NATIONAL OPEN UNIVERSITY OF NIGERIA

SCHOOL OF MANAGEMENT SCIENCES

COURSE CODE: BHM 718

COURSE TITLE: PRINCIPLES OF MACRO ECONOMICS

BHM 718: PRINCIPLES OF **MACRO ECONOMICS**

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COURSE GUIDE

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COURSE GUIDE

Introduction

In the last contact, our discussions were based on managerial economics, which comprises mainly of issues in microeconomics. This time around, we are going to provide you not with ready-made solutions to business problems, but with a background knowledge of the environment in which business firms operate. This implies that macroeconomics does not look at what happens to individual business firms, but at what is happening to the entire economy.

This course, therefore, studies managerial decisions together with the entire business environment in which the firm finds itself. As such, good managers should look far beyond the frontiers of their firm, into the entire national as well as, global economy when they are making managerial decisions. As a course, macroeconomics is directed towards opening up your mind to understand the performance of the entire national or global economy. An understanding of this environment will enhance your decision-making capabilities, and open more avenues for you to realise business goals.

What you will be learning in this course

You are aware by now that, while firms influence the microeconomic environment, the macroeconomic environment dictates the survival of firms. Firms are therefore to study the environment in which they operate and then take their decisions to suit such an environment. As a result of this, we have designed this course in such a way that information about the macroeconomic environment in which firms operate has been simplified to enhance your understanding. In this course, you will be studying concepts that mostly relate to macroeconomics and methods of enhancing the survival of firms. You will also be required from time to time to analyse real economic situations in the country in particular and the international community in general. Therefore, you will be learning how to blend managerial decisions, as we have said, with the macroeconomic environment, so as to achieve the organisational goals.

Course Aims and Objectives

The aims and objectives of this course are focused on exposing you to the global environment in which firms operate. As such, the following have been designed as the specific aims of the course:

1 Exposing you to the macroeconomic environment which is a scenario that deals with aggregates.
2. Enhancing your understanding of the concepts to be discussed, so that you could apply these concepts to real economic problems.
3. Enabling you to understand current economic problems or, issues. When all these are accomplished, your ability to take business decisions will be greatly enhanced.

Working Through the Course

For you to successfully complete this course, you are required to read the study units, reference books and other resources that are related to the units.

Each unit of the course contains self-assessment exercises and a Tutor-marked assignment (TMA). The self-assessment exercises are to enhance your understanding of the course, but are not to be submitted. On the other hand, the Tutor-marked assignments are to be done immediately every unit is completed and sent to the course facilitators for assessment.

The medium to be used and the time to submit the TMA will be specified to you later. This course is a 3-credit course. As such you are expected to spend a minimum of three hours every week studying the course. You are expected to complete the entire course outlined within a period of 18-25 weeks.

Course Evaluation

As stated before, every unit of this course has an assignment attached to it. You are required to keep an assignment file. After every unit the assignment should be done. At the end of the course, the evaluation shall be as follows:

Assignments	30%
Examination	70%
Total	100%

Each assignment you do shall be marked and converted to 3%. At the end, the best 3 shall be selected so as to make up the 30%. The examination at the end of the course shall cover all aspects of the course, ie you will be examined in all the units.

Course units

In this course, economic theory, and the economic environment that could be helpful to you as a manager shall be considered under different topics. Based on this, the following units have been designed for the course:

Unit	Title
1.	Macroeconomics: An overview
2.	National income accounting
3.	Different approaches to the measurement of national income
4.	Uses and limitations of national income
5.	Theory of national income determination
6.	Theory of consumption
7.	Savings and investment analysis
8.	Economic fluctuations
9.	Theories of the business cycle
10.	Inflation
11.	Unemployment
12.	Economic stabilisation
13.	Fiscal policy
14.	Monetary policy
15.	Alternative economic systems
16.	Public finance
17.	Balance of payments
18.	Exchange rates
19.	International trade and protectionism
20.	Economic growth and development
21.	Money and the macroeconomic environment
22.	Monetary institutions and markets
23.	Demand and supply of money in an economy

These units should be treated sequentially because preceding units act as a base for subsequent units. A maximum period of one week is required for every unit. You are expected to finish the unit and its assignments within the one week.

Reference materials and other resources

As was earlier mentioned, materials relevant to the course include not only those below, but also others that you can lay your hands on. But for now, the following reference books are recommended:

1. Lipsey, R.G. and K.A.Crystal (1997): An Introduction to Positive Economics, Oxford: Oxford Press.
2. Lipsey, R.G. et al (1987) Economics, London: Harper and Row Publishers.
3. Dwivedi, D.N. (1987): Managerial Economics, New Delhi: Vikas Publishing House Pvt Ltd.

Presentation schedule

Specific dates for particular activities, such as submission of assignments, tutorial schedules and examination dates, shall follow the school calendar, which shall be made available to you. This will enable you to plan your activities in the same line. You are therefore called upon to work hard in order not to fall behind schedule. The method of submitting your assignment and receiving other course materials shall also be agreed upon on a later date. You should endeavour to keep to it whenever it is given.

Conclusion

By the time you complete this course, you will find it useful not only in solving business problems, but also your day-to-day problems. It would be possible for you to analyse the entire environment in which business operates and be able to appreciate the way things work.

Unit 1 **MACROECONOMICS: AN OVERVIEW**

CONTENTS

1.0 Introduction

Business firms operate on their own and have their own specific objectives.

The decisions of one firm may not be of any significance to the decisions of the others: This depends most specifically on the type of market in which the firms operate. It is common knowledge that in a perfectly competitive system individual firms have no significant effect, while in an imperfect market setting like in a monopoly, oligopoly and duopoly, the decisions of individual firms do affect other firms, especially those within the same industry. A complete economy comprises individual firms, households and government. Together, their individual decisions determine the economy's total spending, its total income and its total level of production of goods and services. As a corollary, therefore, the aggregation of firms, households and government departments determines the performance of individual firms.

The performance of individual households, firms and government departments makes up what is called macroeconomics. Macroeconomics, therefore, is the study of how the entire economy behaves. In a broad sense, without dwelling much on its interesting but sometimes confusing details, macroeconomics is largely concerned with the behaviour of economic aggregates. What constitutes the macroeconomic aggregate includes items such as total national product, total investment and exports for the entire economy. It is thus concerned with totals rather than individual items as against microeconomics. In this respect, attention is on the broad range of opportunities and difficulties facing the economy as a whole. This differs from microeconomics, which is concerned with the behaviour of individual markets and individual decision makers.

The student may ask what constitutes the behaviour of individual markets and individual decision makers. Individual market behaviour entails the nature and degree of competition existing in the market, while 'individual decision makers' entails the way in which individuals in an economy allocate their scarce resources among competing wants. The need to study macroeconomics arises from the fact that there are forces that affect the economy as a whole, which cannot be fully or simply understood by analysing individual markets and individual decision-making processes. For instance, a problem that affects firms or many workers in different industries may need to be tackled in the whole economy. Certainly, if circumstances are common across many sectors of the economy, then an analysis at the level of the whole economy may help us to understand what is happening generally in the country.

In the analysis of macroeconomics, issues such as business cycles, inflation, unemployment, economic development and the balance of payments will be considered. These issues directly have an impact on business organisations; as such managers need to be aware of these. Detailed knowledge of macroeconomics will enable managers to appreciate the way in which the macroeconomic environment affects business organisations. It will thus enable them to decide in a more rational perspective. Macroeconomics and microeconomics are cosmetic divisions within economics, as the two are seriously interwoven. Looking at the Nigerian economy, for instance, which are those things we can say fall under microeconomics and those we can say fall under macroeconomics? We will answer this question after we have looked at the objectives of this unit of study.

2.0 Objectives of the unit

The objective of this unit is to enable the student to be able to understand the impact of the macroeconomic environment on business firms. As a result, the student who has or manages business firms should be:

1. Conversant with variables that constitute the macroeconomic environment.
2. Aware of how macroeconomic variables affect individual business firms.
3. Able to tailor business decisions in line with the macroeconomic objectives and still achieve the goals of the business.

3.1 Differences between macroeconomics and microeconomics

As we have already seen in the course, managerial economics, microeconomics is concerned with individuatunits of the society, such as individual demand, theory of demand, theory of supply, theory of the firm, consumption, price theory, theory of profit, etc.

On the other hand, macroeconomics does not concern itself with individual activities at all. It concentrates all its efforts on the aggregate of individual units for the entire economy. This suggests that instead of studying individual demand, supply and profit, as is the case with microeconomics, macroeconomics focuses on aggregate demand, aggregate supply, etc. Going by this, it is evident that macroeconomics is doncerned with aggregate environmental issues pertaining to the general survival of business in an economy. These environmental aspects cover the economic, social and political environment of the country.

Firstly, there are issues that are related to trends in macro variables, eg, the general trend in the economic activities of the country, investment climate, trends in output and employment, and price trends. These factors do not only determine the prospects of private business, but also greatly influence the functioning of individual firms. Therefore, a firm planning to set up a new unit or to expand its existing size would like to ask itself: What is the general trend in the economy? What would be the consumption pattern of the society? Will it be profitable to expand the business? Answers to questions such as these are sought through macroeconomic studies.

Also, an economy is affected by its trade relations with other countries, especially the sectors or firms dealing in exports and imports. Fluctuations in the international market, the exchange rate, and inflows and outflows of capital in an open economy have a serious bearing on the economic environment and, therefore, on the functioning of an economy's business undertakings. The managers of a firm would, therefore, be interested in knowing the trends in international trade, prices, exchange rates, and prospects in the international market. Answers to such problems are obtained through the study of international trade and the international monetary mechanism.

Furthermore, government policies designed to control and regulate the economic activities of the people affect the functioning of private business undertakings. Besides, firms' activities as producers and their attempt to maximise their private gains or profits lead to considerable social costs, in terms of environmental pollution, congestion in the cities, creation of slums, etc. Such social costs do not only bring firms' interest in conflict with that of the society, but also impose a social responsibility on the firms. Government policies and its various regulatory measures are designed, by and large, to minimise such conflicts. Managers should therefore be fully aware of the aspirations of the people and give such factors due consideration in their business decisions. Economic concepts and tools of analysis help in determining the costs and benefits of such decisions.

Economic theories, both on microeconomics and macroeconomics, have a wide application in business decision-making. Some of the major theories widely applied to business analysis have been mentioned above. But it should always be borne in mind that economic theories, models and tools of analysis do not offer ready- made answers to the practical problems of individual firms. They provide only logic and methods to find answers to such problems. It depends on the manager's own understanding, experience and intelligence and training as to how to use the tools of economic analysis to find correct answers to the practical problems of business.

3.2 Why we need to study macroeconomics

The need to introduce macroeconomics to students of business administration is occasioned by the far-reaching implications of aggregate variables on business firms. Macroeconomics gets its roots from microeconomics which is that aspect of economics that handles individuals'/firms' demand, etc. It is the aggregation of such units that gives rise to macroeconomics. In this work, attention shall be paid to aggregates such as exchange rates, inflation, unemployment, fiscal and monetary policies, just to mention a few.

4.0 Conclusion

We can at this juncture say that we have prepared the ground for the understanding of this course, by identifying the issues concerned and the expectations. There should therefore be no confusion between this course and microeconomics. Even though aspects of microeconomics shall be mentioned, they shall in this case constitute part of the aggregate, i.e. macroeconomics.

5.0 Summary

This unit has provided the basis for understanding what constitutes an area of study known as macroeconomics and what really differentiates it from microeconomics, two separate but highly related fields of economics study.

Macroeconomics is entirely another complete area in economics. It handles aggregates rather than individual units of the economy. These aggregate components are those forces that have a general effect on the entire economy, e.g. issues such as inflation, unemployment, and the national income. These aspects have a direct bearing on business organisations and other areas of human endeavour. Hence, knowledge of these aggregate variables as they affect the external environment of business firms is worth it. We have distinguished this course from microeconomics. We can now progress with other aspects of the course.

6.0 Tutor-marked assignment

Distinguish between microeconomics and macroeconomics.

7.0 References and other resources

1. Lipsey, R.G. and K.A.Crystal (1997) *An Introduction to Positive Economics,* Oxford: Oxford Press.
2. Lipsey, R.G. et at (1987) *Economics,* London: Harper and Row Publishers.
3. Dwivedi, D.N. (1987) *Managerial Economics,* New Delhi: Vikas Publishing House Pvt Limited.

Unit2 National income accounting

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1.0 Introduction

National income is a measure of the entire value of goods and services produced in an economy over a period of time (usually a year). National income is an issue that explains the performance of the economy. It demonstrates the extent to which the society is growing or otherwise, which in itself reflects the performance of the business sector of the economy, which constitutes the agents of producing goods and services.

In this unit, we shall examine the concept of national income, and some basic concepts of national income. Everyday, people are running around to accomplish their activities. These are mostly private activities, yet at the end of the fiscal year all these private and public activities are calculated and called national income. How? And where is the income?

2.0 Objectives of the unit

The objectives of this unit are as follows:

1. You should be able to explain the meaning of national income and those of related concepts.
2. You should also be able to explain the conceptual and practical problems of national income accounting.
3. You should also be able to capture and discuss the shortcomings of currently used national income concepts.

3.1 Definition of national income

National income refers to the market value of all goods and services produced in an economy during a particular period of time, usually a year. Alfred Marshall defined national income as the aggregate net product of and the sole sources of payment for all the agents of production. Sir John Hicks defined national income as being made up of a collection of goods and services produced to a common basis which is measured in terms of money.

Consequently, national income is the money value of the end result of all economic activities of a nation. Economic activities generate a large number of goods and services, and make a net addition to the national stock of capital. These together constitute the national income of a closed economy, i.e. an economy which has no economic transaction with the rest of the world. In an open economy, national income includes also the net results of a nation's transaction with the rest of the world (i.e. exports less imports). National income is alternatively called national product. Incomes are earned by producing goods and services. This value of products represents incomes to producers in the form of wages, salaries, rent, interest, or profits. Thus the total of a l incomes must be exactly identical with the value of a l goods and services produced in an economy within the particular year.

3.2 National income concepts

In treating national income accounting in economics, we frequently come across a number of concepts. These concepts are so interesting that, except one gets the meaning of each very clearly, they are bound to cause confusion. To avoid such confusion, we shall define the major national income concepts in the following order.

1. Gross national product **(GNP)**

The gross national product (GNP) is defined as the value of a l final goods and services produced during a specific period of time, usually one year, plus the difference between foreign receipts and payments. The GNP so defined is identical to the concept of gross national income (GNP). Thus, GNP = GNI. The difference between the two is only of a procedural nature. While the GNP is estimated on the basis of product flows, the GNI is estimated on the basis of money income flows (i.e. wages, profits, rent, interest, etc.) Thus GNP = M + X where M stands for imports and X for exports.

2. Gross domestic product (GDP)

This is the value of total output of goods actually produced in the whole economy over some period of time, usually a year. It is gross because allowance has not been made for the consumption of fixed capital used up in the production. When the value of the production is measured at the market price, we then have what is commonly referred to as gross domestic product at market price. When the value of the gross domestic product (GDP) is at factor cost, it is referred to as gross domestic product at factor cost. The difference between the two is that GDP at factor cost excludes the excess of indirect taxes over subsidies that may have been levied on the goods and services, while the other does not.

3. Net national product

This is what is often seen as national income proper. It is the sum of all incomes accruing to factors of production that are supplied by the residents of a given country over a period of time, usually a year, after deducting depreciation. You may likely ask, 'What constitutes depreciation?' Depreciation means the value of wear and tear of capital and machinery replacement after the year of use.

Therefore, GNP — Depreciation = NNP. Put differently,

NNP = GNP— Depreciation.

Depreciation is thus that part of total productive assets which are used to replace worn out capital in the process of creating the GNP. Briefly speaking, in the process of producing goods and services (including capital goods), a part of total stock of capital is used up. Depreciation is then the term used to denote the worn out or used up capital. An estimated value of depreciation is deducted from the GNP to arrive at the NNP.

The NNP, as defined above, gives the measure of net output available for consumption by the society. The NNP is the same as the national income at factor cost. It should be noted that the NNP is measured at market prices, including direct taxes and indirect taxes deducted. Thus, NNP — indirect taxes = national income.

4. Personal income

Personal income is given by the total national income of a particular country or total GNP less payment of indirect taxes, less undistributed profits, less profits of public parastatals plus transfer payments (i.e. by government and business organisations), such as social security allowance, unemployment benefits etc. Personal income implies the income accruing to individuals which can be used for paying taxes, consumption and savings. It refers to the rewards earned by individuals due to their contribution to the productive sector of the economy.

5. Disposable income

This is the income from all sources that accrues to households and private non-profit institutions after deducting direct taxes and other transfers from them. Thus, disposable income is income minus direct taxes and other transfers. Disposable income constitutes that amount which an individual can use for the purchase of goods and services and also for savings. It is presented in a frugal economy as Y= C+S.

National income: Some accounting relationships

1. *Relations at market price*

   GNP = GNI (gross national income)

   GDP = GNP less net income from abroad

   NNP = GNP less depreciation

   NDP (Net Domestic Product) = NNP less net income from abroad

2. *Relations at factor cost*

   GNP at factor cost = GNP at market price less net indirect taxes NNP at factor cost = NNP at market price less net indirect taxes NDP at factor cost = NNP at market price less net indirect taxes NDP at factor cost = GDP at market price less depreciation

The need for national income analysis in business organisations

National income and its related conceptual framework as seen in the presentation above is directly related to business organisations as it reflects the extent to which goods and services are valued in monetary terms.

National income measures the entire value of goods and services produced in an economy over a particular period of time (usually a year). This concept can be seen from either the GDP, GNP or NNP viewpoint, as highlighted above. Looking at these concepts from the business perspective one can rightly observe that national income explains the performance of business organisations which constitute the unit that produces goods and services. Considering national income from the GNP perspective enables the management of a business to appreciate the contribution of different sectors of the economy with a view to devising suggestions on the way forward through identifying their areas of weaknesses or the contributory forces to their poor performance.

Also, the GDP will explain the overall contribution of the various businesses and individuals (either the citizens or foreigners), and this will also show the extent to which foreigners' participation is relevant to the national economy.

A study of national income as a macroeconomic indicator of the collective sectoral performance will enable a business to adopt better resource allocation and adjustment procedures as it highlights the individual contributions of different sectors of the national economy. This, among many other reasons, makes it relevant for business managers to have knowledge of the ways, mechanics and strategies of national income accounting.

4.0 Conclusion

From the foregoing discussion, we now can appreciate what national income is all about and its related concepts. Hence, you should know that GNP, NNP, NPI, GDP, PI, etc. are all important concepts of national income.

5.0 Summary

The importance of the concept of national income to the business firm cannot be over-emphasised. Business managers are therefore called upon to understand this concept to enhance their decision making.

6.0 Tutor-marked assignment

1. What is national income?
2. Differentiate between GNP and GDR

7.0 References and other resources

1. Lipsey, R.G. and K.A. Crystal (1997) An Introduction to Positive Economics, Oxford: Oxford Press.
2. Lipsey, R.G. et al (1987) Economics, London: Harper and Row Publishers.
3. Dwivedi, D.N. (1987) Managerial Economics, New Delhi: Vikas Publishing House Pvt Limited.

Unit 3 Different approaches to the measurement of national income

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1.0 Introduction

From the preceding unit, we have understood what national income is. In this unit, we are going to see how national income is measured. This should be relevant to business managers who take into consideration the economic situation before embarking on their policies. Managers are supposed to be exposed so as to have knowledge of the ways in which the national income is measured so as to assist them to understand how and why government and its agencies seek information from them at particular intervals. The knowledge of why and how this information is being used will enable easier collection and provision of national income data on the side of the manager. All our economic activities are not exposed. The government knows this, yet it goes ahead in calculating our activities in terms of money. How realistic is this?

2.0 Objectives of the unit

The objective of this unit is to expose students to methods used in measuring national income. At the end of the unit, it is expected that the student should know:

1. The three approaches used in measuring national income.
2. The limitations of the approaches.
3. How to measure the national income of a country.

3.1 Approaches used in measuring national income

The following are the conventional methods used in measuring national income:

3.1.1 Income approach

National income can be measured through the income approach by adding up all the incomes earned by the factors of production during the course of a year. In other words, it is the sum of all incomes received by households for their services to production. These include all wages and salaries, incomes earned by professionals, farmers, and armed forces personnel, as well as undistributed business profits and incomes earned by the citizens from abroad. From this total we deduct incomes paid to expatriates from the economy, as well as all transfer payments like interest paid on the national debt or to persons. National income can then be seen also as the summation of the reward accrued to the factors of production (land, labour, capital, and the entrepreneur) as a result of their contribution to production.

Problems of this approach

To measure the national income of an economy through the income approach, requires a lot of consideration relating to which factors to be taken into consideration and which not to.

The problems of the income approach in estimating the national income include the following:

1. Not all income earned by the firm is distributed as dividends; very often, a substantial portion is retained and ploughed back. This means that in some businesses the owners tend to plough back their profits, i.e. to reinvest what they have realised instead of sharing it as a profit. For this reason, to measure the national income through this approach may be misleading as a lot or major part of the profit cannot be calculated. Hence it represents a shortfall in the level of net national income.
2. A house occupied by its owner attracts no rent. This leads to underestimation. Another source of underestimation of the national income is through disregarding the importance of some activities that should command value economically. This can be seen from observing the fact that there are some goods and services that are produced and consumed by a person himself, e.g. occupation of a house by the owner himself, in which its opportunity cost may be the rent accrued to the person (owner) if he rented it out to another person.
3. Individuals who are self-employed do not claim any definite wages or salaries.

Self-employed persons comprise people who are not under the control of any other person, or who are not employed by another individual on a wage/ salary basis. These types of people do earn incomes which cannot be classified as either a profit (reward to the entrepreneur) or a wage (reward to labour), hence complicating the procedure and leading to underestimation.

3.1.2 Output approach

The output approach of the measurement of the national income involves estimating the national income as the sum of the market values of all goods and services produced in the economy. To avoid double counting, only the value of the final goods is used. To this we add subsidies, and subtract the value of indirect taxes.

Problems associated with output approach

To calculate the national income, using the output approach, a numberof problems are encountered. Salient among them are:

1. *Risk of double counting.* This problem arises due to the interrelationships between and among commodities whereby some firms, outputs are the inputs of other firms. In this situation, there is always a tendency for counting the value of some commodity in excess, i.e. more than one time. This is why we call this the problem of double counting.
2. *Omission of unpaid services.* Some activities, especially services whose value is supposed to be incorporated, are mostly neglected, e.g. the value of the services of a housewife which should be taken into consideration by the national income analyst, but is always neglected. However, this sort of service commands a value and deserves to be considered.
3. *Self-service activities.* The identification of some self-service activities is too difficult to be realised. Hence, to try and determine the extent and their level and consequently to value them in monetary terms will not be an easy task. Hence the income approach always leads to underestimation of the actual figure.

3.1.3 Expenditure approach

The expenditure method, also known as the final method, measures national income at the final expenditure stages. In estimating the total national expenditure, any of the following two methods are followed: **Firstly,** all the money expenditure at market price are computed and added up together; and secondly, the value of all the products finally disposed of are computed and added up, to arrive at the total national expenditure. The items of expenditure which are taken into account under the first method are: (a) private consumption expenditure; (b) direct tax payments; (c) payment to non-profit making institutions and charitable organisations like schools, hospitals, orphanages, etc; and (d) private savings. Under the second method, the following items are considered: (a) consumer goods and services; (b) private investment goods; (c) public goods /services; and (d) investments abroad. The second method is more extensively used because the requisite data required by this method can be collected with greater ease and accuracy. This approach involves estimating the sum of all consumption expenditure, investment expenditure, government expenditure and export expenditure.

Problems associated with the expenditure approach

1. It is technically difficult to isolate intermediate products from final products.
2. To obtain actual factor price is an impossible task, particularly in less developed countries.

The identity of output, income and expenditure

In all national income accounting, the basic overall aggregate being measured is the total value'of output at factor cost (either in constant or at current market prices). This can be looked at directly in terms of the output itself, 0, or the income it generates, Y, or the expenditure required to purchase it, E. Although the details of each calculation give us independent information, the totals do not, since the three are defined so that they are identical: Y = 0 = E.

4.0 Conclusion

It can be stated that there are three approaches that could be used in measuring national income. Each of these approaches has limitations. The choice of approach depends upon the data available, and the ability of the manager to handle specific problems. Hence, managers are expected to understand these methods of measuring national income.

5.0 Summary

The unit has shown that national income could be measured using three approaches, i.e. the income, output and expenditure approaches. The income approach is the summation of the entire income accrued to the factors of production due to their contribution to the economy, i.e. the summation of wages, interest, profit and rent.

The output approach is concerned with the measurement of the national income through the summing up of the market value of the final goods and services produced in an economy over a year. The expenditure approach entails the measurement of the entire spending of households, firms and government on goods and services. The limitations of each approach have been highlighted. We have also seen that managers could use knowledge about the national income for the benefit of their firms' decision-making processes. The knowledge will also help them to understand why the government requires them to supply some information for the purpose.

6.0 Tutor-marked assignment

Explain vividly the three approaches used in measuring national income.

7.0 References and other resources

1. Lipsey, R.G. and K.A. Crystal (1997) An *Introduction to Positive Economics,* Oxford: Oxford Press.
2. Lipsey, R.G. et at (1987) *Economics,* London: Harper and Row Publishers.
3. Dwivedi, D.N. (1987) *Managerial Economics,* New Delhi: Vikas Publishing House Pvt Limited.

Unit 4 Uses and limitations of national income

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1.0 Introduction

National income, as observed in the previous units, entails the total monetary value of all the goods and services produced in an economy in a given period. National income accounting gives the record and details of the performance of the national economy, and this is shown by the aggregate contributions of individuals, firms and the government itself. The information it provides is vital to planning.

