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History of Economic Thought

SEMESTER-VI

ECONOMICS

BLOCK- 2

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BLOCK INTRODUCTION

This is the second block of the course and comprises of seven units. The ninth unit deals with the contribution of David Ricardo to the history of economic thought . This unit will help you to understand David Ricardo's theory of diminishing return,theory of exchange value & relative price, theory of income distribution and the theory of trade.The tenth unit outlines J. S. Mill's restatement of classical theory . This unit also discusses Mill's laws of Production & Distribution,theory of international trade and theory of value.The eleventh unit of the course discusses about the rise of socialist thought. This unit will help you to understand the meaning of socialism; difference between socialism & Marxian scientific socialism and Marxian theories like theory of value ,theory of surplus value, theory of capitalist development. The twelfth unit discusses the economic contributions of Jevons, Menger and Walras – the founder members of the marginalist school.The thirteenth unit describes the economic thoughts as developed by the Austrian economists like Menger, Bohm-Bawerk and Wieser.This unit will also make a comparative study of the economic thoughts of Austrian economists.The fourteenth unit will help you acquire knowledge about the contribution of neoclassical economist Marshall to the history of economic thought. In this unit we will discuss the difference between neo-classical school and the classical school,features of the neoclassical School, economic thoughts of Marshall and the role Marshall as Synthesiser. The final unit deals with the major contributions of Keynes to Economics and the different policy prescriptions emanating from Keynesian economics.

While going through a unit, you will notice some along-side boxes, which have been included to help you to know some of the difficult, unseen terms. Again, we have included some relevant concepts in "LET US KNOW" along with the text. And, at the end of each section, you will get "CHECK YOUR PROGRESS" questions. These have been designed to self-check your progress of study. It will be better if you solve the problems put in these boxes immediately after you go through the sections of the units and then match your answers with "ANSWERS TO CHECK YOUR PROGRESS" given at the end of each unit.

UNIT 9: THE CLASSICAL SCHOOL - RICARDO

UNIT STRUCTURE

9.1 Learning Objectives

9:2 Introduction

9.3 Ricardian Theory of Diminishing Return

9.4 Ricardian Theory of Exchange Value and Relative Price

9.5 Ricardian Theory of Distribution of Income

9.6 Ricardian Theory of Trade

9.7 Let Us Sum Up

9.8 Further Reading

9.9 Answers to Check Your Progress

9.10 Model Question

9.1 LEARNING OBJECTIVES

After going through this unit, you will be able to-

- understand David Ricardo's theory of diminishing return
- learn the theory of exchange value and relative price
- explain the theory of income distribution
- explain theory of trade or the theory of comparative advantage.

9.2 INTRODUCTION

David Ricardo is considered as the most influential classical economist after Adam Smith. His ideas are embodied in his book "The Principles of Political Economy and Taxation" was published in the year 1817. Ricardo was popularly known as political economist because he used to analyses the problems of political economy rather than wealth and progress of nation. Although Ricardo drew heavily on Adam Smith's writings, yet he was the first economist who presented the classical thought in a consistent body of economic analysis. Ricardo gave may well contributions which throw light on the development process. Some of them are-theory of rent, theory of relative prices, distribution theory, international trade theory,

debate with Malthus on stability of capitalism etc. Some of his contributions are discussed in this unit.

9.3 RICARDIAN THEORY OF DIMINISHING RETURN

The law of diminishing return is associated with the Ricardian theory of rent. According to Ricardo, "Rent is that portion of the produce of the earth, which is paid to the land lord for the original and indestructible power of the soil."

Ricardo's theory of rent is based on certain assumptions which are as under:

- Land is free gift of nature.
- Law of diminishing return operates on land.
- Supply of land is perfectly inelastic.
- No change in technology
- Factor inputs are homogeneous.

According to Ricardo, rent is a payment that arises because of the original and indestructible power of soil. Thus we can say that rent is a surplus over cost. Price is not determined by the rent but the price level determined the rent. Rent of a land arises when market price of a product is greater than the average cost of production. According to Ricardian theory, rent of a land tends to be equal to the difference between its production and the production of marginal land.

This can be shown with the help of the following diagram-

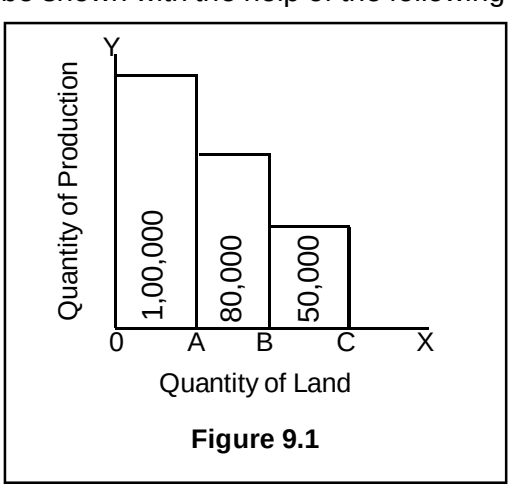


Figure 9.1

Let us suppose that in an island a group of people start cultivation. There are three categories of land are there in that island. Land A which is most fertile, land B which is less fertile and land C which is least fertile. Land A is first brought under cultivation. The total amount of output is 1,00,000 quintals. Now suppose population in that island increases, leading to increase the demand for paddy. Which will necessarily bring land B under cultivation. As land B is less fertile land than A, it will produce 80,000 quintals of paddy. Further, increase in population will bring land C under cultivation. Land C is the least fertile land which will produce 50,000 quintal of paddy. If the population continues to increase, there will be requirement of more paddy. There will be no more land to be brought under cultivation. During such situation output can be increase by increasing dose of input. As a result, law of diminishing returns come into operation. With every successive dose of the input used in the same plot of land will produce less and less unit of output.

In the fig 9.1 we can see that, land A enjoys a surplus of 20,000 quintals over land B and a surplus of 50,000 quintals over land C. Similarly, land B enjoys surplus of 30,000 quintals over land C. Hence land A and land B are regarded as super marginal land and land C is the marginal land.



CHECK YOUR PROGRESS

Q 1: Briefly explain the relationship between rent and price. (Answer in about 30 words)

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Q 2: "Rent is a differential surplus." Explain. (Answer in about 40 words)

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9.4 RICARDIAN THEORY OF EXCHANGE VALUE AND RELATIVE PRICE

At present this concept is usually associated with Marxian economics, although it is also used in the theories of earlier classical economists such as Adam Smith and David Ricardo and later also in anarchist economics. Ricardo has provided an important discussion on the subject of value in his "Principle of Political Economy and Taxation". Like Adam Smith, Ricardo was also concerned with exchange value or price of a commodity and not with its used value or utility. Definitions of value and labour when speaking in terms of a labour theory of value, value, without any quantifying adjective, should theoretically refer to the amount of labour necessary to the production of a marketable commodity, including the labour necessary to the development of any real capital employed in the production. Both David Ricardo and Karl Marx attempted to quantify and embody all labour components in order to develop a theory of real price or normal price of a commodity. The labour theory of value as presented by Adam Smith, however, did not require the quantification of all past labour nor did it deal with the labour needed to create the tools that might be employed in the production of a commodity. The real price of everything, what everything really costs to the man who wants to acquire it, is the toil and trouble of acquiring it. A classical paradox often comes up when considering this type of value. In the words of Adam Smith, the word value is to be observed, has two different meanings, and sometimes expresses the utility of some particular object, and sometimes the power of purchasing other goods which the possession of that object conveys. One called 'value in use' the the other, 'value in exchange'. The things which have the greatest value in use have frequently little or no value in exchange; and on the contrary, those which have the greatest value in exchange have frequently little or no value in use. Nothing is more useful than water: but it will purchase scarcely any thing: scarcely anything can be had in exchange for it. A diamond, on the contrary, has scarcely any value in use; but a very great quantity of other good frequently be had in exchange for it. Value "in exchange" is the

relative proportion with which this commodity exchanges for another commodity.Thus a product with great use value enjoys hardly any exchange value, and a product with hardly any use value gets very high exchange value. In economics, this has come to be known as 'paradox of value'. For Ricardo, labour is the real measure of the exchangeable value of all commodities. Value is the labour embodied in a commodity under a given structure of production. Ricardo, other classical economists, and Marx began their expositions with the assumption that value in exchange was equal to or proportional to this labour value. They thought this was a good assumption from which to explore the dynamics of development in capitalist societies. The value of a commodity increases in proportion to the duration and intensity of labour performed on the average for its production. So though workers may labour with greater skill or more productivity than others, these more skillful and more productive workers thus produce more value through the production of greater quantities of the finished commodity. Each unit still bears the same value as all the others of the same class of commodity. The unskilled workers may drag down the average skill of labour, thus increasing the average labour time necessary for the production of each unit commodity. But these unskilled workers cannot hope to sell the result of their labour process at a higher price simply because they have spent more time than other workers producing the same kind of commodities. However, production not only involves labour, but also certain means of labour: tools, materials, power plants and so on. This means that labour, also known as means of production are often the product of another labour process as well. Labour also requires other means of production that are not produced with labour and therefore bear no value: such as sunlight, air, uncultivated land, un- extracted minerals etc. While these are also very crucial to the production process, but bring no value to that process. Due to the constancy of their value, these means of production are referred as constant capital.

This expressed mathematically as: if the product resulting from the labour process is homogeneous then the value of the product can be divided

by the total number of items produced to derive the unit value of each item.

Some empirical evidence suggests labour value are a better predictor of price. Prices normally include a level of income for "capital" and "land". These incomes are known as "profit" and "rent" respectively.

David Ricardo responded to this paradox by arguing that Smith had confused labour with wages. The value of labour not just the value of wages, but the value of the entire product created by labour. Ricardo's labour theory of value of a good is proportional to how much labour was required to produce the raw materials and machinery used in the process. Ricardo stated that "The value of a commodity, or the quantity of any other commodity for which it will exchange, depends on the relative quantity of labour which is necessary for its production, and not as the greater or less compensation which is paid for that labour." Ricardo seeks to differentiate the quantity of labour necessary to produce a commodity from the wages paid to the labours for its production.

The value theory of Ricardo was criticized on several counts, Including the 'paradox of value'. Later Ricardo had also said that he is not satisfied with his own explanation.

9.5 RICARDIAN THEORY OF DISTRIBUTION OF INCOME

Ricardian theory of distribution is one of the most important theories of economics. For Adam Smith economics is an enquiry into the nature and the causes of wealth, whereas according to Ricardo economics is a study of distribution of wealth. Ricardo wrote in his book, "The production on the earth was divided into rent, profit and wage and that to determine the laws which regulate this distribution, is the principle problem in the political economy".

Assumptions of the theory-

- All land is used for production of corn.
- Law of Diminishing return operates on land.
- Supply of land is fixed.

- The demand for corn is perfectly inelastic.
- Technical progress is constant.
- The workers are paid subsistence wage.
- There is perfect competition.

Ricardo divided the society into three groups, viz, land lord who provides lands, capitalist who carry on the production and labourer who work on land and bring out the production of corn. According to Ricardo, income of an economy is distributed among these major shares: rent, wages and profit. Rent is provided to the land lord for the use of the land, wages are paid to the labourer and the profit is given to the capitalist. Whenever there is a change in distribution of income it will affect the capital accumulation and that will ultimately impact the production. Out of these three income firstly rent is paid to the land lord, then wages are paid to the labour. After giving away the rent and wages whatever is left out is given to the capitalist in the form of profit. Profits are residue arising from difference between productivity of labour and rate of wages. Ricardo says that as an economy grows rents rise which squeeze the rate of profit. As profits are squeezed, economic growth is declines.

These can be explain with the help of a diagram-

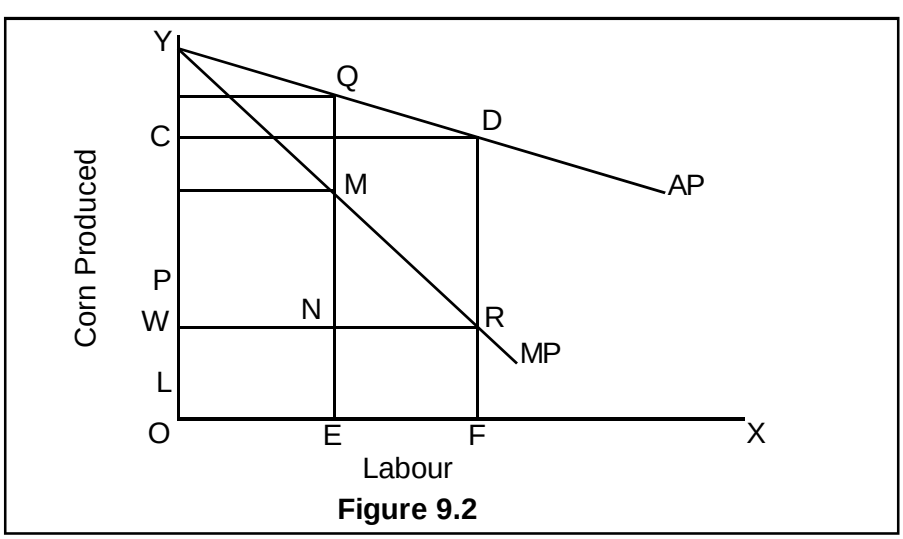


Figure 9.2

In the above diagram X axis measures the amount of labour and the Y axis measures the amount of corn produced. AP and MP stands for average productivity and marginal productivity of labours respectively. The diagram shows that OE amount of labours are given to us and with this amount of labour we are producing total corn equal to OEQP. The rent that is given to the land lord is LMQP. Now at OW wage rate supply of labour is WN. Hence the total wages given to the labour is OENW. After giving away rent and wages whatever is left out is given to the capitalist in the form of profit. The amount profit will be WNML.

Now suppose we increase the amount of labour till OF. This will change the production to OFDC. Now the amount of rent will be WOFR. In the diagram we can clearly see that no profit is left for the capitalist. Ricardo said that in such a situation the whole income is divided among land lord and labours. This is the point when the economic growth is declining and capital accumulation become stagnant.

9.6 RICARDIAN THEORY OF TRADE

The classical theory of international trade also popularly known as the theory of comparative advantage was formed by David Ricardo in the year 1817. According to Adam Smith international trade is beneficial only when two nations are having absolute differences in the cost of production of the commodity in which they specialize. But Ricardo in his theory shows that if a country has an absolute superiority over the other country in both the commodity then also international trade is possible. In this case the country will specialized in that commodity in which it enjoys comparative cost advantage. Ricardo stated in his theory that, other things remain unchanged, a country will specialize and export those commodities in the production of which it has comparative cost advantage.

Assumptions of the theory-

- 2*2*1 model i.e. there exist only 2 countries, 2 commodities and only one factor of production(labour).
- Labour is homogeneous in terms of efficiency.

- There is perfect competition in factor and labour market.
- There exist constant returns to scale in production.
- Labour is perfectly mobile within the nation but not outside the nation.
- There is full employment of resources.
- Trade takes place on barter system.
- No change in technology.

Let us discuss the Ricardian theory of comparative advantage with the help of following tables;

TABLE - 9.1

(Hours of labour necessary to produce a unit of wine and cloth)

Countries	Commodity A (gallon of wine)	Commodity B (meters of cloth)	Exchange Rate
Portugal	80	90	1=.89(80/90)
England	120	100	1=1.2(120/100)

In the above Table 9.1 we see that Portugal has an absolute cost advantage over England in both wine and cloth. The table shows that Portugal produces both wine and cloth at a lower cost than England. But still it can be demonstrated that trade between Portugal and England will benefit both. For this we need to use the concept of opportunity cost. The opportunity cost of good X is the amount of another commodity that has to be given up to produce an additional unit of X. Table 9.2 gives the opportunity costs for producing wine and cloth in Portugal and England.

TABLE-9.2

(Opportunity Cost)

Countries	Opportunity Cost for Wine	Opportunity Cost for Cloth
Portugal	80/90=0.89	90/80=1.125
England	120/100=1.2	100/120=0.83

Comparative cost advantage of a country can be seen in terms of opportunity costs. A country is said to have comparative advantage in producing a good if the opportunity cost for producing the good is lower at home than in the other country. We see that (Table 9.2) Portugal has lower opportunity cost in producing wine (0.89<1.2), while England has lower opportunity cost in producing cloth (0.83<1.125). Thus Portugal has a comparative advantage in producing wine and England has a comparative advantage in producing cloth.

Now the rate of exchange between wine and cloth in Portugal will be 1: 0.89, in this case Portugal will gain if it can obtain more than .89 units of cloths against 1 unit of wine. Similarly, the exchange rate between wine and cloth in England will be 1: 1.2, in this case England will gain if they can obtain 1unit of wine by exporting less than 1.2 units of cloths. These are the upper and lower limits within which the two countries will be mutually beneficial. Ricardo however assumes that the exchange among the two countries will be at the rate of 1:1.



CHECK YOUR PROGRESS

Q 3: On which law of production is the Ricardian theory of comparative cost based?

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Q 4: Analyze the benefit of international trade. (Answer in about 30 words)

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Q 5: Mention the limitations of the Ricardian theory of comparative advantage. (Answer in about 40 words)

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9.7 LET US SUM UP

- Ricardian theory of rent deal with the problems of distribution of food to the expanding population.
- Ricardo shows that difference between production of super marginal land over the marginal land is called rent. Rent dose not determined price, price determined rent. The modern theory criticized that rent arise in respect of all factors of production.
- According to the Ricardian theory of Income Distribution output of an economy distributed among three major shares: rent, wages, profit.
- According to Ricardian theory of international trade, cost difference lead to international trade.
- The Ricardian theory of International Trade is criticized on the ground that it is based on certain unrealistic assumptions such as labours are homogeneous, but In reality labours cannot be homogeneous. Also labour is the only factor of production, but In reality there are four factors of production land, labor, capital and organization.



