

SOW 104
Introduction to Development Economics

Ibadan Distance Learning Centre Series

SOW 104
Introduction to Development Economics

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Vice-Chancellor's Message

I congratulate you on being part of the historic evolution of our Centre for External Studies into a Distance Learning Centre. The reinvigorated Centre, is building on a solid tradition of nearly twenty years of service to the Nigerian community in providing higher education to those who had hitherto been unable to benefit from it.

Distance Learning requires an environment in which learners themselves actively participate in constructing their own knowledge. They need to be able to access and interpret existing knowledge and in the process, become autonomous learners.

Consequently, our major goal is to provide full multi media mode of teaching/learning in which you will use not only print but also video, audio and electronic learning materials.

To this end, we have run two intensive workshops to produce a fresh batch of course materials in order to increase substantially the number of texts available to you. The authors made great efforts to include the latest information, knowledge and skills in the different disciplines and ensure that the materials are user-friendly. It is our hope that you will put them to the best use.

A handwritten signature in dark ink, appearing to read 'Bamiro', with a stylized flourish underneath.

Professor Olufemi A. Bamiro, FNSE

Vice-Chancellor

Foreword

The University of Ibadan Distance Learning Programme has a vision of providing lifelong education for Nigerian citizens who for a variety of reasons have opted for the Distance Learning mode. In this way, it aims at democratizing education by ensuring access and equity.

The U.I. experience in Distance Learning dates back to 1988 when the Centre for External Studies was established to cater mainly for upgrading the knowledge and skills of NCE teachers to a Bachelors degree in Education. Since then, it has gathered considerable experience in preparing and producing course materials for its programmes. The recent expansion of the programme to cover Agriculture and the need to review the existing materials have necessitated an accelerated process of course materials production. To this end, one major workshop was held in December 2006 which have resulted in a substantial increase in the number of course materials. The writing of the courses by a team of experts and rigorous peer review have ensured the maintenance of the University's high standards. The approach is not only to emphasize cognitive knowledge but also skills and humane values which are at the core of education, even in an ICT age.

The materials have had the input of experienced editors and illustrators who have ensured that they are accurate, current and learner friendly. They are specially written with distance learners in mind, since such people can often feel isolated from the community of learners. Adequate supplementary reading materials as well as other information sources are suggested in the course materials.

The Distance Learning Centre also envisages that regular students of tertiary institutions in Nigeria who are faced with a dearth of high quality textbooks will find these books very useful. We are therefore delighted to present these new titles to both our Distance Learning students and the University's regular students. We are confident that the books will be an invaluable resource to them.

We would like to thank all our authors, reviewers and production staff for the high quality of work.

Best wishes.



Professor Francis O. Egbokhare
Director

General Introduction and Course Objectives

This course is designed to introduce you to, and acquaint you with, basic principles in economics and some theories in economic development. The interplay of basic principles and economic development theories will be taught through the following topics:

- Basic economic concepts
- Economic systems
- Production
- Consumer's behaviour
- Market structures
- Concept of elasticity
- Definition of Economic development
- Measures and characteristics of economic development
- Obstacles to economic development
- Some theories of economic development

LECTURE ONE

Meaning and Basic Concepts of Economics

Introduction

It is necessary for students just coming across the subject Economics for the first time to know the meaning and basic concepts that are involved in the study. It is difficult to agree upon a satisfactory, concise definition of economics; through, its subject-matter is generally beyond dispute. Economics is a social science, such as sociology, history, geography, political science, psychology, etc. Economics is concerned with the aspect of human behaviour; the act of choosing between alternatives in order to maximize satisfaction from limited resources. Because our wants are too many and cannot all be satisfied at the same time, choice has to be made. Therefore, economics is a science of scarcity and choice.

Objectives

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

1. define Economics as a subject;
2. define major concepts relating to the definition of economics; and
3. state the relevance of the concepts to the economy.

Pre – Test

1. What is “Economics”?
2. Define the following concepts: Choice, Scarcity, Scale of preference and Opportunity cost.

CONTENT

1. Definition of Economics

Classical economists defined economics as the science of the production and accumulation of material wealth. Their emphasis is on the production of material goods which possess utility. The physiocrats regarded 'economics' as only those activities which were directed to the production of tangible economic goods from the land. That is, only agricultural pursuits were productive while services were regarded as unproductive activities.

Modern economists now define 'economic activity' as any activity, which produces goods required to satisfy human wants. The goods may be tangible or intangible. The most generally used definition of economics is that of Lord Robins (1935). According to him, "economics is the social science, which studies human behaviour as a relationship between ends and scarce means which have alternative uses".

Economics is a science in the sense that it seeks to formulate a systematized body of laws which regulate human economic behaviour under similar circumstances. These laws have a rational basis which is found to be consistent among all human beings under similar economic circumstances (Obone, 1977).

2. Basic Concepts in the definition of economics

1. Wants

Wants, refer to both tangible and intangible goods and services that are desired for consumption. They are desired for their own ends, that is, they are things which one would like to have. Therefore, they are sometimes referred to as ends.

2. Scarcity

Scarcity is central to all economic problems. Human wants are numerous but means of satisfying them are limited relative to the wants; hence, there is the need to economise these resources and choose between the competing alternatives.

It should be noted that in economics, scarcity does not mean 'not available'. Rather it means the quantity available is not large enough to satisfy all the necessary wants.

3. Choice

Since human wants are unlimited and the resources available to satisfy them are limited, choices have to be made between alternative wants. Therefore, choice is the distribution of our resources among numerous competing ends.

4. Scale of Preference

In order to achieve maximum satisfaction with limited resources, wants must be arranged in order of priority. Therefore, the scale of preference is an instrument that guides in making decisions by arranging our needs/wants in order of priority. The topmost in the order of priority is the most pressing want that should be satisfied first. The scale of preference comes before choice which leads us into opportunity cost.

5. Opportunity Cost

Due to scarcity of resources coupled with unlimited wants, choice have to be made between different alternatives. In order to choose, some wants have to be forgone to make the immediate choice. Therefore, opportunity cost is the alternative forgone in order to have the present choice. Opportunity cost is also known as real cost. It is the most important cost to Economics, it is different from money cost or price cost.

3. Practical Implications of the Concepts

(a) To an Individual

Let us look at a student in the university. A student wants to buy bag, shoes, shirts, books etc., but he is faced with the problem of limited resources (money). Lets say, each of the above-named items costs N2,000 (two thousand naira) and the student has only N2,000 on him/her, he is faced with the problem of what to buy out of the items; though, he would like to have them all if his resources (money) were enough. In the present circumstance, he would now have to arrange the items in order of descending priority thus: books, short, shoes and bag. He would make the choice of buying the book (first on the priority list) instead of shirt (second on the priority list). To this student, the opportunity cost was the shirt he/she did not buy, while the money cost/real cost was N2000 (two thousand naira) expended to get the book.

(b) To a Firm

To a manufacturing firm, the concept of opportunity cost helps in deciding the technique of production to be applied. For example, it would decide whether to use capital-intensive method or labour-intensive method for its production process. The employment of more labour means loss of large-scale production facilities that are embedded in capital-intensive method.

(c) To the Government

The concept of opportunity cost helps the government to decide how to spend its revenue. The government decides whether to provide free education or build more hospitals. If the government opts for the provision of free education, there will be no more funds available for the building of more hospitals: if one is chosen, the other has to be forgone.

Summary

In this chapter, we have familiarised you with the meaning of economics and the basic concepts deduced from the meaning. Also you saw how the concepts are highly significant to an Individual, Firm and Government within a given society.

Post – Test

1. Define economics
2. Discuss the major concepts of economics, such as scarcity, choice, scale of preference and opportunity cost.
3. Relate the importance of opportunity cost to an individual, firm and government.

References

- Anyanwuocha, R.A.J. 2000. *Fundamentals of Economics for Senior Secondary Schools*. Onitsha: Africana – Feb Publishers Ltd.
- Harvey, J. 1976. *Modern Economics: An Introduction for Business and Professional Students*. N.Y: Macmillan Press Ltd.

Obone, A.E. 1997. *Economic: Its Principles and Practice in Developing Africa*. London: Evans Brothers Limited.

Udu, E. and Agu, G. A. 1990. *New System Economics: A Senior Secondary Course*. Onitsha: Africana – Feb Publishers Ltd.

LECTURE TWO

Economic Systems

Introduction

In this lecture, we shall examine the basic features of economic systems, which men has been able to develop. Any system which is adopted for solving the basic economic problems of men in society must answer the following questions:

1. What assortment of goods will yield the greatest possible satisfaction?
2. How, out of the various alternatives, do we employ our limited resources to produce this assortment as efficiently as possible?
3. Who are to enjoy the goods which are produced?

Basically, there are three types of economic system, namely:

- a. Capitalist system/Free market enterprise.
- b. Socialist system/Centrally planned system.
- c. Mixed system.

Objectives

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

1. mention the features of the capitalist, socialist and mixed economic systems;
2. list the advantages and disadvantages of both the capitalist and the socialist economic systems; and
3. define what a mixed economy is.

Pre – Test

1. List the main features of capitalism as a form of economic system.
2. What are the advantages of the socialist economic system?
3. List the features of a mixed – economy.

CONTENT

1. Capitalist System

In this type of economic system, various economic activities such as production, distribution and even finding solutions to basic economic problems are carried out solely by private individuals within the society. The government of such societies are not allowed to participate in the various economic activities. Therefore, the government plays what is called the non-interventionist role. The forces of demand and supply and not the government determines “what”, “how”, and “for whom” to produce. Examples of capitalist societies can be got in United States of America (USA), France, Germany, etc.

- *Features of capitalism*

Some of the features of capitalism are:

1. *Private Ownership of Property*

This is the most important feature of capitalism. This is because many problems of economic welfare in a capitalist society are associated with the institution of private property.

An individual as a consumer or producer is free to own property or factors of production and use them as he likes, but not in such a way as to endanger the society as a whole.

2. *Profit Motive*

The profit motive prompts the entrepreneur or producer to undertake a business or enterprise. Profit motive is the driving force that moves and guides the economy.

3. Competition among economic agents

Competition is governed by an individual's self-interest either as a consumer or a producer. The competitive notion enhance efficiency within the system.

4. Operation of the price system in the allocation of resources

Consumption and production within a capitalist economy are regulated by the price system. It is the person that can afford the scarce resources that would have them allocated to them for either production or consumption. In other words, it is the price system that indicates the wishes of consumers or producers towards productive resources allocation. Hence, the economy is called a free market economy.

5. Limited role for government

All the country's means of production are owned by private individuals but the government maintains law and order within the economic order. In cases when private interests are at variance with the public interest, the government intervenes and takes corrective measures to set matters right.

6. Decision making is by individuals

Decisions relating to the basic economic problems are taken by private individuals.

- Advantages of capitalism

1. Easy estimation of Wants

The price mechanism helps to indicate the commodities/services that are in high demand and changes in demand are also reflected in price changes. This means that the estimation of wants in the economy are automatically recorded in the price system.

2. Motivation for Specialization

The profit motive leads the entrepreneur to specialise so as to take its advantage thereby leading to increase in production, improvement in skills, etc.

3. Motivation for Innovation

Specialisation leads to invention and innovation. The competitive aspect of capitalism makes producers to be innovative so as to out-wit co-competitors.

4. Improved Quality of Products

The economic competition among producers and consumers ensures the production of high quality goods; otherwise, such producers will operate at loss and eventually go out of the market.

5. Freedom of Consumption and Production

Consumers are given the freedom to buy what they want without being forced to choose from a restricted supply. In the same fashion, producers have the right to produce whatever they feel will satisfy their consumers.

6. It encourages profit maximisation

Profit motive leads to the use of initiative and improved technique of production by entrepreneurs so as to keep ahead of rivals and remain in business.

7. Consumer's Sovereignty

Since individuals have the freedom to own wealth and productive resources, no individual is allowed to use absolute economic and political power.

8. Labour Mobility

Labour is allowed to move to wherever they are needed, and where they are paid the highest value for their labour.

9. Freedom of ownership of property

The absence of state dictatorship allows all individuals to own wealth. It also encourages hard-work since income from such action will assist in acquiring personal property.

- **Disadvantages of capitalism**

In practice, the price system (capitalism) does not produce entirely satisfactory result, nor does it work quite so smoothly as discussed. There are some reasons for this.

1. Wrong indicator/allocation of resources

It is those consumers with the most money who exercise the greatest weight in spending. Thus, the means of production may be devoted to producing luxuries for the rich to the exclusion of necessities for the poor. This increases the inequality between the rich and the poor.

2. Inadequate provision of social services

Some vital services which are not marketable would not be produced adequately by private enterprise e.g. defence, police and Justice. It is because of this defect that the government of most modern capitalist societies have taken up the provision of these basic needs.

3. Inefficiency

Competition itself may sometimes lead to inefficiency. Small units may persist when co-ordination is vital to securing the advantages of large-scale production. Competitive advertising may waste resources that are to be saved through coordination of efforts.

4. Inefficiency of price mechanism

In practice, the mechanism of the price system in allocating resources may not work smoothly because of obstacles to the movement of factors of production in response to price changes. As a result of this, supply may not adjust easily and quickly to changes in demand.

5. Neglect of public good for private good

The private motive of the entrepreneur does over-ride the public good in some cases. For example, private gains influence the sighting of some factories in certain areas but not the common good. This explains why some factories are.

6. Zero utilisation of factors of production

Under capitalism, there sometimes occurs zero utilization of the factors of production because the entrepreneur feels that there are no prospects of profit in utilising them.

2. Socialist System

This is a centrally planned economy. It is an economic system in which all decisions are made by the government through a central economic planning bureau. The planning authority estimates the people's wants and accordingly directs the means of production. It also decides the basis upon which the goods produced are distributed. The main aim of production is to maximize public welfare and raise the general standard of living.

Features of Socialism

1. *The government owns and controls the means of production and distribution.* Individuals are not free to own any factor of production or possess wealth.
2. The main aim of production under socialism is to maximize public welfare and raise the general standard of living of the people.
3. *The government controls the economy and makes all economic decisions.* Decision-making relating to what to produce, how to produce and for whom to produce are taken by the government.
4. *Prices of goods and services are fixed by the government.* The free hand of price system does not operate under socialism; the government takes decisions relating to prices.
5. *Equitable distribution of income is the aim of socialism.* People are rewarded according to their contributions and need, not according to ability to grab.
6. *Loss of Initiative.* There is little or no individual economic freedom and initiative because the central planning bureau takes all the economic decisions.
7. *Lack of unhealthy competition.* The absence of personal profit motive makes unhealthy rivalry unnecessary within a socialist economy.

Advantages of Socialism

1. *Maximisation of public welfare.* Government produces goods that are good for the people. Profit motivation that encourages the production of harmful or dangerous goods are not allowed. Common good matters most.
2. *Exploitation of the consumer is not encouraged.* Fair pricing is been done by the government rather than the high cost under capitalism that is due to advertisement cost and unnecessary competition.
3. *Equitable distribution of resources.* No single individual is allowed to own wealth or means of production to the detriment of the majority. Resources are distributed according to your input. Social and economic inequalities are minimized to the barest minimum.
4. *Private monopoly is prevented.* Since there is no desire for profit maximisation, there is no need for the growth of private monopolies.
5. *There is job security.* Since the government decides the production process, labour and other factors are equally directed to where they are needed. Therefore, unemployment is minimal.
6. *No hoarding, No excess production.* Production is centrally coordinated and usually on a large scale. Hence, there is efficient use of productive resources as well as meeting people's requirements, since the estimation is done by a central body. Under socialism, the government makes sure that there is no surplus production, or insufficient production.

