GBA S1 02

BUSINESS ECONOMICS

SEMESTER – 1

BACHELOR IN BUSINESS ADMINISTRATION
BLOCK 2

KRISHNA KANTA HANDIQUE STATE OPEN UNIVERSITY

Subject Experts

Prof. Nripendra Narayan Sarma, Maniram Dewan School of Management, KKHSOU
Prof. Munindra Kakati, VC, ARGUCOM
Prof. Rinalini Pathak Kakati, Dept of Business Administration, GU

Course Co-ordinator : Dr. Smritishikha Choudhury, Asst. Prof., KKHSOU

Dr. Chayanika Senapati, Asst. Prof., KKHSOU

SLM Preparation Team

UNITS	CONTRIBUTORS
7, 8,9 and 10	Dr. Bhaskar Sarmah,KKHSOU
11	Dr. Parag Dutta, Dispur College
12	Ms Nibedita Goswami,Ascent Academy High School

Editorial Team

Content : Dr. Gautam Majumdar,Dept. of Economics,Cotton College

Language : Retd. Prof. Robin Goswami, Cotton College

Structure, Format & Graphics : Dr. Chayanika Senapati

Dr. Smritishikha Choudhury

June , 2018

This Self Learning Material (SLM) of the Krishna Kanta Handiqui State Open University is made available under a Creative Commons Attribution-Non Commercial-Share Alike 4.0 License (international): http://creativecommons.org/licenses/by-nc-sa/4.0/

Printed and published by Registrar on behalf of the Krishna Kanta Handiqui State Open University.

Headquarters : Patgaon, Rani Gate, Guwahati - 781017
Housefed Complex, Dispur, Guwahati-781006; Web: www.kkhsou.in

The University acknowledges with thanks the financial support provided by the **Distance Education Bureau**, **UGC** for the preparation of this study material.

BACHELOR IN BUSINESS ADMINISTRATION

BUSINESS ECONOMICS

Block 2

DETAILED SYLLABUS

UNIT 7. Market Structure : Imperfect Competetion **Page : 1 - 25**

Monopoly Competetion : Definition and Classification, Demand and Marginal Revenue Curves, Equilibrium of the Monopolist : Short-run and Long-run, Price Discrimination : Degree and Possibility, Monopolistic Competetion : Definition and Assumptions, Equilibrium of a firm : Short-run and Long-run, Group equilibrium, Concept of Excess Capacity, Some other Important Concepts of Pricing.

UNIT 8. Distribution Theory **Page : 26 - 41**

Marginal Productivity theory of distribution, rent, modern theory of rent.

UNIT 9. Wage **Page : 42 - 57**

concept of wages, wage determination .

UNIT 10. Profit Theory **Page : 58 - 76**

Meaning of profit, profit theories, basic information , nature of profit, measurement ofprofit , profit policies

UNIT 11. Economic Environment **Page : 77 - 93**

Nature and Significance of Economic and Non-Economic Environment in India, Macro Economic Environment : Government Budget, Industrial Policy, Monetary Policy, Role of Banking and other Non-Banking Financial Institutions and their impact on Business, Planning in India-Achievements and Failures.

UNIT 12. Monetary and Fiscal Policies **Page : 94 - 115**

Monetarypolicy, problems in monetary policy, fiscal policy, economic stabilization , instruments of fiscal policy, problems in fiscal policy.

BLOCK INTRODUCTION:

This is the Second *Block* of the course '***Business Economics***'. After completing this block, which consists of six units, you will be able to get a fair idea on the different concepts in business economics.

This block comprises the following six units :

The seventh unit introduces us to the concept of deals with the market structure in Imperfect Competition.

The eighth unit gives us a broad overview on distribution theory and rent.

The ninth unit will help us in understanding concept of wages and its determination.

The tenth unit is about profit and its theories, nature of profit and profit policies

The eleventh unit is about concept of economic enviornment of business.

The twelfth and the last unit is about monetary and fiscal policies.