9.8 FURTHER READING

1) Bhatia, H.L. (2007). *History of Economic Thought.* New Delhi : Vikash Publishing House.
2) Kumarappa, J.C. (2010). *Gandhian Economic Thought.* New Delhi : SSS Prakashan.
3) Loknathan, V. (2010). *A History of Economic Thought.* New Delhi : S Chand & Company Ltd.
4) Paul R.R. (2008). *History of Economic Thought.* Ludhiana : Kalyani Publishers.



9.9 ANSWERS TO CHECK YOUR PROGRESS

Ans to Q No 1: According to Ricardo, rent is a payment arises out of the original and indestructible power of soil. Thus we can say that rent is a surplus over cost. Price is not determined by the rent but the price level

determined the rent. Rent of a land arises when market price of a product is greater than the average cost of production.

Ans to Q No 2: Ricardo's theory of distribution shows that the most fertile land will produce maximum amount of output, the least fertile land will produce least amount of output. According to him ' Rent is the difference between the produce obtained by equal portion of labour and capital employed on land of the same or different qualities'. According to Ricardo, rent is a payment arises out of the original and indestructible power of soil. Thus we can say that rent is a surplus over cost. Price is not determined by the rent but the price level determined the rent. Rent of a land arises when market price of a product is greater than the average cost of production.

Ans to Q No 3: Ricardian theory of comparative cost is based on the law of constant returns to scale.

Ans to Q No 4: Some of the important benefits of international trade are mentioned below

- The countries which are involve in international trade their economic growth boost paster.
- Because of the international trade products available for the consumer at a lower price.
- International trade increases the overall employment in a country.

Ans to Q No5: The Ricardian theory of comparative cast advantage was criticized of various ground. Some of them are mentioned below:

- The theory assumes that the labours are homogeneous; which is unrealistic. In reality labours can not be homogeneous.
- The theory is based on the law of constant return. But with the increase in inputs output will increase in diminishing return.
- Ricardo assumes free trade. But in reality traders have to face high tariff walls.
- Ricardo again assums that transportation cast is zero. This can not be true at any cost.

9.10 MODEL QUESTIONS

Short questions (Answer each questions in about 150 words)

Q 1: Is economic rent a cost or surplus?

Q 2: What type of wages determines the standard of living of the workers?

Q 3: What is the main cause of international trade?

Long questions (Answer each questions in about 300-500 words)

Q 1: Give a brief idea of the contribution of Ricardo.

Q 2: "Price is not high because rent is paid but rent is paid because price is high." Discuss.

Q 3: Critically examine Ricardo's comparative cost theory of international trade. How far it is applicable in the underdeveloped countries?

*** ***** ***

UNIT 10: THE CLASSICAL SCHOOL - MILL

UNIT STRUCTURE

10.1 Objectives

10.2 Introduction

10.3 Mill's Restatement of Classical Theory

10.4 Major Economic Thoughts of J. S. Mill

10.4.1 Mill's Laws of Production and Distribution

10.4.2 Theory of International Trade

10.4.3 Value Analysis

10.5 Let Us Sum Up

10.6 Further Reading

10.7 Answers to Check Your Progress

10.8 Model Questions

10.1 LEARNING OBJECTIVES

After going through this unit, you will be able to-

- appreciate J. S. Mill's restatement of classical theory
- understand Mill's Laws of Production and Distribution
- explain the Mill's theory of international trade
- understand the Mill's Value Analysis

10.2 INTRODUCTION

Classical economics was developed in the late 18th and early 19th century which asserts that market functions the best with minimal government influence. One of the prominent classical economists John Stuart Mill was born on 5th May, 1806 in London. He was home schooled by his father James Mill. By the age of 3 he learnt Greek and by the age of 7 he had learnt Latin. He used to work in the office of the East India Company and worked for the betterment of the economic condition of the working classes. He wrote a number of books on various field. He has an influential contribution to social theory, political theory and political economy. Mill was

also a member of parliament. Among all these books, the most prominent is the "Principles of Political Economy". During the time of Mill, classical economics reached its top and had also experienced its downfall. In this unit we will discuss the contributions of J.S. Mill in the history of economic thought.

10.3 MILL'S RESTATEMENT OF CLASSICAL THEORY

Mill restated many of the classical ideas. Mill rewrote some of the laws with minor modifications; they are the law of individualism, the law of liberalism, the law of population, the law of demand and supply, the law of wages, the law of rent and the law of international trade. Among them Mill's most important modification is Bentham's utilitarianism. The concept of utilitarianism was introduced by Jemery Bentham. J. S. Mill accepted the central concept of utilitarian philosophy. According to them action should be measured in terms of the happiness, or pleasure, that they produce. The utilitarian philosophy states that, "our actions are right if they produce, the greatest happiness of the greatest number".

Three parts of utilitarianism are

- Only the consequence matter.
- Pleasure / happiness should be maximized.
- Utilitarianism is not egoism. Each person counts impartially.

Later, Mill modified this principle. He criticized Bentham for reducing distinctions among all pleasures to quantitative differences and ignoring the qualitative differences. Bentham gave an example that if a game gave more satisfaction than a novel, then the game is better than the novel. On the other hand, Mill argued that same kind of pleasure are qualitatively better than other. He said that men should satisfy these wants which give finest pleasure. As far as the fundamental laws of the political economics are concerned Mill was in the support of classical political economics.

10.4 MAJOR ECONOMIC THOUGHTS OF J. S. MILL

In this section we will discuss the major economic thoughts of J.S.

Mill as follows-

10.4.1 Mill's Law of Production and Distribution

Mill had identified the difference between laws of production and laws of distribution. According to Mill, laws of production are certain and sure; they cannot be changed by human action. But on the other hand law of distribution can be changed by human actions.

- **PRODUCTION :** According to Mill, two important agents of production are labour and natural objects. Labour can be physical labour or mental labour. The natural objects are those which exist or grow involuntarily. Labour is always employed to put motion to the objects. Both labour and nature together produce goods. Mill asserted that employment of labour may lead to production of 'human capital'. Mill says that utilities 'created in the form of services "can be spoken of as wealth, except by an acknowledged metaphor."

Apart from labour and natural agents, Mill also considered the importance of capital as a factor of production.Mill says that capital accumulation will increase the rate of production which again will decline with the increasing depreciation which can be met only out of savings from the current income.

- **DISTRIBUTION :** In the theory of distribution, Mill, more or less agrees with Ricardo. According to Mill a society is made up of three classes of people: landlord, capitalist and labour. This three classes share the total production among themselves. The landlords receive their share in the form of rent; the capitalists receive their share in the form of profit and the labourers receive their share in the form of wage. Here we will discuss about the laws according to which the share of each of the three classes is determined.
  - **WAGE :** Mill observed that wages of the labours depend on demand and supply of labour, which is regulated by wage

fund. The demand side of the wage is affected by the capital and the supply side is affected by population. Thus the rise or fall of wages depend upon whether the capital grows faster than population or the population grows faster than the capital.Wage level of the labours can be increased either by decreasing the numbers of labour employed or by increasing the amount of capital formation. Mill pointed out in an article that wages can very well be increased by the actions of the trade unions.

Mill's idea of wage did not differ from Ricardo's theory of wage. But Ricardo in his theory points out that in the long run population will increase in an increasing rate. This will lead to the decrease of wage rate beyond a subsistence level and there is no hope of enhancement of the living condition of the workers. But Mill believes that providing the education facility will reduce population and the wage rate will rise which will improve the living condition of the workers. Mill provided several other remedial measures for the low wage rate, such as, minimum wage rate should be fix and a trade union should be formed; but these measures did not work. According to Mill the only solution to control the increasing population is to provide proper education.

- **PROFIT :** Profit is earned by the capitalist. According to Mill profit is an interest receive by the capitalist on its own capital; it is a wage for management; it is also a premium received by the capitalist for risk-bearing. Mill pointed out that profit is greater than interest. Profit arises because the labours are given less than what they produce. According to Mill the rate of profit depends on wage rate. If wage rate is too low, the rate of profit is very high. Mill follows the idea of Senior in explaining the theory of profit. Mill says that profit is a reward for abstinence. The term abstinence means sacrifice that is involved in creating capital. Capital can be created through

saving and savings involve sacrifice. Since it is a very painful exercise the owner of the capital gets the profit in the form of reward.

m **RENT :** Mill supported the Ricardian theory of rent. Rent is the excess of returns earned from the better lands in cultivation over the worst land. Rent is a differential surplus. According to Ricardo lands are divided into three different categories: most productive, less productive, least productive. The least productive lands are marginal land and pays no rent for it because the price of the corn can only cover the cost production of the land. The amount rent in other land will be equal to its revenue over cost. Mill made a minor modification in the Ricadrdian theory of rent. He adds that the land should not be taxed away by the government and with the country's progress the rental value will increase. He also considered the personal ability of the lobours.



CHECK YOUR PROGRESS

Q 1: What according to Mill are the major components of production? (Answer in about 20 words)

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Q 2: How does Mill show that the law of production is different form the law of distribution? (Answer in about 20 words)

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10.4.2 Theory of International Trade

One of the most important achievements of Mill was in the field of international trade. Mill's law of international values is also popularly known as "Equation of International Demand". Mill openly criticized

the theory of David Ricardo and reformed the theory of comparative cost advantage and claims that Ricardo did not pay any attention to the ration at which one commodity would exchange for the other commodity. Ricardo's theory of comparative cost shows that the countries set the outer limit between which the international trade takesplace. But Mill's theory of international trade explains the process where between these limits international trade actually take place. According to Mill both the level and the intensity of demand are important in determining the terms of trade and this equilibrium terms of trade are determined by the equation of "Reciprocal Demand".The term reciprocal demand is used to indicate a country's demand for one commodity in terms of the quantities of the other commodities. Reciprocal demand curve is also known as the offer curve. The offer curve is determined by the demand of the product of each country. The unique point of the theory is that Mill assumes a given amount of labour but different output of commodities in the two countries. This part differentiates this theory from the Ricardian theory.

Assumptions of the theory-

- 2*2*1 model i.e. 2 countries, 2 commodities, 1 factor of production.
- Constant return to scale operates.
- The trade between two countries is governed by the principle of comparative costs.
- The demand of two countries are similar in nature.
- There exists perfect competition in the market.
- Free trade and government follows a policy of laissez fair.
- Full employment in both the countries.
- There is absence of transport cost.

This theory of Mill can be explained with the help of the offer curve. The more elastic is offer curve, the more favorable will be the terms of trade.The terms of trade is the ratio of quantity export by a country to the quantity import by the country. When quantity

import is less than quantity export the situation is favorable for the country, and vise versa. The equilibrium terms of trade and the effect of improvement on terms of trade can be represented with the help of the offer curve:

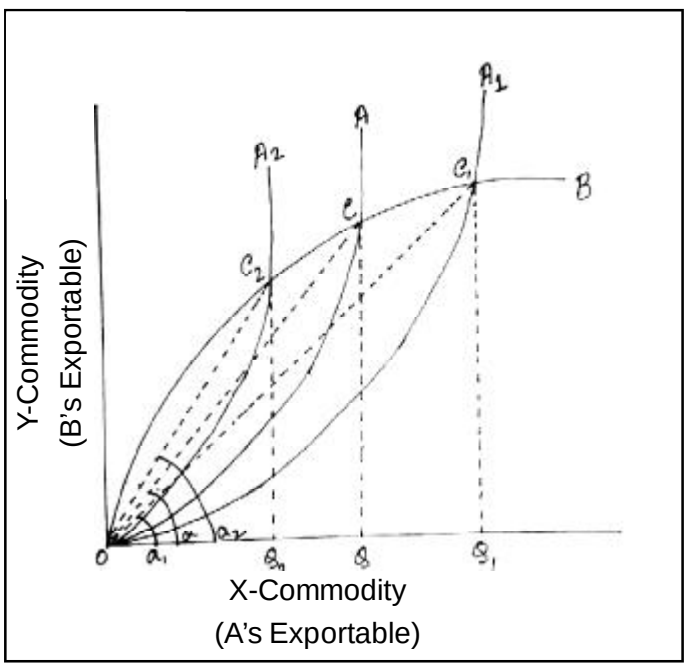


Figure 10.1

We can see in the figure 10.1 that Initially the offer curve of country A intersects the offer curve of country B at point C. C is the point of equilibrium. If A's demand for product Y increases, A would be willing to import more of Y. In this case the offer curve of A shifts from A to A_1. The equilibrium point will shift from point C to C_1. Here the offer curve is more elastic. In this situation the volume of trade increases but the terms of trade become unfavorable. Now if A's demand for product Y decreases, A will import less of Y. In this case the offer curve will shift to A_2 from A. Here the offer curve is less elastic. The equilibrium point will shift from C to C_2. The volume of trade decreases but the terms of trade become favorable.

Now let us discuss the situation with the help of the offer curve B:

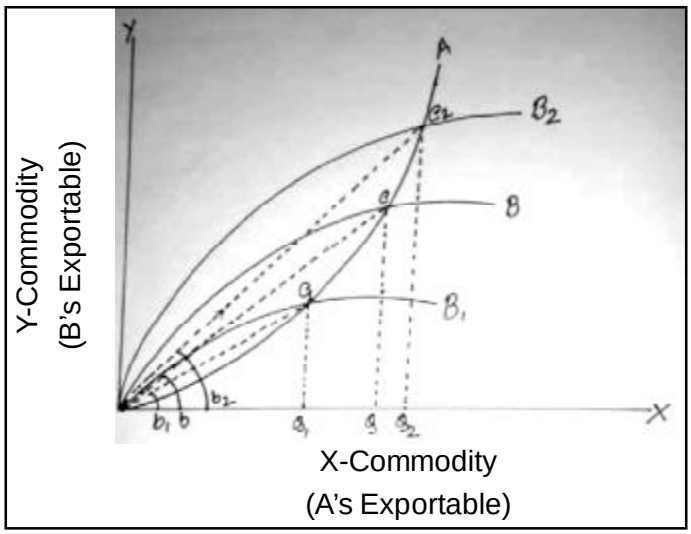


Figure 10.2

Initially the offer curves of country A and country B intersect each other at point C which is known as the point of equilibrium. If B's demand for product X increases, B will be willing to import more of X. In this situation, the offer curve of B will shift from B to B_2. Here the offer curve is more elastic. In this situation the volume of trade increases but the terms of trade become unfavourable. If demand of country B for product X decreases, B will be willing to import lesser of X. In this case offer curve of B shifts from B to B_1. Here the offer curve is less elastic. Volume of trade decreases here but the terms of trade becomes favorable. Thus we can say that if one country is larger than the other, then the gain from the trade will go to the smaller country.



CHECK YOUR PROGRESS

Q 3: What is cost reducing improvement? (Answer in about 20 words)

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Q 4: How is Mill's theory of international trade different form theory of comparative cost advantage? (Answer in about 30 words)

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10.4.3 Value Analysis

Mill considered value as an important subject of political economy. Mill shows that in a society "in which the industrial system is entirely founded on purchase or sale, each individual, for most part, living not on things in the production of which he himself bear a part, but on things obtained by a double exchange, a sale followed by a purchase - the question of value is fundamental". Value have two uses viz. value - in - exchange and value - in- use. A commodity has value only when it has the power to satisfying human wants. Mill tried to relate the exchange value with the diminishing marginal utility, but he failed to break the ground. Mill classified commodities into three categories-

- Goods that have perfect inelasticity supply. In this case the market value of a commodity determines the demand of the product. Here change in the price is necessary to adjust the demand for the commodity since the supply of the product is fixed.
- Goods that have perfect elastic supply. In this category Mill says that supply can be increased only at an increasing cost. Although Mill does not elaborate the price determination of this kind of good, it is obvious that supply can be increased only when the production cost increase and the increase in production cost will increase the price of the product. Thus increase in supply is possible when the price of the product increases.
- Goods whose supply is relatively elastic. In this category Mill brings the time element into consideration. He distinguishes the determination of the value in short run and in long run. According

to Mill in the short run, price of the commodity is determined by the demand and supply of the product at a given point of time. But in the long run not only the demand and supply but there are some other factors that affect the price of a product. The price of a commodity cannot fall below its production cost but the competition between the producers would not let stand above it either. Thus in the long run influence of demand on price is a passive factor only.

The above discussed value theory is also applicable to money. Money functions as a medium of exchange. The value of money is an inverse function of price, i.e. when price increases value of money decreases and vice versa. In the short run the value of money is determined by the demand and supply of money. In the long run the cost of production of gold and silver determines the value of money.

Mill's confidence on his theory of value can be gauged by his following statement: "Happily, there is nothing in the laws of value which remains for the present or any future writer to clear up; the theory of subject is complete". The above statement made by Mill was true only in the classical tradition.



CHECK YOUR PROGRESS

Q 5: What are the different types of goods, as explained by Mill? (Answer in about 30 words)

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Q 6: Write a note on Mill's idea on stationary state. (Answer in about 70 words)

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10.5 LET US SUM UP

- Mill contributed a number of new ideas which can be listed as original ideas of Mill. Some of them are Mill's theory of reciprocal demand in international trade, the theory of value. Mill re-presents demand and supply in the functional form, considers elasticity and expresses the law of demand and supply as an equation and not identity.
- Mill had identified the difference between the laws of production and the laws of distribution. According to Mill, the laws of production are certain and sure; they cannot be changed by human action. But on the other hand law of distribution can be changed by human actions.
- Mill openly criticized the theory of David Ricardo and reformed the theory of comparative cost advantage and claims that Ricardo did not pay any attention to the ration at which one commodity would exchange for the other commodity.
- Value have two uses viz. value-in-exchange and value-in-use. A commodity has value only when it has the power to satisfying human wants. Mill tried to relate the exchange value with the diminishing marginal utility, but he failed to break the ground.
- Mill also rewrote few theories with minor modification. They are the law of individualism, the law of liberalism, law of population, the law of demand and supply, the law of wage, the law of rent and the law of international trade.



10.6 FURTHER READING

1) Bhatia, H.L. (2007). *History of Economic Thought.* New Delhi : Vikash Publishing House.
2) Kumarappa, J.C. (2010). *Gandhian Economic Thought.* New Delhi : SSS Prakashan.
3) Loknathan, V. (2010). *A History of Economic Thought.* New Delhi : S Chand & Company Ltd.
4) Paul R.R. (2008). *History of Economic Thought.* Ludhiana : Kalyani Publishers.