Disadvantages of Socialism

1. *Suppression of individual initiatives.* Individual initiatives of workers are diminished because all economic decisions are made by the central authority. The board thinks for workers.
2. *Reduction at the rate of economic development.* This is so because the bureaucracy so created through central planning officials slows down the rate of economic development.
3. *Restriction of the right of choice.* The citizenry have restricted choice to be made because it does not provide people with alternative choice. Individual needs are sacrificed for group needs.

4. *Difficulty of estimation of wants.* The goods required by the population change over a period of time, thereby making estimation of demand more difficult. Most often the figures arrived at are not accurate.
5. *Encouragement of laziness and unenterprising people.* Officials engaged in planning are many. They work in committees that estimate and direct factors of production. Such a large number of people in established committees represent a form of wasted labour, since they would have been more productive if employed at the central production system. Any action is premised on the decision of a committee. Therefore, the workers are denied the opportunity of being enterprising.
6. It does not encourage invention and innovation because of the absence of competition among various individuals, organization or firms.
7. *It leads to dictatorship.* State monopoly is encouraged because the state determines the shaping and allocation of resources for production. This also gives rise to ineffective and inefficient production and distribution of goods and services.
8. Specialisation is not encouraged by socialism since economic planning is centrally made.

3. Mixed Economy System

This is a system which promotes economic decisions to be made by firms, households and the central authority. This means that both the market forces and the government exercise some influence on the economic decisions of what to produce, how to produce and for whom to produce.

Features of mixed economy

1. Means of production are owned by both the individual and the government.
2. Decisions on issues relating to production are taken by both private individuals and the state.
3. There is an intervention of government/state in the price system. The influence of the central authority varies from one mixed economy to another.

Advantages of mixed economy

1. The government produces certain goods and services, which would not be provided by private enterprises at all, or might be provided at an expensive rate.
2. Government intervention in the economy tries to overcome great inequalities in the distribution of wealth and to ensure a minimum standard of life for all.
3. The intervention in the price mechanism system checks hardship which the people might have experienced if left totally to the price mechanism system.
4. To obtain a balanced regional development. This type of decisions is political rather than economic principles; otherwise, one region will be more developed than the other.

Summary

In this lecture, we have discussed the main features, advantages and disadvantages of the three major economic systems (capitalism, socialism and mixed economy), which men has developed over the centuries.

Post Test

1. List the main features of the capitalist economic system.
2. What are the advantages of the socialist economic system?
3. List the main features of the system of mixed economy in any society.

References

- Anyanwuocha, R.A.J. 2000. *Fundamentals of Economics for Senior Secondary Schools*. Onitsha: Africana – Feb Publishers Ltd.
- Harvey, J. 1976. *Modern Economics: An Introduction for Business and Professional Students*. N.Y: Macmillan Press Ltd.
- Udu, E. and Agu, G. A. 1990. *New System Economics: A Senior Secondary Course*. Onitsha: Africana – Feb Publishers Ltd.

LECTURE THREE

The Basic Economic Problems in Society

Introduction

All the nations of the world have some problems bordering on fundamental economic decisions. These are what to produce, how to produce it, for whom to produce, efficient allocation of resources, income distribution, etc. This lecture examines these economic problems in society.

Objectives

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

1. mention basic economic problems in society;
2. differentiate between capital intensive and labour intensive methods of production; and
3. identify the different categories of production.

Pre – Test

1. What is capital-intensive method of production?
2. Define labour-intensive method of production.
3. Classify production into three major categories.
4. List the major economic problems in a society.

CONTENT

A. Basic Problems

1. What To Produce?

Arising from the problem of scarcity, the question of what to produce out of limited resources is a matter of great concern to every society. This entails the setting up of a list of goods and services which a society thinks are beneficial to its people. Each country has to determine what type of goods or services its people need and how to produce these within its limited resources. Producers should produce those things, which are required, otherwise resources will be wasted.

2. How to Produce?

This is another basic problem or question which every society in the world has to solve or answer. Immediately a society is able to determine what type of goods and services to produce with the available resources, the next thing is to determine how to produce such goods and services (i.e. technical possibilities of production). This question of how to produce also involves the method of production to be used; it entails what quantities of land, labour and capital should be combined to produce the required goods and services. Basically, there are two types of production methods:

i. Capital Intensive Method

The capital intensive method of production is one that has a higher percentage of capital (machines) than labour; for instance, using 80% of capital and 20% of labour. Most of the developed countries of the world use this method. It is an automated system.

ii. Labour intensive method

Labour intensive method of production is one that uses a higher percentage of labour (human beings) than capital in the production process; for instance, 80% of labour and 20% of capital.

3. For Whom to Produce?

This is the third basic problem or question which is to be asked by every society. Every society or nation has to determine for whom to produce

goods and services. Specifically, here we are talking about the direction of demand, that is, who needs what?

4. Efficient Allocation of Resources

This is another problem. Every society has to ensure that the available resources within that society are put into maximum and efficient usage. There is the need to determine this so as not to engage the resources unprofitably. In essence, we are saying every society should ensure that whatever resources are available to it are not been wasted. If resources are efficiently allocated, there will be increase in production of all goods and services within the economy, and the people are, in the final analysis, better off.

5. Income Distribution

This is another problem facing every society, and this has both social and economic implications. The distribution of income within every society determines the level and the degree of poverty in it. Poverty, on the other hand, determines the living standard of the people; thus, every society has to ensure that income is distributed in such a way that majority of the people are above the poverty line. This means that there is need for government policies on the income distribution just to ensure that the gap between the rich and the poor is closed or bridged a little bit. It is very important to note that it is humanly impossible to eradicate the gap between the rich and the poor; we can only minimize or reduce the gap.

6. Investments Decision

The question here is whether there should be less consumption at present so that there would be higher investment in future. In other words, if less is consumed out of the present production, more would be available for investment, which will translate into increased productivity within the economy in the nearest future.

B. Nature of Production

Production can be divided into three different broad categories.

1. **PRIMARY PRODUCTION:** It is the production that involves the extraction of raw materials from either beneath the earth or above

on the land. This type of production involves getting the raw materials needed for the production of other commodities.

2. **SECONDARY PRODUCTION:** It is the process whereby the extracted raw materials in primary production are transformed into finished products that are acceptable to the consumers. Sometimes, it should be noted that there is always the problem of strictly demarcating when a particular product or production process is in the primary or secondary just because of the problem of overlapping.
3. **TERTIARY PRODUCTION:** This covers commercial and professional services. Under this classification, we have wholesalers, retailers and provision of transportation. Without these groups of producers, both primary and secondary production will be incomplete. A particular finished product can still serve as a raw material for further production, which means that we could sometimes go from secondary production to primary production. An example is sugar in bread baking.

Summary

In this chapter we have examined some basic economic problems in any modern society. The problems are what, how, for whom to produce; efficient allocation of resources, and income distribution. We also discussed the three major categories of production; namely, primary, secondary and tertiary levels of production.

Post-Test

1. What is capital intensive method of production?
2. Define labour intensive method of production.
3. Classify production into three major categories.
4. List the major economic problems within a society.

References

Anyanwuocha, R.A.J. 2000. *Fundamentals of Economics for Senior Secondary Schools*. Onitsha: Africana – Feb Publishers Ltd.

Harvey, J. 1976. *Modern Economics: An Introduction for Business and Professional Students*. N.Y: Macmillan Press Ltd.

Udu, E. and Agu, G. A. 1990. *New System Economics: A Senior Secondary Course*. Onitsha: Africana – Feb Publishers Ltd.

LECTURE FOUR

Factors of Production

Introduction

Production involves a lot of activities performed by several people. It is any activity, which serves to satisfy human wants. Production is not complete until the goods and services reach the final consumers. In the broad form, it includes the services rendered to satisfy another person for a fee, that is, production includes both goods and services.

Therefore, factors of production are factor-inputs that are needed and used within the production processes before goods and services could be produced. They are the essential elements through which the production processes are made complete. Without these factor-inputs, production processes cannot take place. The factors of production are land, labour, capital and entrepreneur.

Objectives

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

1. list the factors of production;
2. discuss the features of each of the factors of production; and
3. mention the rewards attached to each factor of production

Pre – Test

1. The reward of land is _____
2. Which factor of production is human effort?
3. The factor that takes the risk of production is known as the _____

4. Interest is the reward for

CONTENT

A. LAND: Land includes all things that are given to man freely by God. This means that land is a gift of nature. Its existence has not been brought about by the effort of man. Land includes the soil, water, forest, rivers, oceans, minerals, chemicals and plants found both below and above the ground.

Characteristics of Land:

1. Gift of nature: Land is the only factor of production that is a gift of nature.
2. Land is fixed in supply. Its quantity cannot be increased or reduced; you can only change its form. For example, any act of reclamation of land from sea is only changing the form of land from liquid to solid.
3. It is subject to the law of diminishing returns due to constant usage. This is possible because it is fixed. For example, if a piece of land is constantly cultivated, there comes a time that the yield will reduce.
4. Land is geographically immobile. It cannot be moved from one place to another; all other factors of production move to it.
5. Land has no cost of production because it is given to man by God.
6. Land is heterogeneous in nature. It is quite different from location to location. No two parcels of land are the same in characteristics or fertility.
7. The reward of land is rent.

B. LABOUR: This refers to manual and mental efforts of man in production. It can be regarded as human effort of any kind, which includes both mental and physical efforts which contribute to the production processes for a reward called wages/salaries.

Characteristics of Labour

1. Labour is Mobile: Labour could have geographical mobility and/or occupational mobility. Geographical Mobility: It is the ability of labour to move from one geographical point or location to the other. For instance, if a man decides to move from Ibadan to Lagos or from Nigeria to America. Occupational Mobility: This is when labour (man) decides to change from one occupation to another. For instance, a teacher may move from teaching profession to accounting profession.
- 2 Labour cannot be stored/kept for future use unlike capital.
- 3 Labour is perishable: It can die off anytime because it is a human factor.
- 4 Labour could be regarded as a variable factor of production. It also combines and controls other factors of production.
- 5 Labour can be trained and become skilled, that is, the quality of labour can be improved through education and training.
- 6 Labour cannot transfer the skill acquired to another person, that is, knowledge can be transferred but not the skill. The implication is that quality of labour differs from one person to another.
- 7 The reward of labour is wages/salaries.

Division of Labour

Division of labour is the systematic process in which the production processes are broken down into smaller units/stages and each stage/operation is undertaken by one person or a group of persons. The sole aim of division of labour is to increase output.

Advantages of Division of Labour

1. Division of Labour saves time and energy. The time for switching from one operation to another is saved by staying at a particular operation.
2. It increases output.
3. It provides employment/job opportunities.
4. It brings about less fatigue.

5. Division of labour encourages the use of machines (automation)
6. Division of labour encourages specialisation.

Disadvantages of Division of Labour

1. Risk of unemployment (temporarily)
2. Due to the mass introduction of machines, that is automation, division of labour brings about a high level of risk within the occupation (occupational hazards).
3. Division of labour makes the work monotonous (boring). This is attributable to doing the same work everyday, over and over again.
4. Division of labour leads to loss of craftsmanship. Man becomes the tenderer of machines rather than been crafty.

CAPITAL: This is any man-made goods used for the production of further goods and services. Capital is the stock of physical assets accumulated and are then used to produce additional or further commodities. Capital is composed of goods not needed for immediate consumption but set aside for the production of other goods. These include fixed and circulating capital.

Fixed capital refers to buildings, plants, machinery and tools, equipment and other fixed assets of a business concern. Circulating capital is made up of raw materials, cash-in-hand, and all other sources of funds to the firm.

Characteristics of Capital

1. Capital is man-made.
2. Capital can take different forms. It can be fixed assets, money, seedlings, securities in the stock market, plants, machinery, etc.
3. The reward of capital is interest.
4. Capital is been accumulated over a period of time and can increase in quantity.
5. Capital can depreciate, that is, it is subject to – Wear and tear.
6. Mobility. Some forms of capital are fixed; for example, buildings, machineries, while others are mobile like cash, raw materials.

D. Entrepreneur

The entrepreneur is regarded as the fourth factor input within the production processes. It is quite different from labour because labour is seen as the employees within the organisation. The entrepreneur could be regarded as the employers of labour which, in most cases, is called the management. An entrepreneur organizes both human and material resources for the production of goods and services. The major difference between entrepreneur and labour is the aspect of bearing risks. The entrepreneur bears the risk of production.

Characteristics of Entrepreneur

1. Decision making: The entrepreneur is a decision maker that affects other factors. He decides what to produce, how to produce, where to produce, method of production and method of marketing.
2. The entrepreneur is a risk-bearer unlike labour that is employed and receives wages/salaries for its effort. Entrepreneur bears the risks and uncertainty that are connected to production.
3. The entrepreneur controls and oversees other factors of production. The entrepreneur brings together and coordinates the other factors of production and initiates production well ahead of demand.
4. The reward of entrepreneur is profit or loss.
5. The entrepreneur plans and co-ordinates the various activities that go on within the industry.

Summary

In this chapter, we have discussed the characteristics of the four factors of production. The factors examined are Land, Labour, Capital and Entrepreneur.

Post – Test

1. The reward of land is _____
2. Which factor of production is human effort?
3. The factor that takes the risk of production is known as the _____

4. Interest is the reward for

References

- Anyanwuocha, R.A.J. 2000. *Fundamentals of Economics for Senior Secondary Schools*. Onitsha: Africana – Feb Publishers Ltd.
- Hanson, J. L. 1975. *A Textbook of Economics*. London: ELBS.
- Harvey, J. 1976. *Modern Economics: An Introduction for Business and Professional Students*. N.Y: Macmillan Press Ltd.
- Udu, E. and Agu, G. A. 1990. *New System Economics: A Senior Secondary Course*. Onitsha: Africana – Feb Publishers Ltd.

LECTURE FIVE

Theory of Consumer Behaviour

Introduction

Consumers have to choose from many thousands of goods available in the market. In other words, they are faced with the problem of choice. In the consumers' decision process, utility comes into play. When a good is consumed, the consumer derives satisfaction or benefit from the goods. This is termed utility in economics, that is, the satisfaction gained from the consumption of a particular good or service.

Objectives

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

1. mention the main elements of utility;
2. list types of utility;
3. define marginal utility equation for utility of two or more commodities; and
4. explain utility the maximisation.

Pre – Test

1. What is utility in economics?
2. Differentiate between utility of form and place.
3. When is utility maximised at consumption?

CONTENT

1. ***Element of utility:*** Utility is not synonymous with usefulness. Something may be useful but possess no utility. For example, water to a drowning man possesses no utility.
2. ***Utility has no ethical or medical significance:*** Something may be bad but may still possess utility. For instance, a stick of cigarette even though of no nutritional value gives satisfaction (utility) to the smoker.
3. ***Utility is related to time:*** The amount of satisfaction derived from a particular commodity varies with time. For example, the utility derived from a bottle of cold coke is higher during the dry season than during the cold weather.
4. ***Utility derived depends on an individual:*** Every individual tries to gain the greatest possible utility with the amount of resources available, that is, the maximum utility attainable is subject to the size of one's resources.

