

The Central Bank of Nigeria was established in 1958 but went into operation on 1<sup>st</sup> July 1959.

The Nigerian Industrial Development Bank was established in 1964 following the re-organisation of the Investment Company of Nigeria Limited which was earlier formed in 1959. As earlier discussed, the objects and functions of the N.I.D.B. were:

- to join foreign skills and Nigerian skills and capital in the development of new industries and the expansion of existing ones,
- to create alternative opportunities for investment in Nigerian industry,
- to work closely with the various regional development corporations in Nigeria.

Also the Lagos Stock Exchange came on stream in the year 1959. With the establishment of Central Bank of Nigeria, the N.I.D.B. and the Lagos Stock Exchange, some key financial instruments were floated.

In 1973, the Nigerian Bank for Commerce and Industry was established. The primary function by then was to provide equity capital and funds by way of loans to indigenous persons and organisations for medium and long term investments in industry and commerce.

### **3.1.2 Reasons for the Establishment of the Capital Market**

As we have earlier pointed out, at the inception of Independence in 1960, Nigeria had no financial independence and efforts began to be made by the Nigerian Nationalists to ensure gradual development of viable structures that will drive economic growth and development. So the main reasons for the establishment of the Nigerian Capital Market were:

- i. to provide local opportunities for long term borrowing and lending,
- ii. to enable the central authorities to mobilise long term capital for the economic development of the country,
- iii. to provide facilities for the quotation and ready made marketability of shares and stocks and opportunities and facilities to raise fresh capital in the market.

### **3.2 The Composition of the Nigerian Capital Market**

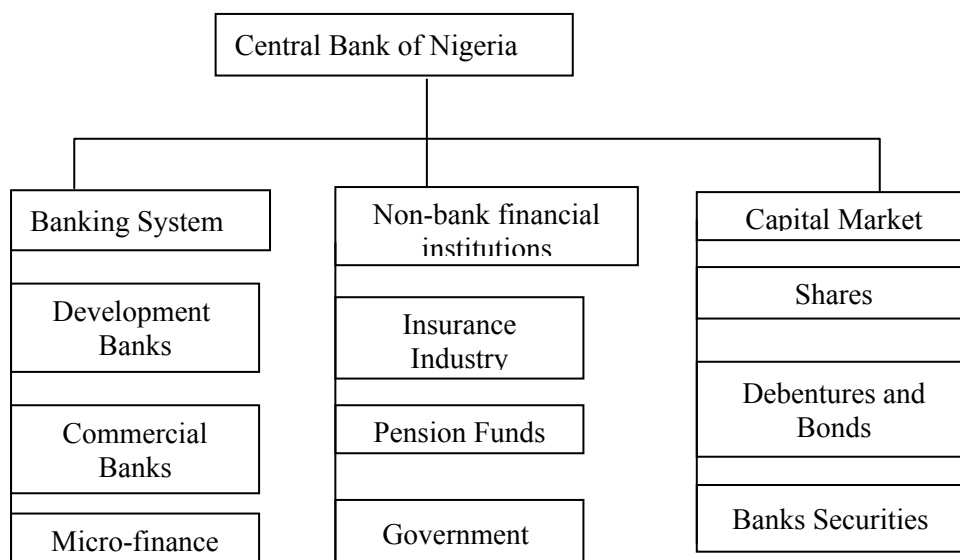
We have just briefly discussed the meaning of the capital market and also the evolution of the capital market in Nigeria. We shall now discuss the composition of the capital market.

For ease of discussions, the capital market is composed of the following institutions:

- i. The Nigerian Stock Exchange,
- ii. The Bank of Industry Limited,
- iii. The Securities and Exchange Commission,
- iv. Nigerian Agricultural, Cooperative and Rural Development Bank Limited.

### 3.2.1 The Central Bank of Nigeria and Institutions in the Nigerian Capital Market

In fig. 3.1 below, you can see the picture of the Nigerian capital market environment. According to the figure, the Central Bank of Nigeria performs some important roles in the capital market.



**Figure 3.1: The Nigerian Capital Market Environment  
The Role of the Central Bank of Nigeria**

When we listed the composition of the Nigerian Capital market, we did not include the Central Bank of Nigeria. That was deliberate because the Central Bank belongs to both the money market and the capital market. The Central Bank plays a promotional, financial, operational and developmental role in the capital market.

The Central bank played a promotional role in the establishment of the Nigerian Industrial Development Bank (NIDB) and also the Nigerian Agricultural Bank Limited.

Apart from its promotional role, the Central Bank also financed the establishment of most of the development institutions. It provided 25% of N.I.D.B.'s equity capital and 60% of the capital of the Bank for Commerce and Industry (NBCI).

In buying and selling government securities; the Central Bank gives stability to the capital market.

### **3.2.2 The Nigerian Stock Exchange**

Another key institution in the capital market is the Nigerian Stock Exchange. The Nigerian Stock Exchange is the pivot of the capital market.

The Nigerian Stock Exchange was established in 1961 by the Lagos Stock Exchange Act. The Lagos Stock Exchange has trading floors in Lagos, Port Harcourt, Kano, Kaduna, Onitsha and Ibadan.

The organisation of the stock exchange comprises the following:

- i. Council members responsible for the day to day management of the exchange,
- ii. Dealing members – stock brokers who are licensed by the council to trade in the exchange.

The Nigerian Stock Exchange was established to perform the following functions:

- i. to provide a safe machinery for the mobilisation of savings from private and the public sector and make the savings available for investment,
- ii. to provide a forum for licensed dealing members of the exchange to buy and sell existing stock and shares.

### **3.2.3 The Bank of Industry Limited (BOI)**

The Bank of Industry Limited (BOI) is the most visible surviving development bank in Nigeria. With its head office at 23 Marina, Lagos, the Bank of Industry is Nigeria's largest Industrial financing institution. It was reconstructed in the year 2001 out of the Nigerian Industrial Development Bank (NIDB) Limited. The bank's authorised share capital is set at \$400 million. The mandate of the bank is to provide financial assistance for the establishment of large, medium and small projects as well as expansion, diversification and modernisation of existing enterprises and rehabilitation of ailing ones.

The bank has zonal offices at Abuja, Aba, Akure, Aba, Bauchi, Kaduna and Lagos. The share holding structure is as follows:

i. Ministry of Finance Incorporated (MOFI)	59.54%
ii. Central Bank of Nigeria (CBN)	40.36%
iii. Equity held by 42 private shareholders	0.10%

The bank's emphasis is on prudent project selection and management. The bank accordingly supports quality projects with good developmental potentials.

### **3.2.4 The Securities and Exchange Commission**

The Securities and Exchange Commission is a key institution in the Capital Market. The Securities and Exchange Commission was established in September, 1979 and was formerly the Capital issues Commission (1973 – 1979). The Securities and Exchange Commission is the apex regulatory authority in the Capital Market. The primary functions of SEC include the following:

- i. The determination of price and time when a security should be sold in the primary market,
- ii. Registration of all securities dealers, brokers, investment advisers, registrars, stock market agents,
- iii. Maintaining surveillance of the capital market to ensure discipline, orderly conduct and equitable dealings.

We shall come back to discuss the Securities and Exchange Commission (SEC).

### **3.2.5 Nigerian Agricultural, Cooperative and Rural Development Bank (NACRDB) Ltd**

The Nigerian Agricultural, Cooperative and Rural Development Bank was formed through the amalgamation of the former Nigerian Agricultural and Cooperative Bank, the Family Economic Advancement Programme (FEAP), the former People's Bank, and the Urban Development Bank. The idea behind its formation is to merge all the various development efforts of Nigeria into a strong focused rural and community-based development bank.

The focus of the bank revolves around agricultural financing, encouragement and provision of cooperative venture capital as well as support to rural based economic initiatives.

As a grass root development-focused institution, the bank has branches in many locations in Nigeria and can be reached by a large number of people especially the rural poor.

Table 3.1: Summarises the list of capital market participants.

	<b>Participants</b>
FINANCIAL INTERMEDIARIES	Central Bank of Nigeria Commercial Banks Development Banks (e.g. BOI) Savings and Loans Microfinance Banks Finance Companies Pension Fund Managers Real Estate Investment Trusts
AGENTS AND BROKERS	Issuing Houses Investment Banks. Stock Brokers Stock Market Agents (SMA)
INVESTORS AND BORROWERS	Stock Owners Bond Owners Loan Borrowers Business State Governments Federal Government

**Table 3.1 The Nigerian Capital Market Participants**

### 3.3 Growth of the Nigerian Capital Market

With the advent of time and the contribution of the various government agencies involved in the development of the capital market, growth of the market became inevitable. With the advent of the companies and Allied matters Decree of 1990, the Securities and Exchange Commission (SEC) was vested with powers to approve and regulate mergers and acquisitions (M&A) and also authorise the establishment of unit trusts which served as vehicles for the mobilisation of investable funds. The emergence of unit trusts was a novel development in the capital market. Some of the unit trusts that emerged were the following:

- i. Abacus Unit Trust,
- ii. Rims Unit Trust,
- iii. First Interstate Unit Trust,
- iv. Devcom Unit Trust,
- v. Continental Unit Trust.

Then came the initiatives to deregulate the Nigerian economy following the advent of the Structural Adjustment Programme (SAP). When the privatisation and commercialisation programme of the Federal Government commenced at about 1989, the small savers in Nigeria had started to become aware of the benefits of buying shares. So, when the share of various public owned companies was offered for sale, the public reacted positively through massive purchase of the shares offered for sale.

A major fallout of Structural Adjustment Programme (SAP) and the privatisation and commercialisation programme of the Federal Government was that funds became very scarce in the money market. Most big companies therefore had no alternative than to approach the capital market for long term funds. This increased activities in the capital market with the floatation of new issues. Also in May 1989, the Federal Government directed that all Federal and state Government Ministries, and parastatals to maintain all their accounts with the Central Bank of Nigeria. This directive further depleted banks deposits and hence their inability to finance the business sector. This situation of funds scarcity further drove more companies to the capital market. So, the number of securities quoted on the stock exchange steadily began to rise. By 1980, over 92 equities were quoted.

To further assist small and medium companies that are unable to meet the stringent documentation requirements for listing at the stock exchange, the Second-Tier Securities Market (SSM) was launched in 1985. By 1990, about 10 small companies had become listed in the Second-Tier Securities Market (SSM). The Second-Tier Securities Market was a novel idea and it really helped a number of small but vibrant companies to seek funds from the capital market at reduced costs.

### **SELF ASSESSMENT EXERCISE**

In what ways can the Central Bank of Nigeria control the activities of the capital market?

## **4.0 CONCLUSION**

In this unit, we have discussed the meanings and functions of the capital market. We discussed the evolution of the Nigerian Capital market. We also discussed the reasons for the establishment of the capital market. We discussed the composition of the capital market. Finally, we discussed the growth of the capital market.

## **5.0 SUMMARY**

In this unit, we have treated the Nigerian Capital Market which is a very crucial aspect of our study. The capital market is the long term end of the market where both business and Government source long term funds. In the next unit, we shall discuss the Securities and Exchange Commission (SEC).

## **6.0 TUTOR-MARKED ASSIGNMENT**

Define the term capital market and present in a nutshell its economic functions.

## **7.0 REFERENCES/FURTHER READING**

- Ekezie, E.S. (2006). *The Elements of Banking*. Onitsha: Africana First Publishers, Limited.
- Nwankwo, G.O. (1985). *The Nigerian Financial System*. London: Macmillan Publishers Ltd.

# **UNIT 3 MONEY, FINANCIAL MARKET AND THE REAL ECONOMY (PART ONE)**

## **CONTENTS**

- 1.0 Introduction
- 2.0 Objectives
- 3.0 Main Content
  - 3.1 The IS-LM Model
    - 3.1.1 The Commodity Market Equilibrium - IS Curve
    - 3.1.2 Shifts in the IS - Curve

### 3.1.3 Financial/Money Market Equilibrium - The LM Curve

#### 3.1.4 Shifts in the LM Curve

- 4.0 Conclusion
- 5.0 Summary
- 6.0 Tutor-Marked Assignment
- 7.0 References/Further Reading

## 1.0 INTRODUCTION

This unit attempts to look at the systematic interactions of money, financial markets, and the real sectors of an economy. Income, employment, interest rates, the supply of money, the flow of credit, and the volumes of consumption, saving, and investment are viewed as simultaneously determined. For economy-wide or general equilibrium, all markets, including markets for money, bonds, goods and services, and labour, must be in equilibrium.

The standard approach to combining the markets for goods and services (the commodity market) with the market for money, for the sake of analysing their interaction, involves the construction of the IS – LM model. In this section, therefore, we attempt to construct such model and apply it to the illustration of the manner in which a number of factors can be viewed as influencing an economy.

## 2.0 OBJECTIVES

At the end of this unit, you should be able to:

- identify the importance of money and financial markets in the real economy
- explain commodity and money market equilibrium
- analyse the IS-LM framework in economic analysis
- apply the IS-LM framework.

## 3.0 MAIN CONTENT

### 3.1 The IS - LM Model

The schedule showing the combinations of interest rates ( $r$ ) and aggregate demand (or output level), ( $Y$ ) that yield equilibrium in the commodity market is called the IS schedule (or curve). While the schedule showing the combinations of interest rates ( $r$ ) and output levels ( $Y$ ) that yield equilibrium in the market for money is called the LM schedule (or curve). A combination of these schedules in general equilibrium analysis is referred to as the IS – LM model.

### 3.1.1 The Commodity Market Equilibrium - IS Curve

The first task in the construction of the IS – LM model is the derivation of the commodity market equilibrium schedule (the IS – Curve). This curve shows all the combination of interest rates, which influence investment, and income levels, which influence consumption, that give rise to commodity market equilibrium.

**Definitions:**

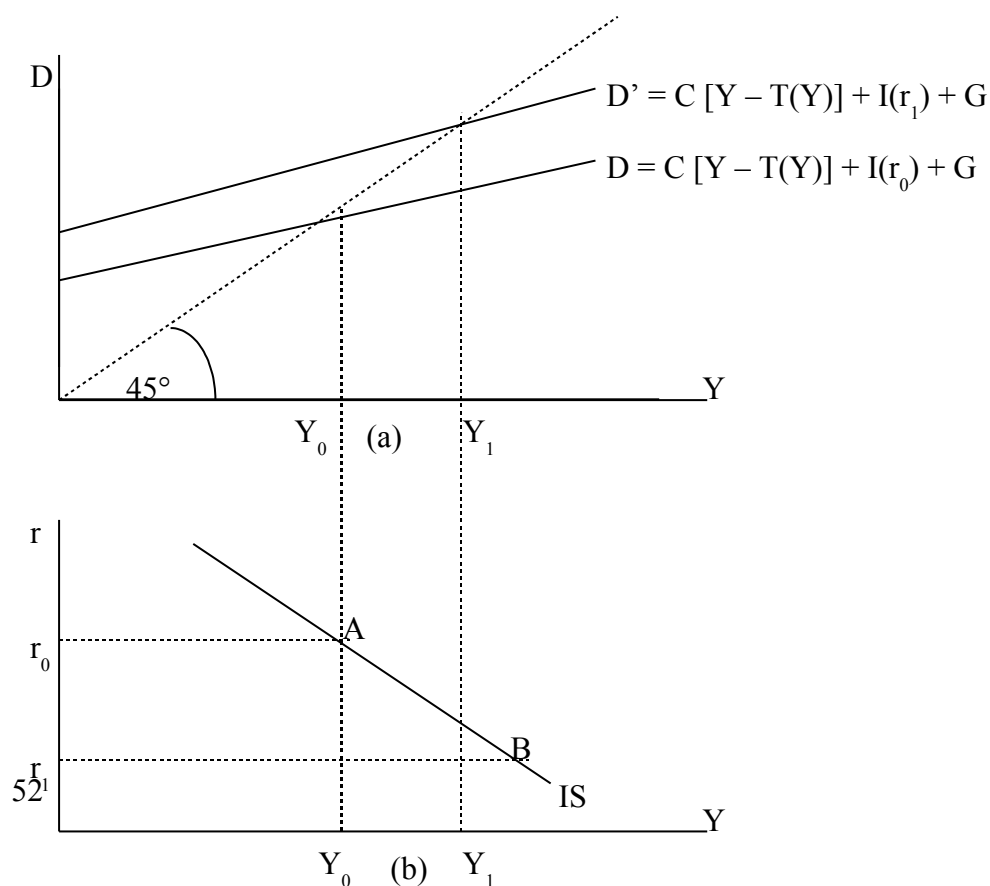
Total planned spending,  $D$ , is given by:

$$D = C (Y - T (Y)) + I (r) + G \quad (3.1)$$

Equilibrium Income:

$$\begin{aligned} Y &= D \\ \text{Or } Y &= C (Y - T (Y)) + I (r) + G \quad (3.2) \end{aligned}$$

The equilibrium equation (3.2) is represented in part (a) of figure 3.1 below, indicating initial commodity market equilibrium at income level,  $Y_0$ .