10.7 ANSWERS TO CHECK YOUR PROGRESS

Ans to Q No 1: According to Mill the production community is made up of 3 classes of people, viz. landlord, capitalist and labourer. These three classes are the owner of 3 requisition of production i.e. land, capital and labour.

Ans to Q No 2: Mill was the 1st economist who showed the distinction between the law of production and the law of distribution. According to him production belongs to the positive economics and deals with the question 'what is' and distribution is concerned with the normative economics and deals with the question 'what ought to be'. He believes that production is controlled by natural and physical laws while the distribution is controlled by man-made social institutions. The production can be increased by improving the skills and technologies. But the distribution will differ among various classes of the people.

Ans to Q No 3: J. S. Mill introduced the concept of cast reducing improvement in his theory of international trade. Cost reducing improvement implies that, an improvement in the production technique of one country will increase its productivity and make the product cheaper as compared to the product of other countries. This will make the terms of trade in favour of other countries.

Ans to Q No 4: Mill extended the theory of comparative cost as developed by Ricardo. Mill, in his theory of international trade stated the condition for equilibrium terms of trade. Ricardo's theory of comparative cost only shows the outer limits between which international trade takes place profitably. It does not tell us where between these limits, international trade actually take place. Mill's theory of international trade provides the answer to this question: 'The produce of a country exchange for the produce of other countries, at such values as are required in order that the whole of her exports may exactly pay for the whole of her imports'.

Ans to Q No 5: Mill introduced three fold classification of the commodities. They are as follows-

- Goods that have perfect inelasticity supply.

- Goods that have perfect elasticity supply.
- Goods whose supply is relatively elastic.

Ans to Q No 6: Mill illustrated three Ricardian Laws: the law of population growth, the law of capital accumulation and the law of diminishing returns. Mill, in his theory, shows that as the economy progresses the law of diminishing return operates, as a result of which wages and profit tends to fall below the minimum level. Further this will stop the growth of population and capital supply. This situation is termed as the stationary state. According to Mill the stationary state is not an undesirable state. He believes that it is a pleasant a situation of growth and hope. In such state quantitative progress might be stopped but the qualitative progress are bright. Thus according to Mill the stationary sate of production and accumulation is a state of human improvement.



10.8 MODEL QUESTIONS

Short Questions (Answer each questions in about 150 words)

Q 1: Which book brought the name of J. S. Mill in the frame of economics?

Q 2: Write short notes on:

a) Mill on Say's law

b) Mill on the role of state.

Long Questions (Answer each of the question in about 300-500 words)

Q 1: Critically explain J. S. Mill's view on the law of production and distribution.

Q 2: What improvement did J. S. Mill make in the theory of international trade?

Q 3: Give a brief account of the important contribution of J. S. Mill.

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UNIT 11: THE RISE OF SOCIALIST THOUGHT

UNIT STRUCTURE

11.1 Learning Objectives

11.2 Introduction

11.3 Overview of Socialism

11.4 Scientific Socialism

11.5 Theory of Value

11.6 Theory of Surplus Value

11.7 Theory of Economic Development

11.8 Let Us Sum Up

11.9 Further Reading

11.10 Answers to Check Your Progress

11.11 Model Questions

11.1 LEARNING OBJECTIVES

After going through this unit, you will be able to-

- state the meaning of socialism
- distinguish between socialism and Marxian scientific socialism
- understand the theory of value as described by Marx
- explain capitalist exploitation by understanding the meaning of surplus value
- describe the fundamental ideas of Marx's theory of capitalist development

11.2 INTRODUCTION

This unit will introduce you to the socialistic thought of Karl Marx (1818-1883). Marx is much more than an economist. In his sweeping analysis he combined Economics, Sociology, Political Theory, History and Philosophy to understand the laws of motion of capitalism. According to G .Meier and R. Baldwin, 'the Marxian system of thought is supported by his followers with tenacity akin to religious zeal'. In the view of Joseph

Schumpeter, 'to an orthodox Marxist, an "opponent is not merely in error but in sin". Karl Marx remains the undisputed leader in socialistic thought for generations because of his contributory work Das Kapital (Capital),1867, which came to be known as the Bible of the scientific socialists. He followed the method of historical materialism that saw economics as the base and all other aspects of human life as superstructure. His ideas of class struggle, capitalistic exploitation, materialistic interpretation of history are the essential basis of revolutionary international or cosmopolitan socialism.

This unit is concerned with familiarizing the learners with the concept of socialism. The unit also tries to distinguish between socialism and Marxian scientific socialism. Apart from it, famous Marxian theories like theory of value, theory of surplus value and theory of economic development are discussed in this unit.

11.3 OVERVIEW OF SOCIALISM

As an economic ideology, there is no universal model of socialism. It has been interpreted in different ways by writers. In the words of George Dalton "Socialism refers to a body of writings, ideas, beliefs and doctrines.... and it refers to real world political movements as well as to policies instituted by socialists in power."

According to H.D. Dickinson "Socialism is an economic organisation of society in which the material means of production are owned by the whole community and operated by organs representative of and responsible to the community according to a general economic plan, all members of the community being entitled to benefit from the results of such socialised planned production on the basis of equal rights."

According to P.M.Sweezy, "In its primary meaning socialism is a complete social system which differs from capitalism not only in the absence of private ownership of the means of production but also in its basic structure and model of functioning."

When we analyse the above definitions, we can derive some common features of socialism which characterise the socialist philosophy

of present time as follows:

- Socialism emphasizes an egalitarian society where everyone can enjoy equal opportunities. The basic aim of socialism is to establish a classless society under constant scrutiny and observation of the State.
- Under socialism the means of production are not owned privately but collectively by the society as a whole.
- In the socialist mode of production, economic activities are not guided by individual welfare (profit motive) but by social welfare.
- Since the means of productions are owned by the state there is a necessity of central economic planning for conscious control.
- In its primary meaning, socialism substitutes competition by co-operation and mutual goodwill.

So, in common parlance, socialism is an economic ideology that tries to establish an egalitarian society where competition is substituted by cooperation and the material means of production are owned by the whole community, controlled by the central economic planning and utilised for maximising social welfare.

11.4 SCIENTIFIC SOCIALISM

The concept of 'socialism', as derived from Karl Marx's analysis is described as 'scientific socialism' and his contributory work Das Kapital (Capital),1867, came to be called the Bible of the scientific socialists. The word scientific is used to distinguish Marxian socialism from the early socialist theories known as utopian. Socialism in the hands of Marx is not a system imposed by the authority, but is one which is the automatic outcome of the inevitable fall of the capitalist production system. Marx states that in a social transition, capitalism which replaces feudalism, would develop and prosper and then would decline ultimately leading to its doom from where would emerge a new system, called "scientific socialism". Marx held the view that the seed of destruction lies in the system of capitalism itself and its inner conflict brings the inevitable fall of the system and give rise to a new system where the working class people produce for themselves. This

inevitable outcome of the capitalist production system through a revolutionary change towards a better social order of socialism is scientific socialism.

Stating Hegelian philosophy 'on its feet instead of on its head', Marx put Hegel's dialectic on materialistic basis and made social evolution a matter of material and economic forces. In his 'dialectical materialism', Marx explained how changes in the society take place. According to him, change is nothing but development and development takes place in stages and each stage will be higher than the previous stage. An initial situation is called "thesis", its contradiction is called "anti-thesis" and the newly emerged stage is called "synthesis". But the process does not end here; it changes further as change is a continuous process. According to Marx, no idea, institution or situation is fixed and each contains in itself, a seed of change. Thus, capitalism succeeded feudalism and socialism could replace capitalism. As capitalism is a historical transition of social order, so is socialism a necessary product of historical development.

While interpreting history materialistically, Marx wanted to establish the "economic law of motion of modern society. " According to him, the mode of production in material life determines the general character of the social, political and spiritual processes of life. To him "all history is the history of class struggle." In ancient times, there was the struggle between the master and slaves, under feudalism there was the struggle between the lord and the serf and under conditions of capitalism the struggle is between the capitalist and the worker. Marx maintained that like all other economic system, the capitalist system also want to produce and produce more. This urge for production is described by Marx as the social character of capitalist production. But Marx also found that in a society which is divided between the capitalist and workers, the working class people derive their purchasing power from the capitalist processes of production. The working class receive subsistence wages which cannot give them enough of purchasing power. Thus, even though the capitalist want to produce more and sell more, they cannot do so because of the general impoverishment of the working classes. This is the contradiction of the capitalist system

and is also the seed of capitalist destruction. This inner contradiction of the capitalist system ultimately spells its doom.

This Marxian analysis of capitalism production system and its inevitable fall because of its inner contradiction must give rise to a new production relation in which the working class people under the state ownership of all material means of production produce for themselves. This transformed order of society which can be called scientific socialism is a transition stage, the ultimate goal being communism, the paradise of all socialists, when the State itself withers away. But the critics of Marx have found too many ingenuities in his logical analysis of inevitability of breakdown of the capitalist system and the emergence of scientific socialism.



ACTIVITY 1

Identify the inner contradictions of the capitalist system of production.

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CHECK YOUR PROGRESS

Q 1: State whether the following statements are True or False:

(a) According to Karl Marx, all history is not the history of class struggle. (True/False)

(b) In the capitalist system of production the working class receive subsistence wages which give them enough purchasing power. (True/False)

Q 2: Mention the common features of socialism. (Answer in about 50 words)

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Q 3: State the meaning of scientific socialism. (Answer in about 20 words)

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11.5 THEORY OF VALUE

In the Marxian analysis, labour is the ultimate source of all value and commodity is the central issue in the capitalist production system. Marx starts his theory of value with an analysis of commodity. According to Marx, a commodity must possess utility, is the product of human labour and produced with the sole objective of selling it in the market. Like Ricardo, Marx also viewed that the gift of nature such as soil, minerals, water, trees etc. are not considered as commodity since they are not the product of human labour. . To Marx, equipment and raw materials do not create value; they merely transfer their own value to the commodity.

To be commodities, things must have a double character viz. use value and exchange value. Use value of a commodity refers to its material qualities and is related to satisfaction of human wants. On the other hand, exchange value refers to the social use value of the commodity (i.e., use value of the commodity not for its owner but for others). Exchange value of a commodity arises because a portion of social labour has been expended upon it. Use value of a commodity does not presuppose its exchange value. It means that a commodity may have a use value without having an exchange value. But the exchange value presupposes the use value, as exchange value of a commodity is a fraction of abstract human labour. It is measured in terms of labour time embodied on producing the commodity. As for example, if 2 labour hours is required to produce X commodity and 4 labour hours is required to produce Y commodity, then we can say that Y commodity has a value twice as that of X commodity. It is important to note that Marx considered and counted only the socially necessary labour time in measuring the exchange value. According to Marx, "misdirected labour does

not count as labour". Socially necessary labour consider only the contribution of simple average skilled labourer who works under normal conditions of production and produce a product which has market demand.

Criticisms of the theory:

- Critics observed that in a free market economy the exchange value of a commodity is determined by the forces of demand and supply and not by abstract human labour.
- In reality, the gift of nature command exchange values where labour has no role to play, so measuring the exchange values without counting the gift of nature as done by Marx is inadequate.
- Production cost not necessarily consists only of wages as assumed by Marx. It may consist of anything that is needed and commands a price.
- Modern theory of value has two sides-subjective and objective so the condemnation of Marx about the subjective part of the process of valuation involves a fundamental error.

11.6 THEORY OF SURPLUS VALUE

The theory of 'surplus value,' has occupied the central position in the Marxian analysis of capitalist exploitation. Karl Marx developed his theory of surplus value in order to explain capitalist exploitation of the working class people on one hand and accumulation of capital and crisis of the capitalist production system on the other . P.N Sweezy viewed that what is specific to capitalism is thus not the fact of exploitation of one part of the population by another, but the form which this exploitation assumes, namely, the production of surplus value.

In the Marxian analysis, labour is the ultimate source of all value. To Marx, equipment and raw materials do not create value; they merely transfer their own value to the commodity. It is the unique characteristic of labour power that creates more than its own value. The capitalist production is not simply the production of commodities; it is essentially the production of surplus value. The worker produces, not for himself, but for the capitalist

and it is not sufficient that the worker should simply produce, he must produce surplus value.

In a capitalist production system, labour power is a commodity, and it must have a value. The value of labour power is determined by the value of goods and services which is required to maintain labourers at the minimum subsistence level. Marx divided labour into two kinds- necessary labour and surplus labour. If a worker in an industry works for 12 hours a day, the exchange value of the product of his labour should be equal to 12 hours labour but if wage he receives are equivalent to 8 hours labour, this labour is necessary labour and the remaining 4 hours labour is regarded as surplus labour. This surplus labour creates surplus value which goes to the hands of the capitalist. The surplus value is, thus, the difference between what the labourers create and what they receive. According to Marx, this surplus value becomes the basis of capitalist exploitation.

In a simple commodity production, the producer sells out their product in the market to buy some other necessary product. They start with commodities and convert them into money, which is again converted into some other commodities. This relation in simple commodity production can be written as,

C à M à C

In capitalist production, this process, however, changes. The capitalist starts with money for the purchase of commodities, than those commodities are again sold out for money. Thus, money comes at the beginning and also at the end. This can be written as,

$$M \rightarrow C \rightarrow M'$$

This exchange relationship is the core of the capitalist production system and also a very important feature of capitalism. The difference between M' and M is the surplus value which is the income of the capitalist.

In the Marxian system, the total value is composed of three elements. Firstly, it consists of the value of capital and raw materials consumed in the production of goods and services. Marx called this as Constant Capital (C). Secondly, the total value of output contains the value of labour power used in the production of goods and services which is called by Marx as Variable

Capital (V). Thirdly, the value which is created by labourers over and above the value of the labour power is described by Marx as Surplus Value (S). Thus, the value of total output (W) may be denoted as,

W = C + V + S

The rate of surplus value (S') is the ratio of surplus (S) to variable capital V, i.e. the rate of exploitation by the capitalist and is measured as follows:

$$s' = \frac{s}{v} \text{.....(1)}$$

The surplus value measured against the total capital is known as the rate of profit (p). In a capitalist economy, the rate of profit p is measured as follows:

$$p = \frac{s}{c+v} \text{.....(2)}$$

The relation between constant and variable capital is described by Marx as the organic composition of capital indicated by q and is shown as follows:

$$q = \frac{s}{c+v} \text{.....(3)}$$

$$\begin{aligned} \textit{Now,} \quad p &= \frac{s}{c+v} \\ &= \frac{sv}{v(v+v)} \\ &= \frac{sc+sv-sc}{v(c+v)} \\ &= \frac{s(c+v)-sc}{v(c+v)} \\ &= \frac{s(c+v)}{v(c+v)} - \frac{sc}{v(c+v)} \\ &= \frac{s}{v} - \frac{s}{v}\left(\frac{s}{c+v}\right) \\ &= s' - s'(q) \\ p &= s'(1-q) \end{aligned}$$

This equation shows that the rate of profit moves in the same direction with surplus value and in the opposite direction with the organic composition of capital. The capitalist accumulate with a view to earn more and more profit but ultimately increased accumulation leads to a declining rate of profit. According to Marx, the rate of profit being the goal of capitalist production, its fall checks the formation of new independent capital and thus appears as a threat to the development of the capitalist production process. The tendency of falling rate of profit is one of the most important forces of Marxian dynamics.



CHECK YOUR PROGRESS

Q 4: State whether the following statements are True or False:

(a) To Marx, equipment and raw materials do not create value; they merely transfer their own value to the commodity. (True/False)

(b) The relation between constant and variable capital is described by Marx as the organic composition of capital. (True/False)

Q 5: To be commodities, things must have double characteristics. What are the two characteristics? (Answer in about 30 words)

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Q 6: Mention the components of total value in the Marxian system. (Answer in about 20 words)

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11.7 THEORY OF ECONOMIC DEVELOPMENT

The theory of capitalist development of Karl Marx is the most penetrating examination of the capitalist process of production. Marx interpreted the history materialistically and established "the economic laws of motion of modern society." According to Haney, Marx puts Hegel's

dialectic upon a materialistic basis, and made social evolution a matter of material and economic forces. Marx observed that all societies, all economic and social institution are on constant change. To him no idea, no system remains the same, everything is on change. Development is change and change is development. Behind social development, there is a class struggle which is related to the mode of production and production relation. To Marx, "all history is the history of class struggle" and this is a mechanism that leads to social change.

The fundamental idea of Marx's theory of capitalist development is that the capitalist accumulates out of the fruit of labour, expands production for profit and it is for profit that the wheels of capitalist production move. According to Marx, in the capitalist system of production, the capitalist owns the means of the production and employs labour power as a commodity. The workers produce and create value for the capitalist against which they only receive the subsistence wage. According to G. Meier and R. Baldwin, Marx quite clearly believed that under capitalism the real wage of workers will not rise, but will instead hover around the subsistence level. As mentioned in the earlier section, the value of a commodity according to Marx, consist of Constant Capital (C), Variable Capital (V) and Surplus Value (S). Thus the total value of a commodity may be expressed as,

W=C+V+S.

Marx divided the total output of an economy into two departments- department (1) producing capital goods and department (2) producing consumer goods. The total output of each department may be presented as,

$$w_1 = c_1 + v_1 + s_1$$
$$w_2 = c_2 + v_2 + s_2$$
$$w = c + v + s$$

In a simple reproduction scheme, all that is produced is consumed and there is no accumulation or surplus. The value of total constant capital in both the department (C_1+C_2) must equal the output of department 1 (C_1+V_1+S_1) i.e,

$C_1+C_2=C_1+V_1+S_1$

Or $C_2=V_1+S_1$

Similarly, the total consumption in both the department ($V_1+S_1+V_2+S_2$) must equal the total output of department 2 ($C_2+V_2+S_2$) i.e,

$C_2+V_2+S_2=V_1+S_1+V_2+S_2$

Or $C_2=V_1+S_1$

In the extended reproduction scheme, Marx has shown that capital accumulation takes place because production on department 1 (capital sector) is greater than the demand for constant capital in both the department i.e.