1. Types of Utility

1. ***Utility of form:*** This is increasing the utility of an article by changing its form, especially, through manufacturing process.
2. ***Utility of place:*** This is increasing the utility of commodity by changing its geographical point. Transportation of sand and stones from quarry confers more utility on them at the urban centre where they are being used for building purposes.
3. ***Utility of Time:*** Time space can confer utility on commodity. For instance, storing of agricultural products during harvest time confers more utility on them during scarce period (off – season).

2. Measurement of utility

Some 19th century economists belief that utility can be measured as if it were physical commodity. In other words, just as it can be measured in kilogrammes, utility should be similarly measured in its own unit called utils. These economists were known as the Cardinalists because they stated that cardinal numbers should be used to express utility e.g. a consumer may obtain 10 utils from a bowl of pap but only 5 utils from a plate of rice. The conclusion of the Cardinalists would be that the

consumer obtained twice as much utility from the pap than from the rice and the absolute difference between utility derived from both commodities is 5 utils.

However, by the 1930's Economists were coming to the conclusion that utility cannot be measured cardinally. These economists were known as Ordinalists. They claimed that an individual can rank "bundle of goods" in order of preference because he/she prefers one bundle to another or he/she derives more utility from the bundle preferred than from the others, or he/she derives same utility from two sets of goods. In this case, only ordinal numbers i.e. 1st, 2nd and 3rd e.t.c. can be used to rank bundles of goods, and this shows nothing about the absolute difference between the two sets of goods.

3. Concepts in utility. Of very important consideration in this approach is the concept of total utility, marginal utility and the hypothesis of diminishing marginal utility.

- a. Total Utility:** This is the total amount of satisfaction derived from all the units of a commodity consumed at a particular time.
- b. Marginal Utility:** This is the extra utility derived from the consumption of one more unit of a good while the consumption of other goods remains constant. The increase or decrease in the supply, because this is where decisions are made and marginal utility enters into the determination of value and price.

Consider an individual's consumption of goods over a particular period of time:

Qty of x consumed per week	Total utility	Marginal utility
0	0	0
1	20	20
2	50	30
3	60	10
4	62	2
5	60	-2

Table 5.1: Table showing Total and Marginal Utility

- c. Law of Diminishing Marginal utility:** This states that as you take or consume more and more of a commodity, the total utility tends

to increase up to a certain level (saturation point), and any additional intake beyond this level will lead to a decrease in the marginal utility. From the above table, the law of diminishing marginal utility sets in at the 3rd quantity because the marginal utility drops from 30 to 10 though the total utility increases from 50 to 60.

- d. Utility Maximisation:** A demand for a product exists because it provides the user some utility. Therefore, the key concept behind demand is marginal utility. It is clear therefore that the law of diminishing marginal utility is the basis for the third law of demand. The demand curve can therefore be derived from the utility theory. The height of the demand curve reflects marginal utility. The marginal utility curve resembles the demand curve.

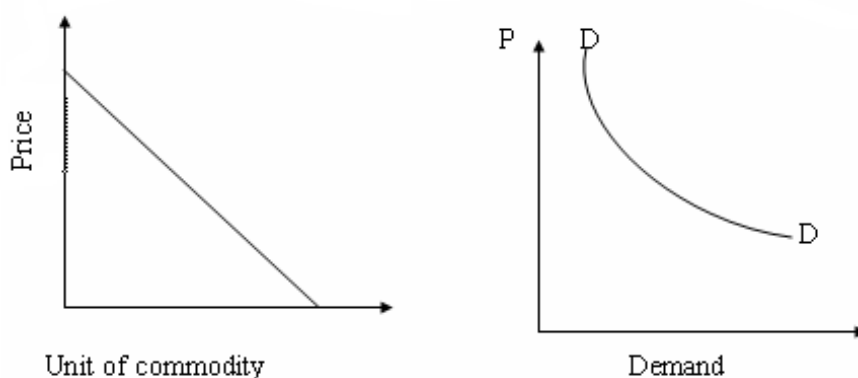


Fig. 5.1: Similarity between a Marginal Utility Curve and Demand Curve

The explanation is that additional units of a commodity consumes gives less utility (diminishing marginal utility), so the consumer will consume more of the commodity at lower prices. This means that the consumer's price represents the additional amount of satisfaction, which he hopes to derive from purchasing additional or more units of the commodity.

A consumer at any point in time wants to equate the marginal utility of a product to its price. If the marginal utility of a commodity were above the price paid for it, it means the consumer valued the extra unit more than he had paid for it. Hence he/she would increase his/her purchases more

units of the commodity. Therefore, the tendency is to arrange purchases in such a way that the marginal utility of any good is equal to its price, i.e. $MU_X = P_X$.

Suppose $MU_X = 20$ and $P_X = 4$

$MU_Y = 25$ and $P_Y = 5$

$MU_X/P_X = 20/4 = 5$ utils per unit price of commodity x

$MU_Y/P_Y = 25/5 = 5$ utils per unit of commodity y

In the example above, the consumer will be indifferent because what he derives per unit price of each of the commodity is the same.

Supposing the price of commodity x changes to N2. $MU_X/P_X = 20/2 = 10$ utils per unit of commodity x i.e. the consumer will buy more of X thus connoting more satisfaction. Generally, as the price of one commodity drops in response to the other commodity, more of the commodity is consumed but a point will be reached where the ratio of marginal utility to the price of one commodity (MU_X/P_X) will be equal to the ratio of marginal utility to the price of the other (MU_Y/P_Y). This is the point at which the consumer will be indifferent, that is, he derives the same satisfaction from either commodity.

Summary

In this lecture, we have discussed the key elements that are related to utility as a concept in economics. Types of utility were examined as well as the methods of measuring utility. We concluded by looking at concepts of total utility, marginal utility, law of diminishing marginal utility and utility maximisation.

Post-Test

1. What is utility in economics?
2. Differentiate between utility of form and place.
3. When is utility maximised at consumption?

References

Anyanwuocha, R.A.J. 2000. *Fundamentals of Economics for Senior Secondary Schools*. Onitsha: Africana – Feb Publishers Ltd.

Hanson, J. L. 1975. *A Textbook of Economics*. London: ELBS.

Harvey, J. 1976. *Modern Economics: An Introduction for Business and Professional Students*. N.Y: Macmillan Press Ltd.

Udu, E. and Agu, G. A. 1990. *New System Economics: A Senior Secondary Course*. Onitsha: Africana – Feb Publishers Ltd.

LECTURE SIX

Indifference Curves

Introduction

In the ordinalist approach, consumer is presumed to prefer and rank commodities rather than assign util values. The consumers' preference for commodities X and Y, for instance can usefully be analysed by means of indifference curves. The significance of these curves would be discussed in this chapter.

Objectives

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

1. define what an indifference curve is; and
2. list the properties of indifference curves.

Pre – Test

1. What is an indifference curve?
2. List three main characteristics of indifference curves.

CONTENT

After 1930's, during the inter-war years, J. R. Hicks and other economists began to shift attention from the 'cardinal' aspect of utility to its 'ordinal' aspect, that is, the utility from different combinations of commodities could be ranked in order of preference by consumers.

Indifference analysis assumes that among various combinations of any two commodities, a consumer can distinguish combinations, which are of equal utility to him and between which he is indifferent, so that he

can rank different combinations in order of preference. Suppose that there are only two commodities available to the consumer – say X and Y. If he has 4 units of commodity X and 1 unit of commodity Y, he will obtain a certain amount of satisfaction for this combination of goods. Now, let us say he has 3 units of commodity X. For him to stay on the same level of satisfaction as before, he needs 2 units of Y. Then he can say that he/she was indifferent to 4 units of X plus 1 unit of Y amount of satisfaction from either combination.

Let us look at four combinations for this consumer at which he/she is indifferent.

Combination	Commodity X	Commodity Y	Substitution of Y for X
1	4 units	Plus 1 unit	-
2	3 units	Plus 2 units	1 unit
3	2 units	Plus 4 units	2 units
4	1 unit	Plus 7 units	3 units

Table 6.1: Table Showing Combination of Two Commodities

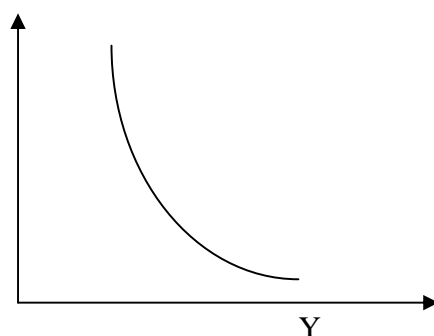


Fig. 6.1: Indifference Curve

Comparing combinations 1 and 2, we can see that one more unit of Y compensates for the loss of one unit of X. However, comparing combinations 2 and 3, we can see that 2 units of Y are now necessary to compensate for the loss of one additional unit of X. The implication is that as the amount of X becomes smaller, and the amount of Y greater, X becomes more and more significant and Y less and less significant; hence more and more of Y is required to compensate for the loss of successive units of X.

Another combination that will yield another level of satisfaction can be obtained for the same consumer. For example,

Combination	Commodity X	Commodity Y	Substitution of Y for X
1	6	2	-
2	5	4	2
3	4	7	3
4	3	11	4

Table 6.2: Table Showing Combination of Two Commodities

If these two indifference curves are plotted on a single graph, they yield an indifference map.

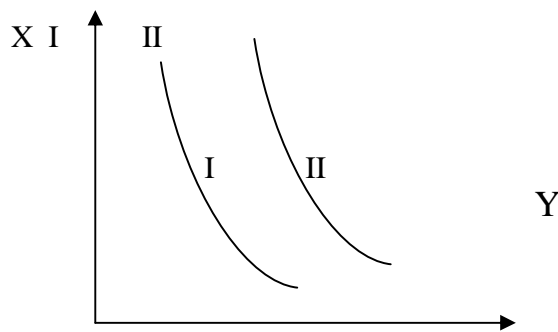


Fig. 6.2: Indifference Map

It should be noted that the rationality of the consumer on the combination principle is based on the following:

1. He must be able to rank his preference over the entire field of choice facing him.
2. His behaviour must be transitive: if he prefers A to B and B to C, he must therefore prefer A to C.
3. There is diminishing marginal rate of substitution, and this is depicted by the slope of the indifference curve or rate of substituting X for Y.
4. The total utility of the consumer depends on the quantity of individual commodity consumed.

There are, in reality, an infinite number of indifference curves on an indifference map, but any of those that are of interest and relevance from any particular analysis are shown. It should be noted that a higher indifference curve denotes greater satisfaction than a lower one. The slope of indifference curve is called the marginal rate of substitution (MRS), that is, the ratio at which X is substituted for Y without the consumer being either better or worse off.

Characteristics of Indifference Curves

1. Indifference curves do not intersect.
2. Indifference curves slope downward from left to right. As the quantity of Y decreases, the quantity of X must increase; otherwise, it would mean that the same quantity of X and different quantities of Y would be equally desirable.
3. It is convex to the origin. This is because the commodities are not perfect substitutes, neither are they complements and as one moves, along the curve from left to right, there is a diminishing marginal rate of substitution.
4. The further away from the origin the curve lies, the better for the consumer, that is, the higher the level of satisfaction.

Summary

In this chapter, we have discussed the meaning and significance of an indifference curve, and how practically utilities are substituted. We also examined the major characteristics of indifference curves.

Post-Test

1. What is an indifference curve?
2. List three main characteristics of indifference curves.

References

- Hanson, J. L. 1975. *A Textbook of Economics*. London: ELBS
- Thirkettle, G. L. 1975. *Advanced Economics*. London: M&E Handbooks.

LECTURE SEVEN

Theory of Market Structures

Introduction

The term 'market' structure states those characteristics of a market organisation that affect the behaviour and performance of firms. The number of sellers and the nature of the product are the most significant dimensions of any market structure. Furthermore, price determination and levels of output are very much affected by the nature and operations of the market. Here, we shall classify and discuss some types of market structures and analyse their effects on price and outputs.

Objectives

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

1. explain what a perfect market is and a monopoly market is;
2. list the characteristics of a perfect market;
3. give the equation for the determination of price under perfect and monopoly markets; and
4. discuss market structures such as monopsony, duopoly, oligopoly and duopsony

Pre – Test

1. List the main features of a perfect market.
2. Define monopsony and duopsony.
3. What are the features of a monopolistic market?

CONTENT

A. Perfect Competition

A state of perfect competition exists when the market price of any commodity is established by forces beyond the control of the individual economic agent in the market, and it is as such a given and unalterable constant. This means that the market actors, that is, sellers and buyers for the commodities are price-takers. Perfect competition is thus theoretical, and every market is aspiring to achieve this.

Characteristics of a Perfect Competition

1. There are many buyers and sellers. – That is why everybody is a price taker as nobody can single handedly influence the price.
2. Commodities bought/sold are homogenous, that is, one unit of any commodity is like another, there is no real or imagined difference. Thus, the product of one seller is identical to that of another, and this ensures that buyers are indifferent as to sellers from whom they purchase commodities.
3. There is free mobility of resources. There is complete openness in buying and selling of goods, that is, there is free movement of goods and services and resources in the market in response to market signals.
4. There is free entry and free exit that is, Any firm is free to enter the market and free to leave at will. Whenever the industry is earning excess profits, some new firms attracted can gain entry, but in case of loss firms are free to leave.
5. There is perfect information and knowledge of market situation. This ensures that the same price obtains in the market. Buyers and sellers possess complete knowledge about the general asking price in the market.
6. There is no preferential treatment – Due to perfect information about the general asking price and the type of commodities sold in the market, every customer is treated in the same way; thus, there is no question of exploiting one customer at the expense of another.
7. Absence of Transport Costs. There is no transport cost in carrying products from one place to another. This is an essential condition

for the existence of perfect competition where the same price obtains in the market. If transport cost is allowed and added to the cost price. There will be variation in prices within the market.