In this unit, the importance and limitations of national income statistics will be considered. This should serve as a lesson to business managers, in the sense that they will be exposed to the understanding of the importance and significance of the measure, i.e. national income. Suppose your brother had been listening to the radio in your absence, and heard about national income during the president's budgetary speech. When you came back he decided to find out from you the relevance of this concept. What would you tell him?

2.0 Objectives of the unit

At the end of this unit, it is expected that you should know the significance of national income statistics as well as the problems militating against it and the solutions that can be offered.

3.1 Uses and limitations of national income statistics

The general problems of measuring the national income irrespective of the approach used can be explained under the following points:

The danger of double counting, i.e. via including transfer payments, prices of intermediate goods, etc. You may want to ask what constitutes transfer payments and prices of intermediate goods.

By transfer payments, we mean the payment on income received by an individual which is not a reward for his own labour, e.g. bonuses, and charity. All these should be excluded from the overall national income estimate.

Equally, the prices of intermediate goods, which are semi-finished goods, should be excluded. They are regarded as intermediate or semi-finished because they may likely be used to produce other products (final goods), which when considered will represent double counting of the same commodity (as input and as output).

2. Treatment of depreciation. Depreciation, as seen in the previous unit, refers to wear and tear valuation. It remains a problem especially with respect to the expenditure approach, as its inclusion may amount to over/undervaluation of the real national income figure itself.
3. Treatment of illegal activities like prostitution and gambling which are not included in the national income, whereas they are services and generate income. Since they generate income, such activities ideally are supposed to form part of the national income as they represent earnings. But because they are considered in society as a taboo/ill, they are not included. This negligence of these activities may tremendously render national income estimation insufficient.
4. The problem of what to include and what to exclude, for instance the services of the housewife, which are economically valuable. Since all economic activities are supposed to assume value, the negligence of services such as those of the housewife represents a serious underestimation of the real value of the national income.

3.2 Uses of national income estimates

The estimate of the national income is used in the following ways

1. The gross national product indicates the overall economic performance of a country. It tells whether the national out put is growing or declining. This is because an increase in the national income represents increased national ouptput. Since the national income is a measure of the value of total national output, an increase represents growth in the national product.
2. National income estimates help us to know the contribution made by each sector

of the economy to national output. Since the national income is a representation of sectoral contributions, an analysis of the various contributions of different sectors of the economy is presented. This provides a basis for understanding the different sectoral contributions, and helps determine the rate at which each sector is growing or declining.

3. National income figures indicate the standard of living through showing the per capita income (PCI) where PCI = GNP ÷ population. This measure, i.e. the per capita income explains the income per person, and the income per person indicates the standard of living of the people in a country. The higher the per capita income, the higher the standard of living and vice versa. If the national income of a country seen through the GNP increases, then with a constant population size, the standard of living of the country is expected to rise and vice versa.

4. It is used to compare the standard of living in different countries through the use of per capita income. The standard of living of different countrieswill enable a country to assess its performance in relation to other countries of the world. With the determination of its position in relation to other countries of the world, a particular country could determine the steps it could take to raise the standard of living of her citizens to match that of other nations' citizens.

5. National income statistics are used in determining how much a country should contribute to international organisations, e.g. the United Nations, I.M.F., World Bank, African Union (AU), etc. You may ask, how and why? These agencies are specialised international bodies that perform different tasks and activities which are of global benefit and, naturally, being organisations charged with particular responsibilities, they need to be sponsored through different ways. The extent to which a particular country can contribute often depends on the level of her resources.

3.3 Limitations of national income estimates

Despite all its usefulness as just outlined above, the estimate of the national income has the following limitations, which are both conceptual and practical in nature. These problems make its usefulness questionable and even, sometimes, inadequate particularly when it is used as a measure of the standard of living.

Conceptual problems

The conceptual problems are those that arise as a result of trying to answer the question of what to include as part of the national income. These problems include the following:

1. The per capita income, which is calculated from the national income estimate, is only an average. Although it gives the flow of goods and services per person, it does not tell us how the goods and services are distributed among the various components of the economy.
2. National income estimates fail to tell us the kinds of goods and services produced. They only tell us the sectoral contribution in monetary terms.
3. The national income neglects some important factors which influence the standard of living. For instance, it does not consider life expectancy and working conditions. It only measures the volume of income irrespective of how it is generated.

Practical problems

The practical problems of measuring the national income estimate have to do with the hurdles encountered when gathering the information for the measurement of incomes. They are termed 'practical' due to the fact that they arise as a result of actual attempts to derive the national income from individuals and organisations. Such problems include the following:

1. Many people tend to give false information, thereby making the data available for national income computation misleading. For instance, businessmen often refuse to give the real picture of their business for fear of taxation.
2. The exchange of service for service is a practical problem facing national income data collection. For instance, in the rural areas of Africa communal activities are very common. This is a situation in which people organise themselves to work as a team for one another in turns.
3. The necessary tools to use, e.g. computers, telephones plus other administrative facilities are often unavailable or grossly inadequate, thereby impeding the efficiency of the people that gather information about the goods and services produced in the economy.
4. Some exchanges of goods, particularly in less developed economies, take place without money. So computation in monetary terms is not possible. This has to do with those modes of exchange through trade by barter, whereby people exchange goods for goods.
5. Technical expertise for collecting national income data is sometimes lacking, especially in the less developed economies. This problem makes such countries

Unit 5 Theory of national income determination

Table of contents

1.0 Introduction

Having discussed in the preceding unit, some basic concepts of national income and methods of estimating it, we shall in this unit discuss a more profound problem of national income determination. The theory of income determination is that branch of economic science in which we seek to explain the factors that determine the level of the national income at a particular point in time. The theory also deals with the factors that are responsible for the changes that take place at the level of the national income over time. The theory was first developed by John Maynard Keynes, a British economist, in his book published in 1936 under the title, *General Theoty of Employment, Interest and Money.*

In this unit we shall deal with the various aspects of the theory of income determination, including the circular flow of income, concepts on income determination, equilibrium level of national income, and the theory of the multiplier. People say national income is the income of the entire nation. How does this apply to everybody?

2.0 Objectives of the unit

The objectives of this unit are that students should be able to:

1. Identify sectors in the national economy and explain the flow of inputs and outputs and income among the sectors.

7.0 References

1. Lipsey, R.G. and K.A. Crystal (1997) An Introduction to Positive Economics, Oxford: Oxford Press.
2. Lipsey, R.G. et al (1987) Economics, London: Harper and Row Publishers.
3. Dwivedi, D.N. (1987) Managerial Economics, New Delhi: Vikas Publishing House Pvt Limited.

2. Draw simple diagrams illustrating the circular flow of income.
3. Explain the concepts of savings, investment and consumption and relationships among the concepts.
4. Explain simple concepts like the marginal propensity to consume and the marginal propensity to save and their relevance to the growth of national income.
5. Explain and illustrate the determination of equilibrium level of income.

3.1 Circular flow of income

Before proceeding to describe the theory of income determination, let us look into the workings of the economic system and the process of income generation, i.e. circular flow of income. In Keynes's analytical framework, the entire economy is divided into four sectors:

1. Household sector
2. Firms or the business sector
3. Government sector
4. Foreign sector

We shall, however, limit our discussion of the circular flow of income to the two- sector model, involving only the household and firm sectors. This is because a good knowledge of the flow of income between the two sectors will help to equip you to take good business decisions.

3.2 Two-sector model

In this two-sector model, the economy is closed with no government and foreign sectors. The model assumes:

1. There are only two sectors — households and firms.
2. Households are the owners, and firms are the users of those factors of production.
3. Household incomes comprise factors' payments — wages, interest, rent and profits. Households spend their total income on consumer and capital goods.
4. The economy is spendthrift, with no element of savings.
5. There is no foreign trade and no government expenditure.

The circular flow of income which shows how income flows from firms to households and how expenditure flows from households to firms is, indeed, a very simple illustration of how the economy works. The circular flow of income is very useful in the theory of income determination, for it shows that, if withdrawals from the flow are equal to 'injections' into the flow, then national income will remain at the same level. Withdrawals are as a result of savings, taxation and expenditure and imported goods. Injections are due to investment and government expenditures and income from exports.

Diagrammatically, the circular flow of income may be shown as in figure 5.1.

Payments for factors of production

Factors of production

Households

Firms

Goods and services

Payments for goods and services

Fig. 5.1 Circular flow of income

The figure is divided into two parts. The upper half represents the factor market in which households sell and firms buy the services or factors of production. In the process, income factors, i.e. wages, interest, rent and profit move from the firm and flow to the household.

The lower part of the figure represents the product or commodity market where firms sell and households buy the commodities. In this process, household incomes flow to the firms and commodities flow to the households. From the diagram, therefore, payments flow from firms to households in the form of payments for the factors of production; and from households back again to firms in the form of expenditure on goods and services within the economy.

3.3 Concepts in national income determination

The following concepts are encountered in the theory of income determination:

1. Withdrawals
2. Injections
3. Consumption
4. Saving
5. Investment

Withdrawals

Withdrawals are incomes received in the course of the circular flow but which are not passed on in the flow. It is called withdrawals ber.ause it is the payment received from the flow but kept out of it. Examples are savings and undistributed profits of firms. Withdrawals have a contractionary effect on the national income.

Injections

An injection is income passed into the circular flow of income from outside the system. A good example is investments by firms. Injections have an expansionary effect on the national income.

Consumption

Consumption is that part of income which is spent on goods and services that are used up within a specified time, usually a short period.

Saving

Saving is that part of income which is neither spent on goods and services for current consumption, nor invested.

Investment

An investment is that part of income which is spent on real capital goods. That is, it is payment on physical productive assets, i.e. goods which are not meant for immediate consumption, e.g. factory buildings and road construction machinery.

3.4 Equilibrium level of national income

It is that level of national income at which there is no tendency for it to either increase or decrease. The national income achieved at that point is called the equilibrium national income.

4.0 Conclusion

The two-sector model which we have considered above clearly informs us as to how a simple economy works. Once you have grasped this, the other sectors will be easy for you to understand.

5.0 Summary

From the discussion above, the two-sector economy has been x-rayed. **In** the course of doing this, we have examined various concepts related to it such as consumption, saving, investment, etc. It is my hope that you will use the knowledge gained here to apply to other subsequent parts where it will be needed.

6.0 Tutor-marked assignment

Describe the flow of income in a two-sector economy.

7.0 References and other resources

1. Lipsey, R.G. and K.A. Crystal (1997) An Introduction to Positive Economics, Oxford: Oxford Press.
2. Lipsey, R.G. et al (1987) Economics, London: Harper and Row Publishers.
3. Dwivedi, D.N. (1987) Managerial Economics, New Delhi: Vikas Publishing House Pvt Limited.

Unit 6 Theory of consumption

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1.0 *Introduction

In this unit, an attempt is made to provide a clear explanation on the theory of consumption and how it relates to business management. Consumption is quite relevant and worth studying as it is of paramount importance to any rational business decision.

Consumption is the largest component of aggregate expenditure of most countries. Its effect on a nation's income is very great. Various theories of consumption are considered. Suppose you and your four friends are engaged in a debate over consumption. The first one says children consume very little because they do not have the income to consume much. Another says no, children consume little because their stomachs are small. Another one says children consume little because they see their mates consuming little. Yet the last one says it is because they live on gifts. Suppose, as an arbitrator, they ask you to look at the Nigerian situation and give your opinion. Which view will you support? In this unit you will be exposed to these.

2.0 Objectives of the unit

At the end of this unit, it is expected that the student should be able to:

1. Define consumption, consumption expenditure and consumptionfunction.
2. Explain the types and determinants of consumption.

3. Discuss the theories of consumption.
4. Explain the relevance of consumption to business decisions.

3.1 Consumption

As has been discussed in the earlier units, consumption is one of the components of the national income. It is by far the largest component of aggregate expenditure of most countries. Therefore, if we are to predict the effects of shifts in autonomous expenditure on equilibrium national income, we need to know the relationship between consumption and national income. And also, in the simple two-sector model, consumption is the only expenditure flow that is induced (i.e. endogenous). It is based on the above reasons that we shall concentrate on the determinants of consumption. By consumption, we mean the act of using goods and services to satisfy wants. And consumption expenditure, which is our concern, is that part of national income that is spent on purchasing goods and services for consumption.

The 'consumer is the king' notion is a popular statement. With every man as a king, each is a voter who uses his money to vote for the things he wants. These votes must compete with other men's votes. Therefore, the concept of consumption is very relevant to any rational business decision.

3.2 Consumption function

Many other variables exert a strong influence on consumption. These include:

1. *Change in income distribution.* If the income is skewed towards the rich, there will be more consumption of luxury goods such as cars, jets, etc. while if the distribution of income is skewed towards the poor, then there will be more consumption of necessity goods such as food and clothes.
2. *Changes in terms of credit*, i.e. anything that changes the cost and availability of credit temporarily, shift the consumption function and thus affect aggregate demand.
3. *Changes in existing stock of durable goods* are more volatile and can cause a sharp shift in the consumption function.
4. *Changes in wealth.* If wealth comes unexpectedly, households will increase their savings and vice versa.
5. *Changes in price levet.* As prices of commodities increase (as commodities are more expensive), consumption reduces and vice versa.

The central proposition· of this simple version of national income analysis is that aggregate real consumption expenditure in the economy is determined by the level of disposable (after tax) income. Disposable income was first emphasised by John Maynard Keynes in his path-breaking book, *The General Theory of Employment, Interest and Money* as the 'propensity to consume', although nowadays it goes by the less elegant term 'consumption function'.

The consumption function for a hypothetical economy is shown in figure 6.1. Real disposable income is measured on the horizontal axis. The 45-degree line is a guideline, which denotes that any point on the line is equidistant from the two axes. The level of disposable income can therefore be measured vertically to the 45-degree line along the horizontal axis. The consumption function is drawn as a straight line with a slope of less than one.The slope of the consumption function, or the 'marginal propensity to consume', measures that fraction of each additional disposable income that will be consumed. Both theory and evidence suggest that the marginal propensity to consume (MPC) is less than unity. Consequently, at each additional disposable income, the community will increase its consumption by a fraction and will save the remainder.

Using this simple case in which a constant proportion of income is spent on consumption, expenditure will be 80 per cent of total income, and 80 dollars/naira will be spent on consumption of each 100 dollar/naira income.

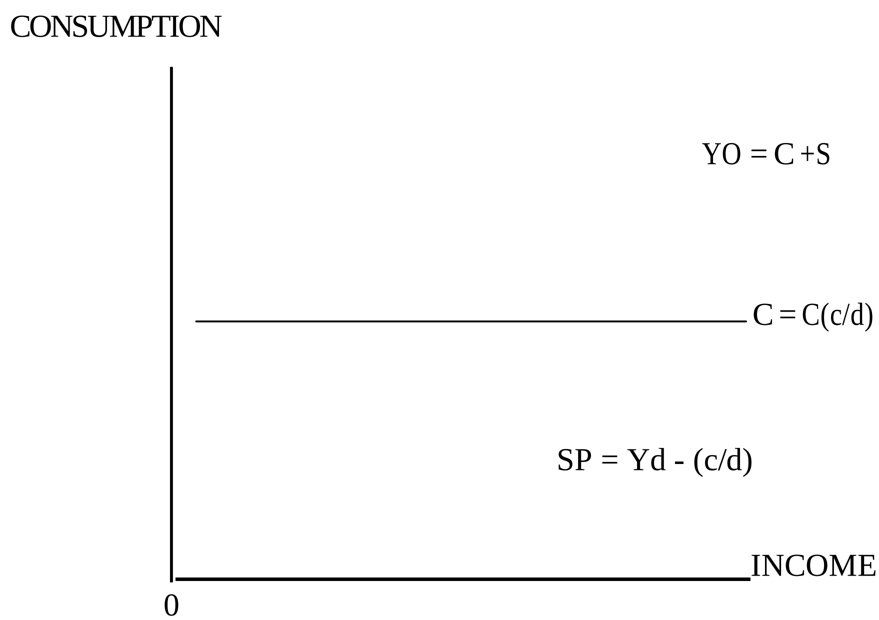

Fig. 6.1

When the consumption function is a straight line through the origin, the APC and MPC are equal.

3.3 Consumption function with a constant

Measured consumption functions are based on annual data. Aggregate consumption and aggregate household income tend to fit the data better if they contain a constant: $C = a + cy$. An example is shown in figure 6.2.

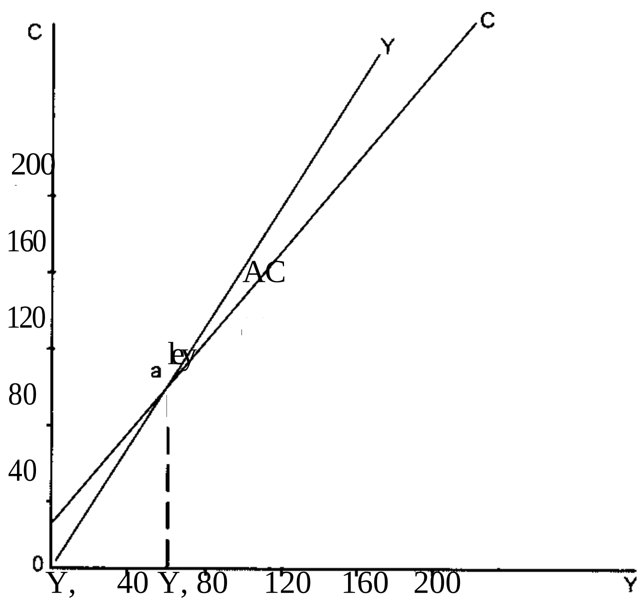

Fig. 6.2

Figure 6.2 shows a consumption function with an intercept of a and slope of C. When income goes from Yo to Yi, the MPC is I^t&

That is, mathematically, C is the slope of the line, and economically, it refers to the extent of the change in consumption with respect to a change in income. Keynes called it the marginal propensity to consume (MPC). It shows what proportion of a change in income will be consumed. Thus A + {t^d k=yMPC

Keynes believed the MPC to be positive, but less than 1, which means that some portion of additional income will be spent, not all of it, and it follows that consumption cannot be unaffected by a change in income.

Since we have assumed a linear relationship, that MPC is constant (the slope of the straight line is always a constant), and thus assumed that whatever the level of income of a community, any change from the level will be divided up into consumption and saving in the same fixed proportions.

Besides, the marginal propensity to consume (MPC) relates to changes in consumption brought about (induced) by changes in income. If the aim is to discover what proportion of a given level of income is devoted to consumption, another concept called the average propensity to consume (APC) is needed. The average propensity to consume can be written as C/Y and derived by dividing both sides of the equation

$$\frac{C}{y} = \frac{C_a}{y} + C$$

3.4 Other determinants of consumption

Many other variables exert a strong influence on consumption. These include:

1. Changes in income distribution.
2. Changes in terms of credit; i.e. anything that changes the cost and availability of credit will temporarily shift the consumption function and thus affect aggregate demand.
3. Changes in existing stock of durable goods; i.e. while expenditure on non- durable goods tends to be relatively steady, purchases of durable goods are more volatile and can cause a sharp shift in the consumption function.
4. Change in wealth. If wealth comes unexpectedly, households will increase their savings and vice versa.

3.5 'Theories of consumption

There are four different theories that have attempted to understand consumption behaviour in the long and in the short run. These are:

1. Absolute income hypothesis
2. Relative income hypothesis
3. Permanent income hypothesis
4. Life cycle hypothesis

The common feature of all these theories is that they seek to explain what determines consumption in both the long and short runs. And they try to also explain what happens to the consumer if his income changes. But this latter is common just to the first two theories.

3.5.1 Absolute income hypothesis

Aggregate consumption is determined by the aggregate absolute income. There is a positive correlation between income and consumption, i.e. the higher the income, the higher the consumption, and the lower the income, the lower will be consumption.

It implies that total real income is relative to people and time.

What happens when income changes? There will be a positive movement of consumption as income increases/changes. The average propensity to consume

(APC) is always positive. In most cases it is near one, e.g. 0.7 or 0.8 but in some cases it is one where money is not hoarded.

Marginal propensity to consume (MPC) is the ratio of change in consumption.
MPC decreases when income increases while marginal propensity to save (MPS) increases. In other words, MPC and MPS are the fraction of income that goes to consumption and saving respectively. If APC is 1, MPC may depend on the size of the income.

The fundamental psychological law is that men are disposed, as a rule and on the average, to increase their consumption as their income increases, but not by as much as the increase in their income.

3.5.2 Relative income hypothesis

The earlier consumption theory was criticised on the ground that consumption does not depend absolutely on income; other factors can have an influence on it.

The first attempt to develop a consumption theory to counteract the Keynesian absolute income hypothesis is the relative income hypothesis formulated by James Dussenberry.

Dussenberry observed that differences in consumption behaviour as explained by Keynes on the basis of absolute income are not an exhaustive analysis. This is because such could be explained by differences in the level of relative income, i.e. income is related to what one is accustomed to. For instance, individuals always need to keep up with others. When their income reduces or increases, they still maintain their consumption, even if it would amount to consuming past saving or de- saving.

3.5.3 Permanent income hypothesis

The permanent income hypothesis was developed by the father of monetary economics, Milton Freidman. He considers income and consumption in two components, viz.

1. Permanent income and permanent consumption
2. Temporary/Transitory income and temporary consumption

Permanent income is the income that the consumer is certain of getting. It is that income that depends on a particular period, e.g. weekly or yearly. Permanent consumption is that consumption that depends on permanent income.

While temporary income is what comes in the form of income apart from permanent income, i.e. unexpected income, transitory consumption is that consumption that depends on temporary income. According to Freidman, permanent income determines permanent consumption and temporary income determines transitory consumption.

3.5.4 Life cycle hypothesis

The theory was propounded by Ando and Modigliani. The theory explains changes in consumption in terms of age. At the age of 0-16, consumption is autonomous. At the age of 16-63, consumption increases due to biological factors and the fact that one is employed, i.e. one earns an income. Beyond the age of 63 consumption declines because people are out of job and biologically forced to consume less.

This can further be explained with the aid of the diagram at figure 6.3.

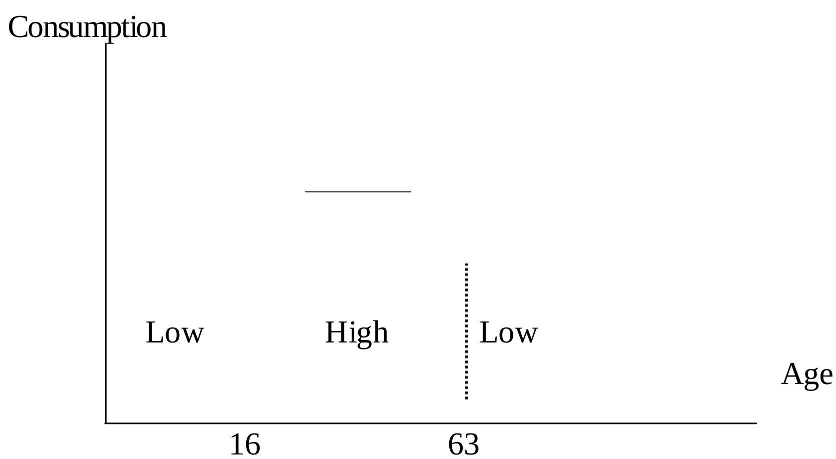

Fig. 6.31

From figure 6.3, we can see that at the age of 16, consumption is low and income is below it. At the age of 16 to 63, income exceeds consumption. At the age of 63 and above, income falls. Consumers below 16 and above 63 are generally depuidants.

The life cycle hypothesis views consumers as attempting to stabilise consumption over their entire lifetime. Families who tend to have low incomes will save little or dis-save. As they grow older and their income rises, their saving also rises to pay off past debts and to accumulate assets for retirement. Finally, retirement arrives and brings with it a reduction in income and also a tendency for saving to become negative again.

4.1 Relevance of the study of consumption to business decisions

The following may be regarded as some of the relevance of the study of consumption to the taking of business decisions:

1. Profit determination. Producers can use their knowledge of consumption to predict the general level of consumption of society and, hence, of their product; thereby predicting their level of profit indirectly.
2. Determination of level of output. The higher the consumption of a society, the higher the need for output for the society. Therefore the knowledge of consumption will help business decision makers to determine their level of output.
3. Determination of investment. If the aggregate consumption of a country is high, there is a need for higher investment in the country and vice versa.

4.2 Conclusion

In the foregoing discussion, we have examined concepts related to consumption. In doing this, we have concentrated on the determinants of consumption and the various theories developed to explain the concept.

5.0 Summary

Consumption simply means the act of using goods and services to satisfy wants. Aggregate consumption is that part of national income that is spent on the purchase of goods and services. Consumption is the largest component of expenditure, hence it largely affects the level of national income. Lastly, the theories of consumption were also discussed.

6.0 Tutor-marked assignment

Which of the theories of consumption do you think is applicable to Nigeria?

7.0 References and other resources

1. Samuelson, P.A. (1976) Economics, McGraw—Hill Inc.
2. Baumol, W.J. (1962) Business Behaviour, Value and Growth, Harcourt and Brace.
3. Lipsey, R.G. and K.A. Crystal (1997) An Introduction to Positive Economics, Oxford: Oxford Press. •
4. Lipsey, R.G. et al (1987) Economics, London Harper and Row Publishers.
5. Dwivedi, D.N. (1987)4Managerial Economics, New Delhi: Vikas Publishing House Pvt Limited.

Unit7 Savings and investment analysis

Table of contents

1.0 Introduction

'Savings' is defined as all disposable income that is not consumed. Investment on the other hand refers to expenses made on the production of goods for future consumption. In this unit, an attempt will be made to examine what determines the amount that households decide to save and what determines investment.

Some theories of savings and investment shall be explained in this unit. Also, we will discuss the relevance of saving and investment to business firms in this unit. Suppose your friend from the village visited you in town and saw a handful of businesses. Suppose you now went to the village on holiday and your friend came to you and asked, 'Why is it that we in the village cannot carry out any meaningful investment, whereas we have more food to eat and more wine to drink than those in the city?' What would be your response?