$C_1+V_1+S_1>C_1+C_2$

Or $V_1+S_1>C_2$

In other words, the accumulation taking place is being invested in employing more labour (V_1) and means of production (S_1) in department 1 than in department 2.

According to Marx, the surplus value which is created by labour power goes to the hands of the capitalist in the form of the capital accumulation and is invested by the capitalist in the form of constant capital. The capitalist production system expands and economic progress takes place. Marx established the relation between constant capital and variable capital $\left(\frac{c}{v} or \frac{c}{c+v}\right)$ and termed it as the "organic composition of capital". The goal of the capitalist is to increase the mass of surplus value and this is achieved by raising the rate of exploitation i.e. the ratio of surplus value to variable capital $\left(\frac{s}{v}\right)$. The accumulation takes place through surplus value which goes on increasing with the change in the organic composition of capital. The "Reserved army of unemployed" tends to increase with this change in the organic composition of capital. And the increase in the reserved army of unemployed leads to a fall in the rate of profit. Apart from it, the capitalist increases the degree of exploitation by reducing wages, lengthening the working hours and introducing labour saving devices. The

crisis deepens with further increase of unemployment, the working class people lose their purchasing power and they become more and more impoverished. In this worsening situation, the capitalist production almost comes to a halt and the working class people become organized, united and disciplined. They can identify their cause of misery and they no longer remain a class by itself but becomes a class for itself. The society gets radicalized and expropriators are expropriated. The capitalist system gets overthrown and the 'dictatorship of the proletariat' is established. Thus the theory of capitalist development of Marx depicts how the capitalist system grows and meet its inevitable fall. This Marxian analysis of capitalism production system and its inevitable fall because of its inner contradiction gives rise to a new production relation in which the working class people under the state ownership of all material means of production produce for themselves.

The Marxian theory of capitalist development has been severely criticized by the opponents of Marx on the following grounds:

- In the real world we are confronted with tangible price and not with values as such. This has made it difficult to understand the working of capitalism.
- Marx is trapped by the labour theory of value as he measured everything in terms of man-hour. He did not consider profit or interest or cost payment necessary for the production process to go on.
- Marxian analysis and his prediction are yet to be proved to be true. Unlike Marx, the working class people are now in better place with rising level of wage, increasing standard of living and adequate social security.
- In modern times, the fixed capital cannot be treated as unproductive; instead it is considered as an essential requirement of rapid economic growth.
- According to Mrs. Joan Robinson, "Marx's explanation of the falling tendency of profit explains nothing at all." To her, Marx failed to visualize that technological innovation can be capital saving too and this may increase the rate of productivity, wages and profit.

- Though Marx wanted to explain a dynamic process of development, his theory of development is static one.

But despite the criticisms, the Marxian theory of capitalist development is one of the most logical and rational studies of the process of capitalist growth and decay. According to Meier and Baldwin, Marxism must be understood as "the appealing political religion challenging the future of the poor and the rich countries alike."



ACTIVITY 2

List out the differences between capitalism and socialism as economic systems.

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CHECK YOUR PROGRESS

Q 7: State whether the following statements are True or False

(a) To Marx, all history is the history of class struggle and this is a mechanism that leads to social change. (True/False)

(b) Through 'dialectical materialism' Marx explained how changes in the society take place. (True/False)

Q 8: What is meant by surplus value in the Marxian analysis? (Answer in about 20 words)

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11.8 LET US SUM UP

- Karl Marx was remain as the undisputed leader in socialistic thought for a generation because of his contributory work Das Kapital (Capital),1867, which came to be called as the Bible of the scientific socialists.
- Socialism as an economic ideology tries to establish an egalitarian

classless society where competition is substituted by cooperation and the material means of production are owned by the whole community, controlled by the central economic planning and utilised for maximising social welfare level.

- The concept of 'socialism', as derived from Karl Marx's analysis is described as 'scientific socialism'. The word scientific is used to distinguish the Marxian socialism from the early socialist theories known as utopian.
- Marx put Hegel's dialectic on materialistic basis and made social evolution a matter of material and economic forces. In his 'dialectical materialism', Marx explained how changes in the society take place.
- According to Marx, a commodity must possess utility, is the product of human labour and is produced with the sole objective of selling it in the market.
- Karl Marx developed his theory of surplus value in order to explain the capitalist exploitation of the working class people on one hand and the accumulation of capital and the crisis of the capitalist production system on the other.
- The fundamental idea of Marx's theory of capitalist development is that the capitalist accumulates out of the fruit of labour, expands production for profit and it is for profit that the wheels of capitalist production move. The theory of capitalist development of Marx depicts how the capitalist system grows and meet its inevitable fall.



11.9 FURTHER READING

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3. Meier, G. and Baldwin, R. (1973). *Development: Theory, History,Policy.* Bombay: Asia Publishing House.
4. Paul, R.R. (1999). *History of Economic Thought.* New Delhi: Kalyani

Publication.

5. Robinson, Joan (1949). *An Essay on Marxian Economics.* London: Macmillan and Co.
6. Schumpeter, Joseph (1947): *Capitalism, Socialism and Democracy.* Second Edition. New York: Harper and Brothers.

11.10 ANSWERS TO CHECK YOUR PROGRESS

Ans to Q No 1: (a) False (b) False

Ans to Q No 2: The common features of socialism are as follows:

- Socialism tries to establish an egalitarian classless society
- In socialism, competition is substituted by cooperation
- In socialism the material means of production are owned by the whole community
- Means of production are controlled by the central economic planning and utilised for maximising social welfare level.

Ans to Q No 3: The inevitable outcome of the capitalist production system through a revolutionary change towards a better social order of socialism is scientific socialism.

Ans to Q No 4: (a) True (b) True

Ans to Q No 5: To be commodities, things must have a double character viz. use value and exchange value. Use value of a commodity refers to its material qualities and is related to satisfaction of human wants. On the other hand, exchange value refers to the social use value of the commodity.

Ans to Q No 6: In the Marxian system, the total value is composed of three elements viz. Constant Capital (C), Variable Capital (V) and Surplus Value (S).

Ans to Q No 7: (a) True (b) True

Ans to Q No 8: In the Marxian analysis surplus value is the difference what the labourers produce and create in the production process and what they ultimately receive because of their contribution in the production process from the capitalist class.

11.11 MODEL QUESTIONS

Short Questions (Answer each question in about 150 words)

Q 1: Briefly explain the meaning and features of Socialism.

Q 2: Briefly explain the concept of surplus value.

Q 3: Distinguish between socialism and Marxian scientific socialism.

Q 4: Write a short note on Marxian analysis of capitalist exploitation.

Essay-type Questions (Answer each question in about 300-500 words)

Q 1: Explain the theory of value as developed by Marx.

Q 2: Discuss the concept of Marxian scientific socialism.

Q 3: Explain in details the Marx's theory of capitalism development.

Q 4: Marx wanted to establish the "economic law of motion of modern society." Explain the idea behind the statement.

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UNIT 12: THE MARGINALIST SCHOOL - JEVONS, MENGER AND WALRAS

UNIT STRUCTURE

12.1 Learning Objectives

12.2 Introduction

12.3 Marginalist School

12.4 Economic Thoughts of Jevons

12.5 Economic Thoughts of Menger

12.6 Economic Thoughts of Walras

12.7 Let Us Sum Up

12.8 Further Reading

12.9 Answers to Check Your Progress

12.10 Model Questions

12.1 LEARNING OBJECTIVES

After going through this unit, you will be able to-

- learn the meaning of marginal analysis
- outline the salient features of the marginalist school
- understand the economic contributions of Jevons, Menger and Walras - the founder members of the marginalist school
- explain the concept of general equilibrium

12.2 INTRODUCTION

The development of the marginal utility analysis in value theory is commonly associated with Jevons and the Austrian School of thought. The year 1871 marked a turning point in history of economic thought. It witnessed the emergence of the marginal school. The important feature of this new school was the introduction of marginal analysis. Jevons, Menger and Walras were the founder members of this school. In this unit we are going to study their contribution to the field of economic thoughts.

Jevons' Theory of Political Economy (1871) appeared in England, Menger's Principle of Economics (1874) in Austria and Walras' Elements of Pure Economics (1871) in Lausanne. The priority of this School was the use of Mathematics in Economic Analysis and the theories of value and distributions of the new economics stand in sharp contrast with those of traditional economics. This unit will cover these areas and will present an analysis of the marginalist school.

12.3 MARGINALIST SCHOOL

The traces of the marginalist school of economics may be found in the old writings of David Ricardo, but in true sense marginalism as a paradigm in economic science emerged after the discovery of the principle of "marginal utility". And this principle became the fundamental building block of marginalism. The idea of marginalism, as a new kind of economic analysis was brought to the fore of economic analysis by Jevons, Menger, and Walras. The marginalist school asserted that by using marginal tools it is possible to arrive clearly and accurately at the point of maximization of any economic behaviour.

The concept of "marginal utility" is considered as a basic tool of economic analysis and it was developed by Jevons who led the Austrian School. Similarly, Gossen from England will remain ever important in the history of economic thought for formulating the seminal law of "diminishing marginal utility". Gossen maintained that when a consumer buys different goods, he equates their marginal utilities in order to derive the maximum satisfaction. Inspired by the writings of Gossen, Jevons attempted a comprehensive theory of value on the basis of marginal analysis. He developed the concept of "final degree of utility" from the last unit of commodity and equalized value to it. Based on the analysis of marginal principle, Jevons derived that every work involves some disutility and only some moderate amount of pleasure. Following this tradition, J.B.Clark, an American marginalist, developed the "marginal utility theory of value" and "marginal productivity theory of distribution", which are considered to be

the assets of the marginal school.

The marginalist school left their legacies even in the modern school of economics by providing an important tool of analysis in terms of maximization behaviour of an economic problem. The modern school uses marginal tools to solve even complicated problems in applied economics. Alfred Marshall, the neo-classical economist, made extensive use of the marginal tools in his consumer behaviour analysis and value theory. However, in modern times the marginalist school faces different criticism from different quarters. One of such challenges has come from the writers like Hall and Hitch, who have empirically challenged the concept of marginalism by stating that the price of commodity is not determined on the basis of marginal revenue and marginal cost but on the basis of their full average cost.

12.4 ECONOMIC THOUGHTS OF JEVONS (1835-1882)

William Stanley Jevons was born in Liverpool, England in the year 1835. He was a thoughtful man, much given to introspection, and possessed of a very inquisitive mind. He attended University College School and UniversityCollege, London and in 1854 was made assayer of the mint at Sydney in Australia. After coming back he became a lecturer at Owens College and then a Professor at University College (1876-1880). He died in 1882 in a tragic accident of drowning.

In his Principles of Science (1874), Jevons discussed his ideas on logic and Scientific method. The proper method for scientific research is hypothetic-deductive method. The procedure followed in this method is:

- Framing of hypothesis on the basis of observed facts.
- Drawing deduction from the hypothesis, and
- Comparing the deductions with particular facts.

Unlike Mill, Jevons advanced no special logic for Social Sciences. He wanted economic Science to follow the same methodology as followed by physical sciences and to become as exact an abstract science as the physical sciences are.

Jevons' Political economy, while treating of the wealth of nations with the purpose of teaching how the poor can be made as few as possible and all be well paid for their work, inquires how wealth may be best consumed. Consumption takes a distinct place and puts it before production and distribution.

Thus, Jevons emphasised on wants and their satisfaction by utilities. "The most important law in the whole political economy" is the "law of variety" in human wants: - each separate want is not satisfied, yet there is no end to wants. He employed the word "Utility" to denote the abstract quality whereby an object serves our purposes. He does not allow moral considerations. Jevons related commodities to utility in the following ways. The aim of economics is to maximise utility or to help an individual to secure the greatest amount of what is desirable at the expense of the least that is undesirable. And the commodity is an 'object, substance, action or service which can afford pleasure'. Thus, it is by consuming a commodity that an individual can maximise utility.

Jevons also derived the law of diminishing marginal utility and the law of equi-marginal utility. According to the law of diminishing marginal utility, as stated by Jevons, the 'final degree of utility' for a commodity declines as its quantity increases. Marginal utility was defined as the last additions or the next possible addition of a very small or infinitely small quantity of the existing stocks.

Mathematically, if ‘u’ stands for utility and ‘x’ is the commodity, then the final degree of utility is the differential coefficient of u with respect to x, i.e. du/dx.

With the help of law of diminishing marginal utility Jevon arrived at the 'equation of exchange expressing the condition of consumers' equilibrium and thus farming the basis of his theory of exchange. He derived his equation of exchange as follows:

$$\frac{f_1(a-x)}{\propto_1 y} = \frac{y}{x} = \frac{f_2 x}{\propto_2 (b-y)}$$

The equation states that

$$= \frac{\begin{pmatrix}\text{marg.utility}\\ \text{of cornto A}\end{pmatrix} \times \begin{pmatrix}\text{quantity available}\\ \text{at the exchange}\end{pmatrix}}{\begin{pmatrix}\text{marg. utility}\\ \text{of beef to A}\end{pmatrix} \times \begin{pmatrix}\text{quantity of}\\ \text{beef exchanged}\end{pmatrix}} = \frac{\text{quantity of}\ \text{beef exchanged}}{\text{quantity of}\ \text{corn exchanged}}$$

$$= \frac{\begin{pmatrix}\text{marginal utility}\\ \text{of corn to B}\end{pmatrix} \times \begin{pmatrix}\text{corn}\\ \text{exchanged}\end{pmatrix}}{\begin{pmatrix}\text{marginal utility}\\ \text{of beef to B}\end{pmatrix} \times \begin{pmatrix}\text{quantity available}\\ \text{of the exchange}\end{pmatrix}}$$

Jevons says that the only unknowns in this equation are x and y, i.e., the quantities of the two commodities exchanged.

The theory of Labour supply:

Jevons applied his theory of utility in order to being out a theory of labour supply. He pointed out that labour has two aspects-

- Positive aspect i.e. utility of labour, and
- Negative aspect, i.e. disutility of labour.

Labour has utility because it is rewarding in terms of wages and it has disutility because it is a painful exertion of mind and body.Labour will be supplied as long as the utility of labour is more than the disutility of labour and will be supplied up to that point where the utility and disutility are equal.

The theory of Capital and Interest:

Following Ricardo, Jevons defined capital to mean wages-fund and regarded it a matter concerning time. Capital consists merely in the aggregate for sustaining labours of any kind or class engaged in work.

Jevons broadened the concept of capital by including in it all the consumable articles in the hands of consumes. Capital is also related with time.It is a time lag that separate initial employment of labour in a production project and the final output. Capital is therefore, required to maintain labour during thetime lag. Therefore, capital allows expanding labour in advance.

In emphasising the temporal aspect of capital, Jevons distinguished between the amounts of investment in capital. According to him, the first is concerned with the amount of investment and the second with the amount as well as the period of investment. The amount of investment of capital is

therefore determined by the amount of capital invested multiplied by the average time for which it remains invested.

Thus, as Jevons assumes, if capital is invested and invested continuously and in simple proportion of time, then the amount of investment will be in every case the greatest amount of capital multiplied by half the time lapsing from the beginning to the end of investment.

Appraisal :

Jevons' analysis, though original,is somewhat confusing and incomplete. It is true that he brought in many new ideas but did not fully work them out. It was economists like Walras, Weeksteede, Marshall, BohmBowerk who elaborated his ideas and examined their limitations.

Jevons has been criticised by pointing out that the degree of utility depends partly upon supply, which in turn is subject to limitation of cost. Indeed, Jevons himself goes on to admit that labour plays a part as a determining circumstances, indicating that labour affects supply, supply affects utility.

He has been further criticised in two matters of importance - first, he confuses demand price and in the second place, he did not explain properly in substituting the idea of social utility for that of Individual utility.



CHECK YOUR PROGRESS

Q 1: Mention the simple logic on which the Marginal analysis is based.(Answer in about 30 words)

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Q 2: State the law of diminishing marginal utility, as stated by Jevons.(Answer in about 40 words)

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12.5 ECONOMIC THOUGHTS OF MENGER (1840-1921)

Carl Menger, the father of the Austrian School, was born in Galicia. He received his education from the university of Vienna and Prague. He was famous both as a teacher and a scholar. His most important works are:

- Principles of Economics(1871)
- Investigations into the Methods of Social Sciences (1883)
- On the Theory of Capital (1888).

The main contributions of Menger to the history of economic thought are as follows:

- **Method:** Menger offered subjective approach to economic theory and advocated deductive method. He held that economic phenomena are the outcome of behaviour of individual and so, one must study the behaviour of individual to understand the economy. Individual was the centre of analysis for Menger.
- **Needs:** According to Menger, human needs, goods and the law of cause and effect are the basic elements of economic science. Satisfaction of human need is the ultimate goal of the economy and the welfare of the society depends on this satisfaction. Man's conscious effort to live a harmonious life, thought and reasoning are parts of needs. There exist both individual needs and social needs. Fulfilment of social needs is the goal of social economics while satisfaction of individual needs is the goal of individual economics.
- **Theory of Goods:** Menger, on technical grounds,has made a systematic discussion on different types of goods available in the economy. He has classified the order of goods and the order is fixed according to their direct or indirect relation with which the goods satisfy human wants. Goods of the first order satisfy human wants immediately while goods of the second and higher order satisfy human wants only indirectly. Consumption goods are generally the first order goods where as production and capital goods are the second and higher order goods.On the basis of cause and effect relation, Menger has established a relation

between a commodity and satisfaction derived from it. A thing can be termed as 'good' if it satisfies the following qualities:

- There should be a human want.
- It must possess the power to satisfy human wants.
- The consumer must recognize the want satisfying capability of the commodity
- The consumer has the power and ability to apply the good to the satisfaction of want.