Generally, all these characteristics sum up to mean the price – taking attitude of the actors in the market. Because each firm’s output constitutes a small part of the total supply, it is not able to effect any appreciable influence on the market price of the commodity through changes in its output

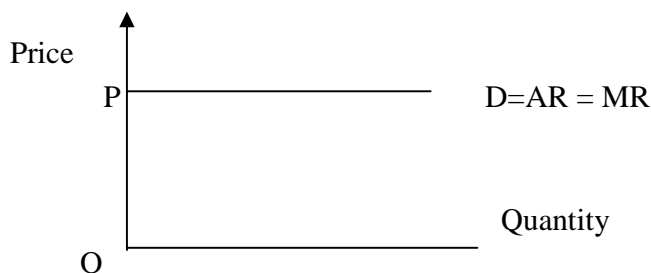
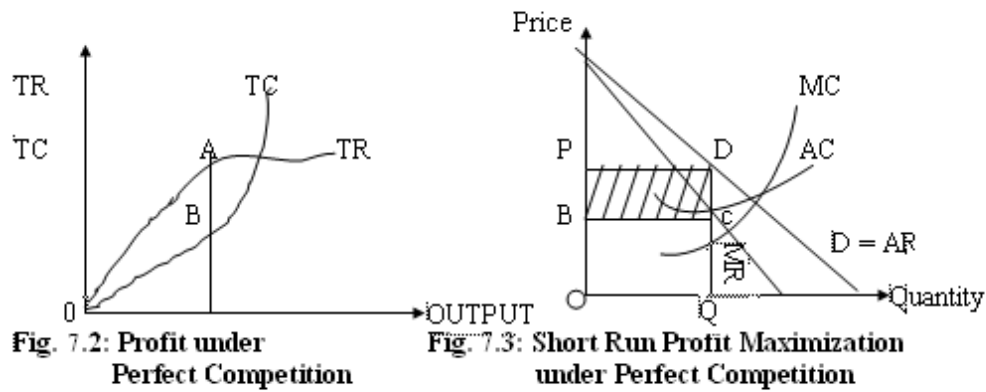


Fig. 7.1: Perfect Competition Market Price

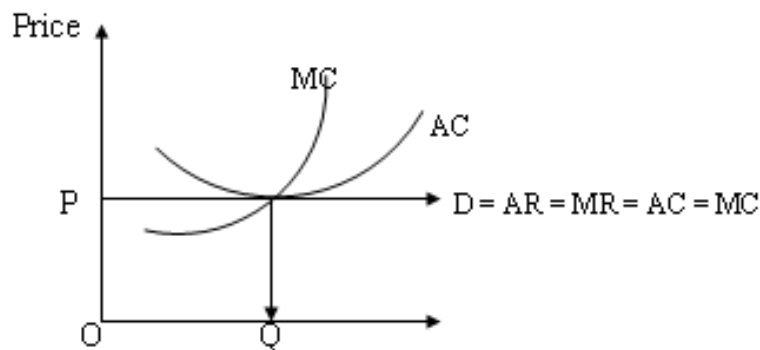
Now, since every unit of the commodity commands the same price or revenue on the average (AR) and at the margin (MR), Hence $OP = AR = MR = D$

Profit Maximisation Under Perfect Competition

Profit is defined as the difference between the total cost and the total revenue which results from a business operation. In the short – run, profit is maximised at the output level where the difference between the total revenue and the total cost is largest. The highest profit of the firm will be earned when the vertical distance (AB) between the total revenue and the total cost curve is as large as possible. This in fact is the output D at which the slope of the two curves is the same, that is, where the tangents of the two curves are parallel. This is illustrated in the diagram below.



It should be noted that, from fig. 7.3, Profit is maximised at the output for which $MC = MR$. If $MR > MC$, it pays the firm to expand output because the addition to revenue is larger than addition to cost and profit can still be increased and vice versa. When $MR = MC$, the equilibrium position is obtained and the firm has no tendency to change. Therefore, the short – run equilibrium and profit maximising output is OQ , the price is OP and the profit is measured by the area of the rectangle $PBCD$. This is an excess profit and will give rise to new firms entering into the industry until the profit is wiped off and thus the long-run normal profit situation of the figure 7.4 is obtained.



B. Imperfect Competition

Whenever any of the characteristics or assumptions of perfect competition is violated, imperfection is the result. This is indicated by a downward – sloping demand curve or an upward – sloping supply curve facing the individual seller or buyer. Thus, when the firm in the industry is no longer a price taker, there is imperfection. Unlike in perfect competition when the firm has only the output decision to make, an imperfect competitor has either the output decision to make or price decision to make at any point in time. There are many shades of imperfect competition. These are the following: monopoly, oligopoly, monopsony, oligopsony, duopoly, etc.

Pure monopoly – This is a market structure in which there is a single firm or producer selling a product for which there is no close substitute. This may take the form of a sole supplier, a unified business organisation or separately controlled firms, which combine to market their product. Since the firm has no rival producers or sellers, it therefore constitutes the entire industry for the product and the demand curve for the product is the market demand, which will slope downwards from left to right.

A pure monopolist has the veto to determine either:

- i. the price at which he sells his product; or
- ii. the quantity he wishes to sell. He cannot determine both price and quantity at the same time because he has no control over demand.

Once he takes output decision, the price decision is left to be settled by the demand for the product. Similarly, if he chooses the price at which he will sell, the quantity of the product he can put on the market will be dictated by the demand.

Price and Output Determination under Monopoly

The goal of price and output determination is to know the levels of both that will enable the monopolist maximise his profit. To maximise profit in the short – run, the monopolist must stick to the rules, which require him to produce at the point where $MR = MC$. The cost curves of the monopolist have the same U – shapes as those of the perfectly competitive producer but there are differences in their marginal, average revenue and price or demand relations. While the three (MR, AR and D or P) coincide in a perfect market, the marginal revenue differs (usually lower) from the

average revenue, and the demand curve (which is the same) in a monopoly market. This is shown below:-

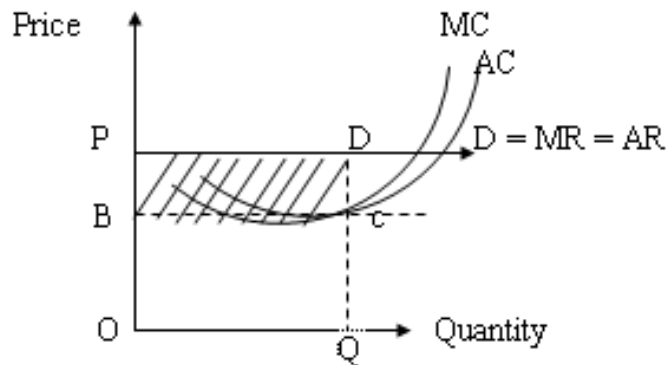


Fig. 7.5: Short Run Profit Maximisation under Monopoly

As shown above, the monopoly market is at a short – run equilibrium where the profit maximisation rule ($MC = MR$) dictates that the market can absorb OQ level of output at a per unit price of $OP (=QD)$, which is determined by the demand curve. At a lower output than OQ , each addition increases the revenue more than the cost i.e. ($MR > MC$), when output is greater than OQ , every additional unit produced adds less to the total revenue than to the cost (i.e. $MC > MR$). Therefore, the most profitable output is OQ at which per unit price is OP . Total revenue is the shaded area $PBCD$. The monopolist has the ability to earn such excess profit for a long time because of the restrictions to entry i.e. it can make abnormal profit.

Causes of Monopoly

1. Sole access to natural resources.
2. Technologically induced monopoly.
3. Legal Monopoly, e.g. Patent right.

Causes of Monopoly

1. *Natural Monopoly*: This is related to the presence of natural resources. Nature places some minerals in a particular area, the resources which are not available somewhere else. Hence, such area has a monopoly of the supply of such minerals.
2. *Government Monopoly*: The establishment of public corporations by the government of any state, in the provision of some social amenities, confers on it monopoly. E.g. supply of power (PHCN), Water Boards, and until recently radio and television broadcasting.
3. *Legal Monopoly*: This is in the form of patents, copyrights and trademarks, with the aim of promoting invention and the development of new ideas.
4. *Technologically induced monopoly*: An improvement in the technique of production can make a firm produce at a lower cost per unit. This empowers such firm to sell at lower prices than its rivals thereby forcing its rivals out of business and assuming the position of the major producer of the goods concerned.
5. *Merger*: Voluntary of firms in form of Trust, Cartel can cause monopoly.
6. *High cost of establishment*: The efficient scale of plant may be so large relative to the market such that there is only room for one firm. This is applicable to public utilities, for example, transport, water, electricity generation, telephones, etc.

Control of Monopoly

Monopoly power can be controlled through the following ways:

1. *Encouragement of Competitors by the Government*. This is by encouraging private investors to produce similar commodities. The provision of close substitutes reduces the power of a monopolist.
2. *Nationalisation of monopolistic enterprises*. The take-over of such monopolistic firms by government will make the provision of such commodities to be at a lower price to the consumer and this breaks the monopoly power.
3. *Price Control*: This is in form of fixing maximum prices by the government so as to prevent the firms from charging higher prices from the consumers.

4. *Enactment of laws making mergers illegal.* Laws may be passed that can set-up standards and even break up monopolies with penalties attached to defaulters of such laws.
5. *Provision of adequate information.* The provision of adequate information about current prices and where goods are available could reduce the discriminating tendencies of the monopolist.
6. *Taxation of the monopolist profit.* The imposition of higher taxes on monopoly profits may curb the monopolistic tendencies of profiteering.
7. Formation of consumer cooperatives so as to enable consumers to produce goods and services at reasonable prices and break up the monopolistic power of single producers.

Similarities between Perfect Competition and Pure Monopoly

1. The goal of both of them is profit maximisation.
2. The cost conditions are such as to give rise to U – shaped cost curves both in the short and in the long-run.
3. In both markets, profit is maximised at the point where $MR = MC$.

Monopolistic Competition

Perfect competition and pure monopoly are the limiting cases at each end of the scale of competition. But, neither situation is found frequently in the real world. What is actually found is the combination of elements of both competition and monopoly. Hence, monopolistic competition is a market structure characterised by numerous firms selling similar, but differentiated products with much effort devoted to forms of non-price competition such as product quality, packaging or wrapping, advertisement, etc. It is very similar to pure competition except that the product is not homogeneous but differentiated. The fact that the product is differentiated between firms means that each does not face a perfectly elastic demand curve for its product unlike perfect competition.

Characteristics of Monopolistic Competition

1. The objective is profit maximisation.

2. The product is heterogeneous because of differentiation. The differentiation allows for different pricing.
3. There is a large number of buyers and sellers in the market. No single buyer or seller dominates the market in such a way as to affect the price or output level.
4. The firm determines either its output or its price.
5. The demand curve slopes downwards hence, the slope is negative. Nevertheless, demand tends to be elastic.

Discrimination Monopoly

A discrimination monopoly is one who can, and does, sell the same product at different prices to different customers. An example is a doctor who varies his fees for the same treatment, according to his estimation of the wealth of his patient or a car manufacturer who sells cars in export markets at a lower price than on the home market.

The necessary conditions for discriminating monopoly are the following:

1. There must be some imperfection in the market. These are in form of different markets or separation of markets by transport costs, consumers' ignorance or national barriers. Seller can exercise some control over each market or each part of the market, separately.
2. Elasticities of demand in the market must be different. The demand curves for each market must slope differently. As a result, different prices will be charged by the monopolist in order to maximise his profits.
3. No 'seepage' is possible between markets or different parts of the market. For instance, if an exporter in one country sells his goods much more cheaply in another country, then their transport costs or physical controls must prevent re-import to the country of origin.

There are other forms of market structures. These are:-

1. **Monopsony**- Here, there is only a single buyer in the market, that is, buyer's monopoly.
2. **Duopoly**- This is a market with only two firms or sellers for the same goods or services. It is a special case of oligopoly.

3. **Oligopoly**- This is a market with a few firms producing differentiated products and where the action of one firm has a perceptible influence upon the other.
4. **Duopsony**- This is a market structure where we have only two buyers. It is a special case of oligopsony.

Summary

In this chapter we have discussed the meaning of perfect competition and its main features, profit maximisation under perfect market, features of monopoly and monopolistic competition. We also examined the causes and the control of monopoly. Lastly, we touched on some other market structures such as monopsony, duopoly, oligopoly and duopsony.

Post-Test

1. List the main features of a perfect market.
2. Define and differentiate between monopsony and duopsony.
3. What are the features of a monopolistic market?

References

- Jhingan, M. L. 1980. *Advanced Economic Theory*. New Delhi: Skylark Printers.
- Udu, E. and Agu, G. A. 1990. *New System Economics: A Senior Secondary Course*. Onitsha: Africana – Feb Publishers Ltd.

LECTURE EIGHT

The Concept of Elasticity

Introduction

Normally, the demand curve slopes downwards from left to right, while supply slopes upward from left to right. However, both respond to changes in the price level. The responsiveness is always referred to as “elasticity”. In this chapter, we shall briefly look at the nature of elasticity of demand and supply.

Objectives

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

1. define elasticity;
2. calculate elasticity; and
3. list the factors that determine the elasticity of both demand and supply.

Pre – Test

1. What is elasticity of demand?
2. List five factors affecting elasticity of demand.
3. Give three forms of elasticity of supply.
4. Mention three types of elasticity.

CONTENT

“Elasticity” is a term used to measure the rate of responsiveness of demand or supply to a slight change in price.

Three main things that affect changes shall be discussed as related to elasticity of demand. They are:

1. price of a particular commodity;
2. size of income; and
3. price of another commodity.

These factors lead us to look at three types of elasticity.

I Price Elasticity of Demand

This is when we compare the rate at which demand expands to the rate at which price falls. In other words, price elasticity of demand measures how the quantity of a given commodity changes when its price slightly changes.

This is measured using the formula

$$E = \frac{\text{Proportionate Change in Quantity Demanded}}{\text{Proportionate Change in Price}}$$

OR

OR

$$\frac{\text{Percentage Change in Quantity Demanded}}{\text{Percentage Change in Price}}$$

OR

OR

$$\frac{\Delta Q}{Q} \times \frac{P}{\Delta P}$$

Where

ΔQ = Change in Quantity (New quantity – Old quantity)

ΔQ = Old quantity

P = Old price

ΔP = Change in price (New price – Old price)

The above calculation shows that price elasticity of demand is the comparison between the rate of change in demand as a result of change in

the price level that causes the change in demand. When elasticity is greater than one (1) (the change in the quantity demanded is more than proportionate to the change in price), we say demand is elastic. When elasticity is less than one (1) (the change in the quantity demanded is less than proportionate to the change in price), we say demand is inelastic. If elasticity is equal to one (1) we say demand is unitary.

These forms of elasticity can be graphically illustrated thus:

(a) Perfectly Elastic Demand Curve

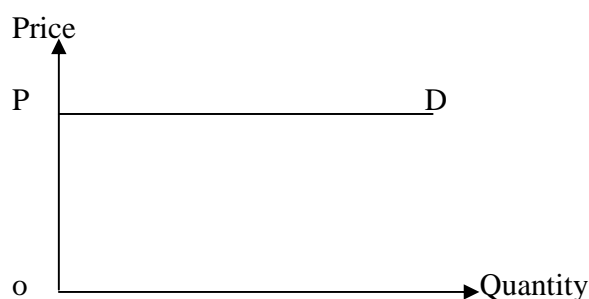


Fig. 8.1: Perfect Elastic Demand Curve

1. The demand curve is parallel to the quantity axis.
2. Demand curve is very sensitive to price changes. Any increase or decrease in price means a zero demand.
3. $PED = \infty$ (infinity).