2.0 Objectives of the unit

At the end of the day, you should be able to:

1. Define both saving and investment.
2. Explain the determinants of savings and investment.
3. Discuss the propensities to save with the help of diagrams.

4. Explain the theories of investment.
5. Explain the importance of savings and investment to business firms.

3.1 Investment

This is the act of producing goods that are not for immediate consumption, i.e. capital goods, inventory and residential housing. Investment expenditure therefore means expenditure on capital goods.

Investment expenditure is also a component of the national income, which has to be considered when determining the equilibrium national income. It has a short-run and long-run effect on the national income. In the short run, the important effect of investment is on aggregate expenditure, hence on the degree to which existing resources are employed. Through that, it has an influence on national income. In the long run, the decisive effect of investment on national income is through its effects on the capital stock, and hence on the size of potential national income.

3.2 Determinants of investment

There are a number of factors that determine investment. The most important among them are:

1. The price and productivity of capital goods. Cheap capital goods with high productivity will result in a high rate of investment and vice versa.
2. Business expectations. These are the attitudes, beliefs or states of mind of people about the nature of economic events, Expectations are often crucial in determining economic behaviour. A firm or an investor may select a price level of output or investment alternative based on what the future of economic events is anticipated to be.
3. The development of new techniques of production and of new products. The higher and the more sophisticated the techniques of production are the more the level of investment and vice versa.
4. The availability of profits earned by firms for re-investment When the net profit is high, there is the possibility of re-investment by investors; but when the net profit is low, the level of re-investment by investors may be low.
5. Government policy Government policy, both fiscal and monetary, affects the level of investment to a great extent. Fiscal policies such as taxation, ranging from personal income tax and profit tax, to tariffs, shape the direction of investment. So also does the monetary policy such as preferential credit scheme, liquidity ratio, etc.

6. *The level of national income.* It is expected that the higher the level of national income, the higher will be the level of investment in the economy.
7. *The rate of interest.* The lower the rate of interest, the greater the number of investment opportunities that would be profitable and, therefore, the greater the investment expenditure firms would wish to make, and vice versa. Let us dwell for a moment on investment by firms, which constitutes the largest

single source of investment expenditure.

Profits provide the basic motive determining the investment decisions of private sector firms. Firms spend money on new investment where they expect the investment to yield a profit over all of their costs. The forces that affect these expectations determine the amount of desired investment expenditure in the economy as a whole. These factorsinclude the following:

1. The price and productivity of capital goods.
2. Expectations about the future demand for the output of capital goods and about the cost of producing those goods.
3. The development of new techniques of production and of new products.
4. Profits earned by firms and which are available for re-investment.
5. The rate of interest; i.e. the lower the rate of interest, the greater the number of investment opportunities that would be profitable and, therefore, the greater the investment expenditure firms would wish to make.

3.3 Marginal efficiency of investment (MEI)

Let us assume that we are dealing with a businessman who is considering investing in a new machine, and that he is a profit maximiser. He knows the cost of the machine, but in order to estimate the profitability of the venture he must have some idea of the net returns to be generated by the machine during its useful economic life. Obviously he will not invest unless the net returns exceed the net cost. The problem the businessman faces, however, is that the net returns lie in the future, which he can only forecast with a degree of uncertainty. Similarly, he cannot be sure about the useful economic life of the machine since tastes or technology advances can change, thus rendering his machine obsolete. Having estimated the MEI the businessman must now determine whether the investment is profitable or not. Assuming that he has to borrow the funds with which to purchase the machine, he will have to pay a rate of interest on these borrowed funds. We can say, therefore, that our businessman will only invest if the rate of return on the new machine exceeds the rate of interest he has to pay on the borrowed funds.

The theory tells us that annual investment is determined by the rate of interest and the factors that comprise the MEI. This can be demonstrated graphically as in figure 7.1.

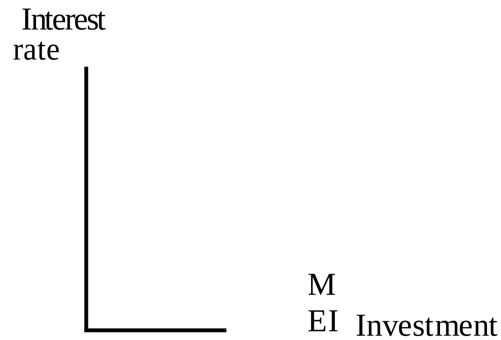

Fig. 7.1

3.4 The accelerator theory

The theory explains the relationship between investment and change in demand or change in income. According to the theory, investment is related to change in national income. When national income is increasing it is necessary to invest in order to increase the capacity to produce consumer goods to meet consumer demand. When income is falling, it is not necessary to replace old capital as it wears out, let alone invest in new capital. This is illustrated in table 7.1.

Table 7.1 The accelerator principle theory illustrated

Year	Annual sale	Change in sale	Required stock of capital. The K/Q is 5:1	Net investment, in- crease in the required capital
1	10	0	50	0
2	10 '	0	50	0
3	11	1	55	5
4	13	2	65	10
5	16	3	80	15
6	19	3	95	15
7	22	3	110	15
8	24	2	120	10
9	25	1	125	5
10	25	0	125	0

As we can see in table 7.1, when change in sales is constant, change in investment is also constant with fixed K/Q.Net investment occurs only when it is necessary to increase the stock of capital in order to change output.

Limitations of the accelerator principle

1. An increase in sales may be expected to be temporary. To this effect, new investment may not take place since overtime work or extra shifts would lead to expansion of the level of output. Hence the accelerator principle is not justified.
2. The accelerator principle does not provide for the fact that investment at any point in time can be restricted by a change in the capital invested.
3. The definition of investment by the accelerator principle emphasises capital widening, but is silent on capital deepening as it assumes capital-output ratio

   to be fixed.

3.5 Nature of investment and investors' behaviour

Most investment decisions are said to be subject to risk, which involves a range of possible outcomes that could flow from it, and possible probabilities can be attached to those outcomes. This is what distinguishes risk from uncertainty. For example, the decision to purchase a premium savings bond and other speculative purchases on the stock exchange for future markets is a decision subject to different kinds of risk. A risky situation in everyday terms is generally one in which one of the outcomes involves the decision taker in losses. A businessman would not feel he was taking a risk ordinarily in an investment with two outcomes, one of which resulted in a profit. But in the strict economic sense, this is a situation involving a risk.

A new development in investment theory has discovered that an asset can be risky and riskless and an investor can have access to both. Therefore, it is left for him to make decisions, taking into cognisance the difference in their respective rates of return. Some investors may prefer to accept a lower expected return on any asset that provides lower risk. Naturally a higher expected rate of return bears a higher risk, as can be observed from W.F. Sharpe's analysis of the capital asset market equilibrium under conditions of risk as in figure 7.2.

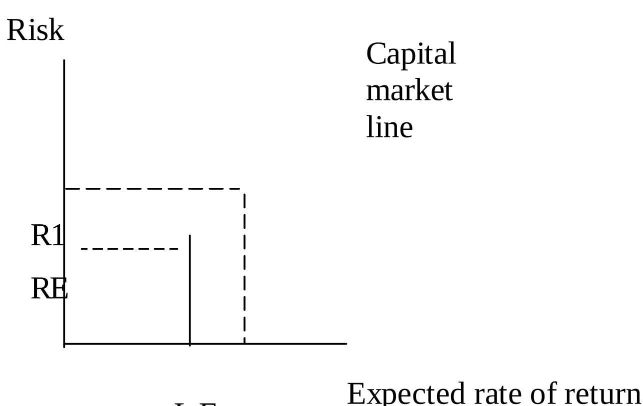

Fig. 7.2 L E
L i

In equilibrium, capital asset price has adjusted so that the investor, if he follows rational procedures, is able to attain any desired point along a capital market link. He may obtain a higher expected rate of return on his holdings only by incurring additional risk. In effect the market has presented him with two prices: the price of time of the pure interest rate, and the price of risk, the additional expected rate of return per unit of risk borne.

3.6 The saving function

Households decide how much to consume and how much to save. As has been said, this is the single decision of how to divide disposable income between consumption and saving. It follows that, once we know the dependence of consumption on disposable income, we also automatically know the dependence of saving on disposable income.

Two saving concepts are exactly parallel to the consumption concepts of APC and MPG. The average propensity to save, APS is the proportion of disposable income that households want to save. It is derived from dividing total desired saving by total disposable income: APS = DS/DYd.

There is a simple relationship between saving and consumption propensities. APC and MPG must sum up to unity and so must MPC and MPS. Since income is either spent or saved, it follows that the fractions of income consumed and saved must account for all income (APC + APS = 1). It also follows that the fraction of any increment to income consumed and saved must account for all of that increment.

(MPG + MPS) = 1
Where MPC is $^4/_5$, the MPS must be 1/5 (the two together making 1)
and therefore

K = 1/v5
1/1/ x 5/1 =5

This indicates that the total rise in income necessary to generate enough savings to equal new investment of 410,000 is #50,000. This will be composed of the original investment ofi#10,000 plus the secondary or generated increment.

3.7 Determinant of savings

1. Size of income. Income is the major determinant of savings. The higherthe income, the more one saves and vice versa. This is the more reason why high income earners save more than low income earners.

2. The rate of interest Classical economists consider that in order to induce people to forgo the present for future enjoyment, compensation in the form of interest has to be paid. The higher the rate of interest, the more people would save.
3. Psychological attitudes. Some societies are by nature more thrifty than others, providing against sickness, unemployment, old age, and for education of dependants. Certain people save beyond these needs; either it gives them a feeling of power, independence or security or because they want to leave something to an heir.
4. Social environment Apart from influencing the general attitude to savings, the environment can be a major factor in other ways. In an urban area for example, there are a lot of banks, saving institutions, etc. Such institutions usually campaign and advertise their products extensively. This tends to encourage savings among the individuals in that area. However, in rural areas, saving is very low because banks and saving institutions are not very much available.
5. Government policy The government can influence people's saving in a variety of ways. Some countries have compulsory saving schemes where people, especially workers, are forced to keep some portion of their income. In some countries, the government tries to stimulate personal savings through the rate of interest, propaganda, income tax concessions as well as other special devices like savings certificates and premium bonds.

4.0 Conclusion

Based on what has been discussed so far, one can conclude that investment and savings have a decisive effect on national income, and therefore, very relevant in any business decision. Managers like you should try as much as possible to equip yourself with such knowledge.

5.0 Summary

Investment expenditure is an integral part of national income. It is that part of income that is spent on the purchase of capital goods. Investment expenditure as explained is determined by some factors like interest rate, price and productivity of capital goods, expectations about future demand, development of new techniques of production, etc. Marginal efficiency of investment (MEI) and the accelerator principle or theory have also been discussed.

Saving is part of income that is not consumed. So at equilibrium saving is assumed to be equal to investment:

I = C + I = C+S = I

I=s

where I stands for income,

consumption,

investment,

savings.

6.0 Tutor-marked assignment

1. Explain the determinants of investment.
2. Investment has a negative relationship with the interest rate. Discuss.

7.0 References and other resources

1. Bonnet, P., D. Birmingham, D. Herbert (1980) Understanding Economics, David McKay & Co. Inc.
2. Lipsey, R. (1992) An Introduction to Positive Economics (Seventh edition) Weidenfeld & Nicholson Ltd.
3. Marris, R. (1964) The Economic Theoty of Managerial Capitalism, Macmillan.
4. Williamson, 0. E. (1970) Corporate Control and Business Behaviour Prentice-Hall.

Unit 8 Economic fluctuations

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1.0 Introduction

Economic activities normally proceed in an irregular path, with forward spurts being followed by passes and even relapses, good times followed by bad times, a boom period followed by a recession. These short-term fluctuations are commonly known as trade cycles or business cycles in Britain and North America respectively.

Economic fluctuations, i.e. a boom in one period and a slump in another in economic activities, are perpetual features of the economic environment of nations. They influence business decisions tremendously and set the trend of future business. The period of prosperity opens up new and larger opportunities for investment, employment and production, and thereby promotes business opportunities. A profit- maximising entrepreneur must therefore analyse the economic environment of the period relevant for his important business decision, particularly those pertaining to forward planning.

Now suppose you are passing through a market, and a foodstuffs dealer who had run out of stock the previous year and has decided to stock much this year, but is witnessing very poor sales, decides to learn from you. He beckons on you and asks you, 'Why is it that things moved so well two years back. Last year they were all right, but this year business is not moving. What is the problem?' What will be your reply? In this unit, we shall discuss the phases of business cycles and their causes, all of which lead to answers to the question.

2.0 Objectives of the unit

It is the objective of this unit that at the end of the discussion you should be able to:

1. Explain fluctuations in the level of economic activities.
2. Discuss the various phases of business cycles.
3. Explain the significance of the knowledge of business cycles to business decisions.

3.1 Phases of business cycles

The ups and downs in the economy are reflected by fluctuations in aggregate economic indices such as production, investment, employment, prices, wages and interest. The upward and downward movement in these indices shows the different phases of business cycles. Basically, there are two phases in a cycle, viz prosperity and depression. However, considering the immediate stages between prosperity and depression, the various phases of a trade cycle may be stated as follows:

1. Recovery and expansion
2. Boom, peak or prosperity
3. Recession/downward trend
4. Trough/the bottom of depression/slump
5. Expansion of economic activities

The five phases of business cycles have been presented diagrammatically in figure 8.1. The potential GDP shows the growth of the economy when there are no economic fluctuations. The various phases are shown in the up and down movement of the graph around the potential GDP. The line of cycle moving above the potential GDP is the peak. The expansion phase is characterised by an increase in output, employment, investment, aggregate demand, sales, profits, bank credit, wholesale and retail process, per capita output, and a rise in the standard of living. The various phases are discussed in some detail below.

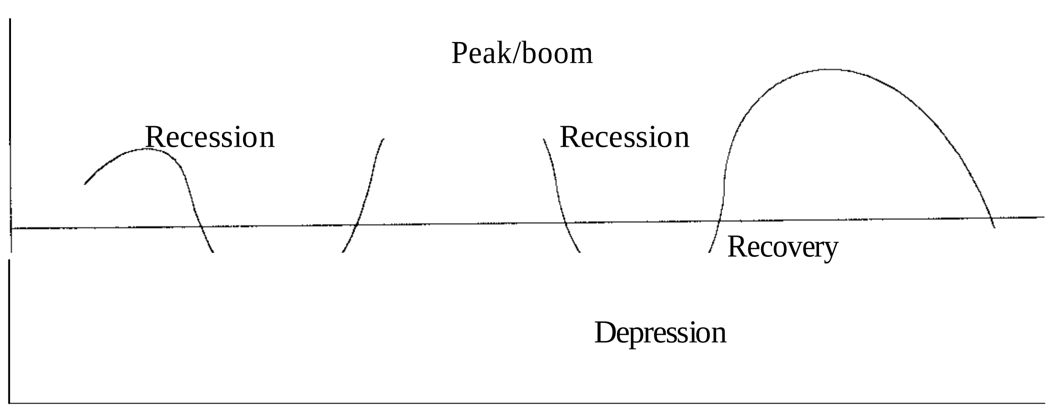

Fig. 8.1 Different phases of the business cycle

3.2 Expansion

The expansion phase is characterised as explained above by an increase in output, employment, aggregate demand, etc. The growth rate eventually slows down and reaches a peak. Expansion is the starting point of economic prosperity as shown in the diagram.

3.3 Peak

A peak is the top of the cycle. At the peak there is a high degree of utilisation of existing capacity; shortages of essential raw materials may develop. That is why the peak is generally characterised by a slack in the expansion rate. Output can be raised further only by investments that increase capacity. Because such investments take time, further rises in demand are now met more by an increase in prices than by increases in production. As shortages develop in more and more markets, a situation of general excess demand for factors develops. Costs rise, but prices rise also, and business remains generally profitable.

3.4 Recession

A recession, which often follows a peak, is a sustained fall in the level of economic activities. Demand falls off, and as a result production and employment fall. As employment falls, so do household incomes; falling income causes demand to fall further. Profits drop and more and more firms get into difficulties. Investments that looked profitable on the expectation of continually rising demand suddenly appear unprofitable, and investments are reduced to a low level. It may not even be worth replacing capital goods when they wear out because of much existing unused capacity. The very point at which recession sets in is called the upper turning point.

3.5 Depression and trough

During the phase of depression, economic activities slide down their normal level. The growth rate becomes negative. The level of national income and expenditure declines rapidly. Prices of consumer and capital goods decline steadily. Workers lose their jobs. Debtors find it difficult to pay off their debts. Demand for bank credit reaches its low ebb and banks experience mounting of cash balances. Investment in stocks becomes less profitable and less attractive. At the depth of a depression, all economic activities touch the bottom and the phase of a trough is reached. Even the expenditure on maintenance is deferred in view of excess production capacity. Weaker firms are eliminated from industries. At this point the process of depression is complete.

3.6 Recovery

The factors that reverse the downswing vary from cycle to cycle like the factors responsible for making the business cycle vary from cycle to cycle. Generally, the reverse process begins in the labour market. The widespread unemployment forces workers to work at wages less than the prevailing rates. The producers anticipating a better future try to maintain their capital stock and offer jobs to some workers here and there. When such a trend continues, the economy will proceed to recovery.

When something sets off a recovery, the lower turning point of the cycle has been reached. The 'symptoms' of a recovery are many: worn out machinery is replaced; employment, income and consumer spending all begin to rise; and expectations become more favourable as a result of increases in production, sales and profits. Investments that once seemed risky may now be undertaken as the climate of business opinion starts to change from pessimism to optimism. As demand expands, production can be expanded with relative ease merely by re-employing the existing unused production capacity and unemployed labour. With this process catching up, the economy enters the phase of expansion and prosperity. The cycle is thus complete.

Although the phases of the business cycle are described by a series of commonly used terms, no two cycles are the same. Starting from expansion, a cycle goes through a phase of peak, reaches an upper turning point, and then enters the period of recession, from there moving to depression before reaching recovery when the lower turning point is reached. Cycles differ from one another in the severity of their troughs and peaks and the speed with which one phase follows another. Severe troughs are called depressions; extreme peaks are called booms.

4.0 Conclusion

Being one of the general economic problems that have a decisive effect on business activities, the business cycle has to be seriously addressed for a better outcome. As a result, the study of the business cycle could be helpful for proper managerial decisions.

5.0 Summary

This unit has examined the fluctuating tendencies of an economy. The unit has concentrated much on the business cycle as it affects the decision of business firms. Business activities and operations tend to move along an oscillatory path, i.e. through a fluctuating pattern in which the period of boom is followed by a recession, then a depression, and later recovery. This fluctuation tendency of an economy is worth understanding for a proper decision making process by firms.

6.0 Tutor-marked assignment

What are the phases of the business cycle?

7.0 References and other resources

1. Bonnet, P., D. Birmingham and D. Herbert (1980) *Understanding Economics,* David McKay & Co. Inc.
2. Lipsey, R. (1992) *An Introduction to Positive Economics* (Seventh edition) Weidenfeld & Nicholson Ltd.
3. Marris, R. (1964) *The Economic Theory of Managerial Capitalism,* Macmillan.
4. Williamson, O.E. (1970) *Corporate Control and Business Behaviour,* Prentice-Hall.

Unit 9 Theories of the business cycle

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1.0 Introduction

In order to answer the questions: 'What are the factors responsible for economic fluctuations?' and 'What are the factors that cause such fluctuations to form a cyclical pattern?', a number of theories have been offered to provide an explanation. These theories are known as trade cycle theories. The trade cycle theories are generally classified under the following categories:

1. The pure monetary theory
2. The monetary over-investment theory
3. The non-monetary over-investment theory
4. Innovation theory
5. Acceleration principle of trade cycle
6. Psychological theory
7. Under-consumption theories
8. Exogenous forces theory
9. Mitchell's theory of the cycle
10. Theories of the Keynesian system
11. Modern theories of trade cycle based on the interaction of the multiplier and the accelerator

A detailed discussion of all these theories is beyond the realm of this unit. However, three theories shall be considered. Suppose a friend asks you what the theories of the business cycle are concerned with. What would be your response? By the time you finish studying this lecture, you will be able to answer him properly.

2.0 Objectives of the unit

The objectives of this unit are that at the end of the unit, you should be able to:

1. Explain the factors responsible for economic fluctuations.
2. Discuss the causes and solutions of cyclical fluctuations as explained by the pure monetary theory.
3. Discuss at least three theories of the business cycle.

3.1 The pure monetary theory of the business cycle

According to this theory, the main cause of business fluctuation is the unstable monetary and credit system. The fluctuation in the supply of money and bank credit is the basic factor at work in the cyclical process. Hawtrey, the main proponent of this theory, maintains that business cycles are nothing but the successive phases of inflation and deflation. According to him changes in the level of economic activities are only reflections of changes in money flows. When money supply expands, prices rise, profits increase, and the total output increases. When money supply falls, prices decrease, profits decrease, production activities become sluggish, and production falls.

The stabilisation of economic activities going by this theory, therefore, is done by controlling the monetary and credit system. The monetary explanation of the business cycle thus advocates that changes in the flow of money are exclusively responsible for the changes in economic activities, which in turn create fluctuations.

According to this theory, the basic cause of a boom is the change in the volume of money, which is brought about by the change in the rate of interest. A reduction of the rate of interest, for example, will motivate businessmen to borrow more money to expand their business. If the interest rate is increased, businessmen will be discouraged from borrowing and business activities will also be reduced.

3.2 Critical evaluation of the pure monetary theory

The pure monetary theory still remains relevant in explaining modern business fluctuations, but it has been criticised on the following grounds:

1 Economic activities can also fluctuate because of changes in non-monetary factors like aggregate demand, expectations of businessmen, cost structure, etc.

2. Monetary factors do not fully explain the turning points. At the turning points, non-monetary factors have been found to play a major role.
3. Monetary theorists' conviction that businessmen are highly sensitive to changes in the interest rate is highly doubtful. A rather more important factor in business decisions is held to be future business prospects and the marginal efficiency of capital.

3.3 Multiplier—accelerator theory of the business cycle

This theory of the cycle is divided into three steps: first, a theory of cumulative upswings and downswings. Once the swings are started, movements tend to carry on in the same direction; second, a theory of floors and ceilings explains why upward and downward movements are eventualy brought to a halt; and third, a theory of instability explains how, once a process of upward or downward movement is brought to a halt, it tends to reverse itself.

3.3.1 Cumulative movement

As soon as a revival begins, the multiplier process tends to cause cumulative movements, i.e. when some unemployed persons find work again. These people with their newly acquired income can afford to make much-needed consumption expenditures. This new demand causes an increase in production and creates new jobs for other unemployed workers. As income rises, demand rises; and as demand rises, incomes rise. Just the reverse happens in a downswing.

The second major factor is the acceleration theory, which I assume that you know is the accelerator principle. New investments are needed to expand existing productive capacity and to introduce new methods of production. When new investments are made, they tend to drive the economy to a particular direction.

The third factor explains the cumulative movements as expectations. Business expectations influence decisions to produce consumer goods and investment goods and, in that regard, cause cumulative movements, i.e. as they can cause expenditure function shift.

The multiplier—accelerator process, combined with changes in expectations, can explain the cumulative tendencies to recessions and recoveries.

3.3.2 Floors and ceilings

A very rapid expansion can continue for some time, but it cannot go on forever because eventually the economy will run into bottlenecks (or ceilings) in terms of some resources. For instance, when investment funds become scarce, interest rates will rise, investment will fall and the boom will be forced to turn to a recession. On the other hand, a rapid contraction too, is eventually brought to an end. This is because aggregate demand will not fall to zero when past savings are consumed or when debts that create employment are incurred, as some amounts of products have to be produced. That could serve as a lower turning point for recovery to set in.

3.3.3 Turning point

The last aspect explains why, once floors and ceilings stop income from changing at a rapid rate, income does not stabilise at the height of the ceiling or the base of the floor, but instead tends to change direction. If there is a slack in the speed at which income is rising, the level of investment wil decline. This means that a levelling off in income at the top of a cycle may lead to a decline in the level of investment. The decline in investment at the upper turning point will cause a decline in the level of income that will be intensified via the multiplier process. The reverse happens in an upward movement.

3.4 Limitations of the theory

1. Many cycle patterns suggested by the model do not conform to real world experience.
2. The theory is rigid as it assumes constancy of capital/output ratio.
3. The theory emphasises the role of the multiplier and accelerator and the interaction between them, neglecting other factors which may play an important role in business cycles.
4. The model is too simple to explain what actually happens during the period of economic fluctuations.

3.5 An exogenous theory of the cycle

All of the theories discussed so far concentrate on forces within the economy as the cause of cycles. But in so far as economies are open economies, cyclical fluctuations often have exogenous causes. A foreign recession may be transmitted to a country through an induced fall in foreign demand for the goods of the country in question. It has been observed that an exogenous shock sets up a downward multiplier effect, just as would follow from a decline in domestic investment or government expenditure.The more open an economy, the more vulnerable it is to 'imported' cyclical fluctuations in its national income.

The second mechanism by which cycles have been transmitted internationally is the international flow of capital. A recession in a capital exporting country, that makes its firms and households less willing to invest abroad as well as show up in the capital-importing countries as exogenous reductions in their investment expenditure.

A third mechanism concerns interest rates. For instance, the sharp rise in American interest rates caused by a restrictive monetary policy in the US in 1981 and 1982 forced up interest rates in the rest of the world and helped to worsen the already serious widespread recession.