### Fig. 3.1 Commodity Market Equilibrium

The interest rate and income level combination,  $(r_0, Y_0)$ , which gives the initial commodity market equilibrium is plotted as point A in part (b) of figure 3.1. The influence on aggregate demand of an interest rate reduction is illustrated in part (a) of figure 3.1 by the new aggregate demand schedule,  $D'$ , which corresponds to the reduced interest rate,  $r_1$ . This schedule also shows that the increase in aggregate demand raises equilibrium income to level,  $Y_1$ . The new interest rate and income level combination  $(r_1, Y_1)$ , which gives a new commodity market equilibrium, is plotted as point B in part (b) of figure 3.1.

Thus, the schedule showing all the combinations of interest rate,  $r$ , and income level,  $Y$ , that yield equilibrium in the commodity market is the IS – curve in part (b) of figure 3.1. The steepness, or slope, of the IS – curve depends upon the strength of investment response to interest rate changes and of consumption's response to income changes.

#### 3.1.2 Shifts in the IS - Curve

An improvement in businesses expectations about future condition might shift the investment schedule outward, reflecting a larger investment flow at any interest rate. Such an increase raises aggregate demand, so that a higher level of output is required to provide commodity market equilibrium. This will in turn shift the IS – curve to the right as shown in figure 3.2 below. Conversely, an autonomous reduction in investment, which lowers aggregate demand at every interest rate, gives rise to a leftward shift of the IS – curve.

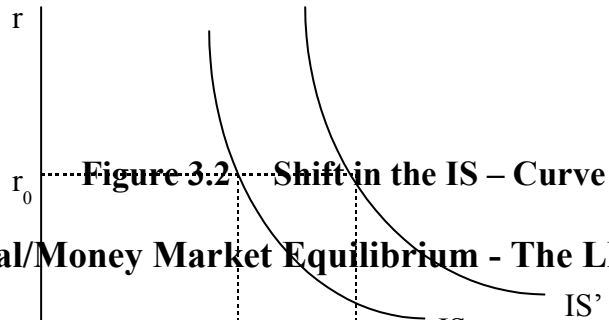


Figure 3.2: Shift in the IS - Curve

**3.1.3 Financial/Money Market Equilibrium - The LM Curve**

The market for money is in equilibrium when the real value of money supply equals the demand for real money balances. The equilibrium representing the real supply of  $\frac{M_s}{p}$  and demand for money balances are, respectively:

$$\frac{M_s}{p} = \frac{M_s(r)}{p}; \quad \frac{d(M_s/p)}{dr} > 0 \tag{3.3}$$

and,

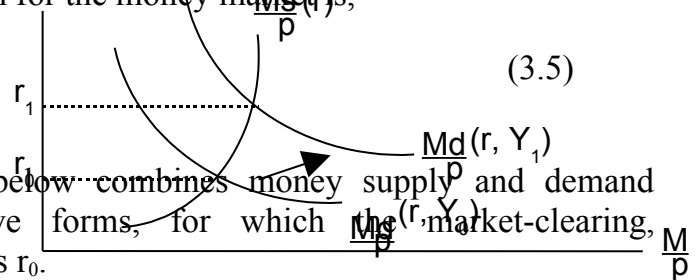
$$\frac{M_d}{p} = \frac{M_d(r, Y)}{p}; \quad \frac{\partial (M_d/p)}{\partial Y} > 0 \text{ and } \frac{\partial (M_d/p)}{\partial r} < 0 \tag{3.4}$$

It follows that the real supply of money is a positive function of the rate of interest ( $r$ ), and the demand for real money balances is positively related to real output and negatively related to the interest rate.

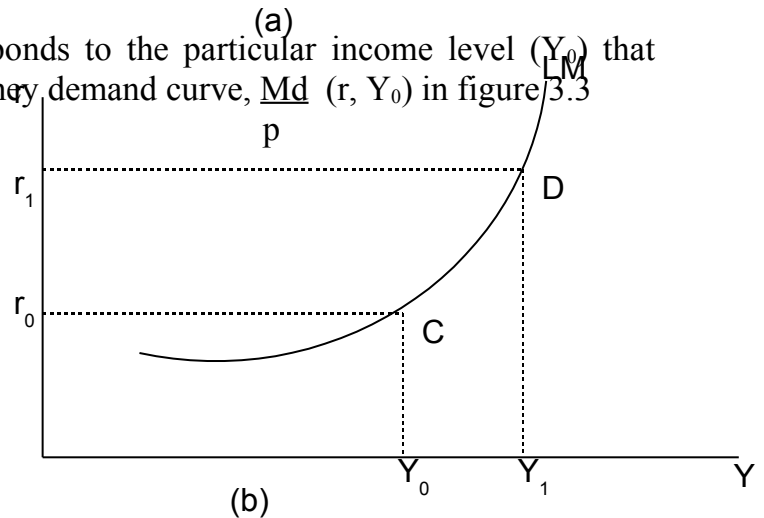
The equilibrium condition for the money market is,

$$\frac{M_s(r)}{p} = \frac{M_d(r, Y)}{p} \tag{3.5}$$

Part (a) of figure 3.3 below combines money supply and demand schedules of the above forms, for which the market-clearing, equilibrium interest rate is  $r_0$ .



This interest rate corresponds to the particular income level ( $Y_0$ ) that determines the initial money demand curve,  $\frac{M_d}{p}(r, Y_0)$  in figure 3.3



### Figure 3.3: Money Market Equilibrium

Point C in part (b) of figures 3.3 shows the income and interest rate combination  $(r_0, Y_0)$  that give rise to equilibrium in the money market.

If the level of real income rises from  $Y_0$  to  $Y_1$ , the real money balances needed for transaction – precautionary purposes will rise, shifting the money demand curve outward, as shown in part (a) of figure 3.3. This shift reflects an excess demand for money which forces the interest rate upwards.

With the increase in interest rate, the supply of money rises and the demand for money falls until the market for money clears at the rate of interest  $r_1$ .

Point D in part (b) of figures 3.3 shows the interest rate and income combination  $(r_1, Y_1)$  that provides a new equilibrium in the money market. With further increases in real output or income, the demand for money will increase, pushing the interest rate upward.

The curve showing the combination of interest rates and output levels that give rise to equilibrium in the market for money is upward sloping, reflecting a positive link between income and the interest rate. This curve is labeled the LM curve (because at equilibrium, liquid money demand,  $L$ , equals money supply,  $M$ ).

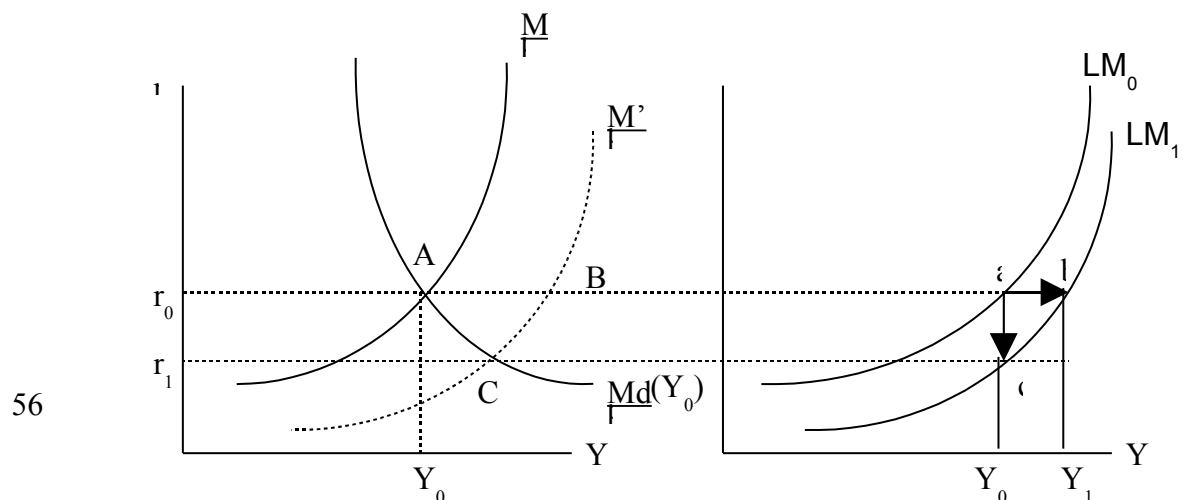
The slope of the LM curve reflects the responsiveness of money supply to interest rate movements and of money demand to changes in both the interest rate and the level of real output or income.

### 3.1.4 Shifts in the LM Curve

The LM curve shifts in response to changes in the underlying money supply or money demand functions. From an initial position in the money market equilibrium, represented by points (A) and (a) in figure 3.4 below, a Central Bank's purchase of securities, which raises the monetary base, shifts the money supply outward from say,

$$\frac{M}{p} \quad \text{to} \quad \frac{M'}{p} \quad \text{in figure 3.4,}$$

creating an excess supply of money, AB, at the original combination of interest rate and income level ( $r_0, Y_0$ ). To absorb the additional real money balances, there must be an increase in output or real income to  $Y_1$ , which would raise transaction – precautionary demand to clear the market for money at point B in part (a) of figure 3.4. A reduction in the rate of interest to  $r_1$ , which would raise speculative demand and possibly transactions – precautionary demand to clear the market for money at point C, or combination of both. That is, the LM curve, showing the combination of interest rate and income level that equates money supply and money demand, shifts rightward by an autonomous increase in the money supply, as indicated in figure 3.4.



### **Figure 3.4: A Shift in the LM Curve due to Increase in Supply**

Conversely, an autonomous reduction in the money supply would give rise to a leftward shift in the LM curve, since a higher interest rate, a lower output level, or a combination of both is then required to equate money supply to money demand.

An autonomous increase in the demand for money results in an excess demand for money and shifts the LM curve to the left.

### **SELF ASSESSMENT EXERCISE**

Why is the IS-LM framework important to a businessperson?

This unit has taken you through to the development of the general equilibrium model. You have observed that the general equilibrium model is useful in looking at the impact of changes in the behaviour of the money market as well as the capital market. It is also useful in the analysis of fiscal and monetary policy effects.

## **4.0 CONCLUSION**

This unit has exposed you to the derivation of the general equilibrium model in real terms. You should have learned the application of this model in analysis of the impacts of monetary and fiscal policies.

## **5.0 SUMMARY**

The schedule showing the combinations of interest rates ( $r$ ) and aggregate demand (or output level), ( $Y$ ) that yield equilibrium in the commodity market is called the IS schedule (or curve). While the schedule showing the combinations of interest rates ( $r$ ) and output levels ( $Y$ ) that yield equilibrium in the market for money is called the LM schedule (or curve). In general equilibrium analysis, a combination of these schedules is referred to as the IS – LM model. An improvement in businesses expectations about future condition might shift the investment schedule outward, reflecting a larger investment flow at any interest rate. Such an increase raises aggregate demand, so that a higher level of output is required to provide commodity market equilibrium

The LM-curve can be said to represent the locus of points for which demand for money holding equals the available supply of money. The slope of the LM curve reflects the responsiveness of money supply to interest rate movements and of money demand to changes in both the interest rate and the level of real output or income. The LM curve shifts in response to changes in the underlying money supply or money demand functions.

## **6.0 TUTOR-MARKED ASSIGNMENT**

Using the IS-LM framework, discuss the impact on the real economy of an improvement in business expectations about future economic conditions.

## **7.0 REFERENCES/FURTHER READING**

Dornbusch, R. and Fischer, S. (1981). *Macroeconomics*. USA: McGraw-Hill Inc.

Campagna Anthony, S. (1974). *Macroeconomics: Theory and Policy*. Boston: Houghton Mifflin.

# **UNIT 4 MONEY, FINANCIAL MARKET AND THE REAL ECONOMY (PART TWO)**

## **CONTENTS**

- 1.0 Introduction
- 2.0 Objectives
- 3.0 Main Content
  - 3.1 The General Equilibrium

3.2	The Liquidity Trap
3.2.1	The Classical Region
3.3	Monetary Effects of the Federal Government Budget
4.0	Conclusion
5.0	Summary
6.0	Tutor-Marked Assignment
7.0	References/Further Reading

## 1.0 INTRODUCTION

In unit 8, the derivation of the general equilibrium, using the IS-LM model was discussed at length. In this unit, you will expand your knowledge of the general equilibrium analysis. The application of the general equilibrium model will be made clear to you.

## 2.0 OBJECTIVES

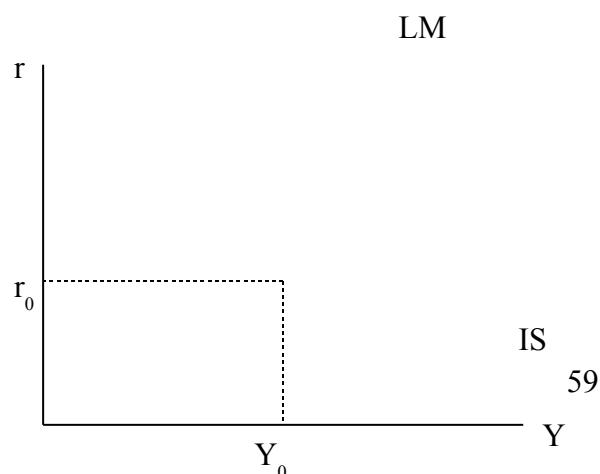
At the end of this unit, you should be able to:

- explain the money and financial market behaviour
- apply the general equilibrium model
- state what economists refer to as liquidity trap
- make business decisions based on general equilibrium analysis.

## 3.0 MAIN CONTENT

### 3.1 The General Equilibrium

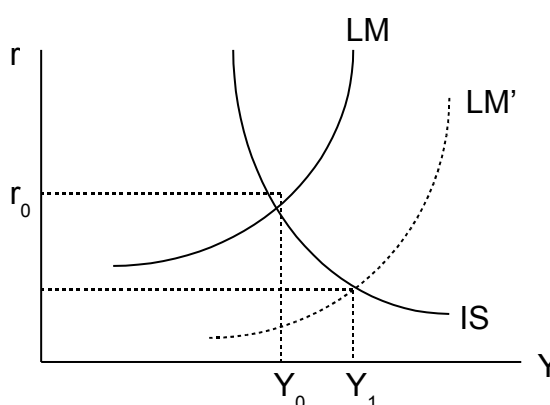
General equilibrium requires simultaneous equilibrium in both the commodity market and the money market. By combining the equilibrium schedules for these markets (that is, the IS and LM curves) as in figure 3.1 below, we see that one combination of interest rate,  $r$ , and income level,  $Y$ , can simultaneously clear both markets. The general equilibrium occurs at  $(r_0, Y_0)$  combination of interest rate and income level that gives rise to equilibrium in both the commodity market and the market for money.