(b) Perfectly Inelastic Demand Curve

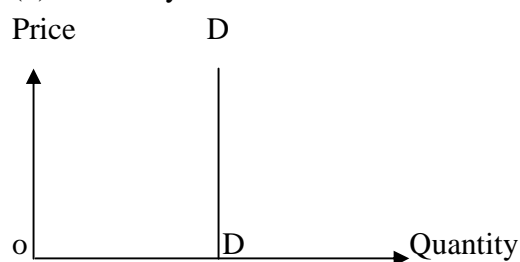


Fig. 8.2: Perfectly Inelastic Demand Curve

1. The demand curve is parallel to the price axis.
 2. At any price, the same quantity is demanded.
 3. $PED = 0$
- (c) Unitary Elastic Demand Curve

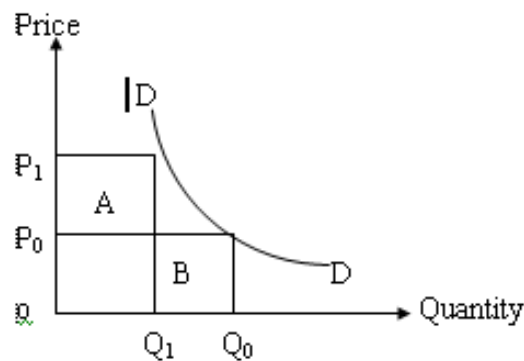


Fig. 8.3: Unitary Elastic Demand Curve

1. The percentage change in quantity demanded is exactly equal to the percentage change in price.
2. Rectangle A is equal to rectangle B.
3. $PED = 1$

Just like demand, we have elasticity of supply. Elasticity of supply measures how supply of commodities varies with price changes. It is measured thus:

$$\text{Elasticity of supply} = \frac{\text{Percentage Change in quantity supplied}}{\text{Percentage Change in price}}$$

We also have elastic, inelastic and unitary elasticity of supply. Graphically, we have

- (a) Perfectly Elastic Supply Curve

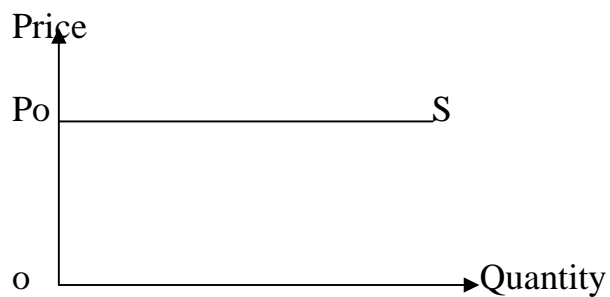


Fig. 8.4: Perfectly Elastic Supply Curve

1. Supply curve is parallel to the quantity axis.
2. Supply is very sensitive to price.
3. $PES = \infty$ (infinity).

(b) Perfectly Inelastic Supply Curve

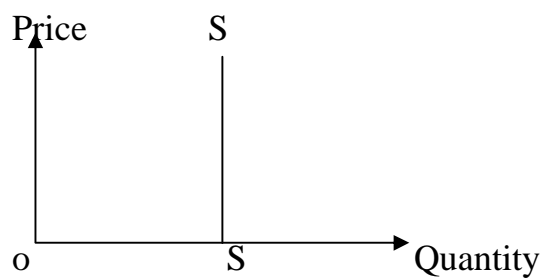


Fig. 8.5: Perfectly Inelastic Supply Curve

1. Supply curve is parallel to the price axis.
2. At any price, the same quantity is supplied.
3. $PES = 0$

(c) Unitary Elastic Supply Curve

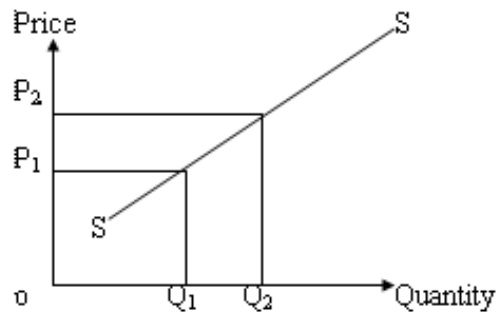


Fig. 8.6: Unitary Elastic Supply Curve

1. Proportionate change in price is equal to proportionate change in supply.
2. $PES = 1$

Factors Determining Elasticity of Demand

1. **Existence of close substitutes.** Demand for goods with close substitutes is likely to be elastic, while the demand for those goods without close substitute is likely to be inelastic.
2. **Consumer's Income.** The higher the income of a consumer, the more likely inelastic will be his/her demand. This is because real income will not be affected by price changes, while low income earners have elastic demand.
3. **The cost of the commodity relative to consumer's income.** The demand for cheap articles is inelastic since the price is insignificant relative to income.
4. **Brand loyalty/Advertisement.** A consumer will have an inelastic demand, if he/she has brand loyalty or due to addiction to a product. It may sometimes be induced by advertisement.
5. **Articles of necessity.** Goods of necessity have inelastic demand, for example, salt.
6. **Degree of durability.** Goods that are durable and susceptible to repairs tend to have elastic demand.

Factors Determining Elasticity of Supply

1. **Time.** Since factors of production sometimes cannot be easily varied in the short-run, supply tends to be inelastic in the short run.
2. **Existence of Alternatives.** The existence of an alternative market for a product makes the supply elastic because there can be shift in the point of sale. Also, manufacturers can shift production to alternatives if price changes on one product.
3. **Flexibility of factors of production.** Goods that have alternative uses have elastic supply curve, whereas goods that are rigid in use have inelastic supply curve.

Other forms of elasticity of demand are:

II. Cross Elasticity of Demand

Cross Elasticity of demand measures the degree of responsiveness of commodity X to a small change in the price of commodity Y. Most of the time, cross elasticity is measured between two commodities that are substitute to each another or complementary. For example, you can measure the change in demand for margarine due to change in the price of butter.

It is measured thus:

$$\text{Cross Elasticity of Demand} = \frac{\text{Percentage change in the quantity of X}}{\text{Percentage change in the price of Y}}$$

III. Income Elasticity of Demand

This is a proportionate change in demand as a result of the proportionate change in real income.

It is measured thus:

$$\text{Income Elasticity of Demand} = \frac{\text{Percentage change in the quantity demanded}}{\text{Percentage change in income}}$$

Summary

In this lecture, we have defined elasticity as related to both demand and supply. Also, we looked at some basic determinants and forms of elasticity of demand and supply. We concluded by looking at other types of elasticity, such as cross elasticity and income elasticity.

Post – Test

1. What is elasticity of demand?
2. List five factors affecting elasticity of demand.
3. Give three forms of elasticity of supply.
4. Mention three types of elasticity.

References

Ajayi, S. I. and Ojo, O. O. 1981. *‘O’ Level Economic Textbook for West Africa*. Ibadan: Onibonoje Press – Printers.

Harvey, J. 1976. *Modern Economics: An Introduction for Business and Professional Students*. N.Y: Macmillan Press Ltd.

Udu, E. and Agu, G. A. 1990. *New System Economics: A Senior Secondary Course*. Onitsha: Africana – Feb Publishers Ltd.

LECTURE NINE

Definition of Economic Development

Introduction

Economic growth is designed to raise the general standards of living in a country so that there is a greater quantity and variety of goods and services available for a growing population. It is therefore necessary to know the meaning and difference between economic development and economic growth.

Objectives

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

1. define the term “economic development”; and
2. explain the difference between economic development and economic growth.

Pre – Test

1. What is economic development?
2. What is economic growth?
3. What are the differences between economic development and economic growth.

CONTENT

I. What is Economic Development?

Different authors have different meanings for the term “economic development”. Meier and Baldwin (1957) confirm that no single definition of economic development is entirely satisfactory. To complicate the

definitional problem, there is the tendency to use the terms, economic development and economic growth interchangeably; though, the two terms are conceptually different.

In this lecture, and using the words of Meier and Baldwin (1957), economic development is defined as a process whereby an economy's real national income increase over a long period of time. Let us pay special attention to some keywords in the definition: they are "process," "real national income," and "long period."

- a. Process implies the operation of certain forces; these forces operate over a long period and embody changes in certain variables. Process varies under diverse conditions in space and time. The general result of the process is growth in an economy's national product. When we focus only on the growth in national product, we are taking a comprehensive view of the end result of the development process. When we examine the process in more detail, we observe that many other changes, each of a particular character, accompany the rise in output. We can classify these changes into two: changes in fundamental factor supplies and changes in the structure of demand for products.

Particular changes in factor supplies comprise the discovery of additional resources; capital accumulation; population growth; introduction of new and better techniques of production; improvement in skills and other institutional and organisational modifications. Particular changes in the structure of demand for products are associated with developments in size and age composition of population; level and distribution of income; tastes and other institutional and organisational arrangements. It is possible, therefore, to interpret economic development in terms of specific developments in factor supplies and product demands.

- b. Real national income refers to the country's total output of final goods and services expressed not in monetary terms but in real terms. National income might refer to gross national product (GNP) or net national product (NNP).

It is important to note here that in a closed economy, national income and total output are identical. In an economy open to foreign trade, however, national income will be greater than total output if the country is receiving income from foreign investments or is receiving gifts and goods from abroad. In measuring economic development, we

look for the most inclusive measure of the final goods and services produced, but allowance should be made for wastages in machinery and other capital goods during the process of production. Since gross national product (GNP), makes no allowance for capital replacements, a better measure is net national product (NNP), which includes final consumer goods and services plus only the net additions to capital goods. Therefore, when we say that a country experiences development, it is the rise in its real national income over a long period.

As regards the period, it should be noted that the increase in real national income between cycles – rather than the increase within a cycle – denotes development. Therefore, the relevant time units are decades rather than years when we talk of development. Meier and Baldwin (1957), suggested a minimum of twenty-five years.

Another definition gives economic development as something more than merely an increase in aggregate output. It is assumed to mean a rising standard of living. Such a view requires economic development to be defined as a process whereby the real per capita income of a country increases over a long period. By relating development to the problem of removing poverty, many would see development as an increase in real per capita income. For, if the criterion is only an increase in real national income, then a situation is possible in which real national income rises, but the standard of living does not. This would happen whenever population growth surpasses the increase in national output, with the result that real per capita income falls; or, if the increase in national income is paralleled by an equal increase in population, real per capita income would remain constant.

It should be noted that this definition still emphasizes the importance of real national income indirectly because of the following:

- a. A larger real national income is normally a prerequisite for an increase in real per capita income.
- b. If an increase in per capita income were taken as the measure of development, we would be in the awkward position of having to say that a country had not developed if its real national income had risen, but population had also risen at the same rate to rub-off the impact.

- c. If per capita income is the measurement, the population problem may be concealed, since population has already been divided out. The field of inquiry is then unduly narrowed.

Another definition of economic development is in terms of economic welfare. When we give attention to real per capita income, it is easy to slide into the position that economic development means economic progress or an increase in economic welfare. When the growth of real national income is compared with population growth, and an increase in real per capita income is found, it is tempting to say that this constitutes progress away from poverty towards a better standard of living. At this point, the term 'economic development' no longer denotes only a quantitative concept but also a qualitative one. The expression is then no longer a descriptive term but rather a prescriptive term. Therefore, the definition of development becomes a persuasive definition, implying that development is a desirable objective.

Economic Development and Economic Growth

Economic development refers to the problems of underdeveloped countries and economic growth to those of developed countries. The distinction between the two terms by Maddison (1970) is that the rising of income levels is generally called economic growth in rich countries and in poor ones it is called economic development. But this view does not specify the underlying forces which raise the income levels in the two types of economies. Hicks (1957) in her own distinction pointed out that economic development is in connection with the problems of underdeveloped countries that are concerned with the development of unused resources, even though their uses are well-known, while those of advanced countries are related to growth, because most of their resources had been known and developed to a considerable extent.

It should be noted that the terms 'development' and 'growth' have nothing to do with the type of economy. The distinction between the two relates to the nature and causes of change. Schumpeter (1934) makes the distinction clearer when he defined development as a discontinuous and spontaneous change in the stationary state which forever alters and displaces the equilibrium state previously existing; while growth is a gradual and steady change in the long-run which comes about through a gradual increase in the rate of savings and population. This view of

Schumpeter (1934) has been widely accepted and elaborated by a good majority of economists. According to Kindleberger (1965), Economic growth means more output, while economic development implies both more output and changes in the technical and institutional arrangement by which it is produced and distributed. Growth may well involve not only more output derived from greater amounts of inputs but also greater efficiency, that is, an increase in output per unit of input. Development goes beyond this to imply changes in the composition of output and in the allocation of inputs by sectors. Friedman (1972) defines growth as an expansion of the system in one or more dimensions without a change in its structure, and development as an innovative process leading to the structural transformation of social system.

Thus, economic growth is related to a quantitative sustained increase in the country's per capita output or income accompanied by expansion in its labour force, consumption, capital and volume of trade. On the other hand, economic development is a wider concept than economic growth. It is taken to mean growth plus change. It is related to qualitative changes in economic wants, goods, incentives, institutions, productivity and knowledge, or the "upward movement of the entire social system", according to Myrdal.

In conclusion, one can say that economic development embraces both growth and decline. For example, an economy can grow but it may not develop because poverty, unemployment and inequalities continue to persist due to the absence of technological and structural changes, however it is difficult to imagine development without economic growth.

Summary

In this chapter, we have talked about different approaches to defining "economic development". Also, we differentiated between economic development and economic growth.

Post-Test

1. What is economic development?
2. What is economic growth?
3. What are the differences between economic development and economic growth.

References

Friedman, J. 1972 in Hansen 1972 eds. Growth Centres in Regional Economic Development.

Hicks, U. 1957. *Learning About Economic Development*. O.E.P

Jhingan, M. L. 2003. *Advanced Economic Theory*, (12th ed). Delhi: Vrinda Publications Ltd.

Jhingan, M. L. 2003. *The Economics of Development and Planning*. Delhi: Vrinda Publications Ltd.

Kindleberger, C. P. 1965. *Economic Development*. (2nd ed.)

Maddison, A. 1970. *Economic Progress and Policy in Developing Countries*.

Meier, G.. M. and Baldwin, R. E. 1957. *Economic Development*. London: Wiley.

Myrdal, G. *Economic Theory and Underdeveloped Region*.

Schumper, J. A. 1934. *The Theory of Economic Development*.

LECTURE TEN

Measurement of Economic Development

Introduction

Economic growth which is interchangeably used for economic development has been defined as an absolute increase in the quantity of factors of production within the economy, on one hand and greater productivity of those factors, on the other hand. The rise in national output must not only be greater absolutely, it must also be greater proportionally. Therefore, there is need to measure economic development in order to assist comparison with other economies. This lectures examines some standard methods of measuring economic development.

Objectives

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

1. discuss or describe the measuring scales for economic development; and
2. list the criticisms of each measuring scale.

Pre – Test

1. List the methods of measuring economic development.
2. What are the main criticisms of measuring economic development through the method of Gross National Product (GNP)?
3. List the basic social indicators that can be used to measure economic development.

CONTENT

Economic development is measured in four ways. The ways are the following:

I. Gross National Product (GNP) - One of the methods for measuring economic development is calculating an increase in the economy's real national income over a long period of time. This measuring system is criticized on some grounds such as:

1. Real national income refers to the country's total output of final goods and services in real terms rather than in monetary terms. Price changes are ruled out while calculating real national income with GNP. This is unrealistic because price changes are a measuring parameter, which is inseparable in modern economy, therefore variations in prices are inevitable within economy.
2. This measurement fails to take into consideration changes in the growth of population. If a rise in real national income is accompanied by a faster growth in population, there will be no economic growth but retardation.
3. The GNP figures also do not reveal the costs to society of environmental pollution, urbanisation, industrialisation and population growth. It considers natural resources to be free, and treats the earth like a business in liquidation.
4. It tells us nothing about the distribution of income in the economy.