3.6 Control of the business cycle

The business or trade cycle creates havoc in the economy through fluctuations and instability. It is thus the responsibility of the government to control the severity of fluctuations caused by the business cycle, and to ensure that economic activities are smooth. The methods of controlling the business cycle can be broadly categorised into two:

1. Monetary policy Monetary inflation, leading to changes in income and profits, can be controlled using monetary policy. Similarly, monetary deflation reinforces the downswing in economic activities leading to a depression. Monetary policy should be adopted in an anti-cyclical way During a boom, the supply of money and credit should be controlled and regulated. The central bank of the country should adopt methods of credit control. The weapons for credit control such as bank rate, open market operation, etc, should be used to control inflation, its tendencies and over-expansion of business activity. During a depression, an expansionary credit policy should be adopted to control the severity of depressions.
2. Fiscal policy Monetary policy alone may not be sufficient to check the instability of the business cycle. It should be reinforced by a suitable fiscal policy During the period of depression, the government should reduce taxes to leave more money in the pockets of individuals for spending and investment. Government should raise its expenditures by initiating public projects. During a boom, the government should increase the level of tax and reduce its expenditure.

4.0 Conclusion

Based on the foregoing explanations, it has been quite clear that the economic scenarios that we observe in the real world are constantly changing. Economic activities move in an oscillatory pattern, where a period of good times is followed by a period of bad times. Therefore, in making a rational business decision, the economic environment of the period in question has to be analysed critically.

Various theories explain in detail the causes and stabilisation devices for economic fluctuations. We have discussed a few above. However, it has been seen that there is no single cause or class of causes governing trade cycles.

5.0 Summary

1. Economic activities never proceed in a regular path; rather they do fluctuate. A period of boom is followed by one of depression.
2. Short-term cyclical fluctuations take the economy through an expansion of economic activities, a peak or boom or prosperity, a recession or downward trend, a slump or trough, and then back to recovery and expansion.
3. Many theories have come up to provide an explanation to questions such as: What are the factors responsible for economic fluctuations? What are the factors that cause such fluctuations to form a cyclical pattern? The few discussed in the unit are monetary theory, multiplier—accelerator theory and the exogenous theory of the cycle.
4. Despite the relevance of the theories in discussing the causes of economic fluctuations, none of the theories can singlehandedly explain such fluctuations. However, the study of economic fluctuations is crucial for any rational business decision to be made.

6.0 Tutor-marked assignment

Discuss in detail the causes and solutions of the cyclical fluctuation of business as has been explained by the pure monetary theory.

7.0 References and other resources

1. Bonnet, P., D. Birmingham and D. Herbert (1980) Understanding Economics, David McKay & Co. Inc.
2. Lipsey, R. (1992) An Introduction to Positive Economics (Seventh edition) Weidenfeld & Nicholson Ltd.

Unit 10 Inflation

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1.0 Introduction

The theory of inflation is the analysis of one of the major economic problems (i.e. a rise in the general prices of goods and services). Inflation as a phenomenon is a product of price instability. It represents a counterproductive phenomenon whereby the rise of prices serves as a disincentive to consume, which consequently affects the level of re-investment and generally the performance of business firms.

The knowledge of inflation, its causes, types and consequences will enable managers to appreciate the existing relationship between inflation and the level of business operation as it affects demand as well as supply by influencing the level of investment. For instance, since 1997, the prices of garri and other goods in Nigeria have been increasing every year. What is the meaning of this, and how can one tackle the situation so as to mitigate its effects?

2.0 Objectives of the unit

By the end of this unit, you are expected to understand inflation and all its attributes. Specifically the unit is aimed at equipping you with the following:

1. To know what inflation means
2. To know the types of inflation.

3.1 Meaning of inflation

Inflation refers to a rise in the general price level of goods and services. Alternatively it means a decline in the purchasing power of a unit of money. The general price level therefore varies inversely with the purchasing power of a unit of money. For example, if the price level doubles, the purchasing power decreases by one half (1/2). It is a condition in which the volume of the purchasing power is persistently running ahead of the output of goods and services, so that there is a continuous tendency for prices both of commodities and factors of production to rise because the supply of goods and services and factors of production fails to keep pace with the demand for them.

Inflation is also associated with increases in money supply Changes in money supply, however, may and may not affect prices. If an increase in money supply is accompanied by a proportional increase in the quantity of goods and services available for purchase, then the general price level will remain unchanged.

3.2 Aspects of inflation

Rate of inflation

Inflation can occur in different economies at different rates. Two types of rates can be distinguished.

1. Creeping inflation. That is a situation in which prices are rising very gently. But creeping inflation can become chronic inflation like the one experienced in Chile and Brazil at the rate of 20 to 90 per cent and which has gone on decade after decade.
2. Hyperinflation or galloping inflation. This is a situation in which increases in prices become a signal for an increase in wages and costs in an economy. This sends prices up, and the process continues. Such a rapid rise in prices is termed hyperinflation. An example of hyperinflation is the inflation that was experienced in Germany between 1920 and 1923.

3.3 Causes of inflation

1 The demand-pull theory. The proponents of this theory hold that the existence of excess demand for final goods and services would cause their prices to rise. Profits would improve as a consequence; hence firms would be induced to expand demand for the various factors such as labour whose prices would themselves be bid up. This theory argues that inflation would be caused by an excess demand for goods and services, which would in turn, lead to rising wages. In other words, aggregate demand equals aggregate supply.

2. The wage cost-push theory The proponents of this theory argue that inflation would be caused by increases in factor payments, especially in the prices of labour. Any increase in wages would cause firms to raise the prices of final goods and services in an attempt to protect their profit levels. These would occur irrespective of whether or not excess demand for goods and services is in existence at the time, although the extent to which firms would be able to pass on wage increases to the consumer is partly determined by market conditions. The theory argues that inflation begins with rising wages or payments made to factors of production (which lead to a rise in the prices of final goods and services). This is possible because of the ability of organised labour to press for more wages even in unfavourable circumstances. In this theory, labour unions demand for increases in wages when there is no excess demand for labour. When such increased wages are achieved, producers pass the increased wage costs on to the consumer through higher prices of goods and services.
3. The price-push theory. This theory is similar to the wage cost-push theory. The theory predicts the same sequence of events as the cost-push theory, with firms rather than unions as the main causative agents. The theory maintains that sellers have monopoly power and would like to raise prices, but are prevented from doing so by their fear of anti-monopoly laws, adverse public opinion or regulatory review of their prices. Under these circumstances, cost increases could provide the necessary excuse for price increases. During wage negotiations, sellers grant wage increases and then use such as an excuse to raise prices by more than is required to offset the rise in wage costs.
4. Structural rigidity theory The structural rigidity theory of inflation assumes that resources do not move quickly from one use to another and that it is easy to increase wages and prices, but difficult to decrease them. Given these conditions, when patterns of demand and costs change, real adjustments occasionally vary slowly Shortages of goods appear in potentially expanding sectors and prices rise because the slow movement of resources prevents those sectors from expanding rapidly enough. Contracting sectors keep factors of production on part-time employment or even in full employment, because mobility is low in the economy. Because their prices are rigid, there is deflation in these potentially contracting sectors. Thus, the mere process of adjustment in an economy with structural rigidities causes inflation to occur. Prices in the expanding sectors rise and prices in the contracting sectors remain the same. On the average, therefore, prices rise.

5. *Expectation theory*. The expectation theory of inflation depends on a general set of expectations of price and wage increases. Suppose, for example, that both unions and firms expect that a 10% inflation will occur next year. Unions will tend to start negotiations from a base of a 10% increase in money wages. They will argue that firms will be able to meet the extra 10% on the wage bill out of the extra revenues that will arise because product prices will go up by 10%. Starting from this base, unions will then negotiate over how much of an increase in real wages they can obtain. Firms will also be inclined to begin bargaining by conceding at least a 10% increase in money wages since they expect that the prices at which they sell their own products will rise by 10%.

The danger of expectation over inflation is that it may cause a demand- pull or any other kind of inflation that has gone on for several years to persist long after its original causes have been removed. It is unlikely that expectation inflation will break out by itself because expectations of continuing inflation do not arise just like that. What is likely, however, is that expectation inflation may take over from a demand-pull inflation after the excess demand is removed or eliminated. If, for example, the government has been generating a demand-pull inflation of 15% per year for 2 or 3 years as a result of too much spending and creating new money to finance its budget deficit, firms and unions expect this rate to continue. Suppose the government eliminates its budget deficit and stabilises the money supply but the expectations of 15% inflation persist. Wage and price increase of at least 15% will occur in the expectation of continuing inflation. At this point demand-pull inflation becomes expectation inflation.

3.4 Effects of inflation

The effect of inflation is of dual appearance in the sense that it has a dual effect on any economy in which it exists. For example, a general rise in the prices of all goods and services represents an incentive for the producers to produce and sell at higher prices, which may encourage further investment. On the other hand with inflation in the economy, there would definitely be a fall in the standard of living of the people by way of reducing their purchasing power. This would create more serious hardship for the masses and the economy in general.

In general terms, inflationary tendencies always go with a number of advantages and disadvantages and studies have shown that in any direction, always the negative tendencies do outweigh the positive ones. So, it can be concluded that inflation is more negative than positive.

3.5 Control of inflation

Inflation can be controlled according to its type. A demand-pull inflation can be eliminated in an economy through the use of appropriate fiscal and monetary policy measures. Since inflation is caused by the existence of excess demand, by a fiscal policy, government can reduce its expenditure or increase taxes so as to eliminate the inflationary gap that exists in the economy. That is, an inflationary gap can be removed by an appropriate decrease in expenditure or increase in tax rates.

Through the use of monetary policy, inflation can also be removed. By using a monetary adjustment mechanism, we can lower aggregate expenditure and remove the inflationary gap that causes prices to rise. The monetarists maintain that monetary constraint is necessary to stop any existing inflation. The central bank must then hold the nominal money supply constant. Therefore, money supply control is necessary and sufficient to control inflation.

Other theorists have argued that if inflation is wage-cost push, attempts to control it by controlling the money supply will lead to levels and durations of unemployment that are politically quite unacceptable. If on the other hand inflation is cost-push, some ways must be found of controlling wages. Legal constraints of wage control can be used, or income policies that persuade labour to reduce their wage demands can be induced. In other words, government can freeze wages so as to stop further wage increase. Price-push, expectation and structural rigidity types of inflation can also be controlled in a similar way as the wage cost-push inflation. Other possible measures that can be taken here include price control. By this measure, the government can fix a price ceiling, that is the highest price which all prices of factors of production should not pass, particularly wages. A ceiling can also be put on the prices of commodities.

Another measure to be taken is foreign exchange control. This will stabilise the prices of imported products. But when the exchange rate is allowed to be flexible it will continue to change overtime, which will affect the prices of imported raw materials.

Tariffs can be reduced so as to reduce inflation in an economy. Higher tariffs increase the prices of imported consumer goods and producer goods. This measure can also reduce imported inflation. Lastly, productivity should be increased in the economy. This is because higher output is always associated with lower prices.

If, however, inflation is imported, the country should stop buying from countries experiencing inflation. It will have to look for other trading partners whose domestic price levels are stable. Tariffs can also be reduced on imports.

4.0 Conclusion

From this theory, it can be concluded that inflation is a bad phenomenon that has a number of effects on any economy. Business firms, therefore, should take caution when designing their policies. Managers who run these businesses should have knowledge of this subject to help them in their decision making processes, so as to design more viable and concrete productive policies for overall organisational development.

5.0 Summary

We have just studied inflation as well as measures to control it. The unit has considered the causes from the perspective of a number of theoretical positions, ranging from the demand-pull theory to the expectation theory. In the course of considering the causes of inflation, various theories have been given, but particular attention should be paid to the demand-pull and cost-push theories. In controlling inflation, it has been made known that it is only possible to control inflation when the causes are known. Fiscal, monetary and physical measures that can be used to combat inflation have been discussed. The conclusion reached is that inflation can be both good and bad. But its negative effects outweigh its positive effects.

6.0 Tutor-marked assignment

1. Identify three theories of inflation and explain them.
2. What are the effects of inflation, and how can they be controlled?

7.0 References and other resources

1. Lipsey, R.G. and K.A. Crystal (1997)An Introduction to Positive Economics, Oxford: Oxford Press.
2. Lipsey, R.G.4et al (1987) Economics, London! Harper and Rot Publishers.
3. Dwivedi, D.N. (1987) Managerial Economics, New Delhi: Vikas Publishing House Pvt Limited.

Unit 11 Unemployment

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1.0 Introduction

Unemployment is socially 'bad' just as much as output is socially 'good'. The harm caused by unemployment (especially involuntary unemployment) is measured in terms of the output cost to the whole economy and the harm done to the individuals who are affected. Unemployment is the result of the balance of two continuous flows: the inflow of potential workers into unemployment (leaving employment but not seeking work, or seeking work but not finding employment) and the outflow of workers from unemployment (finding jobs, or withdrawing from paid employment).

Unemployment affects the business environment in a negative direction as it represents a fall in the productivity level of the economy. In other words, a rise in the level of a country's unemployment means a fall in the level of the country's expected production level, hence, a fall in the level of business operations.

This unit explains what constitutes unemployment, its causes and types as well as a superficial analysis of some of its control measures. Suppose your uncle, who has sponsored three of his children through the university, gets up every morning only to see them at home unemployed. He feels quite bad about the situation, especially when two of his nephews who had been working in Lagos, have come to join him in his house, on the ground that they have lost their jobs. He calls on you to educate him on this subject matter, especially on the Nigerian economic situation. What would you tell him?

2.0 Objectives of the unit

At the end of the unit, you are expected to be able to explain:

1. What unemployment is all about.
2. Types of unemployment.
3. Causes of unemployment.
4. Solutions to the problem of unemployment.

3.1 The concept of unemployment

Unemployment refers to a situation whereby factors of production are not utilised in productive activities. With respect to labour, when a person is willing and able to work and cannot get a suitable paid job, he is said to be unemployed.

Unemployment can be voluntary or involuntary. Voluntary unemployment occurs when there is a job available but the unemployed person is not willing to accept the job at the going wage rate; while involuntary unemployment occurs when a person is willing to accept a job at the going wage rate but cannot get a job. For easy understanding, our concern here will be mainly with involuntary unemployment.

3.2 Types and causes of unemployment

Many economists have endeavoured to outline and explain 'types' and causes of unemployment. You should understand that workers could be unemployed for one or a combination of many factors. The following types and causes of unemployment have been identified:

1. Frictional unemployment This is unemployment that is associated with the normal turnover of labour. It occurs where there are as many job vacancies as there are job seekers. Lack of adequate information on the part of the job seekers largely explains the friction. People leave jobs for different reasons and it takes time before they find new ones.

   Frictional unemployment is inevitable in every country. Thus, the national income theory seeks to explain the causes and control of unemployment in cases of frictional unemployment.

2. Structural unemployment Structural changes in an economy can cause unemployment. A change in the technology of pioduction or any other changes in the economy may shift the demand schedule for labour. This is because such changes require considerable readjustments which do not occur fast enough. As a result, a great deal of unemployment occurs in industries and occupations in which the demand for factors of production is falling faster than the supply. In

most cases, jobs may be available but job seekers do not possess the required skill. Therefore, this type of unemployment occurs when there is a mismatch between the unemployed and the available jobs in terms of regional location, required skills or any other relevant requirement. One distinction between frictional and structural unemployment is that structural unemployment is long-term frictional unemployment.

3. Deficient demand unemployment This unemployment occurs due to insufficient aggregate expenditure needed to purchase all of the output of a fully employed labour force. A decline in the demand for the products of a firm will bring about a reduction in the factors of production, hence unemployment.

During periods of heavy unemployment, frictional, structural and deficient demand causes may all be operative. It is difficult to say that a single worker is unemployed due to deficient demand and another for structural reasons. Rather, all the three causes can operate and contribute to the total volume of unemployment.

4. Search unemployment It occurs when someone refuses to accept the available job and remain unemployed in order to search for a better one. In one sense they can be said to be voluntarily unemployed because they can find some jobs. But in another sense they can be said to be involuntarily unemployed because they have not yet succeeded in finding the job which they are ready to accept somewhere in the economy. Those in search of employment can be said to be frictionally unemployed if they find a job in a short time; but they may be classified under structural unemployment if a long search reveals that there are no longer enough jobs to employ everyone with their particular training and experience. How long it pays to remain in search unemployment depends on the economic costs of being unemployed.

5. Seasonal unemployment Labour employed in economic activities such as farming and fishing usually become unemployed when bad weather prevents the continuation of such work. As such it can be said that such persons that are temporarily employed when there is a job and discharged when the job is completed are seasonally employed.

3.3 Effects of unemployment

There are two main effects of unemployment, which make policy makers very much worried. First, is that it produces economic waste of labour. When labour is unemployed it constitutes an economic waste in an economy. Otherwise, it would have been put to use in practical activities.

Secondly, unemployment can cause human suffering. It can cause severe hardship and misery when the period is long. During the period of heavy long-term unemployment, the social and economic effects can be felt by everyone including those who remain employed or self-employed. Furthermore, heavy and prolonged unemployment among youths can cause major social upheavals.

3.4 Control of unemployment

Unemployment can be controlled according to its type. For example, frictional unemployment can be controlled according to the nature of the economy. Policy measures that make movement of labour between jobs easier and quicker can reduce the volume of frictional unemployment. Structural unemployment, however, can be attacked by policies for retraining and relocating labour as part of a general attempt to facilitate the adjustment of labour supply to changing demand. Workers can also be persuaded to accept changes that maintain the competitive position of an industry and as such protect the remaining jobs in that industry.

Increasing aggregate demand can control unemployment that results from deficient aggregate demand. This could be through the use of expansionary fiscal and monetary policies. Through fiscal policy measures, government expenditure can be increased on currently produced goods and services. If this is not followed by a change in tax rates, it will provide a net addition to the aggregate demand. Using monetary policy measures, government can increase aggregate demand by increasing money supply.

3.5 Philips' curve

It is a curve that shows the inverse relationship between inflation and unemployment. See figure 10.1.

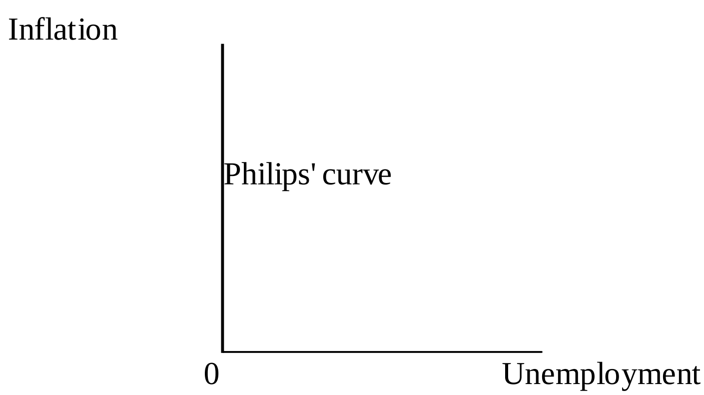

Fig.10A

Expansionary aggregate demand policies tend to produce inflation unless they take place when the economy is at a high level of unemployment. On the other hand, a long period of low aggregate demand tends to reduce the inflation rate and increase unemployment. The costs of inflation are just as serious and obvious as those of unemployment.

Philips' curve exposes the inverse relationship between inflation and unemployment. This has played a key role in macroeconomic policy, since Prof. A.W. Philips established it in 1958. Philips' curve shows that high rates of inflation are accompanied by low rates of unemployment and vice versa. The curve also suggests that less unemployment can be attained only by having more inflation, and that the inflation rate can always be reduced by increasing unemployment. In other words the curve shows that there is a trade-off between inflation and unemployment. Therefore, to curb the problem of unemployment, policy makers have to take into consideration the inverse relationship between inflation and unemployment.

In a nutshell, the type of solutions provided for meeting the problems of unemployment must be related to the factors that brought about the unemployment. In this way, one or a combination of the following could be adopted to solve the problem of unemployment:

1. Increased production via restructuring the economy such that there is reduced reliance on imported raw materials and spare parts, as well as prudent use of available foreign exchange resources, and intensified efforts to promote exports to earn increased foreign exchange.
2. Training and staff development.
3. Improved labour market information.
4. Diversified productive activities.

4.0 Conclusion

Going by the analysis in this unit, it can be concluded that unemployment constitutes a serious economic problem that adversely affects business and the economy generally To combat the detrimental effects of unemployment, there is a need to develop measures such as monetary and fiscal policies which, when successfully implemented, can adequately overcome the effects of unemployment.

5.0 Summary

The unit has exarr$900tmilyAlap phenomenon of unemployment, its causes and how it affects the economy generally, i.e. the consequences of unemployment.

A detailed analysis has been made of its effects on business firms, as well as possible control measures of the trend, i.e. policy instruments needed to address the problem have been highlighted.

6.0 Tutor-marked assignment

1. What is unemployment?
2. Explain any 5 types of unemployment.

7.0 References and other resources

1. Lipsey, R.G. and K.A.Crystal (1997) An Introduction to Positive Economics, Oxford: Oxford Press.
2. Lipsey, R.G. et al (1987) Economics, London: Harper and Row Publishers.
3. Dwivedi, D.N. (1987) Managerial Economics, New Delhi: Vikas Publishing House Pvt Limited.

Unit 12 Economic stabilisation

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1.0 Introduction

This unit is aimed at studying the various stabilisation policies that are used in adjusting the economy from the stage of depression to the path of recovery, which will consequently move the economy to the period of boom in which economic variables such as investment, saving, output as we l as consumption are on a higher level.

Stabilisation policies are made operational by the government to facilitate the level of business operation. As they involve the use of taxes, subsidy, exchange control and other policy guidelines, they help to minimise unemployment and equally reduce, if possible, the rate of inflation.

If properly implemented, stabilisation policies lead to the realisation of price stability, interest rate stability, full employment of factors of production and, consequently, general economic growth and development, hence, a general improvement in societal welfare.

To this end, it can be perceived that business managers need to understand the basic tools of stabilisingthe economy because of their direct implicatiorpfor the level of savings and investment and for the world of business in general. Suppose every year the Nigerian government reveals a set of policies to be used in the economy to regulate problem areas. In spite of all these, the situation every year is the same. How can you explain stabilisation policies practically so that the layman can understand you?

2.0 Objectives of the unit

The general objective of this unit is to acquaint the student with the knowledge of the operational tools used by government in order to adjust the level of economic activities.

Specifically at the end of the analysis, the student is expected to know the following:

1. The meaning of stabilisation policies.
2. The varieties of stabilisation policies, i.e. the different policy tools used in addressing the problem of inflation and employment among others.
3. How these policies are related to business.
4. Why and how the government embarks on certain policies over time.

3.1 Economic stabilisation policies

The violent fluctuations in economic activities cause harm to business but also misery to human beings by creating unemployment and poverty during a depression period. Economists have become so much concerned with the consequences of business cycles and, therefore, suggested various ways and means to control economic fluctuations. The realisation of the need for stabilising the economy and, thereby, preventing severe economic ups and downs came quite recently. Till the depression of the 1930s, the orthodox economic belief that 'invisible market forces would automatically maintain a balance in the economy prevailed. It was then suggested that economic activities should be left alone to take their own course. The great depression, however, proved this belief untenable. The great depression and Keynesian revolution in mid-1930s assigned a big role to government in maintaining economic growth and preventing business fluctuations. Therefore, government intervention in the economy all over the world increased in a big way. The government in free enterprise economies not only entered into the production of commodities and services but also adopted a number of fiscal and monetary measures to control and regulate the private sector economy and prevent violent economic fluctuations. The government in many developing countries like Nigeria assumed the role of a key player in economic growth, employment and stabilisation.

3.2 Concept and objectives of stabilisation

Stabilisation does not mean creating conditions for economic stagnation. Stabilisation and stagnation or freezing should not be treated as synonymous. Stabilisation broadly means preventing the extremes of ups and downs; particularly, preventing a depression in the economy without preventing or obstructing the process of economic growth. It also implies preventing over- and under- employment. Stabilisation does not mean rigidities; it should permit a reasonable degree of flexibility for self-adjusting forces of the economy. Stabilisation policy is thus the attempt to reduce fluctuations in income, employment and the price level, and stabilising national income at full employment level. Stabilisation policies are normally pursued using the tools of demand management which will be discussed in the next unit. The policy reduces inflationary or recessionary gaps when they appear.

Fiscal policy

This is a demand management tool whereby government uses its expenditure and tax policies in an attempt to reduce fluctuations in the level of economic activities.

Monetary policy

This is another demand management tool in which government regulates the economy through altering money supply.

You should be able to know that inflation, disasters and war destabilise an economy. Any economy with any of these problems needs some adjustments (i.e. stabilisation devices). Based on what we have discussed so far, how can such an economy be stabilised?

To answer this question, one has to look at the stabilisation policies we have and then pick that which is most relevant in remedying the situation. But at times, the two policies have to be combined before solving the problem. First and foremost, we can employ fiscal policy. To remedy an inflationary situation, government should increase its tax so as to reduce the purchasing power of people and reduce its expenditure. This denies people some additional income with which to make some purchases. On the other hand, monetary policy can also serve in remedying the situation, i.e. when government increases the commercial banks' minimum cash ratio, bank rate and commercial banks' borrowing limits. When money in circulation is reduced, demand falls and finally prices must fall. The reverse will be the case when an economy is suffering from a deflationary situation.

For national emergency, e.g. war or a natural disaster, government can stabilise the economy via fiscal policy This can be done through a reduction in taxation and increased government expenditure. The expenditure should be in the form of undertaking some projects. While using monetary policy government pumps more money into circulation. This is done (as explained in unit 14) by the central bank through commercial banks (i.e. via a reduction in the bank rate, maximum cash ratio and the like). The major objectives of stabilisation policies are:

1. Preventing excessive economic fluctuation, making allowance for fluctuations necessary for long-term sustained economic growth.
2. Efficient utilisation of labour and other productive resources as far as possible.

3. Encouraging free competitive enterprise, i.e. minimum interference with the functioning of the market economy.
4. Avoidance, as far as possible, of conflict between the internal and external interegtsof the economy.

4.0 Conclusion

Economic stabilisation can be understood to be the interference of the government to restore economic sanity. It is a good effort to bring an ailing economy back to the rails. The objective of the programme may be to facilitate the workings of free enterprise which could restore economic prosperity.