Moreover, Menger has divided goods into economic and non-economic goods. The goods which are scarce in supply in relation to demand are economic goods. Again, the goods which are plentiful in supply in relation to demand are termed as non-economic or free goods. Of course, he has pointed out that this classification is not permanent, rather it is relative.

- **Theory of Value:** Menger's subjective theory of value is one of the important contributions to economic thought. Scarcity is the single cause of the economic character of goods. Menger observes that the value of a good arises from its relationship to human needs, and it is inherent in the good itself. As relationship differs, value will differ. We generally satisfy the more important needs first and the less important needs subsequently. Menger held the view that value is not dependent on the total utility, but on the lowest utility one derives from the good. He held the view that a product's value is fixed in its ability to satisfy human wants. Besides, actual value is dependent on the product's utility in its least important use.According to him, supply determines the value of a commodity. An increase in the supply of a good decreases its subjective value for an individual. This insight lies behind the concept of "Law of Diminishing MarginalUtility". Value has nothing to do with the cost of production. A commodity that is valuable for one person may not be valuable at the same rate to another person.The value of the commodity depends on the requirements of the individuals and the amounts available to each person.
- **The Theory of Imputation of value:** Menger developed his theory of imputation while analysing different categories of commodities. His

theory of distribution is also based on his theory of imputation. The imputation theory tells that the value of a good of higher order is derived from the value of a lower good to which it contributes. For example, the value of flour depends on the value of bread. Similarly, the value of labour depends on the good it produces. From this observation, Menger develops the marginal productivity theory of distribution. The share of a factor is to be determined by the loss in value which the product would suffer if that factor was withdrawn from the production process. In other words, the value of a factor of production depends on the marginal value of productivity of that factor. Imputation is a term which makes the value of productive agents rest on the value of their products.



CHECK YOUR PROGRESS

Q 3: Who was the founder of the Austrian School?(Answer in about 20 words)

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Q 4: Mention the main drawbacks of Menger's theory of subjective value.(Answer in about 20 words)

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12.6 ECONOMIC THOUGHTS OF WALRAS (1834-1910)

Leon Walras (1834-1910), the leader of the Lausanne School, was one of the founders of the Marginalist school. He wrote a book 'Elements d' economic politique pure' (Elements of pure Economics) which was published in 1874 after Jevon and Menger. He was an independent thinker but he followed mostly Jevons' ideas. He constructed a modified system based upon mathematical analysis.

Walras made economics an abstract science, distinguishing pure economics from applied economics, on the one hand, and from social economics on the other. According to him, economists had given too much,

attention to exceptional cases, such as old masters pictures. He has also authored the book "Mathematical Theory of Exchange".

He neglects the action of impulses and employs the general hypothesis of exchanges between payments who seek in exchanging to secure the greatest possible satisfaction of their desire.

According to him, social wealth consists of all things, material or immaterial, which have utility and are limited in quantity. The amount of value of external things is proportional to the amount of satisfaction it brings. There is no direct relation between supply and price but there is a relation between demand and price. The cause of such relation is utility.

For Walras, it is rareté, which he defines as "the intensity of the last want satisfied." According to him, given two commodities, say it the utility and the quantity of one of the two commodities in respect to one or more exchanges various, so that the rareté varies, then the value of that commodity in relation to the other, or its price will also vary.

Theory of Capital and Interest:

A notable contribution of Walras was the theory of Capital and Interest. He distinguished between capital goods and their services. Firstly, he called fixed capital as that part of social wealth which is not used up at all or are used only after a gap of time. Secondly, it is the circulating capital or income which is treated as part of social wealth which is used up immediately.

Walras' analysis strictly refers in terms of fixed capital. Symbolically it may be written as.

p = p - (u+v). P

Where,

p is the net value of capital good

p is the annual goods value of the capital good

P is the price of the capital good and u and v are the portions of P allowing for depreciation and an insurance respectively.

It explains that, at a given rate of interest, the prices of capital goods are rigidly proportional to net revenues.

General Equilibrium model:

Leon Walras was the first economist to develop a general equilibrium model of the economy. In the Walrasian system, at the beginning of each period the economy has initial endowment of resources which are distributed among the different economic agents. The economic process begins from the meeting of this economic agent in the market. Agent may be a consumer and/or a supplier of factors of production and/or a producer. Agent comes to the market with fixed amount of endowment and they want to get best possible deal while exchanging their endowment.

Every agent is guided by self interest. As consumer they try to determine the way in which their consumable income is to be spent in buying the various goods so as to attain maximum utility. As a supplier of factors of production an agent tries to obtain the best balance between the income received for supplying such factors and the sacrifice involved in their supply. The producer try to maximise the profit by maximising the difference between the values of the goods produced and cost incurred in producing them.

The central problem of the Walrasian system is that in an economy agents are well informed, self interested and are independent. Thus there must be something which will coordinate all the activities of the economic agents. And according to Walras it is the price which coordinates the activities of the economic agents. Price is the parameter on the basis of which choice and decision are made. According to Walras prices are not independent and they are decided by choice. Price and choice are keep on changing till they become consistent with each other and once they become consistent, there will be the state of general equilibrium. An economy can be in general equilibrium only if the entire economic agent such as consumers, producers and supplier of factors of production are in equilibrium simultaneously.



CHECK YOUR PROGRESS

Q 5: Who was author of the book 'Mathematical Theory of Exchange'

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Q 6: State the Walrasian concept of fixed capital. (Answer in about 40 words)

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12.7 LET US SUM UP

- Marginal Analysis lays down the necessary and sufficient conditions which must be fulfilled so that the scarce resources are to be optimally allocated.
- According to Jevons economics is a science which deals with subjective but calculable phenomena.
- Utility is a term employed for the feelings of pleasure and pain.
- The law of diminishing marginal utility according to Jevons is the final degree of utility for a commodity declines as its quantity increases.
- Menger was of the opinion that Goods are divided into different classes or 'orders', according to their nearness to the consumer
- Walras made economics an abstract science, distinguishing pure economics from applied economics, on the one hand, and from social economics on the other.



12.8 FURTHER READING

1. Brue, S.L.and Grant, R.R.(2012).*The Evolution of Economic thought.* South-Western: Cengage Learning.
2. Haney, L. H. (1977). *History of Economic thought.* Delhi: Surjeet Publications.

3. Paul, R. R. (1999). *History of Economic thought.* New Delhi: Kalyani Publication.
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12.9 ANSWERS TO CHECK YOUR PROGRESS

Ans to Q No 1: Marginal analysis is based on the simple logic of decision making, i.e. an action will be performed only if it adds benefits more than the effort made on it. It lays down the necessary and sufficient conditions which must be fulfilled if the scarce resources are to be optimally allocated.

Ans to Q No 2: The law of diminishing marginal utility, as stated by Jevons, the 'final degree of utility', for a commodity declines as its quality increases.

Ans to Q No 3: Carl Menger was the founder of the Austrian School.

Ans to Q No 4: The main drawbacks of the Menger theory of subjective value are-

a) He restricts his analysis to the isolated exchange between two individuals and
b) He neglects the concept of cost.

Ans to Q No 5: Leon Walras was the author of the book 'Mathematical Theory of Exchange'.

Ans to Q No 6: According to Walras fixed capital as that part of social wealth which is not used up at all or are used only after a gap of time

12.10 MODEL QUESTIONS

Short questions (Answer each question in about 150 words)

Q 1: Briefly explain the concept of marginal analysis.

Q 2: Mention the name of some of the contributors of marginal school.

Q 3: Briefly explain the subjective theory of Value.

Q 4: Give a brief idea of the general equilibrium technique of Walras.

Essay-type questions (Answer each question in about 300-500 words)

Q 1: Evaluate the contribution of Jevon to economic thought.

Q 2: Leon Walras is regarded by some as one of the greatest economists on the world. Discuss his contribution to history of economic thought.

Q 3: Examine Walras theory of capital and Interest

Q 4: Explain the contribution of Jevon and Menger to the marginal revolutions and also point out their economic ideas.

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UNIT 13: THE AUSTRIAN SCHOOL - BOHM-BAWERK AND WIESER

UNIT STRUCTURE

13.1 Learning Objectives

13.2 Introduction

13.3 The Austrian School and Its Main Principles

13.4 Economic Thoughts of the Austrian Economists

13.4.1 Bohm-Bawerk

13.4.2 Wieser

13.5 Criticism of the Austrian School

13.6 Let Us Sum Up

13.7 Further Reading

13.8 Answers to Check Your Progress

13.9 Model Questions

13.1 LEARNING OBJECTIVES

After going through this unit, you will be able to-

- Know the tenets of the Austrian school
- describe the economic thoughts developed by the Austrian economists
- make a comparative study of the economic thoughts of Menger, Bohm-Bawerk and Wieser

13.2 INTRODUCTION

This unit aims at familiarizing you with the economic ideas of the Austrian school. The Austrian school can be regarded as a reaction to the classical school as it advocates subjectivism against the objectivism of the classical school. Of course, it did not only criticize the classical school, but restructured the economic theories on the basis of marginal analysis. The Austrian school emphasized the utility of a product to the consumer while determining its value and they analysed the causes of problem more directly.

According to this school, value determines the cost of production and the vice-versa does not happen.

13.3 THE AUSTRIAN SCHOOL AND ITS MAIN PRINCIPLES

The Austrian school, also known as psychological school, comprises of the body of economic principle developed by the Austrian economists in the late 19th century. Carl Menger has been recognized as the founder of this school. Bohm-Bawerk and Friedrich Ven Wieser are considered as the co-founders of this school. In fact, Menger, Bawerk and Wieser - are the three pillars of this school. Friedrich A. Hayek and I. M. Kirzner are the other economists of this school. The Austrian school is a part of the subjective school. The other division of the subjective school is the mathematical school in which mathematics is widely used as the economists of this school believed that economic phenomena can be expressed quantitatively. In the following we will discuss the main principles of the Austrian school-

- **Methodological Subjectivism:** The Austrian School has given more emphasis on subjectivism. It is the central methodological principle of Austrian thoughts. The economists of the Austrian school believe that only an individual knows his actions and choices. Therefore, to explain economic phenomena, we have to depend upon the judgements and choices made by individuals on the basis of their knowledge and expectations. They held the idea that an individual's values, plans, expectations and understanding of reality are subjective. So, in explaining observable economic behaviour, they have given much importance on the subjective nature of individual intentions, evaluations and expectation. This subjective valuation of human action leads to the creation of economic value. C. Menger explained that the economic value of goods and services are subjective in nature. Hence, what is valuable for one person may not be valuable at the same rate to his neighbour. They used the deductive method of analysis.

- **Methodological Individualism:** Individualism happens to be the focal point of study for the Austrian school in dealing with all economic theories.According to the Austrian economists, only individuals act and so, the main object of study is an individual for them. They believed that in the explanation of economic phenomena only the actions of individuals, not of groups, should be taken into consideration. They held that men behave rationally in balancing their pleasure and pain. And, therefore, for them the determinant of a valid economic theory is only the basic principles of human action. The motivating force in the economic life of all individuals is human wants. Pleasure and pain or the feelings of an individual determines the direction of economic activities; enables him to choose among the alternative utilities.That is, man, in his economic activities, is primarily motivated by the anticipation of pleasure. Value depends on marginal utility and marginal utility is derived/ originates from human needs. Thus, it can be observed that the psychological analysis of the Austrian school is nothing but "individualism".
- **Marginalism:** The Austrian school concentrated on the 'margin' to explain economic phenomena. According to this school, all economic discussion are made at the point of margin. They did not deal with the aggregate economy. In Austrian School of thought subjectivism gives rise to individualism and psychological analysis which, in turn,leads to marginalism because the focus of attention is concentrated on 'points' or 'degree'.
- **Tastes and Preferences:** Subjective valuation of commodities and services determine the demand for them. In other words, market prices are influenced by consumers. The allocation of a consumer's income to a particular good amongst different goods is influenced by the diminishing marginal utility of each good.
- **Opportunity Cost:** The Austrian school uses the concept of opportunity cost in their analysis. The cost of a factor of production can be determined by its utility in some other alternative use - i.e., an opportunity forgone.



Activity 1

Try to differentiate between the Austrian school and the Mathematical school.

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CHECK YOUR PROGRESS

Q 1: Who are regarded as the pillars of the Austrian School? (Answer in about 20 words)

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Q 2: Explain the concept of Marginalism of Austrian School. (Answer in 30 words)

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Q 3: What is meant by individualism in economic thinking? (Answer in about 40 words)

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13.4 ECONOMIC THOUGHTS OF AUSTRIAN ECONOMISTS

In the above discussion,the basic tenets of the Austrian school have been discussed. In this section of the unit, a discussion is carried out regarding the economic thoughts of the Austrian economists- Bohm-Bawerk and Wieser only as in the unit 12 we have already discussed about Carl Menger who is known as the father of Austrian school.

13.4.1 Bohm-Bawerk (1851-1914)

Bohm-Bawerk was born at Bruun, in Moravia, Austria in 1851. He studied law, political science and political Economy. He was a Professor of Economics in the University of Vienna and most widely known member of the Austrian School. His famous works are:

- The theory of Interest(1884),
- Outlines of the Theory of Commodity Value(1886)
- The Positive Value of Capital(1889)

Bohm-Bawerk's chief contribution to the history of economic thoughts lies in the theory of interest and capital. He was the only Austrian economist who gave importance to the three factors of production- land, labour and capital.

- **Agio Theory of Interest:** Bohm-Bawerk's Agio Theory of Interest is also known as the 'Time Preference Theory'. His theory of interest is called Agio theory of Interest because it is built on the concept of 'Agio'- a premium which the present always carries as compared to the future. It is also known as 'Time Preference Theory of Interest.'In his theory of interest, Bohm-Bawerk introduced the importance of time element in the determination of the rate of interest. According to him, human beings prefer present satisfaction to future satisfaction. It is considered that the present goods are more valuable than future goods. If people save, they have to postpone their satisfaction from present consumption. So, if you want people to postpone their present satisfaction, you have to pay them some compensation and this compensation is interest.

  People's tendency to prefer present satisfaction, according to Bohm-Bawerk, is due to the following three reasons:

  - People over estimate future resources. Hope is the cause of this. Present wants are felt more strongly than the future wants.
  - People underestimate the future needs. Future is not clearly

visualized due to lack of imagination and weakness of will. These two causes are psychological and they help to increase the marginal utility of goods in the present as compared to the future. Therefore, they create an Agio or a premium on the present goods.

- Ø The third factor to prefer present is of a technical nature. There is technical superiority of the present goods over the future goods. The whole progress of civilization on its technical side consists in adoption of more 'roundabout' methods of production. It is a time consuming process. We do not know the nature of the commodity to be produced in future. And, due to this uncertainty of things in future, people consider present goods as more valuable than future goods. Hence present goods possess technical superiority over future goods.

  The capitalist has to wait for return of his invested money in production due to complexity of capitalist system. Other factors of production demand immediate payment for their services. Since only the capitalist waits for his return, he has to be given some reward and that reward is interest.

- **Theory of Capital:** Bohm-Bawerk discusses the nature, origin and functions of capital. He defines capital 'as a group of products which serve as a means to the acquisition of goods'. He treats capital as a factor of production because it is the source of income in the form of interest. According to him, capital is a produced means of production. Production takes place with an aim to make goods for consumption. Production can be done both by direct and indirect methods. The indirect method is a round-about method in which more time is needed. Producer goods (capital) are produced in the round-about method and then, producer goods are used for production of consumer goods. Capital is the result of production. According to him, capital is an intermediate factor whose supply is dependent on land

and labour used for the production of capital in the past. It is not an independent factor of production. There exists a close connection between saving and capital formation. So far as satisfactions of wants are concerned, capital goods can be regarded as future goods. The distinction between the original factor of production and the produced factor of production is very crucial for Bohm-Bawerk.

Capital is important in production because it makes it possible to introduce more productive and at the same time, more time-consuming round-about method of production. Productivity in this production method increases due to technical improvement. The round-about method is time-consuming and it can impose a check against the production of capital in abundance. Time limits the magnitude of investment and one has to wait for return.Again, it is noticed that the total product increases at a diminishing rate with every increase in time required for production.

According to Bohm-Bawerk capital is stored-up labour and hence, the more the capital, the older is the average age of the capital stock. Of course,it will be possible only when the concept of capital includes only circulating capital. This working capital is used to support labour during the time of gestation period of production. Since labour remains fixed, more capital per worker will be required for longer production period. Bohm-Bawerk also distinguished between social and private capital. Social capital refers to intermediate products required for further production. Private capital includes production goods (social; capital) as well as all durable consumption goods and means of subsistence given by entrepreneurs to labourers. The concept of social capital is important in the theory of production whereas the concept of private capital is important in the theory of distribution.

13.4.2 Friedrich Von Wieser(1851-1926)

Friedrich Von Wieser was born in 1851. He received his education at the universities of Vienna, Berlin and Prague. He was a professor of political economy at the University of Vienna. He was very much influenced by the theory of marginal utility propounded by C.Menger. He was the first Austrian economist to discuss the problem of resource allocation. His main works are:

Principal Law of Value (1884), The Theory of Natural Value (1889), The Theory of Social Economics (1914)

- **The Theory of Value:** Wieser explains that cost and utility determines value.Criticising classical labour cost theory of value, he has introduced the cost element in the determination of value. Of course, concept of real cost is not introduced by him. To him, utility is the cause of value; value is a circular process. The value of higher order goods (i.e., the value of production goods) depends on the values of their products. This derived value is regarded as cost. He considers cost in terms of marginal utility. Cost and price become equal at the margin in the pricing process. Thus, his theory of value is based on cost element.

  He explains that the factors of production have a value due to the utility they have conferred on the final product, i.e. marginal utility. He concludes that if a production commodity (factor) is used for the production of several commodities then the value of that production commodity is determined by the marginal or least valuable commodity it produces.Thus, marginal productivity determines the value of a factor. Wieser analyses value also in terms of subjective factors. He explains the law of diminishing marginal utility in connection with his value analysis.