II. Per Capita Real Income. This relates to an increase in the per capita reliance of the economy over a long period.

This indicator of economic growth tries to emphasize that for economic development the rate of increase in real per capita income should be higher than the growth rate of population. But this measurement is faced with the following difficulties:

1. An increase in per capita income may not automatically raise the real standard of living of the masses. It is possible that while per capita real income is increasing, per capita consumption might be falling and people might be increasing their rate of savings or increasing military or other purposes, which does not show increase in the standard of living of people.

2. There is another possibility of the people remaining poor despite an increase in the real per capita if the increased income goes to the few rich instead of spreading to many poor.
3. Per capita income measurement subordinates other questions regarding the structure of the society, the size and composition of its population, its institutions and culture, the resource patterns and distribution of output among the society's members.
4. The real per capita income estimates fail to measure adequately changes in output due to changes in the price level. Index numbers used to measure changes in the price level are simply rough approximations. Moreover, the price levels vary in different countries and consumers' wants and preferences also differ in each country. Therefore, the national income figures of different countries are often misleading and incomparable.
5. International comparisons of the real per capital are inaccurate due to exchange rate conversion of different currencies into a common currency, through the use of official exchange rates. These nominal exchange rates do not reflect the relative purchasing power of different currencies. Thus, the comparisons of per capita of different countries are erroneous.
6. The real per capital fails to take into account problems associated with basic needs, such as nutrition, health, sanitation, housing, water and education. The improvement in living standards by providing basic needs cannot be measured by increase in per capita income.

Despite these limitations, the real per capita is the most widely used measure of economic development.

III. WELFARE: The measurement of economic development of a country can also be done through the welfare paradigm. Economic development is regarded as a process whereby there is an increase in the consumption of goods and services of individuals.

This method of measurement is not free from limitations as the following criticisms are ascribed to it:

1. Attachment of weight to the consumption of individuals.
Consumption of goods and services depends on the tastes and

preferences of individuals, it is, therefore not correct to have the same weights in preparing the welfare index of individuals.

2. Composition of total output that gives rise to increased per capita consumption. The increased total output may have more of capital goods than consumer goods. Obviously, this is not a reflection of welfare measurement of economic development.
3. There is difficulty in the valuation of the output. The output may be valued at market prices, whereas economic welfare is measured by an increase in real national output or income. With difference in the distribution of income, prices would be different. Both the composition and value of national output would also be different.
4. From the welfare point of view, another problem is that we must also consider not only what is produced but how it is produced. The expansion of real national output might have raised the real costs (pain and sacrifice) and social costs in the economy. For example, increased output might have resulted from long hours of labour work and increased deterioration of the working conditions of the labour force.
5. It is not totally correct that an increase in national income leads to an improved economic welfare. It is possible that with an increase in real national income/per capita income, the rich might have become richer and the poor poorer. Thus, mere increase in economic welfare does not lead to economic development till the distribution of national income is equitable or justifiable.
6. We cannot equate an increase in output per head with an increase in economic welfare, let alone social welfare without additional considerations. In specifying an optimum rate of development, value judgments must be made in relation to income distribution, composition of output, tastes, real cost and other particular changes that are associated with the overall increase in the real income.

IV. Social Indicators: Dissatisfied with GNP and per capita real income as methods of measuring economic development, certain economists have tried to measure it in terms of social indicators. This group of economists has included a wide variety of items in social indicators, such as nutritional standards, number of hospital beds or doctors per head of population, infant mortality rates, sickness rates, etc. Social indicators are

often referred to as the basic needs for development. Basic needs focus on alleviation of poverty by providing basic human needs to the poor. The direct provision of such basic needs as health, education, food, water, sanitation and housing affects poverty in a short-run and with fewer monetary resources than GNP or per capita strategy which aims at increasing productivity and incomes of the poor automatically over a long run. Basic needs lead to a higher level of productivity and income through human development in the form of educated and healthy people.

The merit of social indicators is that they are concerned with ends, the ends being human development and since economic development is a means of these ends. Social indicators tell us how different countries prefer to allocate the GNP among alternative uses. For example, some countries may prefer to spend more on education and less on health. Moreover, they give an idea about the presence, absence or deficiency of certain basic needs.

Hicks and Streeten (1979) consider six social indicators for basic needs:

Basic Need	Indicator
1. Health	Life expectancy at birth
2. Education	Literacy signifying primary school enrolment as per cent of population.
3. Food	Calorie supply per head
4. Water Supply	Infant mortality and percentage of population with access to potable water
5. Sanitation	Infant mortality and percentage of population with access to sanitation
6. Housing	None

Except for calorie supply per head, all other indicators are output indicators. Of these, infant mortality is both the indicator of sanitation and clean drinking water facilities because children are prone to water-borne diseases. It is also related to life expectancy at birth and nutritional deficiencies among infants. Thus, the infant mortality rate measures four of the six basic needs.

The following are the limitations of social indicators as a measure of economic development. Problems arise in constructing a composite index based on a rational weighting system.

1. There is no unanimity among economists as to the number and type of items to be included in such an index.
2. There is the problem of assigning weights to the various items which may depend upon the social, economic and political set-up of the country. This involves subjectivity indicators and assigned weights. Their international comparisons would be as inaccurate as GNP figures.
3. Social indicators are concerned with current welfare and are not related to the future.
4. Majority of the indicators are inputs and not outputs. For example, education, health, etc are all outputs.
5. Social indicators are subjected to value judgements. In order to avoid the problem of value judgements and for the sake of simplicity, economists and UN organisations use GNP per capita as the measure of economic development.

Summary

In this chapter we have learnt various methods of measuring economic development. The methods discussed are: Gross National Product (GNP), per capita income, welfare and social indicators. We also examined the inherent weaknesses of each of the methods of measuring economic development.

Post-Test

1. List the basic methods of measuring economic development.
2. What are the main criticisms of measuring economic development through method of Gross National Product (GNP)?
3. List some basic social indications that can be used to measure economic development.

References

- Goldstein, J. S. 1985. "Basic Human Needs: The Plateau Curve. *World Development*, vol. 13.
- Hicks, N. L. and Streeten, P. P. 1979. Indicators of Development: The Search for a Basic Needs Yard Stick. *World Development*, vol. 7.

Jhingan, M. L. 2003. *Advanced Economic Theory* (12th Ed.) Delhi: Vrinda Publications Ltd.

Jhingan, M. L. 2003. *The Economics of Development and Planning*. Delhi: Vrinda Publications Ltd.

LECTURE ELEVEN

The Characteristics of Developing Economies

Introduction

There are certain peculiarities that are common to almost all developing economies. As the economy of a nation moves away from developing to a developed status, these features tend to diminish.

Objectives

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

1. list common features of a developing economy; and
2. discuss and with concrete examples of concept to developing economy.

Pre – Test

Discuss the following concepts in developing economies:

1. Dualistic economy.
2. Disguised unemployment
3. Technological backwardness.
4. Import dependent.

CONTENT

1. General Poverty

An underdeveloped country is poverty-ridden. Poverty is reflected in low GNP per capita income. The low per capita income of such economies reflects the extent of poverty in them. It should be noted that it is not

relative poverty but absolute poverty that is important in assessing economies. Absolute poverty is measured not only by low income but also by malnutrition, poor health, clothing, shelter, and lack of education. Thus, absolute poverty is reflected in low living standards of the people. One could therefore conclude that the vast majority of the people in developing economies are ill-fed, ill-clothed, ill housed and ill-educated. In brief people cannot afford decent living and modern amenities.

2. The Main Occupation is Agriculture

In a developing economy, about two-thirds or more of the people live in rural areas and their main occupation is agriculture. This heavy concentration in agriculture is a reflection of poverty. Agriculture, in a developing economy, is carried on in an old fashioned way with outdated methods of production. The average land holdings are as low as 1 to 3 hectares, which usually support 10 to 15 people per hectare (Jhingan, 2003). As a result, the yield from land is precariously low and the peasants continue to live at a bare subsistence level and there is widespread hunger. The agricultural output is mainly raw materials and foodstuff.

3. A Dualistic Economy

Almost all developing economies have a dualistic economy. The economy has market economy on one hand and the subsistence economy on the other hand. The market economy is ultra-modern with all the amenities of life, (media houses, means of transport, schools and colleges, business houses, government offices, banks and few factories) while the subsistence economy is backward and mainly agriculture-oriented. Dualism of the economy is characterised by the existence of an advanced industrial system and an indigenous backward agricultural system. The industrial sector uses capital-intensive techniques and produces a variety of capital goods and durable consumer goods, while the rural sector is engaged in producing agricultural commodities with traditional techniques.

4. Underdeveloped Natural Resources

The natural resources of a developing economy are underdeveloped in the sense that they are either unutilised or underutilised or misutilised due to various inhibitions, such as inaccessibility, lack of technical knowledge,

low level of technology, non-availability of capital and the small scope of the market.

5. Population Features

There exists a rapidly increasing population which adds a substantial number to the total population every year. The high population growth potential is characterised by high birth-rate and high but declining death-rate. This rapid increase in numbers causes the shortage of capital in the economies because large investments are required to be made to equip the growing labour force even with obsolete equipment. The consequence of high birth-rate is that a larger proportion of the total population is in younger age groups. A large percentage of children in the population causes heavy burden on the economy because they do not produce at all but consume. A burden on the economy with many dependants makes it difficult for workers to save for purposes of investment in capital equipment. There is also a shorter life expectancy within the economy, which means a smaller fraction of the population is available as an effective labour force.

6. Unemployment and Disguised Unemployment

In a developing economy, there is vast open unemployment and disguised unemployment. The unemployment is spreading with urbanisation and the spread of education. Since the industrial sector has failed to expand along with the growth of labour force there is increasing urban unemployment. There are various groups of unemployed educated people who fail to get jobs due to structural rigidities and lack of manpower planning.

Underemployment or disguised or concealed unemployment is a notable feature of developing economy. Such unemployment is not voluntary but involuntary. People that are prepared to work are unable to find work throughout the year due to lack of complementary factors. Such unemployment is found among rural landless and small farmers due to the seasonal nature of farm operations and inefficient land and equipment to keep them fully employed.

7. Economic Backwardness

The basic cause of backwardness in a developing economy is low labour productivity. Low labour efficiency results from general poverty, which is reflected in low nutritional standards, ill health, illiteracy and lack of training and occupational immobility, etc. There is occupational immobility of labour due to cultural and family system. The family system makes people lethargic and stay-at-home. There is extensive prevalence of child labour and women's status and position in society are inferior to men. Dignity of labour is conspicuously absent in rural areas, some government jobs in cities have more prestige than manual work in rural areas. All these factors do not favour economic achievement thereby making the economy of a developing country backward.

8. Lack of Enterprise and Initiative

There is lack or poor development of entrepreneurial ability. Entrepreneurship is inhibited by social system, small size of the market, poor capital base, absence of private property, absence of freedom and an discouragement of initiatives.

There exist a few entrepreneurs who are engaged in the manufacture of some and consumer goods, and in plantations and mines that tend to become monopolistic or quasi-monopolistic. The thin supply of entrepreneurs in such economy is attributed to the lack of infrastructural facilities, which add to the risk and uncertainty of men entrepreneurship. Furthermore, entrepreneurship is hindered by technological backwardness. This reduces output per man and the products are of substandard quality. Developing economies do not possess the necessary technical know-how and capital to evolve their own techniques which may be output-increasing and labour-absorbing. Mostly they have to depend upon imported, capital-intensive techniques, which do not fit into their factor endowments.

9. Poor Infrastructure

Basic infrastructural facilities like electricity, transportation, communication, water supply, health facilities, education which are essential for industrial take-off are lacking or poorly developed thereby causing problem for development in developing countries.

10. Technical Backwardness

Developing economies experience backwardness in technology. Most production is done by using primitive methods. The technological backwardness is reflected, firstly, in high average cost of production despite low money wages; secondly, in high labour-output and capital output ratios as a rule, and on the average, given constant factor prices thus reflecting a generally low productivity of labour and capital; thirdly, in the predominance of unskilled and untrained workers; and lastly, in the large amount of capital equipment required to produce a national output.

This technological backwardness is due to technological dualism which implies the use of different production functions in the advanced sector and the traditional sector of the economy. The existence of such dualism has accentuated the problem of structural or technological unemployment in the industrial sector and disguised unemployment in the rural sector.

11. Import Dependent

Developing economies are generally foreign trade-oriented. This orientation is reflected in exports of primary products and imports of consumer goods and machinery.

The dependence on exports of primary products leads to serious repercussions on their economies. Firstly, the economy concentrates mainly on the production of primary exports to the comparative neglect of the other sectors of the economy. Secondly, the economy becomes particularly susceptible to fluctuations in the international prices of the export commodities. A depression abroad brings down their demand and prices, and as a result, the entire economy is adversely affected. Thirdly, too much dependence on a few export commodities to the utter neglect of other consumable goods has made developing economies highly dependent on imports. As a result of import dependence, developing economies are faced with balance of payments difficulties because their economy's weak export capacity relatively to its strong import needs is always reflected in its persistent external indebtedness.

Summary

In this lecture, we have learnt the main features of a developing economy. These are general poverty, agrarian economy, over-population, underdeveloped national resources, unemployment, economic backwardness, poor infrastructures, technical backwardness and import dependent.

Post-Test

1. Briefly explain dualistic economy.
2. Discuss disguised unemployment
3. What do you understand by technological backwardness?

References

Ajayi, S. I. and Ojo, O. O. 1981. *O'Level Economic Textbook for West Africa*. Ibadan: Onibonoje Press.

Jhingan, M. L. 2003. *Advanced Economic Theory*, 12th Ed. Delhi: Vrinda Publications Ltd.

Jhingan, M. L. 2003. *The Economics of Development and Planning*. Delhi: Vrinda Publications Ltd.

LECTURE TWELVE

Obstacles to Economic Development

Introduction

Most of the features discussed in the preceding chapter are causes of, or obstacles to, economic development. However, some of them that are predominantly causes of problems to economic development will be discussed in this chapter.

Objectives

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

1. list the obstacles to economic development; and
2. explain with appropriate examples reasons why some economies are not developing.

Pre – Test

1. Illustrate how poverty circle constitutes a problem to economic development.
2. List at least five obstacles which any developing economy is likely to face.

CONTENT

The obstacles facing developing economies are examined below:

1. The Vicious Circle of Poverty

The basic vicious circle stems from the fact that in developing economies, productivity is low due to deficiency of capital, market imperfections, economic backwardness and undevelopment. The vicious circle is that the low level of real income leads to a low level of demand which, in turn, leads to a low rate of investment and hence back to deficiency of capital, low productivity and low income.

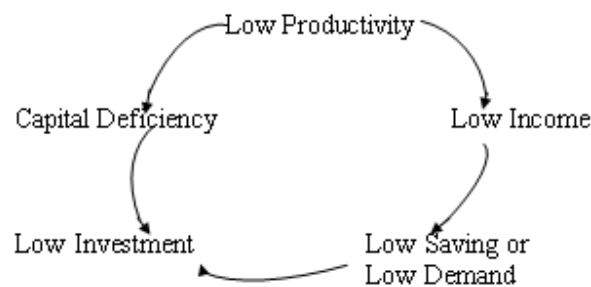


Fig. 12.1: Vicious Circle of Poverty

2. Low Rate of Capital Formation

The most pertinent obstacle to economic development is the shortage of capital. This stems from the vicious circle of poverty. Poverty is both a cause and a consequence of a country's low rate of capital formation. In an undeveloped economy that is characterised by mass poverty, illiterate and unskilled personnel, use of outmoded capital equipment and methods of production, subsistence farming, labour immobility, little connection with the market sector economy, low marginal productivity, there is to low real income, low saving, low investment and this ultimately leads to low rate of capital formation. With low rate of capital formation, there cannot be economic development.