5.0 Summary

It has *been* highlighted in the work that economic fluctuations cause hardship not only to businesses but also to individuals. In a bid to tackle these fluctuations government Usually steps up controls called stabilisation policies to encourage efficient allocation of resources and encourage free competitive enterprise with minimum interference. The policies used to solve problems caused by economic fluctuations are fiscal and monetary policies and direct control measures which we shall discuss in detail in the next unit.

6.0 Tutor-marked assignment

1. What are some of the stabilisation policies the government normally uses and why?
2. How does a stabilisation policy affect the economy?

7.0 References and other resources

1. Lipsey, R.G. and K.A. Crystal (1997) An *Introduction to Positive Economics,* Oxford: Oxford University.
2. Lipsey, R.G. et. al (1987) *Economics,* London: Harper and Row Publishers.
3. Dwivedi, D.N. (1987) *Managerial Economics,* New Delhi: Vikas Publishing House Pvt Limited.

Unit 13 Fiscal policy

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1.0 Introduction

As we mentioned in the last unit, fiscal policy is one of the stabilisation policies used by government to check violent economic fluctuations in an economy. We are going to consider its definition and other aspects related to it.

Fiscal policy is an instrument in the hands of government, used when the intention is to check economic problems by using taxes and public expenditure. This accounts for why fiscal policy is seen as government policy of changing its taxation and public expenditure programme intended to achieve certain pre-determined objectives. This is usually achieved through budgetary policy.

This policy that makes use of taxes and government expenditure affects the entire economy. Fiscal policy is one of the important determinants of the functioning of businesses in an economy. As such business managers must be aware of this policy, so that they can design business decisions that could match the economy. Most businesses are at the mercy of this policy, as taxes have a significant impact on the firms' cost of production. Every year, for instance, the federal government of Nigeria announces large sums of money during its budget presentation. Suppose a friend of yours tries to find clarifications from you on how these large amounts are raised and how they are spent. Educate him practically.

2.0 Objectives of the unit

Conscious of the influence fiscal policy exerts on businesses, it is intended here that business managers should be introduced to some of these influences.

As such this unit is aimed at:

1. Creating awareness among the students about the reasons for the use of fiscal policy.
2. Exposing them to the various tools of fiscal policy.
3. Keeping the students abreast of economic problems and their solutions via fiscal policy

3.1 Fiscal policy as a concept

Fiscal policy simply means the use of taxation, public expenditure and budget by the government to stabilise the economy with a view to achieving some macroeconomic objectives. Fiscal policy, especially in a developing economy is very important and indispensable. This is because in an underdeveloped economy where monetary policy alone is ineffective due to the existence of weak and underdeveloped money and capital markets, fiscal policy is an effective remedy in facilitating capital formation and economic growth in order to:

1. Attain full employment.
2. Maintain stability in the price level.
3. Promote economic growth.
4. Achieve favourable balance of payments.

3.2 Objectives of fiscal policy

The objectives of fiscal policy among others include:

1 To control inflation. One of the major economic problems of developing economies is inflation, which is largely because of the imbalance between the demand for and supply of real resources. With increasing injections of money into the economy demand rises but can lead to an inflationary situation.

Taxes are one of the effective fiscal measures for counteracting inflationary pressure in the economy Taxes tend to reduce disposable income and hence the purchasing power.

2 To increase employment opportunities. Fiscal policy is aimed at increasing

employment and reducing unemployment. To achieve this, government's expenditure should be directed towards engendering social and economic prosperity. Such expenditures create more employment and create efficiency in the long run.

3. To increase the rate of investment. Fiscal policy aims at promoting and accelerating the rate of investment in the private sector of the economy. This can be achieved by checking actual and potential consumption and by raising the incremental savings ratio. The imposition of new taxes and an increase in the rate of existing taxes on a progressive scale are also essential and effective in curtailing consumption and unproductive investments.
4. To promote economic stability In the face of international instability, an underdeveloped economy is prone to international cyclical fluctuations due to the nature of its economy. Fiscal policy plays a crucial role in maintaining economic stability in the face of external and internal forces. In order to minimise the effects of international cyclical fluctuations, during a boom for example, import and export duties could be levied. Export duties can take off the windfall arising from duties on consumer goods and luxury items. Import restrictions are essential to the curbing of purchasing power.
5. To increase and redistribute national income. Fiscal policy aims to increase national income and redistribute national income. Fiscal policy should do this in such a manner that extreme income and wealth inequalities are reduced in the economy. The redistributive role of fiscal policy is achieved by increasing the real income of the masses and reducing the income of those at the higher levels. Direct government investment in economic and social facilities tends to increase the volume of output, employment and real income in the economy. As a result, the economic position of the masses is improved and their standard of living rises. On the other hand in order to reduce higher income levels, fiscal policy may include a higher progressive and broad based tax structure. Such a tax structure comprises taxation of income, wealth, expenditure, real estate, etc. It may also include stiff taxation on articles of conspicuous consumption.

3.3 Tools of fiscal policy

The instruments of fiscal policy are:

3.3.1 Taxation

This refers to the compulsory contribution or levy imposed by government on people when they earn an income or they consume goods and services. It is direct when it is imposed on income earned by individuals, and indirect when imposed on goods and services.

Taxation is perhaps the most effective instrument of fiscal policy. It can be used to achieve the following objectives:

1. To curb consumption and thus transfer resources from consumption to investment.
2. To increase the incentive to save and invest.
3. To transfer resources from the hands of the public to the hands of the government in order to make public investment possible.
4. To reduce economic inequalities.
5. To mobilise economic surplus.

Fiscal objectives can be achieved by manipulating taxes as an instrument. This could be achieved by varying the tax either higher or lower depending on the set objectives to be achieved. When there is inflation, for example, government should increase tax in order to reduce the purchasing power of people. When demand falls, prices will certainly fall; so the problem of inflation will be solved.

3.3.2 Government expenditure

It should be noted that government has large financial resources and is in a better position to finance economic and social development. The role of public expenditure in economic development lies in increasing the growth rate of the economy, providing more employment opportunities, raising incomes and the standard of living and reducing income and wealth inequalities. These can be achieved when total spending is increased or decreased depending on the circumstance, as well as the objectives to be achieved. By government expenditure, we mean the expenses incurred by the government in carrying out its responsibilities, i.e. in the provision of social services and defence, to mention just a few. When there is the problem of unemployment, government can address the problem via an increase in its expenditure.

3.3.3 Government budget

The concept of budget refers to a financial plan of government whereby a government attempts to forecast its expected expenditure and projected revenue within a specific period of time, usually a year. A budget is said to be surplus when projected revenue is higher than expected expenditure. It is a deficit when revenue is less than expenditure. And a budget is balanced when the expected revenue is at rest (equal) with the expected expenditure.

The growth of government spending and taxation has helped to make the budget a key factor in influencing the behaviour of the economy. A balanced budget is achieved when the economy is in equilibrium, that is, a state of being neither inflationary nor deflationary. A budget surplus is applied when too much spending in the economy is causing inflation, while a budget deficit is applied when the economy is depressed. When any of these applies business decisions are affected. For firms to remain vibrant, they must also adjust their business decisions.

4.0 Conclusion

From all that has been discussed above, we can conclude that fiscal policy is a powerful tool in the hands of government and can be manipulated to fit the objectives of the government. These manipulations may or may not favour business firms. This suggests that business managers must keep abreast of this policy before taking business decisions for their firms.

5.0 Summary

In this unit, we have considered the concept of fiscal policy, the objectives of the policy, and the tools used. The implications of this policy for business firms have been mentioned. These implications point to the fact that this policy, which makes use of taxes and government expenditure greatly, affects business firms.

6.0 Tutor-marked assignment

1. What is fiscal policy?
2. What are the objectives and tools of fiscal policy?

7.0 References and other resources

1. Lipsey, R.G. and K.A. Crystal (1997) An Introduction to Positive Economics, Oxford: Oxford Press.
2. Lipsey, R.G. et.al (1987) Economics, London: Harper and Row Publishers.
3. Dwivedi, D.N. (1987) Managerial Economics, New Delhi: Vikas Publishing House Pvt Limited.

Unit ' 4 Monetary policy

Table uf contents

1.0 Introduction

Monetary policy is another stabilisation policy or demand management tool used by the government. It relates to the volume of money in circulation by either expanding or contracting it. When the volume of money in circulation is reduced or increased, it affects the purchasing power of the consumer and definitely the sales volumes of firms. Though this policy seems to be one of government's stabilisation policies, its execution lies in an autonomous body called the central bank. In Nigeria, this policy is carried out by the Central Bank of Nigeria (CBN). In this unit we are going to see the meaning of this concept and its instruments, and how the instruments are used in achieving stabilisation goals. Since the central bank has been implementing monetary policy in the country have you witnessed any changes? What are the reasons behind these?

2.0 Objectives of the unit

The objectives of this unit are:

1. To enable you to understand monetary policy measures as a tool of stabilisation and their application in stabilising the economy.
2. To acquaint the student with the various instruments utilised in the policy in its stabilisation function.
3. To make you able to explain the relevance of the policy to management decisions.

3.1 Monetary policy

Monetary policy refers to the central bank's programme of changing monetary variables, i.e. total supply of money, interest rates and credit rationing, in order to achieve certain predetermined objectives. Monetary policy, which used to be regarded as mainly concerned with varying the supply of money, is today involved in more than the supply of money. Monetary policy is now extended to such issues as external relations. If, for example, imports are considered to be too expensive, it may be necessary to clamp down on demand at times by a contraction of credit in order to reduce the demand for imported goods. Also, since both rising and falling prices bring about an arbitrary redistribution of income, monetary policy now includes maintenance of a stable level of prices. The main objectives of monetary policy include:

1. Maintenance of a reasonably stable internal price level, i.e. to keep inflation in check.
2. Maintenance of full employment or reducing the level of unemployment.
3. Stimulating economic growth (recovery), thereby increasing both national income as well as raising the standard of living of the people.
4. Keeping the balance of payments in balance.
5. Maintenance of stability in the external value of the currency.

To carry out these functions requires a close working relationship between the ministry of finance and the central bank of the country. However, most of these policies are implemented by the central bank as explained above. One of the primary objectives of monetary policy is to achieve economic stability. The following are the instruments through which a central bank carries out the monetary policies:

1. Open market operations
2. Changes in bank rate (or discount rate)
3. Changes in statutory reserve ratios
4. Selective credit controls and moral suasion
5. Directives
6. Minimum cash ratio
7. Exchange control

Briefly speaking, open market operation by the central bank is the sale and pL chase of government bonds, treasury bills, securities, etc. to and from the public. The bank rate is the rate at which the central bank discounts commercial banks' bills of exchange or first class bills. The statutory reserve ratio or statutory liquidity

(SLR) is the proportion of commercial banks' time and demand deposit, which they are required to deposit with the central bank or keep cash in vault. These entire instruments when operated by the central bank reduce or increase the flow of funds from the banks to the public. The pattern and workings of these instruments shall be

seen below.

3.2 Instruments of monetary policy

As we have just seen, for monetary policy to be effective, certain tools are used. These tools include:

3.2.1 Open market operation

During the period of expansion the central bank sells government bonds and securities to the public. The sales of securities depress their price on the one hand, and result in withdrawal of money from the public. As government securities are purchased through the transfer of bank deposits to the central bank, it reduces the credit creation.capacity of the commercial banks. If government securities are popular, people have a good banking habit, and the banking system is fairly highly developed, the sale of bonds results in monetary contraction. During the period of depression, central banks buy government securities. Its impact on money supply with the public is just the reverse of the sale of securities.

Government implements this policy through the central bank, yet the central bank carries out the policy through its control over the commercial banks. This means that the central bank is an agent to the central government, in which case, the central bank controls the commercial banks to implement government monetary policy. In other words, the central bank can alter the reserves of the commercial banks through selling and buying of securities such as treasury bills. The settlement of treasury bills when offered by the central bank reduces cash deposits and vice versa.

3.2.2 The bank rate or rediscount rate

Where the objective is to control inflation, the central bank raises the bank rate which also raises the cost of borrowing from the central bank. Following the increase in the bank rate, commercial banks raise their own discount rates to the public. The increase in the cost of borrowing discourages borrowing from commercial banks: Thus the flow of money to the private sector of the economy is restrained. But this method is effective only when commercial banks do not possess excess reserves. During a depression, the bank rate is lowered with a view to facilitating and encouraging private borrowing, which leads to monetary expansion and works against the forces of depression. Monetary expansion pushes aggregate demand up and, thereby, helps economic recovery.

3.2.3 Statutory liquidity ratio (SLR)

When the central bank wants to reduce the credit creation capacity of commercial banks, it increases the ratio of their demand and time deposits to be held as reserves with the central bank and vice versa. Therefore an anti-inflationary monetary policy requires increases in the liquidity ratio. And a deflationary policy requires lowering the liquidity ratio when the central bank changes the SLR. When deposits, which form the basis of credit creation are affected, banks' capacity to create credit is in turn affected. •

Of the three instruments of monetary policy, open market operation is considered to be the most effective weapon available to the central bank, especially in less developed countries having underdeveloped money markets. Open market operation is flexible and easily adjustable to changing conditions. The other instruments are effective only when: (a) commercial banks do not possess excess cash reserves, and (b) (in case of the bank rate), borrowers are not highly optimistic about future business prospects.

3.2.4 Selective credit control and moral suasion

In addition to the instruments we have seen above, central banks often use various selective credit control measures as well as moral suasion. Selective credit control measures are intended to control credit flows to particular sectors without affecting the total credit, and also to change the composition of credit from an undesirable to a desirable pattern.

Moral suasion is a persuasive method. used to convince commercial banks to carry out their business in accordance with the demand of the time and in the interest of the nation.

3.2.5 Special directives

Apart from using any of the above methods, the central bank has authority to give direct instructions to commercial banks. It can instruct commercial banks whether or not to increase their lending/ beyond a certain amount. It can instruct them to increase the proportion of their leading to a particular area of economic activities such as agriculture.

3.2.6 Minimum cash ratio

The central bank may set the minimum cash ratio, i.e. the proportion of bank deposits that must be kept as cash to meet the day-to-day demand of customers. The central bank can alter this minimum if it wishes. If it raises the cash ratio, commercial banks will have to expand their lending. If it lowers the ratio, meaning that commercial banks should keep less cash, this will result in decreased lending.

3.3 Exchange rate control

The central bank can implement government monetary policy through exchange control. Persistent deficits in the foreign accounts of most West African countries, for example, have created the need to exercise tight controls over limited foreign exchange earnings. These controls emanate from the central bank to the commercial banks.

Fiscal and monetary policies may be simultaneously used to control the business cycle in the economy. The choice of either or both policies should be made, conscious of the fact that their suitability, applicability and limitations vary from one country to the other and from problem to problem. For instance, monetary policy is considered to be more effective to control inflation than to control depression. It is, however, always desirable to adopt a proper mix of fiscal and monetary policies to check the business cycle. This has often proved more effective than a single policy. Besides, a proper mix of the two policies is essential because it would prevent a possible conflict between them. It is therefore always desirable to formulate a counter-cyclical policy with a proper coordination of fiscal and monetary policies.

4.0 Conclusion

Monetary policy is a good stabilisation policy. It is, in fact, more relevant to business decisions especially as it affects their investment decisions through the manipulation of the interest rate. As a result, the knowledge of how monetary policy operates can assist decision-makers and managers in business to focus on the proper strategy that will enhance their business operation. Despite the crucial nature of the policy, it cannot successfully bring about stability in economic activities without other demand management tools. It is left to policy makers to decide how and when to use any of the policies.

5.0 Summary

Monetary policy has been defined in this unit as a demand management tool whereby government attempts to stabilise the economy through varying the supply of money. Such a policy is enforced on behalf of the government by the central bank. Yet central banks carry out that function through the commercial banks, i.e. they control the credit capabilities of the commercial banks. In this regard, central banks use instruments like open market operation, directives, moral suasion, discount rate, and statutory liquidity ratio. The policy is aimed at maintaining stability in the price level, maintenance of full employment, stimulating economic growth, and balance in the balance of payments among others. Monetary policy, even though a very effective policy as explained in this unit, is not exclusively effective. The success of a stabilisation policy depends on how effective the policy makers are in choosing the right policy and in adopting the right policy mix.

6.0 Tutor-marked assignment

1. Mention and explain in detail monetary policy measures used in transforming the economy.
2. Explain the way by which the manipulation of the interest rate through monetary policy affects the performance of business firms.

7.0 References and other resources

1. Dwivedi, D.N. (1987) Managerial Economics, New Delhi: Vikas Publishing House Pvt Limited.
2. Lipsey, R.G. and K. A. Crystal (1997) An Introduction to Positive Economics, Oxford: Oxford University Press.

Unit 15 Alternative economic systems

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1.0 Introduction

Business firms do not operate in a vacuum but in a setting commonly called the 'economic system'. An economic system includes producers of every sort - public and private, as well as domestic and foreign. It includes consumers of every sort, young and old, rich and poor, working and non-working. The economic system includes laws, rules, regulations, taxes, subsidies, everything produced, how it is produced, and who gets it, customs duties of every conceivable kind, and the entire range of economic activities in any nation.

For business decision-makers to be able to make sound decisions, an understanding of the system in which they operate is necessary. These systems are not universal as different nations operate different systems.The predominant conventional economic systems today are capitalism, socialism and mixed economy. In this unit, an examination of the economic systems will be made in line with managerial decisions. If you learn that the American government owns no economic property, but that in Nigeria and most other African countries, the government owns property, what are the reasons for this?

2.0 Objectives of the unit

In this unit, you are expected to:

1. Understand the three basic economic systems of the world.
2. Be able to distinguish one system from another through their fundamental characteristics.
3. Adjudge how managerial decisions can be taken in each case to maximise the goals of the firm.
4. Appreciate the merit of each of the systems.

An economic system has been defined as an organisation for the purpose of satisfying man's wants through the utilisation of the means of production at his disposal. In more specific terms, an economic system consists of the totality of a people's or a nation's ways of handling the job of using their resources for the satisfaction of their citizens' wants. Every nation is faced with the basic economic problems of what to produce, how to produce and for whom to produce. The way and manner resources are owned and decisions made regarding those problems constitute the economic system. Therefore the common characteristics of economic systems are:

1. Ownership of the society's means of production.
2. Decisions made concerning the basic problems highlighted above.

3.1 Questions facing all economies

All societies face three fundamental questions and how these are answered will depend on the type of economic system being operated. These questions are:

1. Which goods shall be produced and in what quantities? This problem concerns the composition of total output. The community must decide which goods it is going to produce and hence which goods it is not going to produce. Having decided the range of goods to be produced, the community must then decide how much of each good should be produced. In reality the choices before a community are rarely few. The first and major task of each economic system is to determine in some ways the actual quantities and varieties of goods and services that will best meet the wants of its citizens.

2. How should the various goods and services be produced? Most goods can be produced by a variety of methods. Different methods of production can be distinguished from one another by differences in the quantities of resources

used in producing them. Economists use the term 'capital intensive' and 'labour intensive' to describe the alternative methods just outlined. The total output of the community depends not only on the total supply of resources available but on the ways in which these resources are combined. A community must make decisions on the methods of production to be adopted.

3. How should the goods and services be distributed? The total output has to be shared among the members of the community. The economic system has to determine the relative sizes of the shares going to each household. Should everyone be given an equal share? Should the division depend upon the individual's contribution to production? Should the output be shared out in accordance with people's ability to pay the price, or should the shares be decided according to tradition and custom?

3.2 Major economic systems of the world

As we have already noted, there are three major economic systems in the world today. These economic systems differ from one another in the way in which economic and business decisions are coordinated. All real economies contain some elements of each of the systems. In the next section, we are going to be looking at these economic systems.

3.2.1 Capitalist economic system

This system is also called *capitalism*. In this economic system, the price system is given a free hand in the allocation of productive resources. Here, consumers decide what products to buy and in what quantities; firms produce those products and buy the factor services that are needed to make them; and owners of factors of production decide to whom and on what terms they will sell these services. These individual decisions collectively determine the economy's allocation of resources among competing uses.

It is said that in a market economy (capitalism) the allocation of resources is the outcome of millions of independent decisions made by consumers and producers, all acting through the medium of markets. The markets here function without conscious control because individuals take their private decisions in response to publicly available signals such as prices, while these signals in turn respond to the collective actions entailed by the sum of all individual decisions. In short, the price system is an automatically functioning social control mechanism.

The major characteristic of this system is that there is private ownership of productive resources. Private individuals own the basic raw materials, productive assets of the society, and the goods produced in the economy. Public participation in such an economy extends only to the provision of basic services such as schools and local transport systems.

Decision-making relies more on the market forces of demand and supply. These determine what should be produced, how to produce and for whom to produce. When this is related to business firms, it is evident that managers have a liberal hand here in taking business decisions. The market stands out as the challenge for every manager to measure the sucess or otherwise of managerial decisions.

Good examples of countries operating this system are the USA, England, Germany and Holland.

Advantages of capitalism

1. Goods, services and factors of production go where they are mostly needed.
2. It leads to efficiency in production and consumption.
3. Consumers and producers are free to make changes to suit their desires.
4. It does not need any decisions from government authorities.

Disadvantages of capitalism

1. It leads to inequality in income distribution.
2. It is not good in providing certain social services.
3. On numerous occasions and in many ways, it has offered business units powerful inducements to reduce production and restrict supplies of goods in order to create scarcity.

Students may need more light on the advantages as well as disadvantages of capitalism. As we all know, prices determine what should be produced by producers and consumed by consumers. So such prices indicate the wishes of consumers, and producers allocate the society's productive resources accordingly. Under this economic system, consumers are free to buy what they need without being forced to accept what may be at the bottom of their scale of preference. People are free to work wherever they choose and produce whatever they want.

Producers will tend to produce less of those goods which yield less profit, and consumers will tend to buy less of those goods which yield less satisfaction, without state interference. Since prices distribute resources under capitalism, there is no need to employ a great number of officials to do so. Such officials can thus be put to other uses.

The capitalist economic system is not without some weaknesses. One of these is that the demand of consumers is not always the best way of determining what should be produced. For instance, when the rich demand more luxury goods, it may lead to the production of more luxury goods than essential goods and services.

Another problem is that those consumers with the most money satisfy most of their wants and producers who are more competitive and better endowed tend to produce more and thus earn more profit; while the poor and less endowed suffer.

As part of its weakness, the supply of certain services like those of the police, the army and the judiciary cannot be made through the price system. Such services are very vital in every country but, by their nature, they may not be provided sufficiently if left to private enterprises.

Again the system breeds small-scale industries, which cannot enjoy the advantages of large-scale production; while competitive advertising among firms leads to a waste of resources.

3.2.2 Planned (socialist) economic system

This is an economic system in which all the factors of production are owned by the society as a whole. There is a central planning unit (CPU) that tries to answer all the three economic questions of what to produce, how to produce, and for whom to produce. This suggests that there is the absence of private ownership of resources. Private initiative is therefore limited as the CPU decides for all the members of the society. In this type of economic system, free market business decisions are therefore absent. This economy is generally characterised by a negative monetary incentive towards work. This is because the incentives are usually in the form of packages other than monetary rewards. A close example of where such an economic system obtains is Cuba.

The common features of a socialist economic system may be summarised as follows:

1. The means of production are owned by the government/society.
2. Decisions regarding what to produce, how to produce and for whom to produce are taken by the government.

Advantages of socialism (planned economic system)

1. Full employment Under a centrally planned economic system, the people

who decide which wants shall be satisfied are also the people who direct factors into the production of the necessary goods and services. All factors are therefore fully employed.

2. *The system is competent in providing vital social services.* Unlike the capitalist economic system, socialism is very competent in providing some vital services which are not marketable, e.g. defence, police, the judiciary, education, medical care, insurance against sickness, unemployment, etc.
3. You should know that *socialism allocates resources better;* the planning committee makes sure that the goods produced are the essential ones needed by the people.
4. *The system ensures equality of income.* It avoids the situation whereby some people are excessively rich while others are desperately poor. This is because the distribution of income is done by a central authority and thus eliminates bitter competition, which often results in the weak and the incapable becoming very poor, and the stronger very rich.

Disadvantages of socialism

The satisfaction derived from consuming different goods by individuals is difficult to obtain under this system. Thus there is no room for satisfying the special needs of consumers. People are lumped into separate groups and provided for according to the groups' needs. E.g. all the labourers are provided with similar goods, all doctors have similar goods, etc.

Socialism tends to lead to lower productivity as it does not give room for high incentives and thus individual efforts and initiative become diminished. There is also the waste of factors of production and existence of red tape; there are so many officials required to estimate wants, and to direct factors of production. This represents a waste of factors of production, since such planners could be employed to satisfy more wants. Such officials are avoidable in a free economic (capitalist) system. Moreover, the use of officials may give rise to red tape (i.e. slow bureaucratic procedures in taking decisions) and corruption.

3.2.3 Mixed economic system

This system is commonly called the mixed economy. As the name implies, it is a mixture of both capitalism and socialism. This suggests that the mixed ecor.omy is one in which public ownership of productive resources exists side by side with private ownership of resources. Here the government representing the public establishes business enterprises just as private individuals do. Most developing countries operate this economic system. Business decisions are a fundamental aspect of the economy. The market forces of demand and supply decide and answer the three basic economic questions, alongside government regulations. This sometimes leads to price fixing. The system of motivation here is both monetary and non-monetary.

Advantages of the mixed economic system

1. It enjoys the advantages of both the capitalist and socialist systems.
2. It provides incentives for exceptional work and, therefore, incentives for entrepreneurship.

Disadvantages of the mixed economic system

1. It suffers the disadvantages of both systems.
2. It tends to heve neither a track record of good planning nor an efficient market price mechanism.

4.0 Conclusion

We should conclude by stressing the thin boundary lines separating the capitalist, socialist and mixed economies. Planning, whether centralised or decentralised, plays an important role in every nation of the world. We can also conclude here that economic systems are diverse. The dominating ones are capitalism, socialism and the mixed economy. Socialism is gradually losing strength. As such the mixed economic system today exhibits an increasing bias towards capitalism, faced with the challenge of living in accordance with the changing times. Business managers therefore have to make business decisions that are in line with the trend. In a nutshell, each of the three economic systems discussed above differs from the others predominantly in the aspects of ownership of productive resources, decision making processes and incentive methods.