### Figure 3.1: General Equilibrium

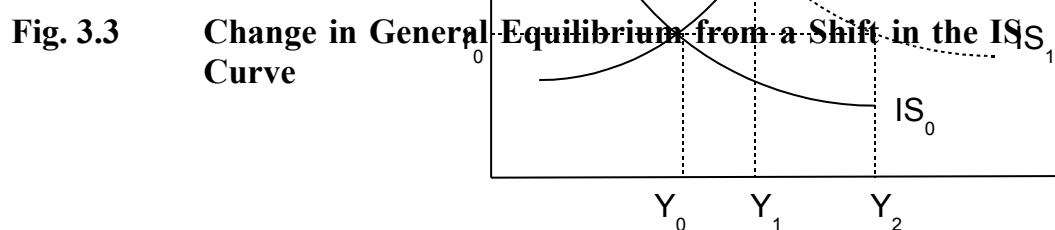
In the general equilibrium model, the price level,  $P$ , government purchases,  $G$ , and the tax schedule,  $T$ , are *exogenous*, that is, they are determined outside the model. The income level,  $Y$ , the interest rate,  $r$ , and all other variables that depend on these are *endogenous* and hence include consumption expenditures,  $C$ , savings,  $S$ , investment,  $I$ , the real supply of and demand for money ( $M_s/p$  and  $M_d/p$ ), the nominal money supply, and total tax revenues.

The general equilibrium model is used to analyse the impact of various economic disturbances on an array of important economic variables. To illustrate the use of this model, suppose there is an autonomous increase in the money supply, which immediately creates an excess supply of money, reduces the interest rate and stimulates investment spending. In figure 3.2, the increase in the money supply is represented by a rightward shift of the LM curve, from  $LM$  to  $LM'$ , so that equilibrium is restored at a reduced interest rate,  $r_1$ , and a higher income level,  $Y_1$ . Since consumption and saving are positive functions of income, the values of both of these variables are greater in the new equilibrium point. Transactions demand for money also increases, due to the increase in income. The lower interest rate results in increased investment expenditures and a further increase in the demand for money, especially the speculative demand for money.



**Fig. 3.2 A Change in General Equilibrium due to a Shift in the LM Curve**

The general equilibrium is also disturbed by events that shift the IS curve. To illustrate, suppose that the initial equilibrium at the point  $(r_0, Y_0)$  in figure 3.3 is disturbed by an autonomous increase in investment. This disturbance shifts rightward the IS curve from  $IS_0$  to  $IS_1$ . This results in higher equilibrium values for both interest rate and income level (that is,  $r_1$  and  $Y_1$ ). At the same time, the supply and demand for real money balances will rise, and consumption, saving, and tax revenues increases.

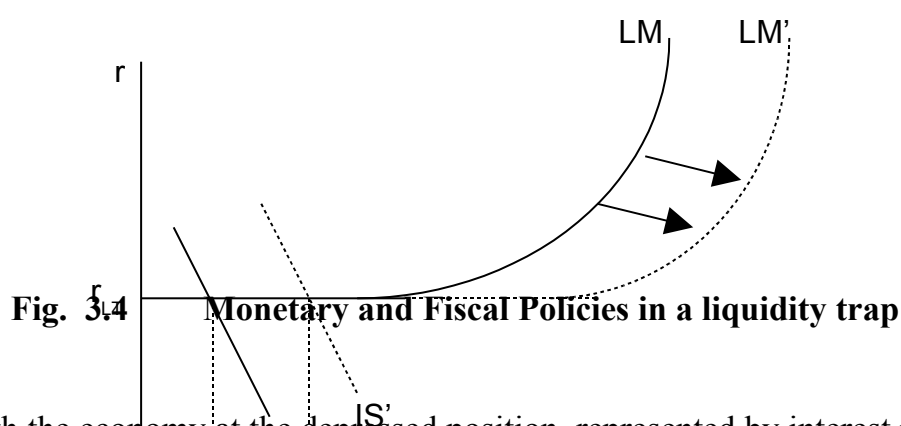


### 3.2 The Liquidity Trap

Suppose that interest rate falls to a level so low that everyone becomes convinced it can go no lower, so low that everyone expects higher interest rates in the future. In this case, no one will be willing to swap money for bonds, no matter how large one's money balances should become. In effect, the speculative demand for money and hence the money demand function would be *perfectly interest-elastic* at this low interest rate, as the public would willingly hoard unlimited volumes of money rather than exchange money for bonds, which are expected to fall

in volume. This possibility was suggested by Keynes and was labeled the *Liquidity Trap*.

The existence of liquidity trap during economic depression would make monetary policy powerless in stimulating the economy, as illustrated in figure 3.4 below.



**Fig. 3.4 Monetary and Fiscal Policies in a liquidity trap**

With the economy at the depressed position, represented by interest rate,  $r_{LT}$ , and income level,  $Y_0$ , an increase in money supply would shift the LM curve to  $LM'$ . However, since there is no willingness to exchange money for bonds (an exchange that would ordinarily push bond prices upward and interest rates downward), the additional money balances would be hoarded, and the interest rate remains unchanged at  $r_{LT}$ . With no interest-rate reduction, the monetary policy action fails to stimulate investment, and equilibrium output remains unchanged at  $Y_0$ .

While monetary policy is regarded as being powerless in a liquidity trap, fiscal policy can be strong. Consider, for example, an increase in government spending or a cut in taxes that shifts the IS curve in figure 3.4 from IS to  $IS'$ . In this case, output can increase by the full amount of the horizontally measured rightward shift of the IS curve. There will be no monetary dampener effect, as the increase in spending is readily financed out of idle, surplus, hoarded money balances. On the basis of the assumption that money demand is highly interest-elastic, some of the supporters of Keynesian analysis have favoured fiscal policy for stimulation of the economy and have dismissed monetary policy as weak and ineffective.

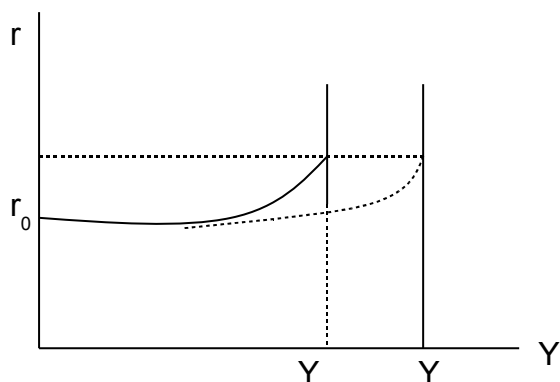
### 3.2.1 The Classical Region

There exists also an interest rate so high as to convince everyone that rates will be lower (bond prices higher) in the future. In this situation, all wealth-holders would want to hold their speculative wealth in securities, and none in speculative money balances. Hence the speculative demand for money would be zero at or above this elevated interest rate.

Keynes's concept for speculative demand for money serves as the major distinction between his analysis of the money market and that of his classical predecessors, the classical view of money demand is relevant if interest rates are high enough to eliminate the speculative demand. According to the simple classical analysis, the demand for money depends basically on the level of output.

The LM curve is more interest-elastic (flatter), as money supply and money demand are more interest-elastic. If both supply of and demand for money respond weakly to interest-rate changes, the LM curve must be steeply sloped. As a matter of fact if neither money supply nor demands for money are sensitive to interest rates, the LM curve will be exactly vertical at the output level that equates money supply and money demand: no changes in interest rate will directly disturb the equality of supply of and demand for money.

Figure 3.5 below, represents an economy with a vertical LM curve above interest rate  $r_c$ . Within the vertical segment of the LM curve, monetary policy is very effective and strong. An increase in the money supply will shift the LM curve from LM to LM', and income will expand from  $Y_0$  to  $Y_1$ .



**Fig. 3.5 Monetary Policy in the Classical Region**

### 3.3 Monetary Effects of the Federal Government Budget

The IS – LM model is used as a tool for assessing the effects of monetary and fiscal policy actions. In this model, changes in money supply shifts the LM curve with no significant impact on the IS curve, while fiscal actions, such as changes in government expenditure, tax levies or both, shift the IS curve with no impact on the monetary base and therefore with no impact on the LM curve.

The standard operational methods by which the monetary authority alters the money supply provide pure monetary policy actions (shifts in the LM without effects on the IS curve), but fiscal actions often have an accompanying effect on the monetary base and hence on the position of the LM curve.

The potential monetary significance of the government's budget activities can be illustrated as follows:

Suppose the government spends ₦100, 000 for the monthly salary of a presidential aide. That payment is made with a Treasury cheque, drawn on an account the Treasury maintains at the Central Bank. In turn, the presidential aide takes this cheque to his or her bank for deposit or for cash. Whether the aide deposits it in a current account or cashes it, the monetary base will be increased by ₦100,000 when the recipient bank has the cheque cleared through the Central Bank and receives ₦100,000 credit in its reserve account, and, correspondingly, the money supply is increased, shifting the LM curve to the right.

When the Treasury collects tax revenues and transfers them to its Central Bank's account, whether it collects in currency or cheques drawn on current accounts in commercial banks, the monetary base is reduced by the amount of tax collections. Consequently the effects on monetary base (and on the LM curve) of ₦100, 000 government expenditure will be offset if the expenditure is tax-financed; a tax-financed fiscal operation is a pure fiscal operation.

#### SELF ASSESSMENT EXERCISE

Explain briefly what you understand by the term liquidity trap

### 4.0 CONCLUSION

Unit 9 is an extension of unit 8. It focuses on how economic policies can affect the general equilibrium as defined by the IS-LM model.

Specifically, we looked at the monetary effects of changes in federal government budget.

You learned that the speculative demand for money and hence the money demand function would be *perfectly interest-elastic* at low interest rates, as the public would willingly hoard unlimited volumes of money rather than exchange money for bonds, which are expected to fall in volume. This possibility was suggested by Keynes and was labeled the *Liquidity Trap*.

## 5.0 SUMMARY

A General equilibrium requires simultaneous equilibrium in both the commodity market and the money market. By combining the equilibrium schedules for these markets (that is, the IS and LM curves), we see that one combination of interest rate,  $r$ , and income level,  $Y$ , can simultaneously clear both markets. The general equilibrium model is used to analyse the impact of various economic disturbances on an array of important economic variables.

The existence of liquidity trap during economic depression would make monetary policy powerless in stimulating the economy, as illustrated in figure 3.4 below.

The IS – LM model is used as a tool for assessing the effects of monetary and fiscal policy actions. In this model, changes in money supply shifts the LM curve with no significant impact on the IS curve, while fiscal actions, such as changes in government expenditure, tax levies or both, shift the IS curve with no impact on the monetary base and therefore with no impact on the LM curve.

## 6.0 TUTOR-MARKED ASSIGNMENT

With the aid of a diagram, discuss the effectiveness of monetary policy at the classical region of the general equilibrium model.

## 7.0 REFERENCES/FURTHER READING

Dornbusch, R and Fischer, S. 1981. *Macroeconomics*. USA: McGraw-Hill Inc.

Campagna Anthony, S. (1974). *Macroeconomics: Theory and Policy*.  
Boston: Houghton Mifflin.

## **UNIT 5 THE CENTRAL BANK OF NIGERIA**

### **CONTENTS**

- 1.0 Introduction
- 2.0 Objectives
- 3.0 Main Content
  - 3.1 Establishment, Organisation and Functions of the Central Bank of Nigeria
  - 3.2 The Establishment of the Central Bank of Nigeria

- 3.3 The Objectives of the Central Bank of Nigeria
- 3.4 Organisation and Management of the Central Bank of Nigeria
  - 3.4.1 General Administration
- 3.5 The Functions of the Central Bank of Nigeria
- 3.6 Central Banking: An Appraisal
- 4.0 Conclusion
- 5.0 Summary
- 6.0 Tutor-Marked Assignment
- 7.0 References/Further Reading

## **1.0 INTRODUCTION**

Recall our earlier references to the Central Bank of Nigeria. In this unit, the Central Bank of Nigeria will be further examined in terms of its establishment, its objectives, the management, and its economic functions.

## **2.0 OBJECTIVES**

At the end of this unit, you should be able to:

- explain what the Central Bank of Nigeria (CBN) is all about
- categorise the organisational structure of the Central Bank of Nigeria
- discuss its functions in the financial system.

## **3.0 MAIN CONTENT**

### **3.1 Establishment, Organisation and Functions of the Central Bank of Nigeria**

All over the world, Central Banking refers to the critical role of a central monetary authority that plays a leading role in a country's financial system. It promotes or tries to promote monetary stability, growth and general economic development. The Central Bank of Nigeria (CBN) like other Central Banks worldwide is at the Apex of the Nigerian financial system with its structures and functions generally backed up by relevant legislation. In this unit, we shall take an exhaustive look at this key institution so that we can appreciate what it stands for.

### **3.2 The Establishment of the Central Bank of Nigeria**

For us to properly understand the Central Bank of Nigeria of today, we need to go back and trace the historical development and evolution of the bank. This definitely will take us back to the colonial period of Nigeria's history. Before the establishment of the Central Bank of

Nigeria, the monetary system, which was in place, was largely deficient. The currency or legal tender obtaining in the colonies was issued by a currency board. In the case of West Africa, the issuing authority was the then West African Currency Board (WACB).

The West African Currency Board itself was established as far back as November 1912 following the recommendations of the Emott Committee set up by the British Colonial Authorities. The Committee was set up to study two main things. One was to study the ways and means of financing the export trade of the expatriate firms operating in West Africa. Secondly, the Committee was also to study the eradication of the inefficient currency system operating at that time. Given the shortcomings of the West African Currency Board and the wave of nationalist sentiments amongst Nigerians, it was inevitable that the Central Bank of Nigeria should be established.

In 1952, at the first session of the Federal House of assembly, a private members motion called for the establishment of a Central Bank for the purpose of rapid economic development. In the parliamentary process the private member's motion was defeated but the struggle by the Nationalists continued.

The colonial administration now appointed Mr. Fisher of the Bank of England to look into the desirability or otherwise of establishing a Central Bank in Nigeria.

Fisher's report was very negative. He could not see how Nigeria could operate a Central Bank without any money or capital market in place. Nigerian Nationalist leaders did not take kindly to the Fisher report. Luck came the way of Nigeria when a World Bank mission visited Nigeria in 1953. The mission in its submission agreed that the continued political and economic development of Nigeria will definitely lead to the establishment of a Central Bank of Nigeria.

With the achievement of internal autonomy in 1957, the Federal Government engaged Mr. J. B. Loynes of the Bank of England to make recommendations on the establishment of a Nigerian currency and other matters.

Mr. Loynes's recommendations led to the establishment of the Central Bank of Nigeria (CBN) in 1958 by the Central Bank Ordinance of that year. However, the CBN commenced operations on 1<sup>st</sup> July 1959.

### **3.3 The Objectives of the Central Bank of Nigeria**

We have briefly discussed the key events that led to the establishment of the Central Bank of Nigeria. We are now going to discuss the objectives. It will be in order if you can put at the back of your mind that the Central Bank of Nigeria is not a profit driven organisation. It was established for the public interest.

Section 4 of the 1958 Ordinance clearly spelt out the key objectives of the Central Bank of Nigeria as follows:

- i. to issue legal tender currency in Nigeria,
- ii. to maintain external reserve in order to safeguard the international value of the currency,
- iii. to promote monetary stability and a sound financial structure in Nigeria and,
- iv. to act as banker and financial adviser to the Federal Government.

### **3.4 Organisation and Management of the Central Bank of Nigeria**

When the Central Bank of Nigeria commenced operations at inception, it had a Board of seven members.

- i. The Governor,
- ii. Deputy Governor,
- iii. Five (5) part-time directors.

When the operations of the bank started to expand, the board was enlarged in 1978. The board was enlarged to thirteen members.

- i. The Governor,
- ii. Deputy Governor,
- iii. Three executive directors,
- iv. Eight part-time directors.

Under the 1958 ordinance, the Governor and the Deputy were appointed by the Governor-General and the Directors by the Prime Minister of the Federation.

With the passage of time and also unfolding events, the organisational structure of the Central Bank of Nigeria continued to change. In 1978, the organisational structure was made up of:

- The board of directors,
- The governor,
- The deputy governor,

- Three executive directors who were in charge of the three major divisions of the bank namely – monetary and banking policy, operations and management and staff services.

The Central Bank of Nigeria decree No. 24 of 1991 enlarged the CBN structure to include 5 deputy governors in charge of the 5 major divisions of the bank.