3. Agricultural Constraint

Another obstacle to economic development relates to the agricultural sector. Majority of developing economies are predominantly agricultural. Agricultural production constitutes a large share of their GDP and agricultural commodities form a considerable part of the value of their

total exports. The poor performance of the agricultural sector is a major constraint on the sluggish economic growth of developing economies. It should be noted that it is not the behaviour of farmers that acts as constraint on agricultural growth; rather, the constraints are to be found in the environment in which farmers operate, the technology available to them, incentives for production and investment, availability and price of inputs and the climate. For example, the developing economies that are situated in the tropical and sub-tropical Zones are at a disadvantage in terms of climate. Due to heat and torrential rains, their soils become poor because they contain little organic matter. As a result these environmental factors, agricultural output fail to increase and therefore meet the rising demand of the developing economy.

4. Human Resources Constraint

Undeveloped human resources are a very prominent obstacle to economic development in developing economies. Inadequate supply of requisite labour possessing critical skills and knowledge required for all-round development of the economy is prevalent. The existence of surplus labour as observable in these economies is not in absolute figures but to a considerable extent due to the shortage of critical skills. Undeveloped human resources are manifest in low labour productivity, factor immobility, limited specialisation in occupation, etc. and all these minimises the incentives for economic development. The dearth of critical skills and knowledge, physical capital, etc. which can be productively utilised in a developing economy results in machines breaking down and wearing out soonest, materials and components are wasted, quality of production falls and costs rise. All these are indicators of a non-developed economy.

5. Foreign Exchange Constraint

Dependence on exports has exposed developing economies to international fluctuations in the demand for and prices of their products. They have become unstable due to cyclical instability and balance of payments difficulties. During a depression, the terms of trade of developing economies become adverse and foreign exchange earnings fall rapidly. As a result, they suffer from unfavourable balance of payments,

the problem which arises because of the inelastic nature of supply of their export goods that are mainly agricultural and mineral products.

As a result of unfavourable balance of payments, they are faced with foreign exchange constraint which consequently lead to the need for larger inflow of aid and foreign investment. Therefore, debt servicing of amortisation and interest of debt have risen, income payments of dividends and profits on private direct foreign investment have grown and the net inflow of foreign capital has declined. All these have led to further shortage of foreign exchange reserves, which in act turn as a severe limitation on the development programmes of developing economies.

6. Poor Infrastructural Facilities

Infrastructural facilities include access roads, railways, communication networks, electricity, hospitals, water supplies etc. since these facilities are essential for economic development are grossly inadequate, the rate of economic development is sluggish. This inadequacy is associated with poverty, poor investment and low capital formation.

7. Rapid Population Growth

Rapid population growth is a serious problem of economic development in developing economies. Any improvement achieved in gross domestic product is usually neutralised by rapid population growth that consumes such improvement rather than re-invests such gain for further output.

8. Political Instability

Political instability has two main impacts on economic development. First, foreign investors are scared away. They are not willing to invest their funds in wanton areas. Secondly, the instability causes instability in policies constant changes of government causes economic policies to vary/change regularly. Such regular changes of economic policies does not support economic development.

Solutions to Problems of Economic Underdevelopment

Once you look at the characteristics and problems of underdevelopment in any economy, solutions can easily be proffered. Some solutions are discussed below:

1. **Economic Planning:** This is appropriate allocation of resources by government in such a way that growth is guaranteed.
2. **Provision of Social and Economic Infrastructures:** The provision of social and economic infrastructures, such as education, health, roads, electricity, water will solve the problem of illiteracy, inadequate manpower, diseases. With the solution to these problems there will be funding for investment and capital formation.
3. **Establishment of Manpower Training Institute:** This is to forestall impartation of manpower from abroad for such impartation is a drain on the reserve of the imparting country.
4. **Creation of Stable Political Climate** Developing states should create stable political climate so as to attract both human and financial investment into the country and also to guarantee full implementation of economic policies without change mid-way.
5. **Diversification of Economy:** The agrarian economy should be diversified to include industrial sector.

Summary

In this chapter, we have learnt about the major obstacles that are facing economic development in developing countries. Some of the obstacles discussed are vicious circle of poverty, low capital function, agricultural constraint, human resources constraint, foreign exchange constraint, poor infrastructural development, rapid population growth and political instability.

Post-Test

1. Illustrate how poverty circle constitutes a problem to economic development.
2. List at least five obstacles which any developing economy is likely to face.

References

Jhingan, M. L. 2003. *Advanced Economic Theory*, 12th Ed. Delhi: Vrinda Publications Ltd.

Jhingan, M. L. 2003. *The Economics of Development and Planning*. Delhi: Vrinda Publications Ltd.

Udu, E. and Agu, G. A. 1990. *New System Economics: A Senior Secondary Course*. Onitsha: Africana – Feb Publishers Ltd.

LECTURE THIRTEEN

Adam Smith's Theory of Economic Development

Introduction

Adam Smith, a foremost classical economist, in his monumental work, *An Enquiry into the Nature and Causes of the Wealth of Nations* published in 1776, was primarily concerned with the problem of economic development. Though he did not propound any systematic growth theory, a coherent theory has been deduced by later day economists to project that he was talking about economic development.

Objectives

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

1. discuss the main features of Adam Smith's theory of economic development; and
2. list the criticisms of Adam Smith's theory of economic development.

Pre – Test

1. What can you say of the following concepts as related to Adam Smith's theory of economic development?
 - a. process of capital accumulation
 - b. division of labour
 - c. process of growth
2. Give four criticisms of Adam Smith's theory of economic development.

CONTENT

The following were the deductions to show that Adam Smith was talking about economic development.

1. **Natural Law:** Adam Smith believed in the doctrine of natural law in economic affairs. He regarded every person as the best judge of his interest who should be left to pursue it to his own advantage. In furthering his own self-interest, he would also further the common good. That is why in pursuance of self-interest, an individual is led by an invisible hand which guides market mechanism. Smith was naturally opposed to any government intervention in industry and commerce. Therefore he believed that every individuals, that is left free, seeks to maximise his own wealth, thereby maximising aggregate wealth which is development.
2. **Division of Labour:** This is the starting point of Smith's theory of economic growth. He stated that division of labour results in the greatest improvement in the productive powers of labour. He attributed this increase in productivity to: (a) increase in the dexterity of every worker; (b) saving in time to produce goods; and (c) invention of large number of labour-saving machines. The invention of machines stems not from labour but from capital. It is noted that improved technology leads to division of labour and the expansion of the market. Division of labour, however, depends on the size of the market and increase in capital.
3. **Process of Capital Accumulation:** Smith emphasized that capital accumulation must precede the introduction of division of labour. Smith regarded capital accumulation as a necessary condition for economic development. Therefore, the problem of economic development is largely the ability of the people to save more and invest more in a country. The rate of investment was determined by the rate of savings and savings were invested in full. He said that all savings resulted from capital investments or the renting of land, hence only capitalists and landlords were able to save. The labour classes were considered to be incapable of saving.
4. **Profit Motive:** According to Smith, investments were made because capitalists expect to earn profits on them and that the future expectations with regard to profits depended on the present climate for investment as well as actual profits. Smith believed that

profits tend to fall with economic progress. For instance, when the rate of capital accumulation increases, increasing competition among capitalists raises wages and tends to lower profits.

Smith wrote that with the increase in prosperity, progress, and population, the rate of interest falls, and as a result the supply of capital is augmented. The reason for this is that with the fall in interest rate, the moneylenders will lend more to earn more interest so as to maintain their standard of living at the previous level. This means that the quantity of capital for lending will increase with the fall in the rate of interest. But when the rate of interest falls considerably, moneylenders are unable to lend more in order to earn more to maintain their standard of living. Under this circumstance, they themselves will start investing and become entrepreneurs. Thus, with the fall in the rate of interest, there is increase in capital accumulation and economic progress.

5. **Agents of Growth:** According to Smith, farmers, producers and businessmen are the agents of economic progress. Free trade, enterprise and competition leads farmers, producers and businessmen to expand the market which, in turn, makes economic development possible. The functions of these three groups of people are interrelated. To Smith, development of agriculture leads to increase in construction works and commerce. When agricultural surplus arises as a result of economic development, the demand for commercial services and manufactured articles increases. This leads to commercial progress and the establishment of manufacturing industries. On the other hand, their development leads to increase in agricultural production when farmers use advanced production techniques. Thus, capital accumulation and economic development take place due to the emergence of the farmer, the producer and the businessman.
6. **Process of Growth:** According to Smith, this process of growth is cumulative. When there is prosperity as a result of progress in agriculture, manufacturing industries and commerce, it leads to capital accumulation, technical progress, increase in population, expansion of markets, division of labour and rise in profits continuously. All these happen in Smith's progressive state which in reality is the cheerful and hearty state of all the different orders of the society.

7. **Stationary State:** The progressive state is not endless, it ultimately leads to a stationary state. It is the scarcity of natural resources that finally stops growth. In such an opulent state, the competition for employment would reduce wages to the subsistence level and competition among businessmen would bring profits as low as possible. Once profits fall, they continue to fall, investment also starts declining; thus, the end result of capitalism is the stationary state. When this happens, capital accumulation stops, population becomes stationary, profits are at the minimum, wages are at the subsistence level, there is no change in per capita income and production, and the economy reaches the state of stagnation. According to Smith, the stationary state is dull, life is hard for the different sections of the society, life is miserable. All these happen in a free market economy.

Appraisal of Smith's Theory

Smith's theory has the great merit of pointing out how economic growth came about and what factors and policies impede it. In particular, he pointed out the importance of parsimony in saving and capital accumulation; of improved technology, division of labour and expansion of market in production; and of the process of balanced growth in the interdependence of farmers, traders and producers. Despite these merits, it has certain weaknesses (Jhingan, 2003). These weaknesses are examined below:

1. **Rigid Division of Society:** Smith's theory is based on the socioeconomic environment prevailing in Great Britain and certain parts of Europe. It assumes the existence of a rigid division of society between capitalists (including landlords) and labourers; however, the middle class occupies an important place in modern society. Thus, this theory neglects the role of the middle class, which provides the necessary impetus to economic development.
2. **One-sided Saving Base:** According to Smith, capitalists, landlords and moneylenders save. This, however is a one-sided base of savings because it did not occur to him that the major source of savings in an advanced society is the income-receivers and not the capitalists and landlords.

3. **Unrealistic Assumption of Perfect Competition:** Smith's whole theory is based upon the unrealistic assumption of perfect competition. This laissez-faire policy of perfect competition is highly utopistic. Rather, a number of restrictions are imposed on the private sector, and on internal and international trade in every country of the world.
4. **Neglect of Entrepreneur:** Smith neglected the role of the entrepreneur in development. This is a serious defect in his theory. The entrepreneur is the focal point of development. It is the entrepreneur who organizes and brings about innovations thereby leading to capital formation.
5. **Unrealistic Assumption of Stationary State:** Smith was of the view that the end result of a capitalist economy is the stationary state. It implies that there is change in such an economy but around a point of equilibrium. There is progress but it is steady, uniform and regular like a tree. But this explanation of the process of development is not satisfactory because development takes place by 'fits and starts' and is not uniform and steady. Thus the assumption of the stationary state is unrealistic.
6. **Static Model:** Though Smith's model looks like a growth model, it is not a growth model in the modern sense, It does not exhibit a sequence. Thus, it is a static model.

Summary

You have learnt about major deductions of Adam Smith's theory of economic development. They are: national law, division of labour, process of capital, accumulation, profit positive, agent of growth, process of growth and stationary state. Also major criticisms of this theory were learnt.

Post-Test

1. What can you say of the following concepts as related to Adam Smith's theory of economic development:
 - a. process of capital accumulation
 - b. division of labour
 - c. process of growth

2. Give four criticisms of Adam Smith's theory of economic development.

References

Jhingan, M. L. 2003. *The Economics of Development and Planning*. 16th Revised Edition. Delhi: Vrinda Publication Ltd.

Meier, G. M. and Baldwin, R. E. 1957. *Economic Development*. London: Wiley.

LECTURE FOURTEEN

Rostow's Stages of Economic Growth

Introduction

Professor W.W. Rostow used an historical approach to the process of economic development. He distinguished five stages of economic growth, namely., (1) the traditional society; (2) the pre-conditions for take-off; (3) the take-off; (4) the drive to maturity; and (5) the age of high mass-consumption.

Objectives

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

1. give the five stages of Rostow's stages of economic development;
and
2. list five criticisms of Rostow's theory of economic development.

Pre – Test

1. Discuss the following stages of Rostow's theory of economic development:
 - a. Traditional society
 - b. Pre take-off
 - c. Take off
 - d. Drive to maturity
 - e. High mass – consumption
2. List five criticisms of Rostow's theory of economic development.

CONTENT

A detailed discussion of the five stages now follows

A. The Traditional Society

In the traditional society more land are brought under cultivation, the scale and pattern of trade are expanded, manufactures are developed and agricultural productivity are raised along with increase in population and real income. The undeniable fact is that for want of a regular and systematic use of modern science and technology 'a ceiling existed on the level of attainable output per head'. It did not lack inventiveness and innovations, but lacked the tools.

The social structure of such societies was hierarchical in which family and clan connections played a dominant role. Political power was concentrated in the regions, in the hands of the landed aristocracy supported by a large retinue of soldiers and civil servants. More than 75 per cent of the working population was engaged in agriculture. Naturally, agriculture happened to be the main source of income.

B. The Pre-conditions for Take-off

The second stage is a transitional era in which the pre-conditions for sustained growth are created. The pre-conditions for take-off were encouraged or initiated by four forces: The New Learning or Renaissance, the New Monarchy, the New World and the New Religion or the Reformation. These forces led to reasoning and scepticism in place of faith and authority. This brought an end to feudalism and led to the rise of national states; inculcated the spirit of adventure which led to new discoveries and inventions. Thus these forces were instrumental in bringing about changes in social attitudes, expectations, structure and values. Generally speaking, the pre-conditions arise not endogenously but from some external invasion.

The pre-conditions for sustained industrialisation, according to Rostow, usually require radical changes in three non-industrial sectors: First, a build-up of social overhead capital, especially in transport, in order to enlarge the extent of the market, to exploit natural resources productively and to allow the state to rule effectively. Second, a technological revolution in agriculture so that agricultural productivity increases to meet the requirements of a rising general and urban

population. Third, an expansion of imports, including capital imports, financed by efficient production and marketing of natural resources for exports.

The continuous development and expansion of modern industry was mainly possible by the ploughing back of profits into fruitful investment channels. As Rostow says: "The essence of the transition can be described legitimately as a rise in the rate of investment to a level which regularly, substantially and perceptibly outstrips population growth."

C. The Take-off

Rostow defines the take off as an industrial revolution, tied directly to radical changes in the methods of production, having their decisive consequence over a relatively short period of time." The take-off period is supposed to be short, lasting for about two decades. The requirements of take-off which are necessary are as follows.