5.0 Summary

In this unit of work, we have examined the basic economic systems of the world today. We have established that capitalism, socialism and the mixed economy are dominant systems. Most developed countries practise capitalism while most less developed countries practise mixed economy. The trend for the less developed countries today is gradually moving towards capitalism as the private sector is constantly being expanded through the privatisation programmes embarked upon by most of these countries. With the collapse of the former USSR, socialism is gradually giving way to capitalism.

6.0 Tutor-marked assignment

1. What is an economic system?
2. Differentiate between any two economic systems.

7.0 References and other resources

1. Lipsey, R.G. and K.A. Crystal (1997) *An Introduction to Positive Economics,* Oxford: Oxford Press.
2. Lipsey, R.G. et al (1987) *Economics,* London: Harper and Row Publishers.
3. Dwivedi, D.N. (1987) *Managerial Economics,* New Delhi: Vikas Publishing House Pvt Limited.

Unit 16 Public finance

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1.0 Introduction

Government performs several national and international functions. It needs money to do these. Public finance deals with government income and expenditure.

Public finance is an important aspect of macroeconomics. It refers to financing of the public sector by the government. In financing the public sector, business firms are in one way or the other affected. This is in the sense that funds must be raised for government to finance its activities. The raising of these funds is what touches on private ventures. As such business managers take this into consideration when designing their business strategies. Put in another way, public finance deals with the financial activities of the public sector. Embedded in the concept of public finance are the ideas of public expenditure and revenue. These two aspects are presented to the country every year by way of the budget. We shall discuss all this in this unit. Suppose a friend of yours seeks to know how taxes constitute an important source of government finance, while most Nigerians do not pay taxes. What would you tell him?

2.0 Objectives of the unit

At the end of this unit, it is expected that you should be able to take major decisions based on the analysis of the trend of public finance. You should also be able to comfortably analyse and appreciate the budget.

3.1 Components of public finance

The main components of public finance are:

1. Public expenditure
2. Government revenue
3. Government indebtedness
4. Fiscal policy
5. Fiscal relationships

3.1.1 Public expenditure

Public expenditure comprises all the spending of the federal, state and local governments and the capital spending of government owned industries.

Government expenditures differ from private expenditure in one very important respect as far as income flow is concerned. The private individual can only spend in excess of his income by running down his savings or by persuading another individual to reduce his spending and lend him the balance. Governments on the other hand, are in a position to consistently spend more than they receive in revenue. If they decide to do so they will achieve it, whether or not other people are prepared to reduce their own expenditure. They can do this because they can finance deficits in various ways.

Classification of public expenditure

Economists categorise government expenditure into three broad categories:

/. Capital expenditure.This refers to expenditure on long-term projects such as construction of roads, hospitals, power stations, etc. This form of investment is often an investment that will benefit the country for many years. Borrowing commonly finances this investment.

2 Current expenditure. This covers payment of wages and salaries and the cost of materials or supplies necessary to operate existing public services on a day-to-day basis

3 Transfer expenditure. This refers to payments such as pension and other social responsibility costs, which the government makes out of taxes, mainly to those who need special help. Such spending differs fundamentally from the other two categories because it is not real expenditure by the government, but rather a

method of shifting spending power between members of the community, generally from the rich to the poor.

Structure ancl pattern of public expenditure

The services on which governments spend their revenue can be grouped under four major headings, namely:

1. General or administrative services. These include expenditure on the armed forces (the army, navy and air force), the police force, the courts, public servants, including teachers in public schools.
2. Economic services. These include expenditure on agriculture, trade and industry, mining, power stations, communication, forestry, fishery, etc.
3 Social services. These are expenditures on education, health care delivery, recreational facilities, refuse disposal, fire protection, environmental sanitation, etc.
4 Transfer services. Important items in this group include servicing of public debt (i.e. payment of interest on money already borrowed), grants to local governments, payment of pensions, social security and unemployment benefits. Government expenditure tends to grow over the years. This has been influenced

by the following factors:

1. An upward movement of the country's population.
2. The emergence of strong public opinion for the economic and social security of the citizens.
3. The international demonstration effects of what roles other governments are playing, such as in research and development, and in the development of military weapons.
4. Rising demand for certain public goods (e.g. education and health).
5. The need for government to be the source of increased saving and capital formation.

3.1.2 Government revenue

Government revenue performs a number of important functions, such as providing essential services in the country. To perform its functions effectively, it requires a huge amount of money annualy. The main sources of government revenue are taxes, which take a number of different forms. There are other forms of revenue. All these could be summarised as follows:

1. *Taxation.* Income tax, property tax and profit tax are examples of taxes that accrue to government. This is usually the most important of all the sources of revenue to government.
2. *Borrowing.* Like a private individual, the government borrows when its resources are inadequate to meet current expenditure. It also borrows to finance major investments or during a period of emergency, such as civil war or economic problems such as we have had in Nigeria and Ghana. A government may also borrow to settle previous debts. A government can borrow from individuals, financial institutions like commercial banks and insurance companies, the central bank, and from other countries or international organisations such as the IMF and World Bank.
3. *Fees and charges.* Sometimes when a government provides some kinds of goods and services, it makes some charges. These include payment for various types of licences. Others include postages, toll gate fees, water rate, court fees, etc.
4. *Rents, royalties.* Rents are paid by users of public land. Royalties are obtained from users of mineral resources, e.g. tin ore. Profits are also made by public corporations and companies. When these resources are put together, they can be substantial.
5. *Grants.* Within the country, grants are made from the federal government to the states and local governments. This grant is the main source of revenue to most state and local governments. The national government, on its own, may sometimes receive grants from other friendly governments. This may be in the form of aid for specific projects such as health and education.

Effects of financing government

The above methods of financing government expenditure can create some loss to society. But the major effect of the methods of financing government expenditure is on those who bear the costs, not on how much the costs are. Business firms are highly susceptible to this question. For instance, where government decides to finance its expenditure by creating new money through the sale of government bonds, the implication is that if the economy is in full employment, this method can create an inflationary gap and thus cause a rise in the price level. The rise in price would mean that households and firms would be able to buy less than they would otherwise have bought, and the government would be able to obtain resources for its own activities. Thus, fewer resources would be available for private consumption and capital formation.

Taxation

A tax is a compulsory payment to government by private individuals, groups or institutions. Taxes, as we have seen, can be either direct or indirect. There are a number of reasons why taxes are imposed. We will consider them here under ***aims of taxation.***

Aims of taxation

Taxes are imposed for the following reasons:

1. ***As a source of revenue.*** The first purpose of taxation is clearly financial, to raise the revenue necessary to meet the cost of public services. For a long time now, governments impose taxes to raise revenue which could help cover the cost of administration and defence; and in the case of despotic monarchs, the personal expenditure of the rulers.
2. ***Protection of infant industries.*** Tax may be imposed to protect infant industries of the country. Import duties especially serve this purpose. Once the tax is imposed on imported goods, their prices will rise thereby making them unaffordable to many people. This often gives domestically produced goods a chance to favourably compete with foreign goods.
3. To ***control the economy*** Tax is a very useful tool of control as well as regulation of various economic activities. It should be noted that too much spending in the economy could lead to inflation and too little to unemployment. Taxation is a means by which government can adjust the level of spending. Thus taxes may be increased if spending is too high, or reduced if it is too low. Such policies

are explained fully under fiscal policy in another unit.

Tax is also use ito influence a particular part of the economy, or to achieve a particular economic effect. For instance, an industry can be encouraged to invest and expand by means of tax relief on its products.

4. To redistribute income. An important modern use of taxation is to achieve a fairer distribution of income and wealth amoeg members of the community. Taxing the rich heavily and using much of the money to help the poor through welfare services ensure a fair redistribution of income.

5 A tool for growth. Taxes can be used to promote economic growth.

6 A disincentive to consumption. It discourages the consumption of some unwanted goods. The consumption of some foreign goods, which may be dangerous and harmful to the citizens can be discouraged by way of tax. A well-known historical example is British tax on gin and tobacco originally imposed in the eighteenth century to reduce drunkenness, which was then a serious problem among the working class in Britain.

Classification of taxes

The most common classification of taxes places them into two broad categories: direct and indirect taxes.

1 Direct taxes

Direct taxes are charged or imposed directly on the taxpayer's income or wealth (capital). They comprise personal income tax and corporation tax collected by the country's Federal Inland Revenue Board and Board of Internal Revenue at federal and state levels respectively.

21 Indirect taxes

These are taxes in which the taxpayer is not in direct contact with the tax co lector. Such taxes are outlay or purchases tax on goods and services. How much one pays depends on the extent of his consumption. These include excise duties, import duties, sales tax, VAT, entertainment tax, etc. These taxes are called indirect taxes because they are normally collected from firms and the burden of payment is commonly shifted to the consumers when they make their purchases. The burden of direct taxes cannot usually be shifted to others in this way.

3.1.3 Government indebtedness

It is not always possible that revenue and expenditure of government will always balance. Very often, there is either a budget surplus or a deficit. In the case of a budget surplus, government will attempt to build up some reserves against future uncertainties. In the case of a budget deficit, however, government may go into existing reserves from past savings (if any) to cover the gap. If, unfortunately, there are no such reserves, the government may have to borrow. The way and manner government borrows and repays loans is referred to as government indebtedness.

3.1.4 Fiscal policy

The various instruments used to allocate resources are referred to as fiscal policy. Fiscal policy is an important tool in public finance. Though a thorough examination is given to this concept in another part of this work, it will be worth mentioning it here. Fiscal policy involves intervention in people's choices. This could be by influencing consumption either positively or otherwise. The consumption of a particular commodity, for instance, cigarettes, could be discouraged by imposing taxes on it, thus making it expensive. In the same way, the consumption of some other goods may be encouraged as when subsidies are given on them, such as government subsidy on petrol in some countries. Some goods may be prohibited altogether as injurious to health.

Fiscal policy is one of the stabilisation polices used by the government to check violent economic fluctuations in an economy. In modern societies, fiscal policy performs three basic functions:

1. It influences resource allocation in the direction where it provides greater satisfaction to the public.
2. Fiscal policy performs the task of redistributing wealth and income between one group in the society and another.
3. Fiscal policy also provides a general guidance for the national economy in terms of growth and stability.

Fiscal relationship

Fiscal relationships are also part of the scope of public finance. These refer to the financial relationship between federal, state and local governments, i.e. how grants are made from the federal government to states and local governments.

4.0 Conclusion

Public finance is that aspect of government that has to do with government revenue and expenditure. Since most of the government's responsibilities (i.e. provision of some vital social services, defence, etc) are to be carried out with money, which could be generated from the above discussed sources, government should intensify its revenue sources for the improvement of her citizens' standard of living. We can conclude at this juncture that public finance is a great factor that affects business finance. Its effects on firms would be devastating if managers do not understand them so as to counteract them.

5.0 Summary

In this unit an attempt has been made to study public finance. The scope of public finance, we have seen, includes government revenue, government expenditure, government indebtedness, fiscal policy and fiscal relationships. All these have been examined in this unit. Taxation has been identified as the main source of government revenue. And the unit is concluded with the idea that government should intensify its revenue sources for improved performance.

From the discussion, it is clear that public expenditure deals with the finances of the public sector. This comprises revenue and expenditure. In the area of revenue, taxes form the base. These taxes do affect business decisions since businesses are the ultimate targets.

6.0 Tutor-marked assignment

Explain vividly the components of public finance.

7.0 References and other resources

1. Bonnet, P., D. Birmingham and D. Herbert (1980) ***Understanding Economics,*** David Mckay & Co. Inc.
2. Lipsey, R. (1992) ***An Introduction to Positive Economics*** (Seventh edition) Weidenfield & Nicholson Ltd.

Unit 17 Balance of payments

Table of contents

1.0 Introduction

International trade involves payments and receipts resulting from international transactions. A country earns money when it exports goods to the rest of the world and makes payments when it imports goods from other countries Hence, international trade gives rise to indebtedness among countries. The balance of payments shows the relationship between a country's payments to other countries and its receipts from them. The balance of payments is thus a statement of income and expenditure on international account. Before we go ahead, consider whether you can reconcile the fact that Nigeria imports capital goods and consumer goods from other countries; yet it exports so little especially when the monetary values are considered.

2.0 Objectives of the unit

The objectives of this unit are that you should be able to:

1. Define balance of payments concepts.
2. Identify the various components of balance of payments.
3. Explain the causes of and solutions to balance of payments problems.

4 Discuss the effects of balance of payments on business decisions.

The balance of payments accounting technique is basically that of simple double entry bookkeeping. If a transaction involves the purchase of foreign currency, thereby reducing the foreign exchange holdings of a country, it is a debit transaction; for example imports. Where a transaction leads to foreign countries buying the country's goods, and so raises the foreign exchange holdings of a country, then it is a credit transaction; for example, exports. Like other accounts, balance of payments accounts could either be a plus or minus. Here, a plus item is called a credit and a minus is called a debit.

3.1 Components of balance of payments

Current account

It shows al transactions in goods and services, which include both visible and invisible goods. Visible goods are goods like foodstuffs, cars, computers, iron, etc. that can be seen when they cross international borders. Invisible goods are services like tourism services and freight haulage. Another important item among the invisible items in the current accounts is the receipts of interest and dividends on loans and investments in foreign countries. A Nigerian resident, for instance, who holds shares in Elf will receive dividend payments in US dollars, if he wishes. Such foreign loans and investments thus provide foreign exchange and are entered as credit items.

Capital account

Whereas the current account covers income earning and spending in the course of trade, capital account deals with movement of long- and short-term capital. A Nigerian investor, who wishes to invest abroad by lending money to a British industry, is exporting capital from Nigeria to Britain. Furthermore, a Nigerian investor who wishes to buy bonds being sold in the United States by an expanding firm, say, in New Jersey, is also exporting capital to the United States. To do so, the investor needs to obtain dollars. He has to buy dollars with the naira.

3. 2 Equilibrium, deficit and surplus in the balance of payments

3.2.1 Equilibrium

Equilibrium in the balance of payments is said to exist when the values of the credit items in the balance of payments account exactly match the value of the debit items. That is to say, the country's receipts and payments with the rest of the world are equal. It should be noted that the balance of payments equilibrium is not always possible.

A balance of payments surplus, as we shall see in unit 3.2.2, arises when the items on the credit side are greater than the debit items. This means that the country's reserves are increasing. A deficit in the balance of payments account (see also unit 3.2.3) arises where the items on the debit side are greater than the items on the credit side. This means that the nation is spending more than it is earning. A deficit means the reserves of the central bank are running down or its foreign indebtedness is rising.

3.2.2 Balance of payments surplus

A balance of payments surplus means that the flow of resources into the country from the rest of the world is greater than the outflow of resources from the country in the period under consideration. It can be regarded as a situation in which the country exports more than she exports during a given period.

A balance of payments surplus is always a thing of joy to a country because it implies that citizens of the country would be better off. A balance of payments surplus often brings about the following economic effects to a country and her citizens:

1. Greater net income
2. Debt retirement
3. Quickening of economic activities
4. **Inflationary** tendency

3.2.3 Balance of payments deficit

A balance of payments deficit means a country is importing more than she is exporting, implying that more resources go out of the country than come into the country during the period under consideration. It is clear that a balance of payments deficit does not augur well for the economy of a country. As a result, once a deficit occurs in the balance of payments, the government quickly takes a number of measures to rectify the deficit. Some of these measures are discussed in unit 3.4.

3.3 Causes of balance of payments deficit

1 *Loss of market*. Since the balance of payments is the relationship between receipts and payments of a country, a fall in the level of the country's exports will

lead to poor export earnings, with a negative impact on the balance of payments.

2. Excessive visible imports over invisible imports. Any time there is a rise in the level of imports without a corresponding increase in exports, a balance of payments deficit will likely occur. This was evident in Nigeria in the early 80s when excessive importation led to the country experiencing balance of payments disequilibrium.
3. Exchange rate. A country with an over-valued currency will likely import more and export less and vice versa. This would lead the country to pay more than it is receiving and as a result, experience a balance of payments deficit.
4. Level of domestic prices. A country with a high level of inflation is most likely to have balance of payments disequilibrium. As a result, its exports will fal and its imports will rise.
5. Interest rate. A high interest rate attracts foreign capital and, hence, a favourable balance of payments. However, low rates of interest could lead to capital flight and this would cause a state of disequilibrium.
6. Income growth. An increase in a nation's income will usually cause increased demand for imports. This would adversely affect the balance of payments.

3.4 Measures of correcting balance of payments deficit

Countries normally aim at a surplus balance. A deficit is a matter of concern. However the effect of a deficit depends partly on its cause. If it is due to loans or investment overseas, it may mean that the country is increasing its wealth abroad and so strengthening its future current account through the resulting inflow of interest and profits. On the other hand, deficits on current account mean that the nation is spending more than it is earning abroad. This is similar to an individual living beyond his income.

Balance of payments deficits, especially if persistent, stand to be a greater threat to a country, especially a developing country. A country with a balance of payments deficit can either adopt temporary measures which are aimed at arresting the deteriorating situation, or look for long-term solutions, which involve the overhauling of the whole economy.

Temporary measures

1 Borrowing. A country with a deficit, as part of temporary measures, can borrow to finance the deficit. This entails borrowing from the IMF, international credit

organisations (London Club or Paris Club), or from other wealthy countries (US, Germany, France, etc.). Equally, a country can raise domestic loans denominated in foreign currencies.

2. ***Reducing imports.*** The country can also reduce imports, especially if the deficit is in the current account. This can be done by the use of tariffs or quotas on imports, thereby restoring balance of payments equilibrium.
3. ***Controlling the flow of capital.*** If a deficit in the balance of payments is reducing the nation's reserves, this may be relieved by government restrictions on investment and other capital flow abroad. However, this measure can only be used when the deficit is in the capital account. In any case, restricting the flow of capital does nothing to relieve a deficit on current account, the crucial part of balance of payments.
4. ***IMF loan.*** The country can equally seek assistance from the International Monetary Fund (IMF) through the special facilities normally given by the fund to countries with balance of payments deficits.

Long-term measures

1. ***Expanding exports.*** Export expansion is the ideal solution to a current account deficit since it avoids the need to cut back on imports. Direct government subsidies to exporters may be given to encourage firms to export, for instance, by giving them tax incentives.

The government could also try to assist exporters by helping to promote and advertise their products through trade fairs, exhibitions, providing information about overseas markets, arranging loans on favourable rates of interest, and so on. In Nigeria, the Nigerian Export Promotion Council was established as part of this measure.

2. ***Deflation.*** This can be achieved through a tight monetary policy to retard inflation and drive up interest rates (at least in the short run). The tight monetary policy can reduce the country's rate of inflation and thereby lower its prices relative to those in other countries. This would make its exports relatively cheaper than they were before (if other nations did not enact a tight monetary policy), promote exports and discourage imports, as well as generate a flow of investment funds into the country since interest rates are higher.
3. ***Devaluation.*** This is seen as the last resort, which means a reduction

in the value of a nation's currency (that is, the rate at which it can be changed into other currencies). Suppose the rate of exchange between the naira and the dollar was originally $1 = N100, an American product priced at $100 would then sell in Nigeria for **N10,000** (assuming that there are no transport costs). Now suppose the dollar is devalued to N50 a dollar. The same product would now cost N5,000 in Nigeria.

By devaluing a currency, countries make their products cheaper to foreigners and so encourage their exports. Similarly, devaluation makes imports more expensive, since it makes the local currency cheaper, so that the citizens of other countries will give less of their currencies to purchase goods from the country with a devalued currency.

3.5 Problems of devaluation

1. The success of devaluation depends on how foreign demand responds to cheaper export prices. In the language of economics, it is necessary for demand to be elastic. Similarly, if the demand for imported goods is price inelastic, devaluation will not work because it will not succeed in reducing imports.
2. Devaluation when used to correct a balance of payments deficit, makes imports very expensive. So, it raises the cost of living especially in a country that depends on imports for essential items like foodstuffs. it also makes people worse off by diverting goods from the home market to export.
3. Inflation. By making imports very expensive, devaluation leads to a rise in the cost of machines and raw materials used by domestic industries. This forces manufacturers to increase their prices, thereby causing inflation.
4. Devaluation leads to a fal in government revenue as a result of the decrease in imports.
5. Devaluation also leads to a deterioration in the country's terms of trade since a country that devalues its currency will receive less for its exports and pay more for its imports.

4.0 Conclusion

Every country is striving to maintain at least a balance in its balance of payments account. This is because of its impact on business activities in the economy. Therefore countries adopt the measures we have highlighted above to ensure a favourable balance of payments. The success of each measure, as we have seen, depends on the circumstances of the problem.

5.0 Summary

The balance of payments is the record of what comes into a country in the form of receipts and what goes out as payments abroad. It has been defined in the unit. Different components of balance of payments like current account, capital account and reserve asset account have been explained. The unit has also dealt with the causes and corrective measures to solve balance of payments problems. It has been shown that a balance of payments analysis is very relevant to business decisions.

6.0 Tutor-marked assignment

Briefly explain:

1. Devaluation
2. Surplus balance of payments
3. Current account

7.0 References and other resources

1. Lipsey, R.G. and K.A. Crystal (1997) *An Introduction to Positive Economics*, Oxford: Oxford Press.
2. Lipsey, R.G. et al (1987) *Economics*, London: Harper and Row Publishers.
3. Dwivedi, D.N. (1987) *Managerial Economics*, New Delhi: Vikas Publishing House Pvt Limited.

Unit 18 Exchange rates

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1.0 Introduction

In the foreign exchange market, currencies of different nations are traded.
In the course of exchanging one currency for another, an exchange rate is established. This exchange rate determines how much of one country's currency should be exchanged for that of another. This activity is of particular interest to the government of every nation and to the business community, especially those that deal with the international market. Based on this, business managers would be able to design better policies for their firms when they possess knowledge of the exchange rate. In this section of the work, we will be examining the concept of exchange rate and the types of exchange rates. Now if, in considering the movement in the exchange rate of the naira against foreign currencies, your friend asks you, 'When does a currency gain value or lose value in the exchange market?' What would be your reply?

2.0 Objectives of the unit

By the end of this unit, the student is expected to:

1. Understand the concept of exchange rate.
2. Be able to appreciate the implication of this rate for the business environment.

3.1 Concept of exchange rate

Exchange rates have a number of concepts. In this section we are going to consider the most salient ones.

3.2 Definition of exchange rate

The exchange rate is simply the price of one currency in terms of another. That is to say, how much of one currency can be given up to obtain another (e.g. \$1 = N100). Here, we can say that the exchange rate of the US dollar in Nigeria is \$1 to N100.

3.3 Types of exchange rate

The following are the types of exchange rates commonly used around the globe:

3.3.1 Flexible exchange rate

This is a system whereby exchange rates are determined by the forces of demand and supply Since the forces of demand and supply purely determine the exchange rate under this system, there is no government intervention in the market.

The demand for US dollars and supply of the naira are linked, as are the demand for the naira and supply of US dollars. Suppose an American wants to buy Nigeria's groundnuts, before he purchases Nigerian groundnuts, he must buy the naira, hence the naira is demanded. But the American will buy the naira with dollars; that is, he supplies dollars to the foreign exchange market in order to demand Nigeria's naira. We then conclude that the American's demand for Nigerian goods has led to a demand for the naira and to a supply of U.S. dollars in the foreign exchange market.

The process is the same if a Nigerian importer wants to buy goods from the U.S. He must buy dollars first, hence U.S. dollars are demanded. He buys the dollar with the naira. It can be concluded that the Nigerian's demand for American goods has led to the demand for U.S. dollars and to the supply of the naira in the foreign exchange market. At the equilibrium exchange rate, the demand for dollars equals the supply of the naira. There is no shortage or surplus of dollars. At any other exchange rate, however, either an excess demand for the dollar or excess supply of the naira exists. The factors that can cause a change in the equilibrium flexible exchange rate include a difference in income growth rates, differences in the relative inflation rate, and change in real interest rates.

3.3.2 Fixed exchange rate

This is a system where a nation's currency is set at a fixed rate relative to all other currencies and central banks intervene in the foreign exchange market to maintain the fixed rate. The major alternative to the flexible exchange rate system is the fixed exchange rate system. This system works the way it sounds: exchange rates are fixed or pegged; they are not allowed to fluctuate freely in response to the forces of supply and demand.

For instance if the naira price of dollars is above its equilibrium level (which, for example, is the case at the official price of $1 = N100), the naira is said to be overvalued. It follows that if the naira is overvalued, the dollar is undervalued. Similarly, if the naira price of the dollar is below the equilibrium level, the naira is undervalued. It follows that if the naira is undervalued, the dollar must be overvalued.

A nation that persistently has a deficit or a surplus in its combined current and capital accounts has several options under a fixed exchange rate system. These options include devaluation and revaluation, protectionist trade policies and change in macroeconomic policies.

3.3.3 Managed floating system

A managed flexible rate system is that in which nations now and then intervene to adjust their official reserve holdings and to moderate major changes in the exchange rate. Today's international monetary system is best described as a managed flexible exchange rate system. Sometimes it is referred to more casually as a managed float. It is a kind of compromise between the fixed and flexible exchange rates. Nations now and then intervene to adjust their official reserve holdings to moderate major swings in exchange rates. Buying up or supplying foreign currency at the market price does this.

Proponents of the managed float system stress the following advantages:

1. It allows nations to pursue independent monetary pqlicies. Under a (strict) fixed exchange rate system, fixed either by agreement or by gold, a nation with a merchandise trade deficit might have to enact a tight monetary policy in order to retard inflation and promote its export. This would not be the case with a managed float system.