- **Natural Value:** Wieser defines natural value as one which is found 'in a community at a high stage of development carrying on its economic life without price or exchange.'This type of value exists in a communistic state. It is relevant in an economy where

goods are valued simply by the relation between the amount of stock and marginal utilities. According to Wieser, natural value is completely a neutral phenomenon, independent of economic system. However, to formulate natural value it is necessary to have a market system of allocation.

- **Theory of Imputation:** Wieser has enunciated the laws governing the imputation of value to different factors of production under different conditions of supply, demand and quality.In case of producing commodities, the imputation of value follows the marginal law, i.e., the smallest contribution is imputed to every single quantity. Hence, the amount of value imputed to a production commodity will decrease with an increase in its supply and vice-versa. The commodities of the same kind but of different qualities will have different values. Wieser applies this theory to land, labour, and capital to determine rent, wages and profit. Thus, it is really a theory of distribution because it explains how the different factors of production are paid. Every input has a definite share in production and Weiser observes that withdrawal of one factor affects the productivity of other factors.

  Again, the value of input establishes the opportunity cost of utilizing it in other direction. Through the opportunity cost, values of inputs and outputs are determined in a system.In case of consumption commodity, the value is determined by their marginal utility, and the amount of satisfaction that a man derives, depends upon the possession of certain commodities.

- **Social Economics:** In his book 'Theory of Social Economics', Weiser introduces some new ideas.He propounded the theory of welfare in his book of 'Social Economics'. According to him, economics is concerned with social process. Therefore, economics should be based on social economy. There are often social conflicts in the society. There exists domination of one class over the other class. Weiser is of the view that in social economy there are three types of goods - goods which are

consumed mostly by working class and their values are determined by marginal utility of poor. Then, the luxury goods which are used mostly by the rich people and their values are determined by their marginal utility of the rich. The third class consists of intermediate goods which are partly utilised by poor and largely by middle class and their value is fixed by their marginal utility of middle class.In a modern economy, this theory of value cannot help to explain the determination of price because differences in the purchasing power of people are not considered in this theory.

Wieser found the free economy to be socially unjust where competitive capitalism leads to unequal distribution of wealth. The state should play an active role in promoting social welfare by protecting the weak.

Weiser was of the view that social degeneration occurs due to growing urbanisation, increasing oppressiveness and harmful effects of inequalities in wealth. He argued for establishment of trade union as a countervailing force in the labour market, particularly against the exploitation by the monopolist and oligopolist. He was in favour of centralised control for protecting properties, national progress, economic welfare and regulation of social economy.



CHECK YOUR PROGRESS

Q 4: Bohm-Bawerk's theory of interest is known as? (Answer in about 20 words)

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Q 5: State true or false:

Menger used deductive method in his analysis of economic theory. (True/ false)

Q 6: What is round-about production? (Answer in about 30 words)

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Q 7: What are the qualities that a thing should possess to be termed as 'good', according to Menger? (Answer in 40 words)

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13.5 CRITICISM OF THE AUSTRIAN SCHOOL

The main criticisms against the Austrian school are as follows:

- The doctrine of Austrian school relies on marginal utility theory of value. It has been criticised on the ground that it is based on abstract idea and circular reasoning.
- The Austrian thought was a reaction to classical economics. But it has many things in common with classical thought like materialism, individualism and hedonism.
- Marginal utility theory of value of the Austrian school has been criticised on the ground that is it based on a defective analysis of the concept of marginal utility. The Austrians have given more importance to 'want'. But, marginal utility is not an expression of wants only. Besides, the theory is based upon hedonistic concept of pleasure and pain, which cannot be regarded as the effective basis of value.
- The Austrian school neglected the part played by institution and human motives. The feelings of pleasure and pain cannot be only basis of value. Impersonal valuation may also determine individual desires. Social institutions, traditions, distribution of income, instincts, and different psychological factors can determine the nature and direction of economic activities of an individual.
- The concept of 'margin' has also been criticised as margin is only an index of total situation. The condition of scarcity or abundance may affect individual valuation. Again, cost can be determined only by knowing

the expenses incurred over the production of a commodity. The Austrians did not realize this.

- The doctrines of the Austrian school are too individualistic and rationalistic. They have not considered important institutional factors.



13.6 LET US SUM UP

- The Austrian school of economic thoughts, developed by Menger, Wieser and Bohm-Bawerk, rejects the classical ideas and introduces new ideas to economic theory on the basis of subjectivism and individualism.
- The Austrian school uses deductive method in their analysis.
- Marginalism, diminishing marginal utility, costs as foregone utility and imputation of value are considered as the characteristic tenets of the Austrian School.
- The Austrian school is generally regarded as non-mathematical.
- According to the Austrian school, costs of production are also determined by subjective factors based on the value of alternative uses of scarce resources.



13.7 FURTHER READING

1) Hajela, T.N. (1999). *History of Economic Thought.* Delhi: Konark Publishers Pvt. Ltd.
2) Jhingan, M.L., Girija, M. Manimekalai.& A. Sasikala. L. (2010). *History of Economic Thought.* Delhi: Vrinda Publications (P) Ltd.



13.8 ANSWERS TO CHECK YOUR PROGRESS

Ans to Q No 1: Carl Menger, Bohm-Bawerk and Friedrich Von Wieser are regarded as the three pillars of the Austrian school.

Ans to Q No 2: Marginalism refers to the principle that all economic phenomena are to be studied by the significance of the marginal i.e., last unit. All economic decisions, value, cost, revenue, productivity and so on are determined at the point of margin in marginalism.

Ans to Q No 3: Individualism in economic thinking refers to the principle that economic phenomena can be explained by the behaviour of individuals.This principle believes that the motivation and action of individuals exclusively results in social phenomena. Therefore, in explanation of economic phenomena, only the actions of individuals, not of group, are to be considered.

Ans to Q No 4: The theory of interest envisaged by Bohm-Bawerk is known as Time Preference Theory of Interest and Agio theory of interest.

Ans to Q No 5: True.

Ans to Q No 6: Round-about production refers to that production in which productive services i.e., land, labour etc. are used for longer period of production. It makes these services more productive. Production technique is higher in this production.

Ans to Q No 7: According to Menger, a thing should possess the following qualities to be termed as 'good'.

- There should be a human want.
- It must possess the power to satisfy human wants.
- The consumer must recognize the want satisfying capability of the commodity.
- The consumer has the power and ability to apply the good to the satisfaction of want.



13.9 MODEL QUESTION

Short questions (Answer each question in about 150 words)

Q 1: What is meant by subjectivism in economic thinking?

Q 2: Explain the concept of marginalism in value analysis according to the Austrian School.

Q 3: What is meant by 'Agio' in the Agio theory of interest?

Essay-type questions (Answer each question in about 300-500 words)

Q 1: Analyze the concept of 'Interest' as envisaged by Bohm-Bawerk.

Q 2: Show how Wieser's theory of costs is a derivative theory of marginal utility.

Q 3: What are the criticisms levelled against the concepts of the Austrian school?

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UNIT 14: THE NEO-CLASSICAL SCHOOL– MARSHALL

UNIT STRUCTURE

14.1 Learning Objectives

14.2 Introduction

14.3 Difference Between the Classical and the Neo-Classical School

14.4 Features of the Neo-Classical School

14.5 Contributions of Leading Neo-Classical Economists

14.6 Marshall as a Synthesiser

14.7 Economic Thoughts of Marshall

14.8 Let Us Sum Up

14.9 Further Reading

14.10 Answers to Check Your Progress

14.11 Model Questions

14.1 LEARNING OBJECTIVES

After going through this unit, you will be able to-

- know the difference between neo-classical school and the classical school.
- describe the features of the Neoclassical School
- discuss the economic thoughts of Marshall and his role as synthesiser

14.2 INTRODUCTION

In the latter half of the nineteenth century the Marginal revolution took place and it developed in many countries at the same time with different people working separately in different areas. Prominent economists like Stanley Jevons in England, Carl Menger in Austria and Leon Walras at Switzerland are considered to be the founders of the Marginal School of thought and Hermann Heinrich Gossen of Germany to be the anticipator of the Marginalist School. This school had a different outlook towards the

economic problems and concentrated on the 'margin' to explain the economic phenomena and analysed the behaviour of a single firm, the market for a single product and formation of individual prices.

A few years after the Marginal Revolution, a new school developed in different places like England, Austria, Sweden and America. The new school attempted to synthesis the ideas of the Marginal school with the ideas of classical school and came to be known as neo-classical school.Marshall can be regarded as the leader of the Neo-classical school in England and Marshallian Economics applies Marginalism in a comprehensive manner. The Marshallian system of decision making process is inhibited by the reference of margin. Some of the notable neo-classical economists are Knut Wicksell of Swedish (or Scandinavian) School, J.B. Clark, F.W. Taussig and Irving Fisher in America. The neo-classical economists made significant contribution to the theory of money, interest and profit.

14.3 DIFFERENCE BETWEEN THE CLASSICAL AND THE NEO-CLASSICAL SCHOOLS

The neoclassical school differed from the classical school in terms of problem, analysis and approach to the solution of economic problems. The classical economists were concerned primarily with the long run problem of economic growth and how to increase the wealth of nations with limited land and unlimited supply of labour. However, the neoclassical economists were concerned mainly with the short-run problem of allocation of resources to achieve the maximum benefit out of it. The marginal analysis which formed the basis of analysis for the neo-classical school was much popular as it was based on the simple logic of performing an action if it adds more benefits than the effort made to perform the action. Besides, the use of mathematics as a tool finds a prominent place in the economic analysis of the neo-classical school.

In the classical School of thought, the theory of distribution and the theory of value were discussed separately. However the neo-classicists'

were of the opinion that no separate theories of value and distribution were needed and theory of distribution was considered as an integral part of the theory of value.

14.4 FEATURES OF THE NEO-CLASSICAL SCHOOL

The Neo-classical school has certain features which are summarised below:

- The school was mainly concerned with the short-run problem of allocation of resources to achieve the maximum benefit out of it. The utilitarian philosophy, which abridged human behaviour to rational calculation and aimed at utility maximisation, formed the basis of neo-classical school.
- The neo-classical school enjoyed popularity due to its marginal analysis.The marginal analysis was used to explain economic phenomena and the behaviour of economic agents. According to this school, these economic agents must be either individual or at most households or companies.
- The use of mathematics as a tool finds a prominent place in the economic analysis of the neo-classical school.
- The school had no separate theories of value. However the theory of distribution was considered as an integral part of the theory of value. The school substituted the objective theory of value with a subjective one.
- The school also linked economics with natural sciences. Usually Economic laws assumed the natural laws with the characteristics of them being absolute and objective.
- The Neo-classical school changed the name from 'political economy' to 'economics' and Marshall cited one explicit and one implicit reason for the same. The explicit reason was to avoid confusion with vested interest and the implicit reason was to avoid relating economic sciences to any political bodies.
- However, the neo-classical school preserved the basic philosophy of

laissez-faire of the classical school of thought with the difference that Classical school laissez-faire was concerned with the problem of accumulation while the Neo-classical school was oriented towards the allocative efficiency.



CHECK YOUR PROGRESS

Q 1: Why is the Neo-classical school popular? (Answer in about 20 words)

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Q 2: What was the main problem with which the Neo-classical school associated? (Answer in about 20 words)

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Q 3: What are the explicit and implicit reasons cited by Marshall for changing the name from 'political economy' to economics? (Answer in about 30 words)

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Q 4: Why did Economic laws assume the characteristics natural laws? (Answer in about 30 words)

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14.5 CONTRIBUTIONS OF LEADING NEO-CLASSICAL ECONOMISTS

The Neo-classical economists made significant contribution towards the theory of money, interest and profit. The contributions of some of the leading Neo-classical economists are discussed in the sub-sections that follow.

- **Knut Wicksell (1851- 1926):** Knut Wicksell occupies a noteworthy place in the theory of economic thought and is known for his contribution in the fields of capital, interest, monetary theory and price-level.The main contributions of Wicksell include establishing relationship between the rate of interest and general price-level where he analysed the role of inflationary or deflationary price movements. He also contributed towards the saving-investment approach to monetary phenomena and also discussed the role of government and central bank in promoting price stability. Wicksell synthesised monetary theory, public finance, trade cycle theory and price theory into one idea.
- **J.B. Clark(1847-1938):** J. B. Clark is credited to be the leading proponent of 'American Marginalism' who extended the theory of marginal utility to the field of production and distribution. He is accredited to the discovery of marginal theory of productivity independently and clearly demarcated between statics and dynamics by using deductive method of analysis. Clark also made significant contributions to the theory of profits and distinguished between stationary and dynamic economy.
- **Irving Fisher (1867-1947):** Irving Fisher a mathematician turned economist, is deemed as America's greatest scientific economist for his contribution to the Index Number in the theory of statistics. He is known for his pioneering work in the field of econometrics which regarded statistical methods as a part of econometric theory.He also made significant contribution to the monetary theory and formulated the quantity theory of money. Fisher was of the opinion that business cycles were not inherent to an economy; rather it was entirely a monetary phenomenon, which can be cured by stabilising the price level.
- **Taussig (1859-1940):** Taussig was an American economist who synthesised the classical economic theory with the modern theory. His contributions find prominence in the theory of wages and profits and the theory of international trade. He forwarded the modified version of marginal productivity theory of wages. Further, he considered profits as a form of wages.



CHECK YOUR PROGRESS

Q 5: What are the main contributions of Wicksell? (Answer in about 50 words)

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Q 6: What is J.B. Clark accredited for? (Answer in about 30 words)

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Q 7: What are the other significant contributions of Clark? (Answer in about 20 words)

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Q 8: Why is Irving Fisher deemed as America's greatest scientific economist? (Answer in about 30 words)

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Q 9: Where do Taussig's contributions find prominence in the economic theory? (Answer in about 20 words)

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14.6 MARSHALL AS A SYNTHESISER

Alfred Marshall (1842-1924) is considered as one of the most influential economist of his time and is regarded as the true founder of the Neo-classical school. "Economics is a study of mankind in the ordinary business of life"- this is the most common and best known definition of Economics given by Marshall. Marshall was interested in the authenticity of positive economics and emphasised on improving the conditions of the

masses. According to him Economics is not only light-bearing but also fruit-bearing. So he incorporated many human elements in his analysis and his ideas formed the basis of welfare economics.

Marshall also desired to improve and incorporate mathematical rigour into economics and make it more scientific, and he rightly did so in his writings. However, he kept the writings intelligible to any layman by relegating mathematical dimensions in footnotes and in appendix, and not allowing mathematics to overshadow economics. He independently developed the marginal principles and applied them to his system commendably. In the year 1890 he published his Principles of Economics. Marshall supplemented the ideas of Smith and Ricardo and tried to synthesise the cost of production theory of the classical school and the utility theory of the Austrian School.

In his work Principles of Economics Marshall contributed to the analysis of elasticity, consumer surplus, increasing and diminishing returns and marginal utility. He is much accredited for perfecting the tool of 'margin'. His work effectively used the aid of diagrams which was emulated by others world wide.The use of demand and supply graph to demonstrate the relationship between quantity and price, market equilibrium, elasticity, consumer surplus, increasing and diminishing returns were some of the contributions from Marshall. The models propounded by Marshall is used by economists to demonstrate other economic problems using different variables.

Marshall is also known for the application of partial equilibrium approach in times when the general equilibrium approach was much favoured.He was keen on viewing individual actions within the framework of totality. But he couldn't clearly lay the rules to integrate the individual approach of partial equilibrium to the framework of totality. But Marshall was aware of the complexity of the real economy and their interdependence of the economic units.He also recognised the interdependence between demand, supply and price. Besides, the element of time formed an important part of his methodology because the economic variables according to Marshall change their force and direction overtime and so does the conclusions drawn on different time-zones.

According to Haney, "Marshall's Synthesis, as we may call it, is not perfect, but it is a masterpiece, and as a whole has probably never been surpassed as an explanation of economic life." Marshall believed that economic thought was not a revolution but an evolution. According to him his work Principles of Economics was an attempt to present the old doctrines in modern version with the aid of new work and reference to the new problems of his age. His works basically was the reconstruction of the classical school of thought with contributions from others and as such he led to the development of the Neo-classical school.

His system was a comprehensive one and provided the necessary grounds of both classical and later developments in the history of economic thought. His interest in mathematics and several other aspects of human knowledge imparted maturity to his thought and broadened his perspective as an economist. Marshall was a true synthesiser because he forwarded a competitive unified economic theory. According to Newman,Marshall's "greatest contribution was the rehabilitation of economic theory in the public mind, especially as he attempted to synthesize economic laws and ethical concepts." In his book 'From Marshall to Modernity' Ingrid writes that Marshall's "objective in writing the principles was to update and generalise Mill's exposition of Ricardo. His efforts vastly surpassed this modest goal; the completed system incorporates major innovations which delineate Marshall from his classical forebears."The Marshallian theory and analysis neither was just pure abstraction nor was just a historical approach but a theory substantiated with facts. His theories and analysis aimed at optimum allocation of wealth and resources that would maximise social welfare.



LET US KNOW

The works of Alfred Marshall:

1. 1879: The Economics of Industry (with Mary Paley)
2. 1890 : Principles of Economics
3. 1919 : Industry and Trade
4. 1924 : Money, Credit and Commerce

14.7 ECONOMIC THOUGHTS OF MARSHALL

The economic thoughts of Marshall can be discussed under the following heads- the nature and scope of Economics, the economic laws, methodology and tools of analysis, economic policy, value and distribution.

- **Nature and Scope of Economics According to Marshall:** In Marshall's 'Principles of Economics' the subject matter and scope of economics is stated as-

  "Political Economy or Economics is a study of mankind in the ordinary business of life; it examines that part of individual and social action which is most closely connected with the attainment and with the use of material requisites of well-being."