### **3.4.1 General Administration**

#### **Directors**

1. Administration
2. Special Duties
3. Building and Engineering Services
4. Medical Service
5. Personnel
6. Computer Service
7. Fin & Accounting
8. Security Services

#### **Domestic Monetary and Banking Policy**

##### **Directors**

1. Agric Finance
2. Banking Supervision
3. Bank Examination
4. Research

#### **Domestic Operations**

##### **Directors**

1. Banking Operations
2. Branch Operations
3. Currency Operations

#### **International Operations**

##### **Directors**

1. Foreign Operations
2. Trade and Exchange
3. International Economic Relations
4. Debt Management

#### **Other Directors**

1. Director of Internal Audit
2. Director, office of the Governor
3. Director organisation and methods
4. Director, Secretary's department
5. Deputy-Director – Legal Unit

It will be very important to note that in April, 2001 a new department called other Financial Institutions Department (OFID) was created and given the responsibility of overseeing off-site functions. The off site functions are:

1. processing of applications for licenses in respect of other Financial Institutions,
2. appraisal and approval of nominees into their boards of directors and top management positions,
3. processing of applications for transfer of shares and for increase in share capital,
4. processing of requests for branch expansion, branch closure, office relocation and change of address,
5. appraisal of various statutory returns from other financial institutions,
6. handling issues of default by other financial institutions,
7. processing requests for the appointment or change of external auditors,
8. approval of the audited annual financial statements of OFIs before publication.

As provided for in the Central Bank of Nigeria Decree 24 of 1991, the management of the bank is vested on the Governor who is answerable to the Board of Directors. The Board of Directors whose chairman is the Governor is responsible for the policy and general administration of the Central Bank of Nigeria. The Board formulates important policies. The top management of the bank consists of the Governor and the Deputy Governors.

The Governor and his deputies are appointed for a period of three years while other directors are appointed for a period of three years and are also eligible for re-appointment. Below the Directors are sectional managers.

### **3.5 The Functions of the Central Bank of Nigeria**

The Central Bank of Nigeria like any other Central Bank performs certain traditional functions in addition to other functions that may be ascribed to it. Some of the functions of the Central Bank of Nigeria are listed below.

1. **Issuance of Legal Tender Currency:** the CBN has the sole responsibility of issuing currencies and coins, and also changing old and worn out notes. In Nigeria a lot of transactions are done using cash instead of cheques.

The currencies and coins issued by the CBN are distributed through the Commercial banks in Nigeria. Also the CBN withdraws old and mutilated currencies through the Commercial banks.

2. **Banker to Other Financial Institutions:** another major function of the CBN is to act as a banker to other financial institutions. Banks, discount houses and other financial institutions maintain accounts with the CBN. The CBN acts as a lender of last resort to the banks. As a banker to other banks, the CBN issues directives on cash reserve and liquidity ratios. This it does through the monetary policy circulars.
3. **Banker and Financial Adviser to the Government:** the CBN acts as Banker and Financial adviser to the Government of Nigeria. This function is enshrined in sections 31-36 of the CBN Decree of 1991. According to the provisions, the CBN is entrusted with the Federal Government's banking business within and outside Nigeria. The bank also acts as banker to State and Local Governments and also other institutions or parastatals owned by local, state or federal government.

As banker to the government, the CBN is required by law to provide the federal government temporary financial accommodation through the Ways and Means advances. It is also the duty of the CBN to mobilise funds for the Federal Government through the issuance of both long and short term securities.

4. **Promotion of Monetary Stability:** it is also the responsibility of the CBN to promote Monetary and price stability in Nigeria. It also tries to ensure the achievement of monetary policy objectives especially the stability in domestic prices. The effectiveness of the CBN depends to a large extent on how it can promote monetary stability. It is to be realized that if inflation is not controlled, then the Currency (Naira) will cease to be a store of value which it should be by law.
5. **Maintenance of Nigeria's External Reserves:** it is also the responsibility of the CBN to maintain the external reserves of Nigeria so as to safeguard the international value of the National

Currency. As a result of this responsibility, the CBN is the custodian and manager of the nation's foreign exchange reserves. The CBN advises government on various policies affecting the nation's foreign exchange reserves.

6. **Banking Supervision and Examination:** one major function of the CBN is to supervise and examine other financial institutions and ensure that they operate according to set regulations. The supervision is done both off-site and on-site.

Off-site supervision is done through the review of the various weekly, monthly, quarterly or annual returns usually rendered by the financial institutions.

On-site supervision visits by CBN officials to the offices of the various financial institutions refers to the supervision which is done through. During such visits, the CBN officials will examine their books and their various control systems. They also examine the books to ensure strict conformity to operational rule especially in connection with charges to customers of financial institutions.

A benefit of the supervisory function of the CBN is that it enables it to offer advice to the financial institutions on the management of their affairs.

7. **Debt Management:** the CBN manages and mobilises funds for the Federal Government. It also manages its domestic and external debts. Management of domestic debt involves advising government on the size and timing of new debt issues. Also CBN manages the external debts of the government. In carrying out this function, it relates with other agencies.

8. **Developmental Functions of the CBN:** we have discussed the traditional functions of the CBN. The CBN in addition, performs other functions which enhance the development of the Nigerian economy. The developmental functions are in two main areas namely:

- i. **Promotion of the money and capital market:** the growth of the money market has been achieved largely through the activities of the CBN which has the responsibility of issuing Treasury Bills and certificates which are money market instruments. The CBN also helped in the establishment of the Nigerian Stock Exchange. It is also a major shareholder in many capital market institutions like the Bank of Industry Limited.

- ii. Apart from promoting the growth of the money and capital market, the CBN has been playing crucial roles in the establishment of specialised financial institutions. Some of the specialised financial institutions like the Bank of Industry Ltd (built from the Ashes of the former Nigerian Industrial Development Bank in which the CBN is a shareholder play leading roles in the development and transformation of the Nigerian economy.

### **3.6 Central Banking: An Appraisal**

All along in our discussions, we have seemed to concentrate our focus on the Central Bank of Nigeria (CBN). But we need to relax the focus a little bit to take a wider look at Central Banking from a wider perspective. Central banking is not unique or peculiar to Nigeria. All over the world, countries have their own central banks. A central bank has the responsibility of managing the volume of money in circulation and by implication it can also influence the general level of prices in the economy. So, all over the world, Central Banks are charged with the control and protection of the nation's currency as well as their external values.

Central Banking all over the world is primarily non-profit making ventures. Also there is a very close relationship between Central Banks and the Governments.

Also we need to highlight the fact that at certain times, the Central Banks of many countries may be subjected to political manipulations and control. In such cases, appointments to the Board of the bank are made under political considerations and with grave implications.

In situations where appointments to the Board of the Central Banks are not made on merit then policy matters as a matter of fact are treated as extensions of political business.

#### **SELF ASSESSMENT EXERCISE**

Briefly explain what led to the establishment of the Central Bank of Nigeria.

### **4.0 CONCLUSION**

In this unit, we have discussed the Central Bank of Nigeria (CBN). We discussed the establishment of the Central Bank of Nigeria and also discussed the objectives. The organisation and management of the CBN was also discussed. The functions of the CBN and the appraisal of

Central banking were also discussed. All these provided us with a background to understanding the operations of the CBN.

## 5.0 SUMMARY

This unit treats the Central Bank of Nigeria as a topic of discussion. It traces the historical development of the bank as far back as the colonial days when the British ruled Nigeria. The discussion gave us an insight into the functions of the bank which is at the apex of the banking system.

## 6.0 TUTOR-MARKED ASSIGNMENT

What are the objectives of the Central Bank of Nigeria?

## 7.0 REFERENCES/FURTHER READING

Ekezie, E.S. (2006). *The Elements of Banking*. Onitsha: Africana First Publishers Limited.

Central Bank of Nigeria Decree No. 24 of 1991.

## MODULE 3

Unit 1	Monetary Policy and Control
Unit 2	Goals, Instruments, and Problems of Monetary Policy
Unit 3	Bank Consolidation Policies in Nigeria
Unit 4	Bank Consolidation Policies in Nigeria
Unit 5	Foreign Exchange Reserve Management Policies

## UNIT 1 MONETARY POLICY AND CONTROL

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2.0	Objectives

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3.2	The Role of Monetary Policy
3.3	The Monetary Target Variables
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3.5	Direct Controls
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4.0	Conclusion
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6.0	Tutor-Marked Assignment
7.0	References/Further Reading

## 1.0 INTRODUCTION

This unit will expose you to the important monetary policy variables and/or tools available to any money economy. In the preliminary, you need to know that in the modern financial system, where a large proportion of the money supply is created by the private banking sector, it is difficult for the monetary authorities to control both the money supply and interest rates simultaneously.

## 2.0 OBJECTIVES

At the end of this unit, you should be able to:

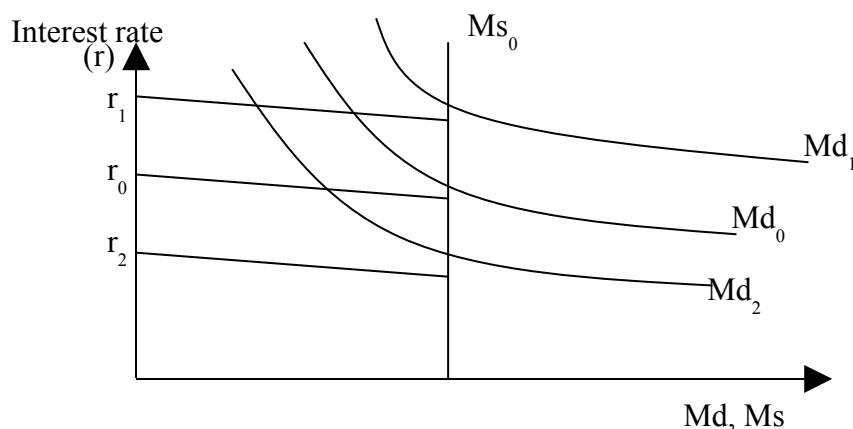
- define the role of monetary policies in the economy
- explain the monetary policy instruments
- identify monetary policy targets
- extrapolate monetary policy variables in making investment decisions.

## 3.0 MAIN CONTENT

### 3.1 Nature of Monetary Policy

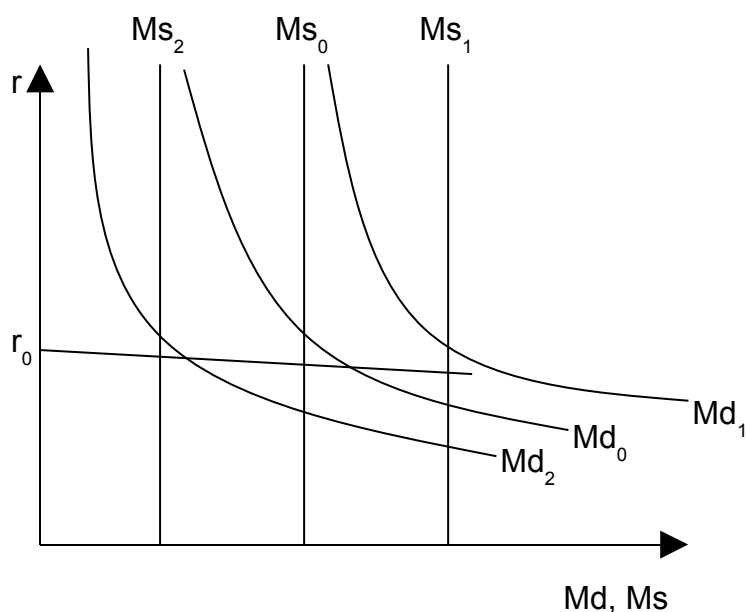
The general nature of monetary policy options open to a country's monetary authorities can be illustrated with the standard Keynesian Liquidity preference theory. In figure 3.1 below, you can observe that if the total supply of money is fixed at the vertical line,  $M_{s_0}$ , a total demand for money,  $M_{d_0}$  will give rise to an initial market rate of interest,  $r_0$ . An increase in the demand for money, possibly due to higher demand for transaction balances at every rate of interest, will shift the  $M_d$  curve to  $M_{d_1}$ , raising the market rate of interest to  $r_1$ . The implication will be that funds are being drawn from speculative (idle) balances, given rise to a shortage of liquidity in the financial portfolios. As wealth holders sell their interest-bearing assets in order to restore

their desired portfolio balance, interest rates will rise since the money supply is fixed at  $Ms_0$ . A reduction in the demand for money will produce the opposite effect. The demand for money shifts from  $Md_0$  to  $Md_2$ , given rise to a lower rate of interest,  $r_2$ .



**Fig. 3.1 Shifts in the Demand for Money with a Fixed Money Supply**

In figure 3.2, you will observe what happens when the monetary authorities decide to peg the rate of interest at  $r_0$ . If there is an increase in demand for money to  $Md_1$ , it will become necessary for the monetary authorities to allow the money supply to rise to  $Ms_1$ , if the rate of interest is to be maintained at  $r_0$ . In most cases, the authorities will allow enough money to be created to meet the increased demand, without serious pressure being placed on the available speculative balances and on the interest rates. If the demand for money falls to  $Md_2$ , for example, the monetary authorities would have to mop up the excess supply of money at  $r_0$ , reducing the money supply to  $Ms_2$ .



### **Fig. 3.2 Shifts in the Demand for Money with a Fixed Rate of Interest**

For any given demand for money, the relationship between the interest rate and demand for money would imply that the monetary authorities might have to accept an undesirable outcome for one monetary variable if they choose to control the other. It follows that if the authorities attempt to set the policy targets in relation to the money supply, they may be forced to accept high rates of interest and correspondingly low security prices. This will in turn raise the cost of public sector borrowing, and may have serious implications for private sector capital investment as well as international currency flows. If the monetary policy target is to set the rate of interest, it may have to necessitate a rate of growth in money supply that is inexpedient in relation to the long-term control of inflation.

### **3.2 The Role of Monetary Policy**

This section presents some theoretical arguments on the role played by monetary policy in management of the national economy. It has been argued that the way in which government uses monetary policy is determined largely by the beliefs about how the economy operates in general, and about how changes in the money supply affect the operation of the economy in particular.

The proponents of the monetarists view believe that the solution to inflationary pressures is paramount to the achievement of a prosperous and growing economy. This group argue that the observed unpredictability in the timing of adjustments in the macroeconomic effects of monetary policies, following and officially sanctioned change in the money supply, makes discretionary manipulations of the money supply of dubious merit. They emphasise the natural adjustments with the national economy, driven by the free market price mechanism, and argue in favour of firm control of the money supply as the only means of establishing financial stability and avoiding inflationary expectations within the economy. Monetary policy forms the centre-piece of the monetarists' macroeconomic policy package, and other macroeconomic policies are seen as being merely supportive to the overriding monetary control position.

Unlike the monetarists, the Keynesian school of thought has a different view, looking at the effects of changes in the stock of money as being of only secondary importance for operations of the macro-economy. It is argued that the real macroeconomic effects of changes in money supply are indirect and, according to the Keynesian school, these effects are very weak. It follows that for demand management purposes, the

Keynesians place emphasis on fiscal policy as it has more direct impact on aggregate demand. They see monetary policy as being merely supportive, with the role of stabilising interest rates in order to maintain business confidence while stimulating investment in productive capital.

Keynesians however, accept the need for a realistic rate of growth of the money supply if inflation is to be minimised or avoided in the long run. The Keynesians still rejects the rigidity imposed on policy by strict adherence to the money supply growth rules.

### **3.3 The Monetary Target Variables**

Economists argue on the onset that the alternative target variables of monetary policy are the rate of growth of money supply or the structure of interest rates. By taking a wider view, it has been argued that the list of possible targets can be extended to the following alternatives:

- a. the rate of growth of the money supply,
- b. the level or structure of interest rates,
- c. the volume of bank credit,
- d. currency exchange rates,
- e. nominal domestic expenditure.