1. a rise in the rate of productive investment from, say, 5 per cent or less to over 10 per cent of national income or net national product;
2. the development of one or more substantial manufacturing sectors with a high rate of growth;
3. the existence or quick emergence of a political, social and institutional framework which exploits the impulses to expansion in the modern sector and gives to growth an outgoing character.

Let us examine these conditions in detail.

1. Rate of Net Investment over 10 per cent of National Income:

One of the essential condition for take-off is that the increase in per capita output should outstrip the growth of population to maintain a higher level of per capita income in the economy.

The typical case explained by Rostow is based on the supposition that the incremental capital-output ratio and the rate of population growth remain constant. It thus precludes the effects of increased labour force and improved technology on national income. However, during the take-off, capital-output ratio tends to decline with the change in investment pattern and a rise in the proportion of net investment to national income takes place from 5-10 per cent, thus definitely outstripping the growth of population.

2. **Development of Leading Sectors:** Another condition for take-off is the development of one or more leading sectors in the economy. Rostow regards the development of leading sectors as the analytical bone structure of the stages of economic growth. There are generally three sectors of an economy:
 - a. Primary Growth Sectors, where possibilities of innovation or of exploiting new or unexplored resources lead to a higher growth rate than in the rest of the economy.
 - b. Supplementary Growth Sectors, where rapid growth takes place as a consequence of development in the primary growth sectors.
 - c. Derived Growth Sectors, where growth takes place in some fairly steady relation to the growth of total income, population, industrial production or some overall modestly increasing variable.
3. **Cultural Framework that Exploits Expansion:** The last requirement for take-off is the existence or emergence of cultural framework that exploits the impulses to expansion in the modern sector. A necessary condition for this is the ability of the economy to mobilize larger savings out of an expanding income to raise effective demand for the manufactured products, and to create external economies through the expansion of leading sectors. Rostow says, that the take-off requires the massive set of pre-conditions, going to the heart of a society's economic organization, its politics and its effective scale of values. It usually witness a definitive social, political and cultural victory of those who would modernize the economy over those who would either cling to the traditional society or seek other goals. By and large, it persuades the society to persist and to concentrate its efforts on extending the tricks of modern technology beyond the sectors modernized during the take-off.

D. The Drive to Maturity

Rostow defines the above term as the period when a society has effectively applied the range of modern technology to the bulk of its resources. It is a period of long sustained economic growth extending well over four decades. New production techniques take the place of the

old ones. New leading sectors are created. Rate of net investment is well high over 10 per cent of national income, and the economy is able to withstand unexpected shocks.

When a country is in the stage of technological maturity, three significant changes take place: First, the character of working force changes. Labour primarily becomes skilled, people prefer to live in urban areas rather than in rural. Real wages start rising and the workers organize themselves in order to have greater economic and social security.

Secondly, the character of entrepreneurship changes. Rugged and hard working in masters give way to polished and polite efficient managers. Thirdly, the society feels bored of the miracles of industrialisation and wants something new leading to a further change.

E. The Age of High Mass-Consumption

The age of high mass-consumption has been characterised by the migration to suburbia, the extensive use of automobile, durable consumers' goods and household gadgets. In this stage, the balance of attention of the society is shifted from supply to demand, from problems of production to problems of consumption and of welfare in the widest sense. However, three forces are discernible that tend to increase welfare in this post-maturity stage. First, the pursuit of national policy to enhance power and influence beyond national frontiers. Second, to have a welfare state by a more equitable distribution of national income through progressive taxation, increased social security and leisure to the working force. Last, decision to create new commercial centres and leading sectors like cheap automobiles, houses, and innumerable electrically operated household devices. The tendency towards mass consumption of durable consumer goods, continued full employment and the increasing sense of security has led to a higher rate of population growth in such societies.

Criticisms against Rostow's Theory

1. The theory is not applicable to the undeveloped countries as most of the countries are still at their subsistence stage of agricultural development.
2. There are no definite indicators and the trimming of the indicators to show the boundary between the pre-conditions stage and the take-off stage.

3. There have been revolution in developing states without development in some countries like Japan without following all the five stages of development.
4. The actual time of take-off cannot be established since developing countries are agriculturally based and despite the socio-political revolutions, there are no developments.
5. The age of automation is a threat to job security and that the developing nations are still labour intensive.
6. The theory over assumes that all societies are homogeneous in all sectors – whereas the developing nations lack the technological base to take-off.

Summary

In this lecture, we have learnt about the five stages of Rostow's theory of economic development. The stages are the traditional society, the pre-condition for take-off, the take-off, the drive to maturity and the age of high mass-consumption. Also you learnt about the major criticisms of the theory.

Post-Test

1. Discuss the following stages of Rostow's theory of economic development:
 - a. Traditional society
 - b. Pre take-off
 - c. Take off
 - d. Drive to maturity
 - e. High mass – consumption
2. List five criticisms of Rostow's theory of economic development.

References

- Jhingan, M. L. 2003. *The Economics of Development and Planning*. 16th Revised Edition. Delhi: Vrinda Publication Ltd.
- Meier, G. M. and Baldwin, R. E. 1957. *Economic Development*. London: Wiley.

LECTURE FIFTEEN

Malthusian Theory of Economic Development

Introduction

Thomas Robert Malthus, whose name the famous Malthusian theory of population is associated, showed more appreciation, than most of his contemporaries, of the importance of distinct and systematic theory of growth. His ideas about economic development are found in the book titled, *The Progress of Wealth* (1820).

Objectives

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

1. highlight basic deductions about economic development as postulated by Malthus;
2. list measures to promote economic development according to Malthus; and
3. discuss the main criticisms of Malthusian theory of economic development

Pre – Test

1. Explain the following concepts under Malthusian theory of economic development:
 - a. population growth and economic development
 - b. factors in economic development
 - c. process of capital accumulation
 - d. deficiency of effective demand

2. What are the measures to promote economic development under Malthusian theory?

CONTENT

The following are the major deductions about economic development as postulated by Malthus in his book *The Progress of Wealth*.

1. Concept of Development: Malthus did not regard the process of economic development as automatic. Rather, it required consistent efforts on the part of the people. He did not conceive of any movement towards the stationary state but emphasized that the economy reached the slump many times before attaining the optimum level of development. Thus to him, the process of development was one of ups and downs of economic activity rather than smooth.

Malthus was concerned with the “progress of wealth” of a country. By progress of wealth, he meant economic development which could be achieved by increasing the wealth of a country. The wealth of a country depended partly upon the quantity of product obtained by its labour and partly upon the valuation of this product. The wealth of country does not always increase in proportion to the increase in value. This is because an increase in value may sometimes take place under an actual diminution of commodities.

2. Population Growth and Economic Development: Malthus was realistic in his analysis of population growth in the context of economic development. According to him, population growth by itself is not sufficient to bring about economic development; rather, it is the result of the development process. Malthus wrote that an increase of population cannot take place without proportionate increase of wealth, as the rate of capital accumulation increases the demand for labour also increases. This encourages population growth, but mere population growth does not increase wealth. He emphasized that Population growth increases wealth only if it increases effective demand. And, it is the increase in effective demand that leads to increase in wealth.

3. Role of Production and Distribution: Malthus regarded production and distribution as the two grand elements of wealth. If they are combined in right proportions, they can increase the wealth of a country in a short time, but if they are taken separately or combined in undue proportions, they may take many thousand years to increase wealth. So Malthus emphasises maximum production and optimum allocation of resources so as to increase the wealth of a country within the short period.

4. Factors in Economic Development: Malthus defined the problem of economic development as one of explaining the difference between potential gross national product and actual gross national product.

According to Malthus, the size of potential gross national product depend upon land, labour, capital and organisation. When these four factors are employed in right proportions, they maximize production in the two major sectors of the economy (the agricultural and the industrial sectors). It is the accumulation of capital, the fertility of the soil, and technological progress that lead to increase in both agricultural and industrial production. Besides these, Malthus also emphasized the importance of non-economic factors (politics and morals) in economic development. These non-economic factors are security of property, good administration of constitution and excellent laws, hard working by labour and general uprightness of character.

5. Process of Capital Accumulation: Of all the factors (land, labour, capital and organisation), it is the accumulation of capital that is the most important determinant of economic development. The source of capital accumulation is higher profits. Profits come from the savings of capitalists because workers are too poor to save. If capitalists save more and spend less on consumer goods in order to have larger profits, economic growth will be retarded.

Malthus suggested a concept of the optimum propensity to save. To Malthus, this meant saving from the stock which might have been destined for immediate consumption, and adding to that which is to yield profit. In other words it is the conversion of revenue to capital. Thus his conclusion is that saving, pushed to excess, would destroy the motive of production.

6. Deficiency of Effective Demand: This view of Malthus is based on his denial of Say's Law of Markets and belief in the deficiency of effective demand. Malthus does not agree with Say that there cannot be a general over-production or glut in the market. According to him, it is not at all true that commodities are always exchanged for commodities. In fact, the great mass for commodities are exchanged directly for labour rather than for commodities. Since workers who are consumers, receive less than the value of the product they produce, they cannot buy all commodities. Thus there is an excess supply of commodities in the market in relation to the demand. This gap between supply and demand cannot be filled even by the demand of capitalists. Capitalists believe in parsimony and deprive themselves of their usual conveniences and luxuries to save from their revenue and add to their capital. By being parsimonious, they employ more productive workers who are consumers and, in turn, are not able to buy all commodities they produce. Thus there is general over-production and glut of commodities in the market-due to the deficiency of effective demand or under-consumption. This leads to fall in prices, profits, saving, investment and capital accumulation.

7. Economic Stagnation: Malthus believed that the supply of labour is inelastic in the short run and that the supply of capital can be increased faster than the increase of population. As capitalists invest on productive labour to increase the supply of capital, wages rise due to competition. Rise in wages do not increase effective demand because workers prefer leisure to increased consumption. So there is a general glut of commodities. As a result of glut of commodities, prices fall, profits decline, investment falls, and both the power of accumulation and the motive of accumulation are strongly checked. Thus gluts and under consumption would lead to economic stagnation.

Measures for the promotion of Economic Development

Malthus made several policy recommendations to promote economic development, these are:

1. **Balanced Growth:** In the Malthusian system, the economy is divided into the agricultural and the industrial sectors. It is technological progression in these two sectors that can lead to economic development. Capital is invested in agriculture until all

the arable land is brought under cultivation, stocked and improved. After that there are no more opportunities for profitable investment in that sector due to diminishing returns and therefore, investment opportunities exist only in the industrial sector. Diminishing returns to increased employment in the land can be avoided only if technical progress in the industrial sector is rapid enough, and if investment takes place to absorb most of the population growth in the industrial sector and to reduce the cost of living of workers on the land, permitting reduction in their wage rates. Thus Malthus favoured balanced growth of both the agricultural and industrial sectors for the economic development of the country.

2. **Raising Effective Demand:** Technical progress alone cannot lead to economic development unless effective demand increases. Malthus suggested a number of measures to increase effective demand. Firstly, by more equitable distribution of wealth and landed property. Malthus believed that a few moderately rich people can raise effective demand more than one millionaire poor masses. Further, he favoured a more equitable distribution of landed property for that would increase effective demand as well as production. According to Malthus, if the division of land into small properties is carried to an extreme, it would adversely affect production.

Secondly, effective demand can be increased by the expansion of the internal and external trade. It is internal as well as external trade that increases wants and tastes and the desire to consume, which are absolutely necessary to keep up the market prices of commodities and prevent the fall of profits. Internal and external trade also increase the value of products by exchanging what is wanted less for what is wanted more.

Thirdly, Malthus suggested the maintenance of unproductive consumers to increase effective demand. He defined unproductive consumers as those persons who did not produce material objects. It is underconsumption which leads to gluts and stagnation in the country, therefore, production can be raised by increasing consumption. Since capitalists are parsimonious and productive workers live upon subsistence wages, unproductive consumption on the part of unproductive labourers and landlords will increase effective demand.

Lastly, Malthus suggested public works schemes to remove unemployment and increase effective demand. Public works would not have the tendency to diminish the capital employed by productive labour.

In summary, in the Malthusian theory, it is underconsumption or deficiency in effective demand leading to gluts which is the main cause of underdevelopment. For development to occur, the country should maximize production in the agricultural and industrial sectors of the economy. This requires technical progress, equitable distribution of wealth and land, expansion of internal and external trade, increase in unproductive consumption, and increase in employment opportunities through public works schemes. Besides, there are non-economic factors, such as, education, moral standards, hard working habits, good administration and efficient laws which help in increasing production in the two sectors of economy. Thus, these economic and non-economic factors lead to economic development.

Appraisal of Malthusian Theory

Malthus laid emphasis upon the importance of effective demand. He pointed out the factors which hinder and promote economic development. In particular, he pointed out the importance of technological progress, equitable distribution of wealth, internal and external trade, public works programme, good administration, hard work, and balanced growth. These measures have come to be recognized as the main planks of modern economic growth.

Despite all these virtues, researchers like Jhingan (2003) noted the following weaknesses of Malthusian theory of development thus:

1. **Secular Stagnation not Inherent in Capital Accumulation:** Malthus argues that the process of capital accumulation leads inherently to secular stagnation. For Malthus there is the possibility of permanent underconsumption of all commodities. The fact is that underconsumption is not a permanent phenomenon but a temporary one, so secular stagnation is not inherent in the process of capital accumulation.
2. **Negative View of Capital Accumulation:** Malthus's view that capital accumulation leads inherently to secular stagnation is not correct from another angle. In reality, capital accumulation does

not lead to a reduction in the demand for consumer goods and fall in profits. As capital accumulation increases, the shares of wages and profits in aggregate income increases, and so does the demand for consumer goods. Thus, Malthus had a negative view of the process of capital accumulation.

3. **Commodities not Exchanged for Commodities Directly:** Malthus argued that commodities are not exchanged for commodities, but they are exchanged for labour. In fact, labour is not a correct measure of commodities. In the real world, commodities are measured by real tangible prices and not by labour.
4. **Unproductive consumers Retard Progress:** Another serious weakness of Malthus's theory is that he suggests spending by unproductive consumers to overcome underconsumption and increase effective demand. This remedy is tantamount to giving money to unproductive workers and deliberately supporting idle persons. Such a measure slows down the rate of capital accumulation.
5. **One-Sided Saving Base:** Malthus had a one-sided base of savings. He believed that it is only the landlords who save. But this is an erroneous view because the major source of savings in a society is the income-earners and not profit-earners.

Summary

In this chapter, we have discussed major concepts of Malthusian theory on economic development. The concepts are concept of development, population growth and economic development, role of production and distribution, factors in economic development, process of capital accumulation, deficiency of effective demand. Also we examined major criticisms of the theory.

Post-Test

1. Explain the following concepts under Malthusian theory of economic development
 - a. population growth and economic development
 - b. factors in economic development

- c. process of capital accumulation
 - d. deficiency of effective demand
2. What are the measures to promote economic development under Malthusian theory?

References

- Jhingan, M. L. 2003. *The Economics of Development and Planning*. 16th Revised Edition. Delhi: Vrinda Publication Ltd.
- Meier, G. M. and Baldwin, R. E. 1957. *Economic Development*. London: Wiley.