2. It solves trade problems without trade restrictions. As we have stated earlier,

to solve trade imbalances. For example, a nation in deficit can impose tariffs or import quotas so that import and exchange rate trade imbalances are solved through changes in the exchange rate.

3. It is 'flexible' and therefore can easily adjust to shocks. In 1973/74 the OPEC nations dramatically raised the price of oil, which resulted in many oil-importing nations running trade deficits. A fixed exchange system would have had a hard time accommodating such a major change in oil prices. The managed floating system has little trouble, however.

The disadvantages of the managed floating system include the following:

1. It promotes inflation. For example, a nation with a deficit is somewhat restrained from changing the exchange rate because this will worsen the deficit problem, as it will make its goods more expensive.
2. It promotes exchange rate volatility and uncertainty, and results in less international trade than would be the case under a fixed exchange rate system.
3. Changes in exchange rates alter trade balances in the desired direction only after a long time. In the short run, a depreciation in a currency can make the situation worse instead of better.

4.0 Conclusion

The significance of exchange rates to business decisions cannot be ignored. Firms and their managers as well as government representatives must be informed of changes in the foreign exchange market so as to reap maximum benefits from this variable.

5.0 Summary

This unit has examined exchange rates and has tried to link up the analysis to business firms. Managers with knowledge of the exchange rate may have an upper hand among competitors in making business decisions.

6.0 Tutor-marked assignment

1. What are exchange rates?
2 Explain in detail how flexible and managed exchange rates function.

7.0 References and other resources

1. Lipsey, R.G. and K.A. Crystal (1997) *An Introduction to Positive Economics,* Oxford, Oxford Press.
2. Lipsey, R.G. et al (1987) *Economics*, London: Harper and Row Publishers.
3. Dwivedi, D.N. (1987) *Managerial Economics,* New Delhi: Vikas Publishing House Pvt Limited.

Unit 19 International trade and protectionism

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1.0 Introduction

This unit examines the subject of international trade and studies the existing differences between international and domestic trade, and the pattern of world trade especially as it affects the less developed economies. Some classical theories of trade and the gains from trade, problems of trade and the reasons for protecting national boundaries are also considered. Equally in this unit the different methods employed by countries to control trade are discussed. The arguments for protectionism are analysed.

Managers of business firms are expected to be exposed to this aspect of macroeconomics, because the external environment has a direct implication for their business decisions. Sqmetime in year 2003, the US increased their tariff on steel by over 8% to 30%. In the same year also, Nigeria did a similar thing on cars. What do you think this can do to trade?

2.0 Objectives of the unit

This unit studies the external sector of the national economy. Specifically, it focuses on interdependence among countries. At the end of the unit you are expected to:

1. Appreciate the differences between international and regional or domestic trade.
2. Explain the reasons for international trade.
3. Explain the theoretical background of free trade.
4. Outline reasons and measures of trade protectionism.
5. Be able to establish the relationship between the external environment and business firms' operations.

3.1 Definition of international trade

International trade can be defined as the exchange of goods and services between one country and others throughout the world. It is also known as foreign trade. International trade first began because some countries could produce goods which others, on account of differences in climate and other factors (which will be discussed later), could not.

3.2 Differences between domestic and international trade

International trade is an issue in every nation's daily life. Nigerians use Japanese cars, Americans buy Nigeria's oil, while Germans drink French wine. International trade is therefore defined as trading between one country and another The term also refers to all such exchanges of goods and services that take place across international boundaries. For example, trade between Nigeria and China or trade between France and Italy

Domestic trade on the other hand is the trading of goods within the boundaries of a particular country among the citizens of that country. An example of domestic trade is trade between a businessman in Kano and a businessman in Lagos. The following differences exist between international trade and domestic trade:

1. In domestic trade, factors of production are more mobile than they are in international trade. This implies that, in internal trade, the same kinds of labour will obtain the same reward, while this is not likely to be the case in international trade.

2. Usually, the distance between two regions of a country engaged in international trade will be less than the distance between two countries engaged in international trade. The longer the distance, the greater the freight charges, the greater the risk, and so the greater the insurance costs. Thus international trade is more expensive than internal trade.

3. *Differences in national policies.* Since internal trade does not involve movement of goods and services across national boundaries, it is not subject to differences in policies with respect to wages, prices and other business regulations, all of which affect international trade. It may also become necessary, because of the local needs of the different countries, to introduce such restrictive measures as tariffs, quotas, and even outright prohibitions, all in the form of commercial policies which affect international trade, but not internal trade.

4. One major difference between foreign trade and domestic trade is the fact that different countries use different currencies. In Nigeria for example, the naira is the legal means of exchange. However the same naira will not be acceptable to firms and households in Germany. If an importer in Nigeria wishes to purchase German goods, he cannot pay for them in naira, instead he will have to obtain the German currency (the deutschmark) first.

5. Also, there is the issue of dealing with different government systems in international trade, as opposed to dealing with one government system in domestic trade.

6. Language differences make international trade differ from domestic trade.

Despite the differences highlighted above, international and domestic trade is similar in some ways. The similarities include the following:

1. In a country, for example, trade takes place between one region and another mainly because the regions are mutually dependent. One region has something to offer which the other needs, and has a need which can be obtained from the other. The same thing happens in international trade.

2. Both domestic and international trade involve the use of money as a medium of exchange.

3. They are also similar in that they both involve a degree of specialisation between the trading partners, since specialisation causes exchange. Their basis for trade is thus the same.

3.3 Necessity for international trade

Countries trade with one another essentially for the following reasons:

1. Uneven distribution of natural resources. It is obvious that resources have been distributed haphazardly over the earth's surface. Such has resulted in a situation in which a country may have an excess of one mineral, while totally lacking in another. Nigeria, for instance, has an abundant supply of petroleum while lacking in diamonds. Sierra Leone, though having no petroleum, has plenty of diamonds. It is therefore only sensible that the two countries should engage in trade to exchange their products.
2. Differences in climate. Different countries of the world fall into different climatic zones. This has a lot of influence on trade especially trade in agricultural products. International trade becomes necessary if the products from different climatic regions are to be found in different parts of the world where there is a demand for them.
3. International trade increases the chances of a peaceful world.
4. It widens the market and thus increases the inducement to save and invest, which in turn, makes for greater economic development.
5. International trade enables developing countries to learn from the experiences of developed countries.
6. It also leads to the efficient allocation of resources in the participating countries.

3.3.1 Demerits of international trade

1. International trade leads to the movement of capital from the developing to developed countries (known as capital flight).
2. It creates unemployment as a result of the replacement of human labour with capital.
3. It reduces capital formation.
4. It leads to unfavourable terms of trade.

3.4 Free trade and protectionism

The argument in this unit up to this point seems to support uninterrupted trade between nations. It has been shown, for example, that free trade increases a country's span of goods and has numerous advantages. Yet countries impose restrictions on some of their imports. Reasons for these are given in subsequent sections.

3.5 Theories of international trade

Experts who have studied international trade have come up with a number of theories. A few of these theories are discussed below.

3.5.1 Absolute advantage theory

The principle of absolute advantage is usually attributed to Adam Smith. In his book, The Wealth of Nations (1776), he said that a country might possess natural or other resources (climate, minerals, skills and so on) that simply are not available in some other countries. This would enable the country to produce certain products absolutely cheaper than they could have been produced in other countries when cost is measured in terms of the physical amount of labour or other input required to produce a unit of output. Hence, the principle of absolute advantage states that a country's export will consist of goods that it can produce with fewer resources per unit of output than its trading partners. Similarly, it will import those goods that its trading partners can produce with fewer resources per unit of output than it can produce.

3.5.2 Theory of comparative advantage

A renowned economist, David Ricardo, propounded this theory. According to Ricardo, countries differ with respect to the productivity of the resources used in producing goods and services. These differences in productivity give rise to differences in the real cost of production. It is the existence of this real cost difference, which constitutes the basis for mutually beneficial trade. According to this theory, benefits will accrue to countries if they only produce those goods in which they have a comparative cost advantage, while they import goods which they don't have a comparative advantage of producing.

3.6 Problems of international trade

1. Language barrier Since international trade is trade that involves two or more countries, it is very rare for those countries to have the same language. For example, a Nigerian businessman importing or exporting goods from or to Germany must employ an interpreter to enable him to communicate effectively in order to carry on the trade. As a result of this, a lot of time might be wasted which may likely affect the business in one way or the other.
2. Greater transaction cost International trade, especially intercontinental trade which covers a long distance is very costly. Transport expenses are often very

high because of the distance. As a result, prices of some goods that are either imported or exported become high.

3. *Use of different currencies.* The fact that international trade is trade between countries makes it involve the use of different currencies. This is because every sovereign nation has its own currency For example, a Nigerian businessman who wishes to import goods from the United States of America has to use the dolar. If he deals with India, he must deal with the Indian currency (rupees), while if he deals with British businessmen or companies, he must pay them in pounds.

4. *Artificial barrier to movement of goods and services.* In international trade, for a variety of political reasons, countries erect barriers against the movement of goods across national boundaries. Such devices include tariffs, import duties, quotas, licences and exchange rate control. These barriers make international trade difficult and sometimes hinder trading completely.

3.7 Advantages of free trade

The theory of comparative costs, in essence, justifies free trade among countries; that is, free movement of goods among countries without restrictions. It shows how every country can enjoy a higher standard of living when each applies the principles of division of labour to the production of goods. Theoretically, it seems to follow that trade should be as free as possible, for only then can maximum specialisation according to the law of comparative advantage be achieved. In practice, however, we find that al countries follow policies which, to varying degrees, prevent goods moving freely according to differences in relative prices.

The following is a summary of reasons why a government may impose restrictions on its trade with other countries:

1. To raise revenue.
2. To protect local industries.
3. To keep employment and incomes high.
4. To prevent a deficit in the balance of payments.

3.8 Methods of controlling international trade

1 *Customs duties.* Customs duties are a common example of tariffs which are

goods bear a higher rate of tax than similar home produced goods. However, it should be noted that import duties have their limitations in terms of the desired result. If demand is inelastic, the increase in price resulting from a customs duty will have little effect on the quantity imported.

2 *Quotas.* Quotas are restrictions on the maximum quantity of imports. Governments apply this to restrict the import of goods to a definite quantity.

3. *Exchange control.* This refers to a deliberate attempt by government to regulate the flow of foreign exchange to overseas exporters. A higher check on the amount spent on imported goods can be achieved if quotas are fixed in terms of foreign currency This necessitates some form of exchange control. All earnings in foreign currency or claims to foreign currency may have to be handed over to the government and goods can be imported only under licence. Thus, the government, not the free market, determines what should be imported.

4. *Subsidies.* Apart from restrictions on imports, a country can also utilise subsidies as a commercial policy to boost exports. This can vary from giving outright subsidies in order to keep down cost of production or by exemption from certain domestic taxes.

4.0 Conclusion

Having examined the various issues relating to international trade in this unit, it is logical to conclude that the external environment has an influence on the performance of the national economy. When international trade favours a country its business performance will improve. Government should be very much careful in its commercial policies for better results.

5.0 Summary

This unit has made a summary of various issues concerning international trade, starting from differences between international and regional or domestic trade down to protectionism, i.e. the policy of trade restriction and its economic justification. Two prominent theories of trade have also been discussed.

6.0 Tutor-marked assignment

1. Explain any two theories of international trade.
2. Make a case for trade liberalisation.

7.0 References and other resources

1. Lipsey, R.G. and K.A. Crystal (1997) *An Introduction to Positive Economics*, Oxford: Oxford Press.
2. Dwivedi, **D.N.** (1987) *Managerial Economics,* **New** Delhi: Vikas Publishing House Pvt Limited.

Unit 20 Economic growth and development

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1.0 Introduction

Economic growth and development are concepts universally admired.
These concepts connote better living conditions for citizens of countries in which they are achieved.

In most of the least developed countries where economic growth and development are almost strangers, a difficult business environment is created for business managers. Fluctuations in growth trends do not make matters easier for managers. Hence, growth and development give cause for concern.

In this unit, therefore, the concepts of economic growth and development are examined, and problems militating against them highlighted. This background is used to evaluate the difficulties business managers face in such conditions. Suppose in a government speech, the minister was using economic growth and economic development interchangeably. A friend of yours who could not really differentiate the two, came to you for clarification. Try using practical examples to clarify the two to him.

2.0 Objectives of the unit

This unit is aimed at introducing the concept of economic growth and development to business managers and allied students. It is hoped that at the end of the unit you should able to:

1. Differentiate growth from development.
2. Appreciate the difficulties of business firms in environments where growth and development are very low.

3.1 Definition of growth, development and underdevelopment

In development economics, the terms economic development, economic growth and economic underdevelopment are always encountered, and may be used in a manner which is capable of causing confusion. We shall here explain their respective meanings.

1. Economic development

Economic development is the process by which there is a long period of sustained growth in the per capita real income of a country, accompanied by fundamental changes in the structure of the economy and an overall sustained improvement in the material well being of the people.

Structural changes in the economy take the form of an increase in industrial employment and activity accompanied by dwindling agricultural employment, a lessening of the country's dependence on imports and an increase in the export of manufactured goods. Economic development occurs if the rate of growth of real per capita income in the country is higher than the rate of growth of population, over a long period of time. It means an expansion of health and educational services and more persons having access to them. Economic development is followed by an increase in life expectancy, lower mortality rate and an increase in the standard of living. In a sentence, economic development is growth plus change.

2. Economic growth

Economic growth is the process by which the productive capacity of an economy increases over a given period, leading to a rise in the level of the national income. When there is economic growth, it shows in the form of an increase in income levels, an expansion in the labour force, an increase in the total capital stock of the country and a higher volume of trade and consumption.

However, you should remember that an increase in incomes, in the labour force, in the volume of trade and consumption, and in the total capital stock of a country could take place with no sustained improvement in economic welfare proportionate to the increase in population. This will leave per capita income at its former level. Yet, we call this economic growth. Again, an increase in income may be accompanied by an equal increase in the rate of inflation. This will leave purchasing power unchanged. Yet, there has been economic growth. Furthermore, the capital stock of a country may increase due to production methods becoming more capital intensive. When this happens, it may result in some people losing their jobs to machines, which will actually decrease the welfare of the people. Still, there has been economic growth.

What we have just said shows that although economic development and economic growth are often used interchangeably in textbooks of economics, there are differences between them.

3. **Economic underdevelopment**

The term less developed countries, underdeveloped countries, developing countries and Third World countries are used in contemporary economic literature to describe the same group of countries. All countries in the group have one thing in common. They are suffering from economic underdevelopment.

Economic underdevelopment is that stage at which the rate of growth of industrialisation and the level of the national income are so low that domestic saving is not enough to finance the investment required for further growth. Underdeveloped countries are also referred to as backward or poor countries. Economic underdevelopment exists where the capital output available per head of the population is very low, where manufactured goods are a sma l proportion of total output, where the income per head is very low and where there is chronic mass poverty.

3.2 Distinction between economic growth and development

In order to understand the differences between the above concepts, we can look at the following points:

3.2.1 Economic growth

1 Economic growth is normally relevant to countries that are already developed.
These advanced countries have already explored and known most of their

resources. They know the uses of these resources and have developed them considerably. Their problem, therefore, is how to ensure the growth of these resources 1 nis is why we say that economic growth is the problem of developed or advanced countries

2. Economic growth is often spontaneous. It does not necessarily follow any plans or conscious determined steps. This is why the gross national product can increase at a widely varying rate. In certain years, it may grow at up to 12 per cent, while, in others, it may only grow at 2 per cent.
3. Economic growth has to do with objective and measurable changes. This is why an increase in incomes, capital formation and employment, is automatically qualified as economic growth, even if, for instance, the increase in income is accompanied by an increase in inflation so that there is no increase in the purchasing power of money or real incomes.
4. There can be economic growth without economic development, e.g. where urban industrial employment increases are accompanied by high urban rents and congestion and the growth of slums and ghettos.

Economic growth means different things to different persons. Some see it as an increase in the output of a particular country. Others see it as the raising of income levels.

3.2.2 Economic development

1. Economic development is relevant to underdeveloped countries. These backward countries are concerned with how to develop and use their unknown and unused resources. Thus, we say that economic development is the problem of underdeveloped countries.
2. Economic development is concerned with the quality of the changes taking place in the economy. It is only when there is an increase in the quality of life (e.g. a higher average life expectancy), food output (e.g. more protein rather than carbohydrate), real income (increase in purchasing power of money), and so on that we can say that economic development has taken place.

3.3 Characteristics of underdeveloped economies

Every country has its special problems, and rates of progress vary widely between different countries. But there are some features which are common to the majority of the underdeveloped countries. These include the following:

1. Birth rates remain very high. Most of these countries experience a rapid growth of population and a high dependency rate.
2. Concentration on agriculture. It is common to find 70 per cent or more of the labour force engaged in agriculture, but, in spite of this high degree of specialisation , productivity is extremely low.
3. *A* very low capital to labour ratio. All developing countries are suffering from a grave deficiency in the supply of capital.
4. Poor natural resource endowment Many of the developing countries are in tropical and sub-tropical regions where soils are fragile and climatic conditions unfavourable to many agricultural activities. Massive investments in programmes for soil conservation, irrigation, the control of pest and the use of fertilizers are needed in order to raise the productivity of the land.
5. Massive underemployment Most people do some work but most are under- employed. Peasant holdings are very small and the system of land tenure often means that all the members of the peasant's family work on the family plot. Under these conditions the marginal productivity of labour is probably zero. There is often little activity between planting and harvesting.
6. Social, religious, and cultural patterns of life often act as serious barriers to change and development. Where people are strongly attached to customary ways of doing things, it is extremely difficult to improve the mobility of labour and introduce new techniques.
7. Low quality labour force. Workers are lacking in education and technical skills, and relatively low standards of health often mean a low level of physical performance.
8. Heavy dependency on one or two export products (invariably primary products). Foreign currency earnings are subject to large variations because the world prices of primary products are notoriously unstable.
9. Totally inadequate industrial and social infrastructure. Rapid economic development needs a basis in the form of good communications, power supply, and so on. The returns on this type of investment are of a very long-term nature so that private investors are not likely to supply the resources for social overhead capital (or infrastructure) where these are not provided by the government.

3.4 Conditions for development

To achieve sustained growth in income per head and advancement in economic welfare, the quality and quantity of factors of production will have to be improved. These can be achieved as outlined below.

1. *Human resources.* The quality of human resources can be increased by improvements in education, training and health.
2. *Capital resources.* Output per head will increase with capital deepening and with improved technology.
3. *Natural resources.* Fertile land, a favourable climate and a good supply of minerals and fuels are obviously beneficial. However, a number of advanced countries, for example, Israel, do not possess a good supply of natural resources.
4. *Allocation of resources.* To increase income per head, resources should be moved from low productivity industries to high productivity industries.
5. *Innovation.* Economic development will be stimulated by the adoption of new methods, improved technology, better communications and advanced management techniques.

3.5 Advantages and disadvantages of economic growth

Whatever has advantages must have disadvantages. Economic growth also has some advantages and disadvantages. Let us begin with the advantages:

1. Economic growth increases the range of human choices. It provides freedom to choose greater leisure as well as more goods and services.
2. Economic growth gives man greater control over his physical and social environment. It enables him to escape from his bondage to famine, ill health and diseases.
3. Economic growth makes possible the spread of humanitarianism, in terms of the greater ability of rich societies to care for those who are weak and cannot help themselves.

The disadvantages which economic growth confers on societies can be grouped into two:

1. The negative effects of growth on conditions of living, e.g. negative cultural aspects of so-called modernisation ideals.
2. The generation of externalities such as pollution, etc.

3.6 Factors that militate against economic growth

Economic growth is not easy to come by. To meet the UN recommended annual growth rate of over 4 per cent is not an easy task for most LDCs. This could be because of any of the fo lowing factors: inadequate capital formation, low technological advances, and limited natural resources that could be used to develop the nation. These factors are also impediments to business firms, which require some response.

Economic development, on the other hand, which connotes both growth and institutional change, is hampered by the following factors: political instability especially in the LDCs, the vicious circle of poverty, and scarcity of capital, and human resources constraints.

The rate at which a country grows and develops is of significance to business firms. They are to tailor their business decisions in line with the trend of growth and development.

4.0 Conclusion

Growth and development are the desire of every individual and economy as a whole. The achievement of these desires creates a conducive atmosphere for all economic agents. Business managers in facing the challenges open to them must be constantly ready to take decisions that reflect the changing trend of the economy. Economic development always produces economic growth. For example, to increase the standard of living, there must be an increase in real income (increase in incomes without a corresponding increase in prices).

5.0 Summary

In the discussion above, economic growth, economic development and economic underdevelopment are highlighted. Distinctions between economic growth and development as well as underdevelopment have been made clear in this unit. The characteristics of underdevelopment, conditions for development as well as the advantages and disadvantages of economic growth have been examined. The factors that militate against their performances especially in the LDCs have been enumerated. It has also been pointed out that the direction of movement of these variables, i.e. growth and development, causes business uncertainty, which managers must address.

6.0 Tutor-marked assignment

1. What is economic growth and development?
2. What factors militate against economic growth in Nigeria?

7.0 References and other resources

1. Lipsey, R.G. and K.A. Crystal (1997) An Introduction to Positive Economics, Oxford: Oxford Press.
2. Lipsey, R.G. et al (1987) *Economics,* London: Harper and Row Publishers.
3. Dwivedi, D.N. (1987) *Managerial Economics,* New Delhi: Vikas Publishing House Pvt Limited.

Unit 21 Money and the macroeconomic environment

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1.0 Introduction

In the course of your programme, I know there is a specialised course on money and banking. However, a discussion on macroeconomics would be incomplete if we do not consider money as part of it. It is for this reason that we are going to briefly look at the significance of money, and the nature of money. To many people, money is the most important thing in life for it provides them with almost all of what is needed. This may be supported by the way such people run around for money. To the economist, money matters but not all that much.

This is based on the argument that increasing the world's money supply such that access to it is easy would not make the average person better off. Although money allows those who have it to buy what they want, a better life depends on the total output produced, not on the total amount of money that people possess. In this unit, we are going to look at the nature of money, its qualities and its functions.

Before we go ahead, find out why those who have money chase it around more than those who do not have much. By the time you find out this, you will understand that money is not all that matters. Imagine also that we are to revert our economies to the system of barter What do you think would happen?

2.0 Objectives of the unit

As we move into a consideration of money in the macroeconomic environment, it is expected that you should pay keen attention to the details of the unit. By the end of the unit, the expectation will be that you have fully understood:

1. The meaning of money.
2. The qualities of good money.
3. The role of money in the economy.
4. The relationship between money and the general price level of goods and services.

An understanding of the above aspects will enable you to take some managerial decisions that are anchored on money.

3.1 Aspects of money

In this section of the work, a number of aspects that are linked to the study of money are to be given consideration. These aspects are the meaning of money, the development of money, and the functions of money.

3.2 Meaning of money

Money is given a simple and unambiguous definition in economics. It is defined as anything generally accepted by the society as a medium of exchange. It is anything that the society would accept in exchange for goods and services. This definition does not tie money to particular coins or notes, but limits it to anything that the society accepts for exchange. This accounts for why different items such as gold, metal, cowries, animals, grains, paper, etc. were all accepted as money by our foreparents. In effect, if the society chooses anything, no matter what it is, as their money, provided such a thing is accepted by the generality of the society, such an item can function as money.

3.3 The development of money

When the era of trade by barter had elapsed, and that of exchange by way of offer of precious goods, animals and grains was gone, metallic money came into being. Though all sorts of commodities had been used at one time or another, the introduction of gold and silver proved to have great advantages. They were precious because their supply was relatively limited and they were in constant demand by the wealthy for ornament and decoration. This led to the metals having a high and stable price. The divisibility, recognisability, and durability gave them additional advantages.

Another development in the history of money was the evolution of papercurrency. Paper money developed out of the goldsmiths' activities of safekeeping of valuables, especially gold. When people deposited their gold with the goldsmith for safekeeping, he in turn issued a receipt promising to hand over the gold on demand. When the reliability of the goldsmith was established, people began to use his receipts as a means of exchange. These receipts were passed on from one transaction to another, as the receipts were seen to be as good as gold. With this development and the introduction of banks, such receipts became bank notes and were backed by precious metal often convertible on demand into this metal (gold).

Yet another development in money came into being when the fractionally backed paper money came into use. Many goldsmiths and banks discovered that it was not necessary to keep a full ounce of gold in the vaults for every claim to an ounce circulating as paper money. At any one time, some of the banks' customers would be withdrawing gold, others would be depositing it, and most would be trading in the banks' paper without indicating any need or desire to convert them into gold. As a result, the bank was able to issue more money (initially notes, but later deposits) redeemable in gold than the amount of gold that it held in its vaults. This was good business, because the money could be invested profitably in interest-earning loans (often called advances) to individuals and firms. The demand for loans arose, as it does today, because some customers wanted credit to help them through hard times or to buy equipment for their business. To this day, banks have many more claims outstanding against them than they actually have in reserves available to pay these claims. We say that the currency issued in such a situation is fractionally backed by the reserves.

Fiat money This was another development in the history of money. As time went on, note issue by private banks became less common, and central banks took control of the currency. With time, only central banks were permitted to issue notes. Originally, the central banks issued paper currency that was fully convertible into gold. In those days gold would be brought to the central bank, which would issue currency in the form of 'gold certificates' that asserted that the gold was available on demand. The gold supply thus set some upper limit on the amount of currency to be issued. However, central banks like private banks before them, could issue more currency than they had in gold because in normal times only a small fraction of the currency was presented for payment at any time. Thus, even though the need to maintain convertibility under a gold standard put a limit on notes issued, central banks had substantial discretionary control over the quantity of currency outstanding.

During the period between the two world wars, almost a l the countries of the world abandoned the gold standard; their currencies were thus no longer convertible into gold. Money that is not convertible by law into anything valuable derives its value from its acceptability in exchange. Fiat money is widely acceptable because it is declared by government order, or fiat, to be legal tender Legal tender is anything that by law is accepted when offered either for the purchase of goods or services or to discharge a debt. Today, almost all currency is fiat money. Fiat money is valuable because it is accepted (by convention and in law) in payment for the purchase of goods or services and for the discharge of debts.