The choice of target variables by the monetary authorities will normally depend upon their views on how the economy operates, as well as the beliefs about the strength and stability of the relationships between the target variables and the desired policy objectives. It is a general belief that monetary targets to be set for internal control purposes should not be made known to the general public. It is believed that advance publication of monetary targets carries with it the clear disadvantage that rigidity is built into the macroeconomic policy framework and thus making it harder for the authorities to change course should the economic environment alter; policy changes have to be justified explicitly if these are relevant to the achievement of the targets.

### **3.4 Monetary Controls**

To formulate an appropriate monetary control mechanism, it is crucial that the potential components of the money supply are clearly identified. You may recall that the measures of money supply include cash, bank deposits, and the liabilities of non-bank financial institutions.

Traditionally, monetary authorities focus their monetary control activities upon the creation of bank deposits, as these forms the largest single element of the money supply according to the conventional measure of money supply. You should be informed that at the basics, controls on creation of bank deposits are often directed towards

attacking the willingness of members of the non-bank private sector institutions to borrow or reducing the ability and willingness of banks to lend. All things being equal, the main instruments used for controlling the rate of growth of bank deposits are divided into two groups.

**Group 1: Instruments of Market Intervention** are:

- i. Open Market Operations,
- ii. Manipulation of the Central Bank's discount rate.

**Group 2: Instruments of Portfolio Constraint** are:

- i. Liquid assets reserve requirements,
- ii. Special deposits with the Central Bank,
- iii. Prescribed target growth rates for deposit liabilities, with financial penalties for violation,
- iv. Moral Suasion,
- v. Direct controls, including the imposition of interest rate ceilings, lending ceilings, and qualitative lending guidelines.

You should note that the instruments of market intervention are likely to have a fairly generalised effect on financial conditions. Their influence will therefore probably not be limited to the bank credit creation process. For instance, heavy sales of government securities may push up all interest rates and may not only dampen the demand for bank loans, but also may undermine the demands for mortgage loans from building societies, hire-purchase credit from finance houses, and the like.

In addition to the above control instruments, there are a number of other actions the monetary authorities can take for limiting the money supply growth in the long term. Specifically, these actions include:

- i. reduction of the public sector's borrowing requirement,
- ii. increased sales of gilt-edged securities and national savings instruments,
- iii. funding of the national debt,
- iv. reduction of a balance of payments surplus for the raising of a deficit,
- v. the undermining of the non-bank private sector's desire to borrow,
- vi. the encouragement of foreigners to hold domestic currency balances,
- vii. the encouragement of banks to raise their holding of capital funds.

If the monetary authorities believe that the broader monetary aggregates are the more relevant targets for monetary control purposes, they may desire to control the supply 'near-money assets, that is, the supply of assets comprising the broad monetary aggregates other than cash or

bank deposits. The monetary authorities may attempt to undermine the ability or willingness of financial institutions to bid for funds. This can be achieved by the use of any or all of the following:

- iv. raising of the interest rates,
- v. officially imposed minimum holdings of low-yield reserve assets,
- vi. officially imposed limits on the maximum rate of growth of the institutions' liabilities.

### 3.5 Direct Controls

Direct controls are usually reserved by monetary authorities for those monetary controls seeking to limit formally and directly some aspects of banks' activities. The *major types of direct controls* include:

- i. interest rate ceilings;
- ii. lending ceilings; and,
- iii. qualitative lending guidelines.

For instance, by placing a limit on the rate of interest payable by banks on deposits, the monetary authority can effectively constrain the ability of banks to bid for funds, thus closing a possible channel through which banks can offset the effects of official policies aimed at squeezing their liquidity bases.

Lending ceilings are applied with the view to limiting the amounts of funds which may be lent to specific categories of customers.

The *major advantages* of direct controls are as follows:

- i. they allow for discriminatory treatment of banks' customers in a manner supportive of the broader economic policy objectives of government; and,
- ii. they may be implemented quickly and focused upon the activities which give the greatest cause for concern to the authorities.

Direct controls are associated with three major problems:

- i. they tend to stifle competition between banks, by overriding bankers' commercial decisions;
- ii. they distort competition between controlled and non-controlled banks, and between banks non-bank financial intermediaries; and,
- iii. depending on the severity, they are likely to lead to disintermediation.

### 3.6 Monetary Base Control

A specific approach to controlling the rate of growth of the money supply is through the implementation of monetary base control. The basic principle of monetary base control rests on the assertion that banks will hold money equal to a certain stable proportion of their deposit liabilities.

Base money is defined to comprise cash held by banks in tills plus their balances at the Central Bank. The ratio of base reserves to deposits held is determined either by the banker's commercial requirement to maintain prudential integrity or by mandatory edict from the monetary authorities.

The proponents of monetary base control are of the opinion that it is a conceptually simple direct control mechanism. It is likely to be more effective than instruments which rely upon interest rate movements. With monetary base control, interest rates are determined by free market forces; operationally, they are of little concern to the monetary authorities.

For a monetary base control to function effectively, the following conditions must be in place:

- i. the monetary authorities must be able to control the amount of base money held by banks,
- ii. the relationship desired by banks between the amount of base money held and deposits held must be stable and predictable,
- iii. the monetary authorities must be willing and able to undertake the necessary open market operations to ensure that the volume of the base money in the economy is appropriately controlled.

Even with the above requirements being met, the following problems are likely to be experienced with the use of monetary base control:

- i. the overdraft system is not suitable for the operation of base controls, as banks have little control over the amount of funds drawn from the available facilities;
- ii. faced with a reduction in the cash base, and assuming that non-bank private sector's demand for cash is interest-inelastic, banks would have no alternative but to make the necessary adjustments to their assets portfolios. If the demand for bank loans proved to be interest-elastic however, even large increases in interest rates on loans may not be sufficient to bring about the desired reduction in outstanding bank deposits;

- iii. even if the monetary base grows steadily, banks may still find themselves in difficulties when faced with a sudden upsurge in the demand for loans;
- iv. there exists an inherent conflict between the monetary authorities' desire to maintain stability in the banking system and the wish to control the available stock of base money; and,
- v. it would be almost impossible to achieve targets for two or more monetary aggregates simultaneously, using monetary base control as the sole policy instrument.

### **SELF ASSESSMENT EXERCISE**

In your own opinion, what would you consider to be the most effective instrument for the control of money supply in Nigeria? Please briefly discuss your reasons.

## **4.0 CONCLUSION**

This unit has exposed you to the general monetary control instruments available in any money economy. You also were able to learn the role of monetary policies and the monetary policy targets.

The main instruments used for controlling the rate of growth of bank deposits are divided into two groups:

- i. instruments of market intervention; and,
- ii. instruments of portfolio constraint.

Also of importance in the unit's discussions are the monetary authorities' instruments for direct controls. Monetary base control was emphasised as a specific approach to controlling the money supply growth rate by implementation of the monetary base controls, though there are problems associated with them.

## **5.0 SUMMARY**

This unit has dealt with important issues on monetary policies and control. Specifically, we discussed: the monetary policy roles; the policy instruments; the policy targets; the policy variables; and monetary control instruments.

The main instruments used for controlling the rate of growth of bank deposits are divided into two groups.

**Group 1: Instruments of Market Intervention** are:

- i. Open Market Operations,
- ii. Manipulation of the Central Bank's discount rate.

**Group 2: Instruments of Portfolio Constraint are:**

- i. Liquid assets reserve requirements,
- ii. Special deposits with the Central Bank,
- iii. Prescribed target growth rates for deposit liabilities, with financial penalties for violation,
- iv. Moral suasion,
- v. Direct controls, including the imposition of interest rate ceilings, lending ceilings, and qualitative lending guidelines.

A very important monetary control instrument, different from the above conventional instruments, is that of monetary base control. The basic principle of monetary base control rests on the assertion that banks will hold money equal to a certain stable proportion of their deposit liabilities.

## **6.0 TUTOR-MARKED ASSIGNMENT**

As a management decision maker, would you consider direct controls by the monetary authorities of Nigeria economically advantageous? Discuss in detail with emphasis on advantages and disadvantages.

## **7.0 REFERENCES/FURTHER READING**

Goacher David, J. (1986). *An Introduction to Monetary Economics*. London: Financial Training Publications Ltd.

## UNIT 2 GOALS, INSTRUMENTS, AND PROBLEMS OF MONETARY POLICY

### CONTENTS

- 1.0 Introduction
- 2.0 Objectives
- 3.0 Main Content
  - 3.1 Goals of Monetary Policy
  - 3.2 Review of the Nigerian Monetary Policy Instrument
  - 3.3 The Use of Monetary Targets
  - 3.4 Problems of Monetary Policy
- 4.0 Conclusion
- 5.0 Summary
- 6.0 Tutor-Marked Assignment
- 7.0 References/Further Reading

### 1.0 INTRODUCTION

This unit examines in detail the goals, instruments, and problems of monetary policies in Nigeria. The aim is to make you familiar with the major problems of monetary policy implementations. The unit complements the discussions in unit 11 where emphases were placed on monetary controls.

### 2.0 OBJECTIVES

At the end of this unit, you should be able to:

- state the goals of monetary policy
- differentiate between direct and indirect monetary policy instruments used by the Nigerian monetary authorities
- describe the problems of monetary policies in Nigeria
- proffer solutions to identified implementation problems associated with Nigerian monetary policies.

### 3.0 MAIN CONTENT

#### 3.1 Goals of Monetary Policy

The basic goals of monetary policies include:

1. **High employment:** this is a worthy goal for two basic reasons: First, the alternative, high unemployment, causes much human misery, with affected families suffering financial distress, loss of

personal self-respect, and increase in crime. Secondly, when unemployment is high, the economy not only has idle workers but also idle resources.

For important economic implications, the goal of high employment does not seek for an unemployment level of zero, but rather, a level above zero that is consistent with full employment at which the demand for labour equals the supply of labour. This level of unemployment is referred to as the natural rate of unemployment in economic terms.

2. **Economic growth:** this goal is closely related to the high employment goal because businesses are more likely to invest in capital equipment to increase productivity and economic growth when unemployment is low. Conversely, if unemployment is high and factories and other businesses are idle, it does not pay for a firm to invest in additional plants and equipments.
3. **Price stability:** many economies and professional economists are becoming aware of the social and economic costs of inflation. They have become more concerned with a stable price level as a goal of economic policy. Price stability is desirable because a rising price level creates uncertainty in a given economy. It also makes it difficult to plan for the future. It is more difficult to decide how much funds should be put aside for future engagements in an inflationary environment.
4. **Interest rate stability:** this is desirable because fluctuations in interest rates can create uncertainty in the economy and make it harder for investors to plan for the future. Upward movements in interest rate create hostility toward the monetary authorities and lead to demands that Central Bank's power be curtailed.
5. **Stability of financial markets:** one of the major functions of the monetary authorities is to promote a stable financial system. One way the Central Bank can promote stability in the financial system is by helping prevent financial panics, through its role as the lender of last resort.

The stability of financial markets can also be promoted by interest rate stability, since fluctuations in interest rates create uncertainty for financial institutions. An increase in interest rates gives rise to capital losses on long-term bonds and mortgages, losses that cause the failure of financial institutions holding them.

6. **Stability in foreign exchange markets:** with increasing importance of the global market, the value of a country's

currency relative to other currencies has become a major consideration for the monetary authorities. A fall in the value of Naira relative to other currencies, for example, will stimulate inflation in Nigeria.

Preventing large changes in the value of naira makes it easier for firms and individuals purchasing or selling goods abroad to plan ahead.

### **3.2 Review of the Nigerian Monetary Policy Instruments**

Monetary policy instruments are those variables under the control of monetary authorities and are used in controlling the affairs of the money and financial markets. These instruments can be *direct* or *indirect*.

The Direct Instruments include:

- i. Aggregate Credit Ceilings,
- ii. Deposit Ceilings,
- iii. Exchange Rate Controls,
- iv. Restriction on the Placement of Public Deposits,
- v. Special Deposits,
- vi. Stabilisation Securities.

Indirect Instruments include:

- i. Open Market Operation (OMO),
- ii. Cash Reserve Requirements,
- iii. Liquidity Ratio,
- iv. Minimum Rediscount Rate,
- v. Parity Changes,
- vi. Selective Credit Policies.

For the specific case of Nigeria, direct controls were used not only to control overall credit expansion but also to determine the proportion of bank loans going to the preferred sectors; merchant banks' asset portfolio; proportion of bank loans to indigenous borrowers; proportion of bank loans to small-scale indigenous enterprise; proportion of rural bank deposits granted as loans to rural borrowers; lid on interest rates, and others.

The three main monetary policy instruments used world wide are: Open Market Operations, changes in the reserve requirements and changes in the discount rate. In addition are the selective controls over specific markets, among which are the margin requirements and the ceiling on the interest rate commercial banks can pay on savings or time deposits.

The fractional reserve system is a convenient way to gain control over the money supply. By requiring banks to maintain a stated percentage of their deposits as reserves, it limits the ability of banks to lend out funds and thus their ability to create money. It follows that the prime target of monetary policy has been the level of bank reserves, and the strongest weapon to influence reserves is the required reserve ratio.

*Open Market Operations* refer to the buying and selling of government bonds or securities in order to influence indirectly the reserve position of banks. If the Central Bank buys bonds, the effect would be an increase in bank reserves, a possible increase in the money supply, and a possible fall in interest rates. These effects are potential stimulants to economic activity. Sales of government securities will produce the opposite effects. Open Market Operations is the most frequently used weapon or instrument of monetary policy.

*The Discount Rate* refers to the interest rate with which the Central Bank can lend money to commercial banks. By lowering or raising the discount rate, the Central Bank can encourage or discourage such borrowings. The Central Bank can also openly announce its intentions to be receptive or not to request for loans and advances.

### 3.3 The Use of Monetary Targets

As you were informed in unit 11, apart from the use of the monetary policy instruments such as the open market operation, changes in discount rate, and changes in reserve requirements, the monetary authorities often choose a set of variables to aim for in its efforts to stabilize price and increase employment. These variables are referred to as *intermediate targets*, such as the monetary aggregates ( $M_1$ ,  $M_2$ , or  $M_3$ ) or interest rates which have a direct effect on employment and price level, unlike the use of the regular monetary instruments which have indirect effects. Other sets of variables to aim for are the so-called operating targets, such as reserve aggregates (that is, reserves, non-borrowed reserves, monetary base) or interest rates (the treasury bill rate), which are more responsive to monetary policy tools or instruments. Note that non-borrowed reserves refer to total reserves minus borrowed reserves.

### 3.4 Problems of Monetary Policy

There are a number of limitations on the use of monetary policy for economic stability. These limitations include:

1. **The uneven incidence of monetary policy:** monetary policies have some uneven impacts on different groups within a given

economy. Most notable is the restrictive monetary policy that raises market interest rates, which in turn reduces the flow of funds into the home mortgage market.

It is frequently argued that small businesses are particularly sensitive to altered credit conditions. Large-scale businesses tend to have ready access to several sources of funding and can borrow funds either from banks or by direct sale of security issues. Thus, under restrictive credit conditions, banks might feel it necessary to meet the needs of their large-scale business customers first and to limit the funds available to small-scale businesses.

2. **Compliance with the treasury:** the conduct of monetary policy has also been seriously restricted through the Central Bank's efforts to serve the desires of the National Treasury.
3. **Timing:** here are many lags in the conduct of monetary policy. These lags can be broadly classified into two: *inside lags* and *outside lags*. Inside lags refers to all the steps and time it takes to go from the first recognition that a problem exists to the point where the policy begins to affect the economy by its impact on aggregate demand and output.

Outside lags, on the other hand, are concerned with the response of the economy to the changed monetary conditions resulting from the monetary policy. Monetary authorities may react to a situation by altering money market conditions, but it is other economic units in the economy – consumers, firms government – that must alter their plans in the face of the changed conditions. This outside lag is of considerable importance, for until these economic units change their behaviour the economy will not be materially affected, and to that extent, monetary policy will not be effective.