  This view of Marshall was in line with that of Adam Smith who believed that economics is a study about wealth. However, it was only a part of his study for he mentions, "Thus it is on the one side a study of wealth; and on the other and more important side, a part of the study of man." There are many aspects of a man's life of which economic aspect is just one part. As such, to have a unified social science was considered desirable by Marshall that could cover the totality of man's social life. But in economics there are both incentive and resistance to actions measured in monetary terms and as such economics is different from other social sciences. Another key aspect observed by Marshall relates to the authenticity of predictions which not only relates to economic laws but also in the actions of human beings. But complexity arises as of human nature is subject to ever-changing and unpredictability in actions and thoughts.

- **Marshall's Thoughts on Economic Laws:** According to Marshall, "The laws of economics are to be compared with the laws of tides, rather than with the simple and exact law of gravitation." To him economic Laws are statements of tendencies and not a body of concrete truth. So, Marshall considered both the inductive and deductive methods of analysis. He is known for popularising the concept of margin and also for the application of partial equilibrium approach. He was keen on

viewing individual actions within the framework of totality with the awareness of the complexity of the real economy and the interdependence of the economic units. The element of time was of prominence in his methodology because to Marshall the economic variables change their force and direction overtime and so does the conclusions drawn on different time-zones. Marshall was concerned with the applied aspect of economics and desired to improve and incorporate mathematical rigour into economics to make it more scientific. As such his writings are a combination of both theory and mathematical applications. Marshall used diagrams to illustrate the theories and translated many of Mill's and Ricardo's theorems into diagrammatic jargon. According to Keynes, Marshall is the "founder of modern diagrammatic economics."

- **Marshall's Views on Utility and Demand:** Marshall improved upon the verbal presentation of demand by Mill, established the link between utility and demand and also traced the development of consumer's demand over time. He also opined that demand is based upon utility and gave a clear distinction between total and marginal utility and the law of diminishing marginal utility. The law of demand as stated by Marshall is that- "The greater the amount to be sold, the smaller must be the price at which it is offered in order that it may find purchasers, or in other words, the amount demanded increases with a fall in price, and diminishes with a rise in price."

  Marshall developed the Law of equi-marginal utility on the basis of diminishing utility. The law states that demand or the price paid the consumer is based not only on diminishing marginal utility but also marginal utility of money which is assumed to be constant.

  Further Marshall derived the concept of Consumer's Surplus from the Law of Diminishing Marginal Utility and defined the concept as,- "The excess of a price which a person would be willing to pay for a thing rather than go without the thing over that which he actually does pay is the economic measure of this surplus satisfaction. This may be called consumer's surplus."

The concept was used to illustrate the effects of taxes on commodities with elastic as well as inelastic demand. The concept of consumer's surplus was later used as a basis of welfare economics.

The demand analysis was also used by Marshall to explain the concept of elasticity of demand both mathematically and geometrically. Further, he recognised the factors affecting demand and factors causing a shift in demand curve and also derived the market demand curve from individual demand curve.

- **Marshall's Views on Supply, Production and Cost:** The theory of supply was developed by Marshall on lines similar to his demand analysis. He introduced the concept of supply price and supply schedule in which different amounts of goods are required at different prices. Supply, on the other hand, according to Marshall is governed by the cost of production which is measured in monetary terms. Thus, Marshall distinguished between real and money cost of production. The concept of supply lies on the availability and efficiency of the factors of production. Marshall discussed the features of the agents of production land, labour, capital and organisation and the related problems like laws of returns.

  Marshall also distinguished costs into prime cost (better known as variable costs in economic jargon) and supplementary costs (known as fixed costs in economic jargon) to analyse the problem of value in the short run. Further, Marshall distinguished between internal and external economies while classifying scale of production. He also introduced the concept of representative firm to explain the causes governing the supply price of a commodity. According to Marshall- "A representative firm is in a sense an average firm..... And a representative firm is that particular sort of average firm, at which we need to look in order to see how far the economies, internal and external, of production on a large scale have extended generally in the industry and country in question."

  Marshall defined various laws of returns like Law of diminishing returns, law of increasing returns and law of constant returns. Marshall believed that in the long run while agriculture was subject to the law of

diminishing returns, manufacturing on the other hand was subject to the law of increasing returns. He used the laws of returns to arrive at definite policy conclusions.

- **Theory of Value and the Element of Time in Marshallian Writings:** There was a controversy regarding the value of a commodity.The classical economists was of the opinion that supply or cost of production determined the value of a commodity while the marginalist school believed that demand was the determinant of value of a commodity. However, according to Marshall, Value of a commodity was determined by both demand and supply. As such Marshallian theory of value is also known as the 'Dual Theory of Value'. The theory emphasises on role of 'marginal unit' and combines marginal utility with marginal costs of production.

  The element of time was one of the prime characteristics of Marshallian Analysis and is considered as one of the significant contribution by him to economic thinking. On the basis of the element of time, Marshall classified value into: market value, short period value, long period value and secular value. By distinguishing between long and short-period, the meaning of normal value (which is a combination of short period and long period value) was clarified.

  Marshall discussed the mutual interdependence between demand, supply and value and also the manner in which equilibrium is attained in the market. He limited himself to the competitive market. However, by competitive market he did not mean perfect competition, instead he meant a market that was sufficiently competitive to achieve results with the type of tendencies he was trying to project.

- **Marshall's Views on Distribution:** Marshall, in his Principles of Economics, discussed about the distribution of national income. Just like Marx, Marshall opined that human beings were able to produce more than what was necessary for them, which gives rise to the question of distribution and the principles that would govern the distribution of the surplus amongst the various members of the society. To this Marshall maintained that when each of the factors of production i.e. land, labour,

capital and organisation are duly paid the net national product is completely exhausted. Each factor is paid at the rate of its marginal productivity. He used the element of time to describe the determination of factor incomes.

Marshall introduced the concept of quasi-rent in economic literature because he felt that rent can be observed in other factor prices. According to him, "Quasi-rent is the income derived from machines and other appliances for production made by man." Marshall's theory on rent cleared the confusion between scarcity rent and differential rent and pointed out that they were just different aspects of the same phenomena.

Marshall rejected the concept of a general rate of wages and introduced other elements in his discussion of wages. He opined that, "Wages like any other factor of production, depend on both demand and supply." The long run (or normal) wage rate tends to be determined by cost labour supply and the marginal productivity of labour. However, in the short run wages are affected by numerous other factors.

Marshall made a distinction between gross and net interest. His theory of interest is drawn from Nassau Senior's Abstinence Theory of Interest. But in his theory Marshall replaced the term Abstinence with the term 'waiting', because he believed that the term 'abstinence is often misunderstood and the greatest accumulators of wealth were very rich people and lives in luxury and the term abstinence is not applicable to them; so it was better to avoid its use and instead view accumulation of wealth as the result of postponement of enjoyment or waiting for it.

Marshall asserts that there is a general tendency of the rate of profits to move towards equality. He also distinguished between annual rate of profit and the rate of profit on turnover. According to him, profit was an essential component of the normal supply price. He rejected the risk theory of profits but discussed the reasons of fluctuations in profit earnings. According to him, "Normal profits include interest, earnings of management and reward for organisation." But his views on profits appeared to be on shifting grounds and as a result his contribution

towards the theory of profits was indistinct.

- **Other Contributions of Marshall:** Marshall emphasised on the concept of elasticity of demand,which shows the proportionate change in quantity demand due to proportionate change in price of the commodity.Marshall also made some original contributions to the area of monetary economics, where he analysed the quantity theory of money as a part of the general theory of value. Further, he also distinguished between the real rate of interest and the money rate of interest. To explain the rate of exchange between countries with mutually inconvertible currencies, Marshall articulated the 'purchasing power parity theory'. He explained how an increase in prices reflects the increase in the supply of money.



CHECK YOUR PROGRESS

Q 10: Why did Marshall consider both the inductive and deductive methods for economic analysis? (Answer in about 20 words)

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Q 11: What is Marshall better known for? (Answer in about 40 words)

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Q 12: Why the element of time finds prominence in Marshall's methodology? (Answer in about 50 words)

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Q 13: What according to Marshall governs supply? (Answer in about 20 words)

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Q 14: What were Marshall's views on laws of return to agriculture and manufacturing? (Answer in about 30 words)

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Q 15: Why is Marshallian theory of value also known as the 'Dual Theory of Value'? (Answer in about 60 words)

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14.8 LET US SUM UP

- Marshall was successful in putting forward a competitive unified economic theory and popularising economics and raising it to the status of a pure discipline.
- Marshall's contributions to economics has influenced and paved way for later economists who developed many other theories and created a niche for themselves.
- His contribution to neo-classical economics provided a comprehensive system of economic theory in almost every aspect.
- As compared to his contemporaries, Marshall's system appeared to lack internal consistency, which was due to the very intricate-feature of his system.
- His works were more than just synthesising the ideas of the previous school of thought. According to Haney, Marshall will stand out in the history of economic thoughts as he was the one who made progress toward a united and consistent theory of value and distribution than any predecessor.

- Marshall himself also believed that economics was a subject to usual revolutionary process instead of being a revolutionary one and as such he opined that his theories would also be improved upon like other theories. And he was right about it as his theories were also improved upon in the later course of time.



14.9 FURTHER READING

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14.10 ANSWERS TO CHECK YOUR PROGRESS

Ans to Q No 1: The neo-classical school was popular due to its marginal analysis.The 'margin' analysis was used to explain the economic phenomena which analysed the behaviour of economic agents.

Ans to Q No 2: The school was mainly about the short-run problem of allocation of resources to achieve the maximum benefit out of it.

Ans to Q No 3: Marshall cited one explicit and one implicit reason for changing the name from 'political economy' to 'economies'. The explicit reason was to avoid confusion with vested interest and the implicit reason was to avoid relating economic sciences to any political bodies.

Ans to Q No 4: The neo-classical school linked economics with natural sciences. As such Economic laws assumed the natural laws characteristics of being absolute and objective.

Ans to Q No 5: The main contributions of Wicksell were to the relationship between the rate of interest and general price-level where he analysed the role of inflationary or deflationary price movements. He also contributed towards the saving-investment approach to monetary phenomena and also discussed the role of government and central bank in promoting price stability.

Ans to Q No 6: J.B. Clark is accredited to the discovery of marginal theory of productivity independently and clearly demarcated between statics and dynamics by using deductive method of analysis.

Ans to Q No 7: The other significant contribution of Clark is towards the theory of profits and distinguished between stationary and dynamic economy.

Ans to Q No 8: Irving Fisher is deemed as America's greatest scientific economist for his contribution to the Index Number in the theory of statistics. He is known for his pioneering work in the field of econometrics which regarded statistical methods as a part of econometric theory.

Ans to Q No 9: Taussig synthesised classical economic theory with the modern theory and his contributions find prominence in the theory of wages and profits and the theory of international trade.

Ans to Q No 10: Marshall considered both the inductive and deductive methods for analysis because to him economic Laws are statements of tendencies and not a body of concrete truth.

Ans to Q No 11: Marshall is better known for popularising the concept of margin and also for the application of partial equilibrium approach. He was keen on viewing individual actions within the framework of totality with the awareness of the complexity of the real economy and the interdependence of the economic units.

Ans to Q No 12: The element of time was of prominence in Marshall's methodology because to him the economic variables change their force and direction overtime and so does the conclusions drawn on different time-zones. Besides on the basis of the element time Marshall classified value into: market value, short period value, long period value and secular value. By distinguishing long and short-period, the meaning of normal value was clarified.

Ans to Q No 13: Supply according to Marshall is governed by the cost of production which is measured in monetary terms and distinguished between real and money cost of production.

Ans to Q No 14: Marshall believed that in the long run while agriculture was subject to the law of diminishing returns, manufacturing on the other

hand was subject to the law of increasing returns.

Ans to Q No 15: The controversy regarding the value of a commodity, the classical economists was of the opinion that supply or cost of production determined the value of a commodity while the marginalist school believed that demand was the determinant of value of a commodity. However, according to Marshall, Value of a commodity was determined by both demand and supply. As such Marshallian theory of value is also known as the 'Dual Theory of Value'.



14.11 MODEL QUESTIONS

Short questions (Answer each question in about 150 words)

Q 1: Discuss the features of neo-classical school.

Q 2: Discuss the contributions of Irving Fisher as an economist.

Q 3: Discuss the other contributions of Marshall towards economic thoughts.

Essay-type questions (Answer each question in about 300-500 words)

Q 1: Discuss the role of Marshall as synthesiser of economic theory.

Q 2: What were Marshall's views on utility and demand? Discuss.

Q 3: Discuss the contribution of Marshall into the theory of distribution.

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UNIT 15 : THE KEYNESIAN SCHOOL-KEYNES

UNIT STRUCTURE

15.1 Learning Objectives

15.2 Introduction

15.3 Departure from the Classical School

15.4 Major Contribution of Keynes to Economics

15.5 Policy Prescriptions

15.6 Let Us Sum Up

15.7 Further Reading

15.8 Answers to Check Your Progress

15.9 Model Questions

15.1 LEARNING OBJECTIVES

After going through this unit, you will be able to-

- know the difference between Classical and Keynesian School
- learn about major contributions of Keynes to economics
- understand different policy prescriptions emanating from Keynesian economics.

15.2 INTRODUCTION

In the previous units, starting from the classical era, we have learned about economic ideas of different economists. This section offers an outline of the contributions of J.M. Keynes, a product and pride of Cambridge. Prior to Keynes, economies were run by the postulates of the Classical School of thought. The Great Depression of 1930s worldwide laid bare the loopholes of the existing ideologies and created a situation to rethink about traditional ways of running the economy. Keynes did this rethinking brilliantly and revolutionized our approach to market economy with his remarkable work The General Theory of Employment, Interest and Money,1936. The first section of this unit gives an account of the difference between the Classical and the Keynesian School of thought. In the second section we have

described the main economic ideas of Keynes, followed by his policy prescriptions in the third and the last section.

15.3 DEPARTURE FROM THE CLASSICAL SCHOOL

As we have already hinted that Keynesian postulates of economics were a reaction against the "classical economics". The classical school of thought comprises of collective ideas of the classical economists - D. Ricardo, J.S. Mill, Marshall, Pigou etc. Keynes himself was a student and disciple of Marshall. After mastering and teaching classical theories for many years, Keynes departed and attacked the very ideas of classical economics. The main difference of classical economics and Keynesian economics can be outlined under the following heads-

- **Full Employment and Underemployment:** The classical economists assumed stable equilibrium at full employment level as a normal situation. Temporarily, there may arise voluntary as well as frictional unemployment. The former arises due to refusal of the workers to accept the existing wage rate. The latter arises due to the imperfections of the labour market such as ignorance of job opportunities, immobility of labour, seasonal nature of work, shortage of raw materials etc. Whatever may the cause be, these two types of unemployment automatically disappear in the long run.

  Contrary to this belief, Keynes postulated that there exists no automatic mechanism in a free-market economy that ensures full employment. Wages and other prices do not adjust as fast as classical economists assumed. So, there is a possibility of underemployment equilibrium level of income and employment. And this level income and employment is determined by the equality of aggregate demand and aggregate supply. (To be discussed in the next section).

- **Laissez-fair Vs. Government Intervention:** The classical economists had full faith on the functioning of the economic system without any government intervention. Any kind of unemployment, they believed, could be corrected with the free working of the competitive system.

On the contrary, Keynes did not believe in the self-adjusting mechanism of the competitive system. He believed that active government intervention is required if the objective of full employment is to be achieved. To fight unemployment and to save the economy from the uncertainties of private investment, Keynes suggested a number of fiscal measures.

- **Say's Law of Markets and its Repudiation:** Say's law states that additional supply represents additional demand. When a factor of production (say labour) is employed, both productions of commodities as well as income in the form of payment to the factor of production happen. The income received is spent in the market on the purchase of goods. Thus, the employment of a factor of production pays its own way and there exists no possibility of general overproduction and general unemployment.

  Keynes repudiated Say's law on the ground that the whole part of increased income resulting out of increased employment is not spent on consumer goods. Rather, a part of it is saved. There is also no guarantee that the saved part of increased income will be spent on investment goods. When investment lags behind saving there will appear deficiency of demand. This implies that supply does not create its own demand.

- **Equality of Savings and Investment:** In order to avoid any possibility of general overproduction and to maintain full employment level, the classical economists assumed that the saved part of increased income is invested. Thus, savings is equal to investment. There is not any problem and doubt about it. Their equality is maintained by the adjustment of interest rate.

  Keynes argued that equality of savings and investment is not as simple as the classical economists thought. It is the level of income which brings equality of savings and investment. Whenever savings exceed investment, aggregate demand decreases and income level declines. As a result, saving falls and becomes equal to investment. Similarly, if investment exceeds saving, income level rises, saving

increases and becomes equal to investment. The equality of savings and investment does not mean that the two are necessarily in equilibrium because there are expenditure and production lags.

- **Wage-Employment Relationship:** The classical economists believed that the price mechanism brings full-employment equilibrium in the labour market. Given the state of demand, employment can always be increased by reducing wages. Reduced wages, consequently brings down production costs. As a result, prices fall and demand for the products, and hence labour increases. Naturally, employment increases.

  Contrary to this, Keynes argued that classical postulates are correct for a particular firm or industry. It is not applicable for the economy as a whole. Wages not only constitute costs of production, but also the income of the labourers. If wages fall, demand for goods and services also falls. It will further reduce employment.

- **Theory of Money and its reformulation:** Classical economists believed in quantity theory of money. That is, a change in the quantity of money will bring a direct and proportionate change in the price level. The real factors such as output and employment are not affected by this increase in the quantity of money.

  Keynes reformulated the classical quantity theory of money. He postulated that the function of money is not confined only as a medium of exchange. Money is important also as a store of value. Money is a subtle device for linking the present to the future, via the interest rate. People's desire for holding cash is known as "liquidity preference". Liquidity preference depends on three motives: transaction motive, precautionary motive and speculative motive. If people feel that the current rate of interest is low (or bond prices are high) and it is expected to rise in future (or bond prices will fall in future), then they will borrow money at a lower rate of interest (or sell their already purchased bonds), and keep cash in hand with a view to lend it in future at a higher rate of interest (or to purchase the bonds at cheaper rates in future). Thus the demand for money for speculative motive will rise. Thus, expectations permeate the working of a modern economy.