Bankers' deposit. Consider a situation in which there are no net transactions going on between the central bank and the rest of the economy (either on the bank's own behalf or on behalf of the government for which it is banker). The bank now buys N1m worth of securities from the private sector. (It does not matter whether these securities are purchased from an individual person or, say, from a pension fund). The seller receives a cheque for N1m from the central bank, which is paid into the recipient's account with a commercial bank. Deposit rises by N1 m, but, at the same time, the commercial bank receives an increase of N1m in its deposits at the central bank. This increase in its account at the central bank arises when the commercial bank clears the cheque drawn on the central bank. This process increases the money base of the economy.

Currency. The above discussion explains how the central bank creates or destroys high-powered money. The composition of high-powered money, as between bankers' deposits and currency is determined by the demand for currency on the part of the general public. If we choose to increase our currency holding, relative to bank deposits, we simply go to our bank and withdraw deposits in cash. The bank (if it did not have enough cash in its tills) would go to the central bank and withdraw some bankers' deposit in cash from the banking department. The banking department, in turn, would replenish its own stock of cash by selling securities to the issuing department Currency is made available on demand to the economy in this way and is not restricted in supply by the central bank. The stock of currency in circulation is determined entirely by the demands of the economy set by policy makers. This is because the authorities choose to set short-term interest rates, and supply whatever high-powered money is demanded at those rates.

Modern money. The creation of high-powered money is only part of the story of how money supply is created, because most measures of money supply include a wider range of assets than just the monetary base. In particular, money is usually defined to include bank deposits.

Deposit money. Today's bank customers frequently deposit coins and paper money with the banks for safekeeping, just as in former times they deposited gold. Such a deposit is recorded as a credit to the customer's account. A customer who wishes to pay a debt may come to the bank and claim the money in currency and then pay the money to other persons, who may themselves deposit the money in a bank.

As with gold transfers, this is a tedious procedure. It is more convenient to have the bank transfer claims to money on deposit. As soon as cheques, which are written instructions to the bank to make a transfer, became widely accepted in payment for commodities and debts, bank deposit became a form of money called 'deposit money'. Deposit money is defined as money held by the public in the form of deposit in the commercial banks that can be withdrawn on demand. Cheques, unlike bank notes, do not circulate freely from hand to hand; thus, cheques themselves are not currency. However, a balance in a current account deposit is money; the cheque simply transfers that money from one person to another. Because cheques are easily drawn and deposited, and because they are relatively safe from theft, they have been widely used since the twentieth century. New technology has recently replaced many cheque transactions by computer transfer. Plastic cards, such as Visa, Master Card, and Switch, enable holders of bank accounts to transfer money to other persons' accounts in new ways. The principle is the same, however, the balance in the bank account is the money that is to be transferred between customers, not the cheque or the plastic card.

3.4 Functions of money

When anything is generally accepted by society for exchange, it has become money and will function properly only when it is relatively scarce, durable, divisible, acceptable and homogeneous. With these qualities, money performs the following functions:

exchanged by barter (one good being swapped directly for another). The major difficulty with barter is that each transaction requires a double coincidence of wants; anyone who specialises in producing one commodity would have to spend a great deal of time searching for satisfactory transactions. Thus, a thirsty lecturer, for instance, would have to find a brewer who wants to learn only what he can teach before he can swap a lesson for a pint of beer The use of money as a medium of exchange alleviates this problem. People can sell their service or product for money and subsequently use the money to buy what they wish from others. So a monetary economy involves the exchange of goods (and services) for money and of money for goods, but not (or not very often) of goods for goods.

A store of value. Money is a convenient way to store purchasing power; goods
may be sold today, and the money taken in exchange for them may be stored until it is needed. To be a satisfactory store of value, however, money must have a relatively stable value. A rise in the price level leads to a decrease in the purchasing power of money, because more money is required to acquire a given quantity of goods. When the price level is stable, the purchasing power of money is also stable; when the price level is highly variable, this is not so, and the usefulness of money as a store of value is undermined. Over the past three decades, inflation in the country has been high enough and variable enough and has diminished the naira's usefulness as a store of value.

Although, in a non-inflationary environment, money can serve as a satisfactory store of accumulated purchasing power for a single individual, even in those circumstances it cannot do so for society as a whole. A single individual can accumulate money and, when the time comes to spend it, he can command the current output of some other individuals. However, if all individuals in a society were to save their money and then retire simultaneously to live on their savings, there would be no current production to purchase and consume. Society's ability to satisfy wants depends on goods and services being available; if some of this want satisfying capacity is to be stored up for society as a whole, some goods that could be produced today must be saved (in the form of real physical capital) for future periods. In other words, money may be accumulated as a saving, to help individuals buy future goods, but it is the future real capital stock and labour resources that will determine future real output. Money and real wealth should not be confused.

Money is a store of value for individuals but not for society as a whole.

A unit of account. Money also may be used purely for accounting purposes, without having a physical existence of its own. For instance, a government that is truly communist might specify how much everyone has for spending or to save each month. Goods could then be assigned prices and each consumer's purchases recorded, the consumer being allowed to buy until his or her allocated supply of money was exhausted. These money needs have no existence other than as entries in the store's books, yet they would serve as a perfectly satisfactory unit of account. Whether they could also serve as a medium of exchange between individuals depends on whether the store would agree to transfer credit from one customer to another at the customer's request. Banks will transfer money credit to another current account deposit in this way, and so a bank deposit can serve as both a unit of account and a medium of exchange. People think about values in terms of the monetary unit with which they are familiar. This goes to confirm that money is a unit of account.

4.0 Conclusion

Money today has developed through a series of stages, which makes money today entirely different from what it was in the earlier days. The definition of money does not specify the commodity to be used but the qualities of good money. Generally it could be observed from the discussion so far, that we do not need money for the sake of it but for what money can do. As such, the functions of money have been fully considered. It is our expectation that this knowledge of money will guide your orientation and perfect your decision making capabilities.

5.0 Summary

In this unit, we have made an attempt to define money, give its supporting qualities, and elaborate the functions of money in an economy. The most important functions have been highlighted to include: a medium of exchange, a standard for deferred payment, a store of value and a unit of account. Before this, we have traced the development of money from the metallic era to one of fiat money and bank deposits. All these have been done to help us understand what money is all about.

6.0 Tutor-marked assignment

1. What is fiat money?
2. Outline and explain the various functions of money in an economy.

7.0 References and other resources

1. Lipsey, R.G and K.A. Crystal (1997) *An Introduction to Positive Economics,* Oxford: Oxford Press.
2. Lipsey, R.G. et al (1987) *Economics,* London: Harper and Row Publishers.
3. Dwivedi, D.N. (1987) *Managerial Economics,* New Delhi: Vikas Publishing House Pvt Limited.

Unit 22 Monetary institutions and markets

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1.0 Introduction

In the previous unit, we have examined aspects of money and its historical development. We now know very well the role of money in an economy. In this unit, we are going to examine monetary institutions and markets. This will give us an insight as to how money affects the macroeconomic environment. To fully capture this aspect, some key institutions shall be considered. An understanding of these institutions will help you to understand how policy decisions are actually put into practice. The institutions that are to be considered here will include: the central bank, the entire banking system comprising commercial banks and investment banks, discount houses and money markets, securities markets, ancithe foreign exchange market.

When you go home today, try as much as possible to list all the financial institutions and markets that operate around your vicinity and endeavour to link their activities to the macroeconomic setting.

2.0 Objectives of the unit

The objective of this unit is to expose you to how money affects the macroeconomic environment of a country. Hence, you are expected to:

1. Understand the various money markets in an economy
2. Understand the various financial markets in an economy.
3. Be able to link these markets to the performance of the economy A proper understanding of these markets will enable you to tailor your decision making towards a desirable direction.

3.1 Financial institutions

Prominent financial institutions in an economy include the central bank, discount houses and money markets, securities markets and the foreign exchange market. Let us study them now in some detail.

3.2 Central banks

All major countries have central banks. Some group of countries may have one central bank, e.g. CEMAC and UMOA.

A central bank, no matter where it is found, has four main functions:

1. It is the ultimate supplier of cash to the monetary system, which it can literally print. As such, the bank is sometimes referred to as 'lender of last resort'. In this role, it implements the country's monetary policy
2. It is the banker to the government and agent to the government for sales of government debt. It is also banker to the banks, since the banks carry out other transactions with it.
3. The foreign exchange reserve is operated by the central bank as an agent for the Treasury (or Ministry of Finance). Hence it represents the government of the country in its external financial transactions.
4. The central bank is the regulator of all banks that trade under such bank licence. From the foregoing discussion, it is evident that the central bank is the apex bank in an economy

Another function of the central bank is that of the issuance of currency. This bank puts new currency into the economy

3.3 Commercial and investment banks

The banking system is made up of commercial banks and investment banks (or merchant banks). Commercial banks are primarily in the business of taking deposits and making loans. They do some of this by making their own loans, but they also handle issuance and trade in company debts. They are also concerned with retail and wholesale banking. Wholesale banking is concerned with the deposit and loan business market; the banks have considerable competition from building societies in this market. Building societies are mutual organisations specialised in taking in savings deposits and offering loans for house purchase. Banks started to compete with building societies for mortgage business in the 1980s. In turn mortgage houses started to compete with banks by open transaction services and loans unrelated to housing as well as a range of other financial services. Today, the distinction between them has grown slim.

Wholesale banking deals with large corporate customers, large governmental agencies and other financial institutions. The wholesale banking market is highly competitive because there is a significant number of providers and it is open to the international market. Banking worldwide has become increasingly competitive in recent years, because of competition between banks and mortgage societies in the retail market as well as competition from foreign banks in the wholesale market.

3.4 Discount houses

A feature of the monetary system in some countries which makes it different from that in most other countries is the role of a small set of financial institutions known as discount houses. They borrow money for very short periods (or 'on call', which means that it can be called back immediately) from banks, companies, and other financial institutions. The money they borrow is invested in the buying of commercial bills or treasury bills. It is a fact that they buy and sell bills at a discount at their face value, which earned them their label. Most central banks deal with only discount houses in the money market. This dealing is often referred to as being through 'the discount window', but in fact the representatives of the discount houses either meet central bank officials in an office, or deal with them by telephone. The discount houses agree to take up any treasury bills which the central bank wishes to sell (usually at a weekly tender). The central bank agrees to lend cash to the discount houses whenever they want it, but at an interest rate of the bank's choosing. The central bank can always force the discount houses to borrow from it by selling more bills than they would have chosen voluntarily to buy. (Recall that, by selling bills, the central bank is withdrawing high-powered money from the system.)

It is by forcing the discount houses to borrow (through the bank's discount window) that the central bank sets interest rates in the money market. The interest rate set between the central bank and the discount houses is then transmitted very quickly to the rest of the monetary system via the discount houses' dealing with the banks.

3.5 Financial market

The flows in the financial system are normally classified into broad categories depending upon the function they perform. Dividing lines are not precise, but the following are commonly used:

3.5.1 Money markets

The money markets are markets for short-term funds, less than nine months and often just for a few hours or overnight. These are important, because all companies and financial institutions find that they have surplus funds on some days and deficits of cash flow on other days. The money markets enable surplus funds to be invested and to earn interest, while deficits can be funded easily (for a creditworthy borrower).

The traditional money market is the one that links the banks via the discount houses to the central bank. The parallel money market is a market for short-term lending between the banks themselves, now more commonly called the inter-bank market. The latter is vastly more important in scale, but the existence of the former is essential for the transmission of interest rate signals from the central bank.

3.5.2 Securities markets

Securities markets differ from deposit and loan markets in that a tradable security or IOU changes hands. Securities that are issued for short periods (under nine months) are still classified as being part of the money market, because they fulfil the same need for short-term funding. Securities traded in money markets include commercial bills, treasury bills, certificates of deposit (CDs), and commercial paper (CP). These are all just IOUs, but they vary in terms of risk and settlement terms.

It is good to point out that the equity and corporate bond markets are important sources of long-term finance for companies. Markets for long-term finance are known collectively as capital markets.

One very important securities market is that in which the government does its long-term financing. Government borrowing requirements are usually funded by the sale of gilt-edged securities. These are largely government bonds issued with fixed rates of interest, which are redeemable in anything between 5 and 25 years. Other gilt-edged securities include the index-linked gilts, which pay a fixed real interest rate (that is, a specific rate on top of inflation) and are redeemed at a nominal value guaranteed in real terms.

3.5.3 Foreign exchange market

Our discussion of financial markets would not be complete without mention of the foreign exchange market. This market is important because each nation-state has its own national currency area, with the result that you have to be able to change your local money (say, the naira) into the currency of the foreigner whose goods you want to buy (say, the deutschmark). The market in which currencies are exchanged for each other is the foreign exchange market.

4.0 Conclusion

In this unit, we have examined some financial institutions and markets. It has been established that at the apex of the banking system stands out the central bank. This bank, normally called the bank of last resort, performs a number of functions in the economy. Also, the banking system that comprises commercial banks and investment banks has also been considered here, with a distinction made between these banks. Discount houses, which make short-term loans available to investors, mostly money on call, have been examined in this unit. An understanding of this unit entirely will help you enormously in understanding the monetary and financial environment in which your firm operates.

5.0 Summary

The central bank, commercial banks, investment banks, discount houses, the money market, securities markets and the foreign exchange market make up the monetary institutions and markets. One country may own a central bank, but in other situations, a group of countries using the same currency may share the same central bank. On the other hand, commercial banks are concerned with the business of taking deposits and making loans, while investment banks, dominated by merchant banks, raise capital for companies and at times create loans. Discount houses, securities markets and foreign exchange markets have also been considered.

6.0 Tutor- marked assignment

1. Outline the main monetary institutions and markets that can be found in an economy.
2. What are the functions of the central bank?

7.0 References and other resources

1. Lipsey, R.G. and K.A. Crystal (1997) *An Introduction to Positive Economics,* Oxford: Oxford Press.
2. Lipsey, R.G. et al (1987) *Economics,* London: Harper and Row Publishers.
3. Dwivedi, D.N. (1987) *Managerial Economics,* New Delhi: Vikas Publishing House Pvt Limited.

Unit 23 Demand and supply of money in an economy

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1.0 Introduction

In the preceding two units, we have paid particular attention to the examination of money, its history, and its functions as well as the monetary institutions and markets. Having understood these, we can now direct our attention to the supply and demand for money. In this unit, we are going to see that the supply of money in an economy is fixed over a period of time, implying that it is a stock that does not change. This supply of money is also not in the hands of the general public as it is the case with demand, but with the central bank on behalf of the government. On the other hand, the demand for money is also to be x-rayed. In the course of doing so, you should bear in mind that money is demanded for three reasons. These reasons shall be discussed later.

Now suppose you are asked to find out why people need money, what will you say? I know you may struggle your way through, but the main reasons why people need money are to be exposed here. While at home, find out from your friends and associates why they need money and let us try to reconcile their reasons with research findings.

2.0 Objectives of the unit

The objectives of this unit are quite straightforward. In this unit, you are introduced to the intricacies of money supply and demand. At the close of this unit, you should:

Know what constitutes the supply of money.

2. Understand why the supply of money is considered fixed.
3. Understand the reasons why people demand money.

This unit will guide you in taking major managerial decisions to face the challenges posed by the macroeconomic environmpnt.

3.1 Supply of money

Money supply is a stock not a flow over a unit of time. In the preceding two units, we considered the factors that enable banks to create deposit money up to some multiple of the stock of high-powered money. We also saw that the stock of high-powered money could be directly controlled by the central bank of a country. In other words, policy makers exogenously fix the stock of money. Our analysis therefore concentrates on the factors influencing money demand. It is important to notice that money supply is a nominal variable, whereas other variables in our macro models are measured in real terms.

3.2 Demand for money

The amount of wealth that everyone in the economy wishes to hold in the form of money balances is called the demand for money. Since people are choosing how to divide their given stock of wealth between money and bonds, it follows that, if we know the demand for money, we also know the demand for bonds. With a given level of wealth, a rise in the demand for money necessarily implies a fall in the demand for bonds. If people wish to hold one billion more units of money, it follows that if households are in equilibrium with respect to their money holdings, they are in equilibrium with respect to their bond holdings.

When, for instance, we say that on 31 December 1993 the quantity of money demanded was N50 billion, we mean that on that date the public wished to hold money balances that totalled N50 billion. But why do firms and individuals wish to hold money balances at all? There is a cost to holding any money balances. The money could have been used to purchase bonds, which earn higher interest than does money. For the present, we assume no ongoing inflation, so there is no difference between real and nominal interest rates.

The opportunity cost of holding any money balances is the extra interest that could have been earned if the money had been used instead to purchase bonds.Clearly, money will be held only when it provides services that are valued at least as highly as the opportunity cost of holding it. Three important services that are provided by money balances give rise to three different motives for holding money: the transactions, precautionary, and speculative motives.

3.2.1 The transactions motive

Most transactions require money. Money passes from consumers to firms to pay for the goods and services produced by firms; money passes from firms to employees to pay for the factor services supplied by workers to firms. Money balances that are held to finance such flows are called transactions balances.

Consider the balances that are held because of wage payments. Suppose, for purposes of illustration, that firms pay wages every Friday and that employees spend all their wages on the purchase of goods and services, with the expenditure spread out evenly over the week. Thus, on Friday morning firms must hold balances equal to the weekly wage bill; on Friday afternoon the employees will hold these balances.

Over the week, workers' balances will be drawn down as a result of purchasing goods and services. Over the same period, the balances held by firms will build up as a result of selling goods and services until, on the following Friday morning, firms will again have amassed balances equal to the wage bill that must be met on the day

3.2.2 The precautionary motive

Much expenditure arises unexpectedly, such as when your car breaks down, or when you have to make an unplanned journey to visit a sick relative. As a precaution against cash crises, when receipts are abnormally low ordisbursements are abnormally high, firms and individuals carry money balances. Precautionary balances provide a cushion against uncertainty about the timing of cash flows. The larger such balances are, the greater is the protection against running out of money because of temporary fluctuations in cash flows.

The seriousness of the risk of a cash crisis depends on the penalties that are inflicted for being caught without sufficient money balances. A firm is unlikely to be pushed into insolvency, but it may incur considerable costs if it is forced to borrow money at high interest rates in order to meet a temporary cash crisis. Indeed, most

The precautionary motive arises because households and firms are uncertain about the degree to which payments and receipts will be synchronised. The protection provided by a given quantity of precautionary balances depends on the volume of payments and receipts and the activity in question.

The precautionary motive, like the transactions motive, causes the demand for money to vary positively with the money value of national income and is also a function of one's income.For most purposes, the transactions and precautionary motives can be merged, as they both involve desired money holdings being positively related to income. Indeed, they both involve money being held in relation to planned or potential transactions.

3.2.3 The speculative motive

Money can be held for its characteristics as an asset. Firms and individuals may hold some money in order to provide a hedge against the uncertainty inherent in fluctuating prices of other financial assets. Money balances held for this purpose are called speculative balances. Keynes and the classical economists first analysed this motive.

Any holder of money balances forgoes the extra interest income that could be earned if bonds were held instead. However, market interest rates fluctuate, and so do the market prices of existing bonds (their present values depend on the interest rate) because their prices fluctuate. Many individuals and firms do not like risk; they are said to be risk-averse and would therefore take caution before investing in bonds, which are said to be a risky asset.

In choosing between holding money or holding bonds, wealth-holders must balance the extra interest income that they could earn by holding bonds against the risk that bonds carry. At one extreme, if individuals hold all their wealth in the form of bonds, they earn extra interest on their entire wealth, but they also expose their entire wealth to the risk of changes in the price of bonds. At the other extreme, if people hold all their wealth in the form of money, they earn less interest income, but they don't face the risk of unexpected changes in the price of bonds. Wealth-holders usually do not take either extreme position. They hold part of their wealth as money and part of it as bonds; that is, they diversify their holdings. The fact that some proportion of wealth is held in money and some in bonds suggests that, as wealth rises, so will desired money holding.

The speculative motive implies that the demand for money varies positively with wealth. Although one individual's wealth may rise or fall rapidly, the total wealth of a society changes only slowly. For the analysis of short-term fluctuations in national income, the effects of changes in wealth are fairly small. Over the long term, however, variations in wealth can have a major effect on the demand for money.

Wealth that is held in cash or deposits earns less interest than could be earned by holding bonds; hence the reduction in risk involved in holding money entails an opportunity cost in terms of forgone interest earning. The speculative motive leads individuals and firms to add to their money holdings until the reduction in risk obtained by the last amount added is just balanced (in each wealth-holder's view) by the cost in terms of the interest forgone on that amount. A fall in the rate of return on bonds for the same level of risk will encourage people to hold more of their wealth as money and less in bonds. A rise in the rate of return for a given level of risk will cause people to hold more bonds and less money.

The speculative motive also implies that the demand for money will be negatively related to the rate of interest. The precautionary and transactions motives may also be negatively related to interest rates at the margin, because higher returns on bonds encourage people to economise on money-holding. However, in practice we observe only total money holdings, so we cannot distinguish the components held for different motives. Hence demand for money as a whole is likely to be positively related to national income and wealth, and negatively related to the interest rate. The demand for money as a function of interest rates, income, and the price level is illustrated in figure 22.1.

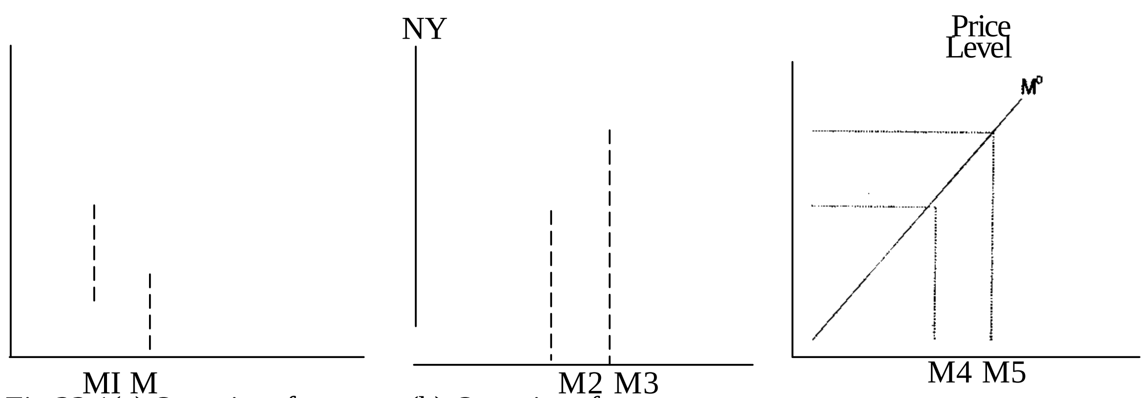

Fig.22.1(a) Quantity of money (b) Quantity of money C) Quantity.of money

The quantity of money demanded varies negatively with the nominal rate of interest

and positively with both real national income and the price level. In figure 22.1 (a) the demand for money is shown varying negatively with the interest rate along the money demand function. When the interest rate rises from Ito i.1, individuals and firms reduce the.quantity of money demanded from M_0 to M_i. In figure 22.1(b) the demand for money varies positively with national income. When national income rises from Y_0 to Y_1, individuals and firms increase the quantity of money demanded from **M_2 to M_3.** In figure 22.1(c) the demand for money varies in proportion to the price level. When the price level doubles from P_0 to P_1, individuals and firms double the quantity of money demanded from **M_4 to M_5.** In the text we refer to the M° curve in figure 22.1 (a) as the money demand function. It is drawn for given values of income, wealth, and the price
level.

The real demand for money (or the demand for real money balances) is the nominal quantity demanded divided by the price level. Other things being equal, the nominal demand for money balances varies in proportion to the price level: when the price level doubles, desired nominal money balances also double.

4.0 Conclusion

This unit has exposed you to the concept of supply and demand for money. By now you should be aware that money supply is fixed since it is a stock and not a flow and is strictly in the hands of the central bank. Hence society does not really influence money supply. On the other hand, money demand deals entirely with the desires and money needs of society as discussed elaborately above. From all the discussion on this, you must have realised how important this topic is to managerial decision- making.

The transactions motive arises because payments and receipts are not synchronised. It is clear that in our example total transactions balances vary with the value of the wage bill. If the wage bill doubles for any reason, the transactions balances held by firms and households for this purpose will also double, on the average. As it is with wages, so it is with all other transactions: the size of the balances held is positively related to the value of the transactions. It is the average value of money balances that people choose to hold over a particular period that is relevant for macroeconomics, but we need to know how money demand relates to national income rather than to total transactions. In fact, the value of all transactions exceeds the value of the economy's final output. When the miller buys wheat from the farmer and when the baker buys flour from the miller, both are transactions against which money balances must be held, although only the value added at each stage is part of national income.

Generally, there will be a stable, positive relationship between transactions and national income. A rise in national income also leads to a rise in the total value of all transactions and hence to an associated rise in the demand for transactions balances. This allows us to relate transactions balances to national income.

5.0 Summary

In this unit, we have exposed you to aspects of money supply and money demand. Suffice it to say that you are aware that money supply cannot be fully appreciated here since it is fixed and supplied by the central bank. Money demand on the other hand is backed primarily by definite motives. These motives are the transactions demand for money, precautionary demand for money and the speculative demand for money.These motives rely strictly on the income of the consumer as well as the reigning interest rates as the case may be.

6.0 Tutor- marked assignment

What are the reasons economists advance for the demand for money?

7.0 References and other resources

1. Lipsey, R.G. and K.A. Crystal (1997) *An Introduction to Positive Economics,* Oxford: Oxford Press.
2. Lipsey, R.G. eta! (1987) *Economics,* London: Harper and Row Publishers.
3. Dwivedi, D.N. (1987) *Managerial Economics,* New Delhi: Vikas Publishing House Pvt Limited.