4. **Financial intermediaries:** one of the monetary policy problems can be found in financial intermediaries, including: saving and loan associations, insurance companies, pension funds, etc, which deal in “near money”, the highly liquid deposits of the public. These financial intermediaries cannot create money like commercial banks but can affect the money supply indirectly through their actions, over which the monetary authorities have little or no control.

### **SELF ASSESSMENT EXERCISE**

Enumerate and explain briefly the goals of monetary policy in Nigeria

#### **4.0 CONCLUSION**

This unit was designed to expand your knowledge of the nature of monetary policies in Nigeria. You were exposed to the specific goals and problems associated with monetary policies.

#### **5.0 SUMMARY**

The goals of monetary policies in Nigeria include: high employment rate; price stability; interest rate stability; economic growth; stability of the financial market; and, stability in the foreign-exchange market.. The major problems of monetary policy in Nigeria include: uneven incidence of the monetary policies; compliance with the treasury; timing; and, financial intermediation.

#### **6.0 TUTOR-MARKED ASSIGNMENT**

Does the monetary policy goal in Nigeria differ from those of its fiscal policy goals? Explain.

#### **7.0 REFERENCES/FURTHER READING**

The Central Bank of Nigeria (CBN) Economic Review, Various Issues.

## **UNIT 3     BANK CONSOLIDATION POLICIES IN NIGERIA**

### **CONTENTS**

- 1.0 Introduction
- 2.0 Objectives
- 3.0 Main Content
  - 3.1 The Concept of Mergers and Acquisition
    - 3.1.1 The Horizontal Mergers
    - 3.1.2 The Vertical Mergers
    - 3.1.3 Conglomerate Mergers
  - 3.2 Economic Importance of Mergers and Acquisition
  - 3.3 Brand and Structural Implications of Consolidation in the Nigerian Banking Industry
    - 3.3.1 Brand Implications
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  - 3.4 Beneficiaries and Losers Form Bank Consolidation in Nigeria
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  - 3.5 Government Regulations and Important Considerations in Bank Consolidation
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- 5.0 Summary
- 6.0 Tutor-Marked Assignment
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### **1.0 INTRODUCTION**

In the following units, we discuss some policy issues that are of paramount importance in monetary theories and policies, especially as they concern the Nigerian economic environment. This unit looks at bank consolidation policies in Nigeria with reference to mergers and acquisition. In unit 14, the issue of foreign-exchange policies and controls in Nigeria will be discussed, and in unit 15, the course concludes with the management of foreign reserves by the Nigerian monetary authorities.

### **2.0 OBJECTIVES**

At the end of this unit, you should be able to:

- recognise the concept of mergers and acquisition
- state the implications of bank consolidation policies in Nigeria
- identify the beneficiaries and losers of bank consolidation in Nigeria

- list the current issues on bank consolidation.

### **3.0 MAIN CONTENT**

#### **3.1 The Concept of Mergers and Acquisition**

A firm's decision to be involved in mergers and acquisition has been noted as basically in pursuit of effective growth strategy. The quest for growth often leads a firm to the acquisition of compatible units that are crucial to fulfilling its profit objectives. Consideration is usually giving to acquisitions through due regard for opportunity costs of funding a new business.

Corporate growth and survival is enhanced by mergers, acquisitions, tender offers, joint ventures, and other forms of business combinations. Of importance here are mergers and acquisitions as alternative strategies for corporate growth and expansion.

The term merger is used for transactions that form one economic unit from two or more previous units. It is a special case of combination where both merging companies wish to join together on roughly equal terms. The merged company either ceases to exist or continues to exist in a modified form, leaving its assets and liabilities to the acquiring company.

There are three forms of merger as discussed in the literature: horizontal merger; vertical merger, and conglomerate merger.

##### **3.1.1 The Horizontal Mergers**

These involve two firms operating in similar businesses. It is a merger of companies with undifferentiated products with high cross elasticity of demand. From the firms' view point, the products have a high cross elasticity of supply. A good example of horizontal merger is the acquisition of United Match Company by Niger Match Company Ltd (now Associated Match Company) in 1985.

As a result of their potential negative effect on competition (existence of monopolistic tendencies) horizontal mergers are regulated by the federal government. They reduce the number of firms in the industry, making it easy for the industry members to collude for monopoly profit.

##### **3.1.2 The Vertical Mergers**

Vertical mergers occur between firms in different stages of production activities. In this case, the output of one firm becomes a production input for, or is marketed by, the other firm. Here, the company involved aims at achieving either backward or forward integration. A typical example is where an oil refining company attempts to integrate backward by acquiring oil producing companies. The oil refining company can equally integrate forward by taking over an organisation which might be strong in marketing, as well as have a favourable fuel distribution outlet at a good location.

The factors motivating vertical integration include, among others: monopolistic tendencies, and technological economies of scale.

### **3.1.3 Conglomerate Mergers**

These involve firms engaged in unrelated businesses. The products of the merging companies are neither substitutes nor complements. A good example of conglomerate merger is the merging between Intra Motors Nigeria Ltd and West Coast Fisheries Ltd in 1985.

There are three types of conglomerate mergers: product-extension mergers, where product lines are broadened; geographical market extension mergers, involving two companies having operations in non-overlapping geographic areas; and, pure-conglomerate mergers that are involved in unrelated business activities.

## **3.2 Economic Importance of Mergers and Acquisition**

There exist seven advantages in the use of mergers and acquisition for corporate external growth and diversification. These include:

1. speedy achievement of goals and objectives,
2. minimisation of the cost of organisational expansion,
3. existence of fewer risks, lower costs, and shorter time requirements involved in the achievement of an economically feasible market share,
4. enhancement of the ability to use securities in acquiring other companies,
5. the likelihood of effective utilisation of assets of the acquired company,
6. possible tax advantages; and,
7. the opportunity to complement the capability of the companies or firms to be acquired.

Most importantly, companies merge in order to enjoy the synergic advantages accruing from pooling resources together, productive

efficiency, and greater market share. Four different types of such synergic advantages can be enumerated as follows:

- i. sales synergy arising from the use of common channels of distribution, sales administration, and warehousing facilities.
- ii. operating synergy that results from higher utilisation of facilities, personnel, and other assets over which overhead can be spread, and bulk purchasing for the merged companies.
- iii. investment synergy accruing from the joint utilisation of plant, machinery and equipment, common raw materials, transfer of research and development efforts, and the use of common tooling.
- iv. management synergy that arises from two merging companies, one lacking in depth and the other in breadth, and both ultimately complementing each other with a good management team.

Apart from synergy, there are other economic reasons for mergers:

- i. the mutual needs that the merging companies seek to satisfy, including combination of strengths to eliminate individual weaknesses and exploit opportunities.
- ii. possible synergies that can be exploited to the advantage of the merging companies.
- iii. the existence of broad similarities in the markets, organisational structure, and investment plans of the merging companies. These similarities would be those necessary in pooling resources to achieve economies of scale, enhance growth, achieve competitive advantage, and improve profitability.
- iv. serving as a means of financing growth in an era of cash squeeze, liquidity crisis, inflationary pressures, high interest rates, and low rates of return, particularly for companies that are unwilling to introduce new capital into their businesses.
- v. serving as a cost-effective method of achieving business restructuring, as the new organisation that emerges becomes leaner, more efficient in size than individually.

A successful and economically feasible acquisition of a company should follow the following steps:

1. Revision of the history of the acquiring company with the aim of evolving critically a strategy that ensures that it has the purpose and capacity to acquire.
2. The acquiring company should evaluate its corporate strategy and its ability to exploit opportunities.
3. Examination of the acquiring company's corporate environment, resource capabilities, and objectives, with focus on markets, as well as their potential for growth, cost structure, pricing structure, technology, opportunities for innovation, the competitive environment, and social and governmental constraints to performance.
4. The acquirer should determine proper policies in the areas of its objectives and strategies by product, markets, functions, and plans for implementation.
5. The acquirer should assess the relevance of acquisition to its overall corporate strategy in terms of:
  - its existing markets in relation to the growth objectives,
  - its planning gap,
  - its scope for internal growth, and,
  - its scope for acquisitions.
6. The acquirer should choose and evaluate the acquisition candidates if the acquisition is to be outside its existing markets, in which case, those other markets should be carefully studied.
7. The acquirer should also evaluate a specific acquisition candidate with a focus on:
  - its impact on its market, products, industry, competitions, and growth in sales and earnings,
  - potential sources of synergy,
  - debt capacity,
  - valuation of fixed assets,
  - working capital and liquidity, and,
  - human resources.

Apart from corporate crisis, there are various reasons behind corporate decision to embrace business combinations such as take-overs, acquisition, amalgamation, mergers and absorption. Among these reasons are the following different types of integrations, as discussed

above: vertical integration; horizontal or lateral integration; and conglomerate. Business that are involved in mergers and acquisitions aim at the synergy expected to result from them. It has been observed that synergy is attained if the combined value of the merging business turns out to be higher than the integrated value of the previous separate outfits. By implications:

$VAB > VA + VB$ , where  $VAB$  = value of the merging business;  $VA$  = value of business A; and,  $VB$  = value of business B.

While businesspeople focus solely on synergy in taking decisions about mergers and acquisitions, it has been argued that the concern of government is more fundamental. Government would like to prevent concentration of industrial and commercial power in few hands, as this will be detrimental to competition, the bedrock of capitalism.

The trade restraint and creation of monopolistic tendencies that may arise from mergers and acquisitions have been noted as actions against public interest. They give rise to distortions in market equilibrium and, thus bring about inefficiency in industrial production and distribution.

Mergers and acquisition sometimes lead to retrenchment of workers and undue interference with the moderating influence of market forces, which when considerable, would require revisions in macroeconomic policies.

### **3.3 Brand and Structural Implications of Consolidation in the Nigerian Banking Industry**

It has been noted that consolidation of banks has two categories of implication:

- i. brand implications,
- ii. structural implications.

#### **3.3.1 Brand Implications**

Theoretically, it can be asserted that financial sub-sector product differentiation is determined by the capital base. It has been noted that the current consolidation the differentiation factor will gradually become commoditised. This is because more banks are likely to financially strong and have good capital base. The resultant merger and acquisition will likely ensure that the gap in size reduces significantly. Differentiation will therefore, be highly impacted upon by the strength of a bank's brand in the marketplace, and not just the size of its balance sheet. Banks with weak brands, on the other hand, are likely to face

uphill task. They may be devalued and probably be forced to merge or be acquired by stronger banks.

Other critical issues to be addressed under brand implications include:

1. **Change of name:** the financial sub-sector is likely to witness changes in name. It should be noted that the name of an organisation has been its primary token of identification in the marketplace. It follows that consolidated banks will likely face two options:
  - i. adoption of the name of the bank with the strongest brand name,
  - ii. adoption of entirely new name.

It has been suggested that whatever situation it finds itself, introduction of the new name must be done in such a way as that the brand equity resident in the names of the banks involved is not lost but leveraged adequately. It is important that a strategic approach be applied in development of the name, because of its importance to the brand.

2. **Change of logo:** in addition to change of name, it is likely that new logos will be unveiled with mergers and acquisitions. Since in general, the logo of an organisation represents its graphical mark of market identity, it is important to ensure that like the name, the logo resulting from merger and acquisition considers the brand equity resident in the constituent organisations. Such equity may be in the form of colours or symbols.

The design of an organisational logo is not primarily a design function but a strategic function. It is therefore, necessary to redesign the corporate function and visual identity materials, such as letterheads, business cards, identity cards cheque books, websites, and the like.

3. **Brand culture:** one of the important determinants in progression of newly merged banks has to do with how well the culture of the various constituent banks can be melded into one unit cultural system. If this is not properly done, the resulting banks will experience cultural clashes among employees.
4. **Brand message:** at the end of the merger and acquisition process, a critical brand issue that arises is “what message would the new bank entity convey to the market?” It is critically important that the newly merged banks presents a clear and consistent message. The message will determine what the brand will become known for. It has been suggested that an effective brand message must find its basis in the essence of the brand.

5. **Communication:** a major consequence of the consolidation of the banking industry is an increased effort by bank operators to propagate themselves within the marketplace. For this to be effective, it must be based on more than just a need to put out information on the new entity. It has to be a strategic initiative that communicates the essence of the brand, as well as its strengths and consequences. Communication issues are critical and should be handled properly.

### 3.3.2 Structural Implications

In addition to brand issues, the consolidation of the banking industry in Nigeria will be followed with it a number of structural issues. These are issues with direct impact on staff, customers, and the structure of the entire banking industry. Prominent among these issues and implications are:

1. **Reduced number of banks:** one of the major expectations of the Central Bank of Nigeria in its policy of consolidation within the financial sub-sector is the reduction of the number of banks within the sub-sector. Considering the activities in the banking industry, it appears a reduction in the number of banks is inevitable.
2. **Increased competition:** the entities resulting from consolidation of the banking industry in Nigeria should be big so as to be able to compete more aggressively in the global market. As the number of banks is expected to be reduced drastically, more opportunities may be available to the evolved banking groups.
3. **Acquisition digestion issues:** a critical issue in mergers and acquisition is how the constituent banks or organisation in general can integrate their operations and processes. The need to integrate operations effectively will likely lead to the following:
  - i. **Loss of job:** this might occur from the middle level to executive level due to overlaps and duplication of functions within the system.
  - ii. **Consolidation of branch locations:** in cases where the resulting entity possesses more than one branch in a given location, these branches may be coalesced into a singular entity. This will aid in reducing overhead costs and duplication of functions.
  - iii. **Tackling of inefficiencies and bureaucracies:** size can create a certain level of inefficiency and bureaucracy within systems. The newly consolidated banks are likely to be a combination of three or

more banks. It follows that inefficiencies will be strategically managed.

### 3.4 Beneficiaries and Losers from Bank Consolidation in Nigeria

#### 3.4.1 The Beneficiaries

The major beneficiaries of bank consolidation in Nigeria will include:

1. **Customers:** there will be more competition, more value for money, and better products and services.
2. **The Nigerian Stock Exchange:** activities of the Nigerian Stock Exchange are expected to increase due to increased public offers and private placements.
3. **Management consultants:** there will be more briefs for the management of the merger or acquisition process.
4. **Media:** advertisements are expected to increase as a result of the probable need to communicate information on the emerging banking groups.
5. **Technology consultants:** the need for integration and consolidation of diverse platforms into a singular fluid platform. Additionally, the issue of website redesign and redevelopment will arise.
6. **Brand consultants:** the banking industry consolidation was expected to bring to light some critical branding issues and scenarios for the brand consultants to resolve.
7. **The economy:** the evolution of strong and viable banks would encourage rapid growth in the economy.
8. **Small Banks with strong brand profiles:** these banks will have some good selling points. Every other bank will have the desire to acquire them.

#### 3.4.2 The Losers

The losers in the consolidation process include:

1. **Customers:** customers will have fewer options on the banks to transact with.

2. **Middle level managers and executives:** loss of jobs to avoid duplication of roles.
3. **Small banks without high profile:** these banks are likely to be acquired below their actual economic value.

In spite of the above issues, and judging from responses from the consolidated banks, Anibaba (2006) observes that certain objectives are being achieved. Among these objectives are synergy, increased capital, improved credit ratings economies of scale, and increased tax revenues.

### **3.5 Government Regulations and Important Considerations in Bank Consolidation**

It is the observed negative economic implications of mergers and acquisition that lead governments to regulate all forms of business combinations. These regulations are usually aimed at protecting the public. As part of the regulations, the Security and Exchange Commission (SEC) Decree no. 29 of 1998, section 6, charges the SEC with the duty of reviewing, approving, and regulating mergers, acquisitions, and all forms of business combinations.

The SEC's duty was alluded to in part XVII of the Companies and Allied Matters Decree (CAMD) no. 1 of 1990. This is also this SEC's Guidelines on Mergers and Acquisitions aimed at educating the public on the requirements for orderly consummation of business combinations. By section 8 of the SEC Decree 1998, every merger, acquisition or combination between and among companies shall be subject to the prior review and approval of the commission. This duty of reviewing and approving covers acquisition, whether directly or indirectly, of the whole or any part of the equity or other share capital of the whole or any part of the assets of another company. The aim of the SEC duty is to find out whether such business combination is not likely to cause substantial restraint to competition or create monopoly in any line of business enterprise. The reference to assets in section 8 of the Decree has been interpreted by the commission as meaning to bring under its purview operating assets of any enterprise, and not the disposal and replacement of other classes of assets in the normal course of business activities. It should, therefore, be noted that acquisition proposed with respect to operating plants and machinery, or factory facilities of any enterprise (with the sole intention of engaging in production of goods and services) be referred to the commission for review and approval.