Moreover, according to Keynes, increase in quantity of money will lead to a direct and proportionate increase in price level only after the level of full employment is reached. At the stage of unemployment of resources, an increase in the quantity of money reduces the rate of interest. It encourages investment and thus raises income, output and employment. With rise in output, cost of production increases which lead to a rise in prices. But it is less than proportion.

- **Classical dichotomy-Goods and Money Markets:** The classical economists believed that the goods and money markets are totally different. In goods market the equality between savings and investment are always maintained through the rate of interest. It implies that whatever is saved, entire amount is invested without any lag. Similarly, in money market, demand for and supply of money determines the rate of interest. A percentage increase in the supply of money leads to direct and proportionate increase the price level. That is, increase in the supply of money has no impact on the real sector at all.

  But according to Keynes, goods and money markets are mutually influencing and interlinked. Money itself is a bridge that connects present and future through the rate of interest. In a dynamic economy, expectations about future determine current rate of interest and the level of interest. That is real and monetary sectors are not completely separate as the classical economists believed.

15.4 MAJOR CONTRIBUTION OF KEYNES TO ECONOMICS

J.M Keynes was a theorist as well as a practical economist and was gifted with abstraction and realism. His important works are: Indian Currency and Finance (1912), The Economic Consequences of Peace (1919), How to Pay for the War (1940), A Treatise on Money(1930),The General Theory of Employment, Interest and Money(1936).

The greatest contribution of Keynes to economics is his theory of employment.His revolutionary work The General Theory of Employment, Interest and Money explains the employment theory in a scientific and systematic way. The Figure 15.1 gives a skeletal presentation of fundamentals of Keynesian economics.

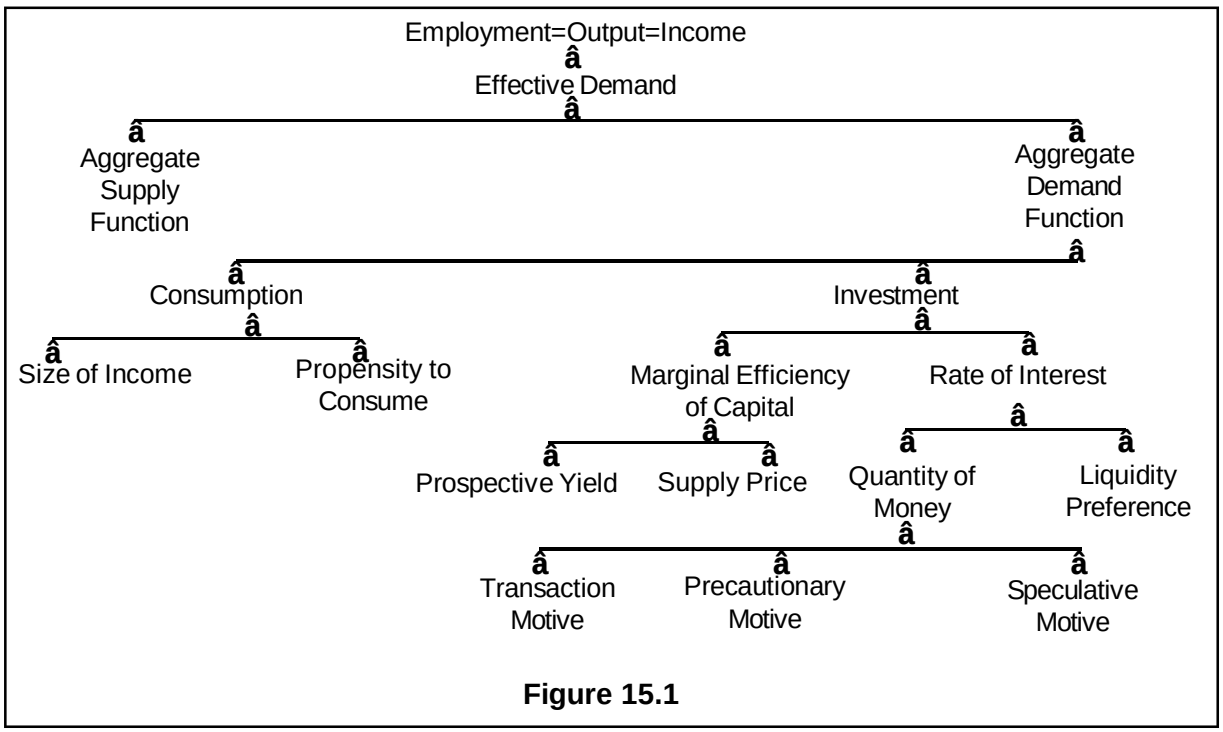


Figure 15.1

In the above Table:

- Employment = Output = Income. If output and income increase employment increases. Thus, income and output are the functions of employment. They move in the same direction.
- Volume of employment depends upon effective demand. Effective demand means desire plus ability and willingness to buy, that is, the actual expenditure. Effective demand is determined by aggregate supply function and aggregate demand function. That is, at the point of effective demand (given by the point of interaction between aggregate demand curve and aggregate supply curve),the total income of the economy equals total expenditure.
- Aggregate supply function refers to the relationship between the minimum sale proceeds required by the entrepreneurs from the products produced by a given volume of employment and that volume of employment. The graphical depiction of this function gives us the aggregate supply curve which is upward sloping and becomes perfectly inelastic at the point of full employment.
- Aggregate demand function refers to the relationship between a given

volume of employment and the maximum sale proceeds expected from the output produced by that volume of employment. The graphical depiction of this function gives us the aggregate demand curve which is also upward sloping, but slants downward beyond a point.

- Consumption function is based on "psychological law of consumption". It states that the community saves a portion of increased income. That is, as income increases consumption increases,but less than proportionately. Besides the size of income, consumption expenditure also depends upon propensity to consume. As propensity to consume does not change quickly, consumption expenditure is fairly stable in the short period. Rich people have low marginal propensity to consume and poor people have high propensity to consume. But in the short run the marginal propensity to consume remains constant. Now with consumption falling behind increasing income, a gap arises between income/output and demand/expenditure. This gap can be filled up only by investment expenditure.
- Public investment leads to manifold increase in income due to the operation of the multiplier.
- Private investment is governed by Marginal Efficiency of Capital (MEC) i.e. profitability of capital and the rate of interest. The former represents the return on the capital invested and the later the cost of investment of capital. It is highly unstable.
- The marginal efficiency of capital refers to the maximum expected rate of return over cost from the additional unit of a capital asset over its life time.It is governed by two factors: the prospective yield and the supply price of capital assets.
- Prospective yield depends upon future expectations. It means the total returns which an entrepreneur expects to obtain from selling the output produced by the capital asset over its lifetime. The supply price refers to the cost of producing a new capital asset. It is the price which would just induce a manufacturer newly to produce an additional unit of such assets. Keynes assumes the supply price to be constant. Because of the dependence on expectation, MEC is erratic/unstable/volatile in the

short run. At the same time, it exhibits a decline as more and more identical capital assets are created.

- Rate of interest is a monetary phenomenon and is determined by the demand for money and the supply of money. Demand for money is the liquidity preference and this liquidity preference depends upon three motives: transaction motive,precautionary motive and speculative motive. In the short run, the supply of money in an economy is fixed by the monetary authority. It is the speculative motive that plays the crucial role in determining the rate of interest. Money demanded for speculative motive is inversely related to the rate of interest and this demand becomes perfectly elastic at a very low rate of interest. This rate is called the floor rate and the situation is described as a 'liquidity trap'. Existence of liquidity trap makes monetary policy completely ineffective.
- Out of the two determinants (consumption and investment expenditure) of the volume of employment in an economy, the inducement to investment is mostly responsible for fluctuations of the level of employment (and income and output). It is because of the fact that consumption function is stable in the short run. Inducement to invest depends on MEC and the rate of interest. The rate of interest being relatively sticky, the variation in inducement to investment is mainly due to variation in MEC. Again, out of the two determinants of MEC, that is, the prospective yield and the supply price, the later is relatively stable in the short run. Therefore, MEC mainly depends on prospective yield. As prospective yield depends on future expectations which are unpredictable and uncertain, the ultimate cause of instability in a capitalist economy is the instable nature of the capital asset.
- Given the uncertainty and instability of MEC, the private investment cannot be relied upon to attain and maintain full employment in a capitalist economy. This necessitates intervention by the State with fiscal policy to address the problem of demand deficiency.



LET US KNOW

- Consumption function represents the relationship between income (Y) and consumption (C) and is expressed as C=f(Y). It has three technical attributes:
  - Ø Marginal Propensity to Consume (MPC),
  - Ø Marginal Propensity to Save (MPS),
  - Ø Average Propensity to Consume (APC).
- MPC refers to the ratio of a small change in consumption due to a small change in income $\left(\frac{\Delta C}{\Delta Y}\right)$. The value of MPC lies between 0 and 1. It determines the slope of the consumption curve.
- Psychological law of consumption states that consumption increases less than proportionately as a result of increase in income.
- Given the MPC, the multiplier establishes a quantitative relationship between aggregate income (or employment) and the investment. It can be defined as the ratio of a small change in income due to a small change in autonomous investment $\left(\frac{\Delta Y}{\Delta I}\right)$.
- MPS refers to the ratio of a small change in saving due to a small change in income $\left(\frac{\Delta S}{\Delta Y}\right)$. MPS is the complement of the MPC, so that MPC+MPS=1
- APC is the ratio of absolute consumption to absolute income (C/Y). It tells the level of consumption at a given level of income.
- APS is the ratio of absolute saving to absolute income (S/Y). It tells the level of saving at a given level of income.

15. 5 POLICY PRESCRIPTIONS

Keynes had full faith on public investment via fiscal policy of the government. The practical objective of his analysis is to suggest a line of action to deal with situations of depression as well as inflation. In his general

theory, Keynes emphasized the key role of aggregate demand in explaining short-run economic fluctuations. During depression, aggregate demand appears insufficient to maintain production at its full employment level. At these circumstances, as private investment is unstable and uncertain; government can start public works in the form of expansionary fiscal policy and raise aggregate demand. Similarly, a restrictive fiscal policy is appropriate to avoid evil effects of inflation. Let us have a detail look on this aspect.

- **Fiscal Policy: Changes in Government Spending:** Fiscal policy refers to the setting of the level of government spending and taxation. In fact, according to Keynes, monetary policy of the government also have effects on the spending decisions of the firms and households. And these decisions have indirect effect on aggregate -demand. On the contrary, when the government changes its own purchases of goods and services, it affects and shifts the aggregate demand curve directly. It has two types of effects: the multiplie reffect and the crowding out effect.

  In order to analyse the multiplier effect, let us suppose that the Government places a big order (20 dollars) of fighter planes to a reputed company. The immediate impact of the higher demand from the government is to raise employment and profits of the company. Due to increased income and profits of the company, demand for the products of many other firms in the economy will increase. Thus, increase in government spending has multiplier effect on aggregate demand.

  And this multiplier effect continues even after this first round. When consumption spending increases, the firms producing those consumer goods hire more people and experience higher profits. Higher income and profits further stimulate consumption spending. Thus, the total impact on the quantity of goods and services demanded can be much larger than the initial increase in government spending. Further, this multiplier effect of increase in consumption spending spurs higher demand for investment goods. This positive impact from demand to investment is sometimes called the investment accelerator.

The crowding out effect partially off-sets the impact of initial increase in government spending on aggregate demand: via the interest rate. As incomes rise due to the operation of the multiplier, the households plan to buy more goods and services. As a result they prefer to hold more liquid assets. Thus, demand for money rises. With the fixed amount of money supply, increased demand for money raises the rate of interest.

And this increment in interest rate reduces the demand for residential and business investment goods. This ultimately reduces the quantity of goods and services demanded. Thus, the crowding out effect partially offsets the impact of government purchases on aggregate demand. If it is large enough, could result in an increase of aggregate demand by less than the initial increment.

- **Fiscal Policy: Changes in Taxes:** Taxation is another important instrument of fiscal policy. A reduction in personal income taxes increases households' take-home pay. Households will save a part of this increased income. But they will also increase consumption spending. Accordingly, aggregate demand curve will shift to the right. Similarly, a tax increase depresses consumption spending and shifts the aggregate demand curve to the left.

  The amount of shift in aggregate demand as a result of change in tax is also affected by the multiplier and crowing out effects. When the government cuts taxes and stimulates consumption spending, earnings of the households as well as profits of the business houses rise. It further stimulates consumption spending. This is the multiplier effect of tax-reduction.

  At the same time, higher income leads to higher demand for money. With fixed money supply, it results in higher interest rates. Higher interest rates make borrowing more costly. As a result, investment expenditure declines. This is the crowing out effect of tax reduction. Each of the multiplier and crowing out effect works in opposite direction as a result of government decision in increasing tax rates.



ACTIVITY

Identify the features of Keynesian school.

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CHECK YOUR PROGRESS

Q 1: State True or False:

a) The classical economists believed that full employment is an abnormal situation. (True/False)

b) Effective demand is determined by aggregate supply function and aggregate demand function. (True/False)

c) Fall in the interest rate will be ineffective in raising investment if the Marginal Efficiency of Capital is too low. (True/False)

Q 2: How, according to Keynes"the policy of wage cut" do not increase employment? Explain. (Answer in about 50 words)

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Q 3: What are the main constituents of aggregate demand? (Answer in about 60 words)

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15. 6 LET US SUM UP

- According to the Keynesian School of thought,there exists no automatic mechanism in a free-market economy that ensures full employment.
- It is the level of income, (and not interest rate) which bring equality of savings and investment.

- Supply does not create its own demand.
- If wages fall, demand for goods and services also falls. It will further reduce employment.
- Increase in quantity of money will lead to a direct and proportionate increase in price level only after the level of full employment is reached.
- As income increases consumption increases less than proportionately.
- Public investment increases income manifold due to the operation of multiplier.
- Private investment is governed by Marginal Efficiency of Capital (MEC).
- Prospective yield depends upon future expectations.



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15.8 ANSWERS TO CHECK YOUR PROGRESS

Ans to Q No 1: (a) False (b) True (c) True

Ans to Q No 2: Keynes argued that the "policy of wage-cut" for increasing employment is correct for a particular firm or industry. But is not fruitful for the economy as a whole. Wages constitute not only costs of production, but also the income of the labourers. If wages are cut in all industries, demand for goods and services also falls. It will further reduce employment. Thus, employment cannot be increased by cutting down the wages as believed by the classical economists.

Ans to Q No 3: Aggregate demand functionis constituted by consumption expenditure and investment expenditure. Consumption function is based

on "psychological law of consumption". It states that the community saves a portion of increased income. That is, as income increases consumption increases less than proportion. Besides the size of income, consumption expenditure also depends upon propensity to consume. As propensity to consume does not change quickly; consumption expenditure is fairly stable in the short period. Public investment increases income manifold due to the operation of multiplier. Private investment is governed by Marginal Efficiency of Capital (MEC) i.e. profitability of capital and the rate of interest. The former represents the return on the capital invested and the later the cost of investment of capital. It is highly unstable.



15.9 MODEL QUESTIONS

Short questions (Answer each question in about 150 words)

Q 1: How is equality of saving and investment achieved? Explain the views of both classical economists and Keynes.

Q 2: Explain the functioning of the investment function as described by Keynes.

Q 3: Briefly explain the Keynesian theory of employment.

Essay-type questions (Answer each question in about 300-500 words)

Q 1: Explain the main economic ideas of Keynes.

Q 2: How does Keynesian ideas differ from that of the classical economics?

Q 3: What type of policy prescription was given by Keynes?

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2) Ricardo, D. (2004) (1817). 'On the Principles of Political Economy and Taxation'. In The Works and Correspondence of David Ricardo. Vol. I. Piero Sraffa (ed.). Indianapolis: Liberty Fund.

3) Elmslie, B. and James, A.M. (1993).'The Renaissance of Adam Smith in Modern Theories of International Trade'. In Perspectives on the History of Economic Thought: Volume IX: Themes on Economic Discourse, Method, Money and Trade. Robert F. Hébert (ed.). 63-76. Aldershot: Elgar.

4) Hume, D. (1987). Essays Moral, Political, and Literary. Eugene F. Miller (ed.), Indianapolis: Liberty Fund.

Name of the Paper: **Course Code:**

Centre for Internal Quality Assurance (CIQA)
Krishna Kanta Handiqui State Open University
City Office, Housefed Complex, Guwahati- 06

Learner's Feedback on Course

Dear Learner,

Regarding the course as mentioned above, we would like to know your opinions and comments so as to improve the quality of self learning materials in future. Please respond to the following statements by ticking the number you feel most reflect your opinion. After completion of the additional comments, please detach the page and send/mail the same to us at the address given below.

The Director, Centre for Internal Quality Assurance, KKHandiqui State Open University
Housefed Complex, Dispur, Guwahati- 781006
(E-mail id: ciqa@kkhsou.in)

1. Approximately how many hours did you spend for studying the units in the course? | | | |
2. Please give your opinions (by √ mark) to the following items based on your reading of the block:

Sl. No.	Statements	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
I.	The SLMs of the course fulfil the learning objectives set out in the beginning of each unit					
II.	The units of the SLM could satisfy my academic needs and expectations					
III.	The Unit writers have excellent knowledge about the course contents					
IV.	Language and contents of the units were presented at a level which I could readily understand					
V.	Ample opportunity for participation in the activities provided in the units					
VI.	Used enough Illustrations (Diagrams, tables etc.) for conceptual clarity					
VII.	Quality of content is engaging, relevant, and up-to-date					
VIII.	The self check questions are very helpful					
IX.	The Possible/model questions and the answers to check my progress have benefited me a lot					

Additional Comments: *(Please feel free to provide your open comments)*

1. Which aspects of the SLM, according to you, worked well?

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2. What sort of changes/improvements do you feel KKHSOU could implement to improve the overall quality of the SLM?

Thank you for taking the time to complete this form.

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