In view of the stipulations of the SEC Decree, scholars recommend certain operational steps to be taken by top management in the process of mergers and acquisitions.

1. **Identification:** management must have specific prospect companies in mind with the help of established guidelines for determination of suitable candidates.
2. **Fact-finding:** reliable data on such pertinent business areas as products, sales, finances, undelivered orders, litigation and competition, with respect to every prospect must be sourced and assembled. A checklist of such pertinent areas should be compiled for effective follow-up.
3. **Initiation:** initiation involves making some overtures to some identified prospects that are found suitable. The chief executive officer or a set up strategic committee for the mergers/acquisitions could handle this step.
4. **Negotiations:** following successful overtures, principal officers of the acquired company and the acquiring company should have meetings to discuss the terms and plans for smooth combination or transfer of the affected assets.
5. **Confirmation:** after agreeing on the terms and plan, approvals of the boards of the affected companies and other shareholders' consents should be obtained.
6. **Implementation:** this should flow from the various consents and approvals as incorporated on a draft scheme of arrangements for attention of the regulatory authorities.
7. **Affiliation:** having gotten all the approvals and the sanctions required in the process, the two businesses will then become legally integrated and could take steps towards consolidation and the transfer of properties.

#### **SELF ASSESSMENT EXERCISE**

Enumerate and discuss three major banks that were affected by recent bank consolidation policy.

#### **4.0 CONCLUSION**

This unit has exposed you to one of the major current issues on monetary policies; the consolidation of the Nigerian banking industry.

You learned that bank consolidation has a lot of economic advantages, apart from having a strong and organised banking system in Nigeria.

## 5.0 SUMMARY

The recent consolidation of the Nigerian banking industry was done by the general encouragement of mergers and acquisition activities among banks. The quest for growth often leads a firm to the acquisition of compatible units that are crucial to fulfilling its profit objectives. Consideration is usually giving to acquisitions through due regard for opportunity costs of funding a new business.

Three forms of mergers were discussed in this unit including, horizontal merger, vertical merger, and conglomerate merger. We noted two major implications of bank consolidation: brand implications and, structural implications

## 6.0 TUTOR-MARKED ASSIGNMENT

Apart from brand and structural implications, can you think of and briefly discuss other possible social and economic effects of bank consolidation in Nigeria?

## 7.0 REFERENCES/FURTHER READING

- Abidogun, A. A. (1985). “*Mergers and Acquisitions: The Nigerian Experience*,” Paper presented at SEC Sponsored Symposium, NIIA, October 16.
- Akamiokhor, G. A. (1985). “*Mergers and Acquisitions: The Nigerian Situation*,” Paper Presented at SEC Sponsored Symposium, NIIA, October 16.
- Akingbohunge, S. S. (1999). “Strategic Acquisition and Divestment as a Means of Achieving Corporate Goals: The Role of Corporate Administrators,” *Journal of the Institute of Chartered Secretaries and Administrators of Nigeria*, vol. 1, no. 7, October.

## UNIT 4 NIGERIAN FOREIGN-EXCHANGE POLICIES AND CONTROLS

### CONTENTS

- 1.0 Introduction
- 2.0 Objectives
- 3.0 Main Content
  - 3.1 Overview of the Exchange Rate Policies in Nigeria
  - 3.2 The Historical Background of Foreign Exchange Regimes in Nigeria
  - 3.3 Realistic Exchange Rate
  - 3.4 Problems of Foreign-Exchange Management in Nigeria
- 4.0 Conclusion
- 5.0 Summary
- 6.0 Tutor-Marked Assignment
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## 1.0 INTRODUCTION

A very important current global issue is the management of a country's foreign exchange. In this unit, you will look at the policies that Nigeria had put in place over the years to ensure good management and control of its foreign exchange. Nigeria believes in the determination of its currency exchange through the market forces, but it has not been easy.

## 2.0 OBJECTIVES

At the end of this unit, you should be able to:

- explain the foreign exchange policies in Nigeria
- identify some basic issues in the Nigerian exchange rate policies and management
- examine the problems of foreign exchange management in Nigeria.

## 3.0 MAIN CONTENT

### 3.2 Overview of the Exchange Rate Policies in Nigeria

Three distinct regimes of exchange rates have been observed in the country between the periods 1960 and 1985:

1. The Fixed Rate Regime of 1960 to 1970,
2. The Adjustable Peg Regime of 1974 to 1978,
3. Managed Float Regime of 1978 to 1985.

In a **fixed rate regime**, exchange rates are either held constant or allowed to fluctuate within some narrow boundaries. Exchange rates were fixed according to the Bretton Woods Agreement in which each currency was valued in terms of gold.

A **managed-float exchange rate regime** requires an exchange rate that lies somewhere between fixed and freely floating rates. It is like a freely

floating system in that exchange rates are allowed to float on a daily basis and official boundaries do not exist. It is similar to the fixed system in that government can intervene in order to prevent its currency from moving too much in a certain direction.

In the **adjustable peg regime**, the value of a country's currency is pegged to another currency or to some unit of account. It has been observed that one of the most well-known pegged exchange rate arrangements was established by the European Economic Community (EEC) in April, 1972. This was the time the EEC member countries established that their currencies were to be maintained within established limits of each other.

The foreign exchange market in Nigeria has, over the years, witnessed a series of changes in structural as well as management strategies, especially since September 1986, the time Second-tier Foreign-Exchange Market (SFEM) was introduced, and about one month after the introduction of the Structural Adjustment Programme (SAP). This period was also associated with division of the Nigerian foreign-exchange market into two broad segments: the autonomous and the parallel markets. The autonomous market in particular consists of the Inter-bank Foreign-Exchange Market (IFEM) and the Bureau de change.

As required by the foreign-exchange rate policy, SFEM operated a fixed-exchange rate for priority public sector transactions, and market-based exchange rate system for the private sector and non-priority public sector transactions. To allow access to small users of foreign exchange and thereby enlarge the officially recognised foreign-exchange market, the Bureau de change were licensed and established in 1989 to deal in foreign exchange transactions at market determined rates. The transitory fixed exchange rate operated under the SFEM was reserved for the settlement of government transactions, while the flexible rate, also under the SFEM, applies to commercial and private transactions.

The main source of supply for foreign exchange in Nigeria was receipts from the sale of oil. The bulk of non-oil foreign-exchange receipts accrued to private sector operators who were allowed to retain such funds in their domiciliary accounts, or sell them to authorised dealers.

This dual exchange rate regime, the SFEM, was discontinued in July, 1987. The First-and Second-tier markets were merged into an enlarged foreign-exchange market referred to as FEM. This enlargement was to put a stop to round tripping and observed instability in the market.

It was the then unending pressures and exchange rate instabilities that led to a complete policy reversal in 1994. The exchange rate was pegged and the Central Bank of Nigeria (CBN) became the sole custodian of the nation's foreign-exchange transactions with absolute powers to allocate foreign exchange to end users on pro-rata basis. According to Ogwuma (1995: 84) however, this did not change the then economic situation in the country. It was observed that the pegging of the exchange rate and interest rates below the market rates was largely responsible for the excessive and speculative demand in the foreign-exchange market (FEM).

A guided deregulation policy came on stream in 1995. This gave rise to the institutionalisation of the Autonomous Foreign Exchange Market (AFEM). Under the AFEM, the private sectors were to source their foreign-exchange requirements at market determined rates. Commercial banks were permitted to deal among themselves in autonomously sourced foreign exchange only. Dealing in Central Bank intervention funds was prohibited. To ensure that this rule is adhered to, the Central Bank funds were disbursed directly to end users. The major aim of AFEM was to build up and strengthen the external reserves to enhance confidence in Nigeria's economy, strengthen the Naira value, and pave way for its sustained stability and eventual convertibility.

The DUTCH AUCTION was later introduced. In this system, end-users of foreign exchange were required to indicate the rate at which they are prepared to buy dollars and at which they can pay if their bid is successful. In this respect, the Central Bank of Nigeria was required to serve notice of the volume of foreign exchange on offer before the bids are submitted. Chizea (2002: 1) observes that this approach would mean that the CBN is in a better position to regulate disbursement than the IFEM. The Central Bank would decide on what should be an acceptable band, and bids outside this band would be rejected.

## **3.2 The Historical Background of Foreign Exchange**

### **Regimes in Nigeria**

The foreign-exchange market in Nigeria was observed as being influenced by a number of factors including: the changing pattern of international trade, and institutional changes in the economy as well as shifts in production. Exchange rate policies have been significant

instruments for macro-economic management, as these policies have been applied in the past in order to preserve the local and international values of the Naira, maintain a manageable external reserves position, and ensure price stability. The different policy stances of the Nigerian exchange rate regimes and management date back to 1959, and have undergone various changes to date. The exchange-rate regime era is two-fold: the pre-SAP era, and the post-SAP era.

### **1. The Pre-SAP Era (1980 – 1985)**

A fixed exchange rate was maintained in Nigeria since it became a member of the International Monetary Fund (IMF). This policy was then in line with the IMF regulations. The articles of association of the fund demanded that every member country declares the par-value of its currency to the US dollar or Gold, and not vary it beyond 1 percent on either side without the Fund's permission.

In the early years of the 80s, the principal objective of exchange rate policies was to check inflationary pressures. This objective was achieved by maintaining an over-valued exchange rate so as to encourage importation. The exchange rate was then maintained well below the equilibrium level. The official rate averaged \$1 = N = 0.7957 between 1980 and 1985. This was in deviant to the then Purchasing Power Parity (PPP) rate of \$1 = N = 3.4716. Attempts to adjust the rate within the context of crawling peg in the subsequent period of foreign exchange scarcity was half-hearted and could not give rise to equilibrium exchange rate.

In 1984, there was a major foreign-exchange reform. This was as a result of the then federal government's decentralisation of foreign-exchange allocations. Licensed banks were allowed to approve applications and allocate foreign exchange to customers subject to the maximum allocated to them by the Central Bank of Nigeria (CBN). The Central Bank made weekly allocations to the licensed banks. This policy was discontinued in 1985 due to observed abuses by the licensed banks. The CBN took over direct allocation of foreign exchange once more. The then principal instrument of foreign exchange management was trade and exchange controls, as well as export promotion.

There were, however, some major shortcomings of the exchange control system. It was unable to achieve internal balance in the short term and unable to guarantee external equilibrium in the long-run. Over-valuation of the currency under the system was also a major obstacle in the achievement of internal balance. The exchange control system led to increased dependence on imports, depletion of external reserves, encouragement of parallel market activities, and reduction of

competition in export activities, reduced capital inflow, and the inability to pay on current basis.

## 2. The Structural Adjustment and Post-Structural Adjustment Era (1986 – 1994)

The shortfalls of the exchange control system resulted to the introduction of the second-tier foreign-exchange market. This was introduced under the Structural Adjustment Programme (SAP) in order to find a realistic value of the Naira. The inception of the second-tier foreign exchange system was followed by the Dual Exchange rate system. In this case, two different rates operated side by side in the foreign-exchange market. These rates refer to the second-tier rates. During the pre-Second-tier system, debt service payments, expenses of Nigerian embassies abroad, and contributions to international organisations were settled at the first-tier (official) rate. All other transactions were settled at the second-tier rate. The second-tier rate was determined by auctions operated by the Central Bank of Nigeria. Various methods were used to fine tune the system while this policy lasted. The methods included average pricing, marginal rates, and the Dutch Auction System. These methods are summarised below:

- i. **The Average Pricing Method:** in this method, at the bidding session, bids were arranged from highest to lowest along with the amount of foreign exchange applied for. Those whose bids were below the point where the amount offered for sale were considered unsuccessful. The average rate of the successful bids was worked out and that became the exchange rate ruling. This method however, had problem. Since it was an average rate, very high bids tended to push the rate upwards.
- ii. **The Marginal Rate:** using this method, exchange rates were determined in the same way as those of the average pricing method. The difference was that the rate depended on what the last dollar offered was exhausted. With increasing demand however, the naira continued to depreciate. The authorised dealers' main preoccupation was to quote high bid rates instead of quoting realistic exchange rates. It was observed that marginal rate pricing did not work effectively in fostering competence and professionalism in the art of price setting by authorised dealers.
- iii. **The Dutch Auction:** the determination of exchange rate using this method was basically same as that of the marginal rate method. Currencies were obtained at the quoted respective bid rate. There was the problem of multiplicity of rates which led to further depreciation of the Naira.

The Dutch Auction is referred to as the Descending Price Auction. This was originally the technique used in auctioning produce and flowers in Netherlands. In recent times, Dutch Auction is used for bidding on internet auction sites. Exchange rates were essentially market determined under the Dutch Auction method.

The Dutch Auction method has been used in different facets of the world economies, including Africa. It was used in financing credit in Romania, and for foreign exchange in Bolivia, Jamaica, and Zambia. In the United States of America, the national treasury sometimes uses it to sell its new treasury notes or bonds.

The guideline for operating the Dutch Auction System (DAS) has been listed as follows (CBN, 2002):

- The Central Bank of Nigeria shall announce on Mondays and Wednesdays the amount on offer for each auction at 8.30 a.m.,
- All authorised dealers shall be eligible to participate at the Auction on behalf of their customers,
- Under this system, authorised dealers shall submit their customers' bids on Mondays and Wednesdays. The CBN reserves the right to reject bids that are deemed to be unrealistic and/or any application that contravenes Foreign-Exchange regulations,
- The authorised dealers shall submit their customers' bids as per the attached format duly signed by two authorised signatories for any particular auction session between 9 a.m. and 12.00 noon of the day of the auction. The bids should be submitted in diskette (Excel Format) to the CBN Lagos/Abuja. Hard copies of the bids should be faxed to CBN, Abuja,
- The minimum bid amount by an authorised dealer shall be \$100,000 and the currencies of transaction shall be the naira and United States dollar,
- The CBN shall announce the result of each auction by 1.00 p. m. on Tuesdays and Thursdays. A copy of the result of the auction may be obtained from the relevant offices,
- Successful bids shall be advised on Tuesdays and Thursdays and authorised dealers shall be debited at the bid rates,
- Authorised dealers shall ensure that they have adequate Naira cover on their current accounts with the Central Bank of Nigeria. The

CBN shall promptly debit the current accounts of banks with the naira equivalent of the foreign exchange purchased at the bid rates. The Central Bank of Nigeria shall deliver US dollars sold to the banks to their Correspondent Bank Accounts used for Inter-bank Foreign Exchange Market (IFEM) transactions. The CBN shall effect delivery of foreign exchange purchased by each authorised dealer within two business days after the date of the auction result. A business day shall be defined as a day in which banking business is carried out in Nigeria,

- Funds purchased from CBN at the auction shall be used for eligible transactions only, subject to stipulated documentation requirements. Such funds shall not be transferred in the inter-bank foreign-exchange market,
- Authorised dealers shall return to the Central Bank of Nigeria any unutilised funds within five (5) business days after delivery, at the rate of purchase,
- The CBN may also purchase foreign exchange from authorised dealers and other participants, such as oil companies, at their offer rates. The CBN shall deliver the naira cover for US dollars bought from the banks to the bank's current accounts at the CBN. The banks shall deliver US dollars sold to CBN to the CBN Special FEM Account with Chase Manhattan Bank, New York,
- The rate that clears the market shall be the prevailing exchange rate for the period,
- Authorised dealers shall quote and display in their Banking Halls the buying and selling rates conspicuously. The spread between the buying and selling rates shall not exceed 1 percent,
- *Sanctions:* Contravention of any of the foreign exchange market regulations shall attract appropriate sanctions as spelt out in the provisions of relevant laws.

### **3.3 Realistic Exchange Rate**

The issue of realistic exchange rate in Nigeria has been the order of the day since the introduction of the Structural Adjustment Programme (SAP). At the inception of SAP, it was clearly stated that the "Objective of government is to evolve a realistic and sustainable market-determined exchange rate for the naira, so as to reduce the demand for foreign exchange and to reduce the pressure on the balance of payments (CBN Annual Report, 1986).

Though the target realistic exchange rate was not known, the market approach was believed to be able to achieve it through depreciation strategy. Scholars suggest that in a floating exchange rate regime, the rate determined by the interaction of the market forces of demand and supply is the short-term equilibrium rate. In practice, he observes, it is difficult to measure the true equilibrium rate of exchange as there may exist multiple markets for foreign exchange, and the demand and supply schedules may not be known.

### **3.4 Problems of Foreign Exchange Management in Nigeria**

Literature analysis notes that something has been wrong with the Nigerian foreign-exchange policy. It was observed that official statistics show that the industrial sector received the lion's shares of foreign exchange allocation under the FEM: 68.6 percent in 1989; 63.8 percent in 1990; 64.2 percent in 1991; and 62.3 percent in 1992. The allocation was supposed to have been used in financing the importation of raw materials, machinery, and spare parts for the industrial sector. Yet capacity utilisation has been low and worrisome. The contributions of the industrial sector to Gross Domestic Sector (GDP) and employment have not been impressive. The problem is either that, contrary to the impression given by foreign-exchange allocation statistics, manufacturing firms do not actually receive the proportion of foreign exchange recorded for them or the foreign exchange is sold to them at parallel market rates. In either case, it appeared the industrial sector has been short-changed.

It has been observed that there exists a misalignment between exchange rate and credit management strategies in Nigeria. This problem manifests itself in the growing shortage of credit for private-sector investment. The argument is that the inadequate alignment between exchange rate management strategies and credit management strategies is an important factor in the growing shortage of credit for private-sector investment. It is noted that the exchange rate management and financial reform programmes were aimed at providing a framework and 'process mechanism' for the creation, channelling, and management of foreign exchange and domestic credit with a view to stimulating private sector-led growth in economic activities. But what has been observed is that the private sector has been experiencing a shortage of investible funds. This has been the case because a sizable proportion of investible credit is being channelled into the purchase and sale of foreign exchange instead of increasing the flow of credit to the private sector. This leakage has been attributed to the buying and selling rates in the foreign-exchange market which generate a highly profitable margin relative to the differential between lending and deposit rates.

## **SELF ASSESSMENT EXERCISE**

Briefly discuss what you think are the serious economic implications of the Nigerian exchange rate regimes

### **4.0 CONCLUSION**

The unit has presented the basic issues in the management of foreign exchange in Nigeria. Of major significance in the presentations is the problematic nature of the foreign exchange regimes in Nigeria. There exists a misalignment between exchange rate and credit management strategies in Nigeria. This problem manifests itself in the growing shortage of credit for private-sector investment.

### **5.0 SUMMARY**

The exchange-rate regime era is two-fold: the pre-SAP era, and the post-SAP era. The pre-SAP (Structural Adjustment Programme) era was an era for which a fixed exchange rate was maintained in Nigeria as a member of the International Monetary Fund (IMF).

The post-SAP era was the era when the shortfalls of the exchange control system resulted to the introduction of the second-tier foreign-exchange market. In this case, two different rates referred to as second-tier rates operated side by side in the Nigerian foreign-exchange market. During the pre-second-tier system, debt service payments, expenses of Nigerian embassies abroad, and contributions to international organisations were settled at the first-tier (official) rate.

### **6.0 TUTOR-MARKED ASSIGNMENT**

Present briefly what you have read as the latest current issue on the management of the Nigerian foreign exchange market.

### **7.0 REFERENCES/FURTHER READING**

Aluko, M. (2004). *“Our Foreign-Exchange Bazaar of the Nigerian Naira” Lagos Forum*, January 23.

Central Bank of Nigeria (2002). *“Guidelines for the Operation of the Foreign Exchange Market: The Dutch Auction System”* FOD/D/S. 14, vol. xvi, July 19.

Chizea, B. I. (2002). “The Dutch Auction” *The Nigerian Treasure Quarterly Journal*, July – September.

Ebi, E. C. (2000) “IFEM and the National Economy: The Major Issues for a treasure in the Year 2000” *The Nigerian Treasurer Quarterly Journal*, vol. 9, no. 1, January – March.

## **UNIT 5      FOREIGN EXCHANGE RESERVE MANAGEMENT STRATEGIES**

### **CONTENTS**

- 1.0 Introduction
- 2.0 Objectives
- 3.0 Main Content
  - 3.1 The Composition of Foreign Reserves in Nigeria
  - 3.2 The Reserve Management Strategies

### 3.2.1 Implementation of the Strategies

- 4.0 Conclusion
- 5.0 Summary
- 6.0 Tutor-Marked Assignment
- 7.0 References/Further Reading

## 2.0 OBJECTIVES

At the end of this unit, you should be able to:

- list strategies used in managing foreign reserves
- explain the composition of foreign exchange reserves in Nigeria
- extrapolate the management of foreign reserves to important investment decisions.

## 3.0 MAIN CONTENT

### 3.1 The Composition of Foreign-Exchange Reserves in Nigeria

The theoretical models on the optimal composition of foreign-exchange reserves tend to ignore the importance of the most basic considerations in reserve management: the liquidity of the reserve holdings. Liquidity is very important for central banks whose responsibility is to manage foreign exchange reserves. Liquidity is important as reserves are held primarily in order to meet unexpected demand for foreign currency. Other reasons for holding reserves as contained in the literature include:

#### 1. Transaction Needs

Transaction considerations play an important role in the determination of currency composition of reserves. The use of reserve for this purpose however, is considered to be of fairly minor importance when the country has good access to the international capital markets. Investment considerations in this case will be dominated by liquidity constraints. In most cases, the currency composition more or less matches the composition of trade flows.

#### 2. Intervention Needs

Reserves are also held for the purpose of foreign exchange market intervention, in pursuit of either balance-of-payments or exchange rate objectives. This type of need corresponds to the Keynesian precautionary demand for money. Intervention need is believed to be the main motive for holding reserves in industrialised countries with very open goods and capital markets and/or exchange rate commitment.

### **3. Wealth Accumulation**

The maximisation of returns on investment may, under some circumstances, have an impact on the management of reserves. This has been the case when the central bank has some responsibility for the country's net foreign exposure and aims at maintaining the country's international credit worthiness or when exchange controls effectively substitute public for private acquisition of foreign-exchange reserves.

This is an investment approach which has been gaining acceptance in developed countries with large or growing fiscal deficits. Within this framework, reserves are allocated by applying the concepts underlying modern portfolio theory (the mean-variance approach), whereby the level of risk can be reduced by diversifying the investment. The central bank applies this approach by focusing on the risk and returns in terms of a basket of currencies, not solely in terms of domestic currency. The approach applies to net foreign assets rather than gross reserves alone.

#### **3.2 The Reserve Management Strategies**

The literature suggests that reserve management is an important function of most central banks, because sound reserve management strategies support a broad range of policy objectives, including:

- Maintaining confidence in the economy's monetary and exchange rate policies;
- Providing confidence to the international community that the economy is able to meet its external obligations;
- Maintaining foreign currency liquidity during periods of external shocks; and,
- Assisting the government in meeting foreign exchange obligations.

Given these objectives, the most commonly cited question is in the area of adequate level of reserves. It has been observed that individual country's reserve holdings cannot be cross-compared or traced through time unless they are scaled in some way to reflect the differences in size of the economy.

The issues of foreign exchange management are largely discussed on the basis of the theoretical formulations of the approaches to the balance of payments. These approaches are discussed as follows:

#### **1. The Elasticity Approach**

This approach is concerned with the analysis of the impact of devaluation on trade balances. Proponents of this approach are of the opinion that, with adequate downward adjustment of exchange rates, countries with balance of payments difficulties would be able to export more, import less, and save some foreign exchange. This is, however, based on rigid assumptions of mass unemployment, perfectly elastic supplies, an initial balanced growth, and the elasticity of domestic and foreign demand for import exceeds unity (IMF, 1977).

It was noted that devaluation per se may not be adequate for developing countries, where relative prices are not the sole determinants of international trade. The elasticity approach prescribes however, complementary fiscal and monetary policies which could be adopted in place of devaluation to achieve the same result.

## **2. Income – Absorption Approach**

The realisation that elasticity includes both price and income influences shifted emphasis to development of a framework that relates income to expenditure by introducing income into the partial analysis of the elasticity approach. The popular identity of the absorption approach relates the trade balance to total output and total absorption. For devaluation to improve the trade balance therefore, output must be greater than absorption. Reason is that devaluation reduces the external value of domestic money supply as well as the value of domestic spending. It has been noted however, that if the demand for foreign exchange is accelerating and the monetary authorities continue to exchange domestic cash balances for foreign exchange by drawing down the country's international reserves, the foreign exchange situation will continue to be precarious.

The income-absorption approach acknowledges the fact that, under extreme circumstances, direct control measures could be applied to reduce foreign exchange disbursements. These measures take the form of financing of temporary deficits, where reserves are large; trade and exchange controls; and, domestic credit restrictions and devaluation, where deficits are persistent and foreign exchange outflow is excessive.

## **3. The Monetary Approach**

This approach emphasises the role of money in shaping other aggregates that influence foreign exchange movement and international reserves. The approach sees income and aggregate expenditure as either the accumulation or non-accumulation of reserve assets. It considers the overall reserves movement as the policy variable. The monetary approach disagrees with the assumption that monetary effects of

surpluses or deficits in the balance of payments are sterilised by the monetary authorities. It believes that the inflow and outflow of foreign exchange associated with surpluses and deficits in the balance of payments are not immediately sterilised, hence they influence aggregate money supply (IMF, 1977).

Furthermore, the monetary approach assumes that when the exchange rate is fixed, the monetary authorities can control the foreign or international reserves component of the monetary base through appropriate credit policies. On the other hand, under floating exchange rate regime, money supply is exogenous and, as such, can be controlled. By implication, when exchange rates are fixed, international reserves have to be adequate to protect such rates. When exchange rates are allowed to float, the need for reserves is diminished. The monetary approach prescribes the adoption of appropriate monetary and fiscal policies, in conjunction with exchange rate variation, to achieve equilibrium in balance of payments.

Other approaches have been suggested as follows:

#### **4. The Benchmark Process**

This is the most commonly used method or approach, by which decisions from one level are passed down to the level below, and by which results of decisions are calculated and passed back up the management chain. A benchmark is a notional or imaginary portfolio constructed to provide a yardstick or baseline against which the return of an actively-managed portfolio can be measured.

#### **5. Liquidity Management**

Liquidity management has been defined as the ability to provide large amounts of cash out of the reserves at short notice.

#### **6. Active Management**

Active management is the term usually given to the operation of the most junior level of reserves management staff. These include the portfolio managers who deal in real securities and real portfolio with the market directly.

Reserve management strategies in Nigeria had involved the following:

1. to invest reserves in secure, short-dated liquid assets,
2. rescheduling of the country's external debt in order to reduce the debt service burden, and thereby enhance the stock of reserves,

3. selection of few correspondent banks to operate the country's documentary credits on an unconfirmed basis in order to enable the country pay only when shipment of goods are made,
4. to limit the foreign exchange expenditure of the public sector through budgetary controls.

IMF (2001) in its guidelines for foreign exchange reserve management suggests the following on the reserve management strategies and coordination:

1. reserve management strategies should be consistent with and supportive of a country's specific policy environment, particularly its monetary and exchange arrangements,
2. evaluation of alternative reserve management strategies and their respective implications for reserve adequacy are likely to be facilitated by a cost/benefit analysis of holding reserves,
3. reserve management strategies may also need to take into account strategies for the management of external debt for purposes of reducing external vulnerability.

### **3.2.1 Implementation of the Strategies**

It has been observed that the Central Bank of Nigeria is anchored on liquidity management and capital preservation, given that the level of foreign exchange receipts is grossly inadequate to accommodate the country's obligations. With this constraint and the unpredictable nature of the country's balance of payments, the Central Bank endeavours to place reserves in assets that are sufficiently liquid to ensure prompt and timely settlement of foreign obligations, and yet profitable enough to ensure adequate capital appreciation.

Majority of foreign exchange receipt by the Central Bank come from proceeds of NNPC's direct crude oil sales, Petroleum Profit Tax (PPT), Royalties, Gas Flaring on the one hand, and non-oil export proceeds, such as sale of foreign exchange by parastatals and draw-down of project loan financed by international organisations, such as the Commission of the European Communities (CEC) and the World Bank, on the other.

In the recent years, it has been noted that Nigeria's foreign exchange obligations have exceeded the receipts, given rise to persistent balance of payment deficits. In the light of this, the Central Bank had to realise most of its foreign investments and shortened the maturity profile of what remains in the portfolio in favour of more liquid assets. This measure has led to a complete elimination of all bond investments from the portfolio, and a consequent loss in yield.

The Central Bank's present investment strategy is to hold a larger proportion of the country's reserves in secure, liquid, although low yield assets, especially foreign government treasury bills and time deposits with reputable institutions, such as Bank for International Settlements, Basle and AAA-rated banks such as Morgan Guaranty Trust Company, New York. Another component of this strategy is to hold the reserves in various trading currencies- their relative proportions dictated by the country's use of each currency in international trade settlements and external debt service, as well as the liquidity of its domestic market.

This strategy has led to the country's ability to meet, at all times, its international payment obligations in a timely and cost effective manner, while at the same time earning the best are in:

1. Time Deposits
2. Treasury Bills of U. S. and Japan
3. The Federal Funds Market
4. The Repo Market
5. Other miscellaneous securities.

### **SELF ASSESSMENT EXERCISE**

Apart from the ones listed in this unit, can you think of other reasons for holding foreign-exchange reserves? Discuss briefly.

## **4.0 CONCLUSION**

This unit has exposed you to what foreign-exchange reserves are all about. You have also learned some strategies for managing foreign reserves.

You observed that the Central Bank of Nigeria is anchored on liquidity management and capital preservation, given that the level of foreign exchange receipts is grossly inadequate to accommodate the country's obligations. With this constraint and the unpredictable nature of the country's balance of payments, the Central Bank endeavours to place reserves in assets that are sufficiently liquid to ensure prompt and timely settlement of foreign obligations, and yet profitable enough to ensure adequate capital appreciation.

## **5.0 SUMMARY**

Liquidity is very important for central banks which responsibility is to manage foreign exchange reserves. Liquidity is important as reserves are held primarily in order to meet unexpected demand for foreign

currency. Other reasons for holding reserves as contained in the literature include:

1. transaction needs
2. intervention needs
3. wealth accumulation.

The issues of foreign exchange reserve management are largely discussed on the basis of the theoretical formulations of the approaches to the balance of payments. These approaches are discussed in terms of:

1. the elasticity approach;
2. the income-absorption approach; and,
3. the monetary approach

The present investment strategy of the Central Bank of Nigeria is to hold a larger proportion of the country's reserves in secure, liquid, although low yield assets, especially foreign government Treasury Bills and time deposits with reputable institutions, such as Bank for International Settlements, Basle and AAA-rated banks such as Morgan Guaranty Trust Company, New York. Another component of this strategy is to hold the reserves in various trading currencies- their relative proportions dictated by the country's use of each currency in international trade settlements and external debt service, as well as the liquidity of its domestic market.

## **6.0 TUTOR-MARKED ASSIGNMENT**

Can you foresee some problems in the implementation of reserve management strategies in Nigeria? Discuss such problems briefly.

## **7.0 REFERENCES/FURTHER READING**

Anifowose, O. K (2000). *“Foreign Exchange Management in Nigeria: Issues and Problems,”* A paper Presented at the Workshop on Foreign Exchange Data Needs for Foreign Exchange Officers of Banks, at The CBN Training Centre Lagos, May 22 – 27.