The structure of Block 2 is as follows :

UNIT 7 : Market Structure : Imperfect Competetion
UNIT 8 : Distribution Theory
UNIT 9 : Wages
UNIT 10 : Profit Theory
UNIT 11 : Economic Environment of Buisness
UNIT 12: Monetary and Fiscal Policies

UNIT 7: MARKET STRUCTURE: IMPERFECT COMPETITION

UNIT STRUCTURE :

7.1 Learning Objectives

7.2 Introduction

7.3 Monopoly Competition: Definition and Classification

- 7.3.1 Demand and Marginal Revenue Curves under monopoly
- 7.3.2 Short run equilibrium of the monopoly firm
- 7.3.3 Long run equilibrium of the monopoly firm
- 7.3.4 Price Discrimination: Degree and Possibility

7.4 Monopolistic Competition: Definition and Assumptions

- 7.4.1 Equilibrium of a Firm: Short-run
- 7.4.2 Equilibrium of a Firm: Long-run
- 7.4.3 Group Equilibrium
- 7.4.4 Concept of Excess Capacity

7.5 Some Other Important Concepts of Pricing

7.6 Let us Sum Up

7.7 Further Readings

7.8 Answers to Check Your Progress

7.9 Model Questions

7.1 LEARNING OBJECTIVES

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

- define monopoly, and monopolistic competition
- discuss various issues relating to monopoly.
- explain price discrimination and its various degrees, possibility and profitability aspects.
- discuss monopolistic competition, price output determiniation under this market structure and group equilibrium

7.2 INTRODUCTION

In the earlier unit 6, we have already come across the terms 'market and 'market equilibrium'. We have known that based on certain characteristics, market structures can be broadly classified into two categories: perfect competition and imperfect competition. Again, an imperfectly competitive market structure can be further divided as: monopoly, monopolistic competition and oligopoly. These markets structures can again be segmented into different types. In this unit, we will discuss basically two major imperfect market structures: monopoly and monopolistic competitions. We shall try to define these market structures, discuss relevant issues therein and explain graphically how firms / industry attain equilibrium under these.

7.3 MONOPOLY COMPETITION: DEFINITION AND CLASSIFICATION



Cartel: A group of firms acting together to control output and price

In the earlier unit, we had discussed about perfect competition. We have seen that perfect competition is the market structure where there exists a large number of buyers and sellers and in which the influencing power of any seller is nil. The monopoly is just the opposite of perfect competition. The word 'monopoly' has come from the Greek words *monos polein,* which means 'alone to sell'. This single seller is called a *monopolist*. The term is also sometimes used for a single group of sellers that acts as a price setter, although often a group is called *a **cartel**.* Thus, in simple terms, monopoly can be described as the market structure where there is only one supplier of the product, which has no close substitute in the market.

As there is only one seller of the product, therefore, the concept of firm and industry is the same in monopoly. In reality, the existence of a monopoly firm is as much rare as perfect competition. However, in some of our remote villages, where there is only one doctor, he may be seen as a monopoly supplier of medical services in the locality.



ACTIVITY 7.1

Do you notice in your locality that in some of the services/ products, there often only one service provider/ supplier? Just think of these services : cooking gas (LPG cylinders), electricity, landline telephone services, fire services, water supply, postal services etc. You may find that until recently, in some of these services there was only one supplier. Some of these still have only one supplier even today. Make a list of such services/products in your locality. These could be interesting examples of monopoly in your area.



LET US KNOW

There are some reasons behind the emergence of a monopoly.Certain factors may facilitate the monopoly industry by preventing new entrants into the industry. According to Prof. E.A.G. Robinson, there are four such sets of factors: a) legal prohibition (e.g., patents and licensing), b) control of a necessary factor of production, c) advantage of large scale of production and d) existence of goodwill (establishment of brand names in the market).

Patent: A patent is a set of exclusive rights granted by a state to an inventor or his assignee for a fixed period of time in exchange for a disclosure of an invention. The exclusive right granted to a patentee in most countries is the right to prevent or exclude others from making, using, selling, offering to sell or importing the invention.

There exists a category of monopolies known as social monopolies or public utilities. These monopolies are socially favoured to remain as monopolies, as large scale and single-handed operations of such monopolies benefit the socieity. Examples like: defence services (civil and military), public road construction, water supply services are important in this category.



Brand name: Its a name or identity of a product that sets it apart from its competitiors.

7.3.1 Demand and Marginal Revenue Curves Under Monopoly

The discussion about demand (or, average revenue) and the marginal revenue curves becomes necessary for the equilibrium analysis. Unlike perfect competition, the monopoly firm can control the price or output in the market; it can control either price or output,but not both. The monopolist can sell larger amount of the product in the market by charging a lower price and vice versa. This characteristic of the monopolist ensures a downward sloping demand curve - exhibiting the general law of demand (the law of demand has already been discussed in unit 2)**.** The shape of the demand curve and the marginal curve of the monopolist firm has been shown with the help of the following figure 7.1

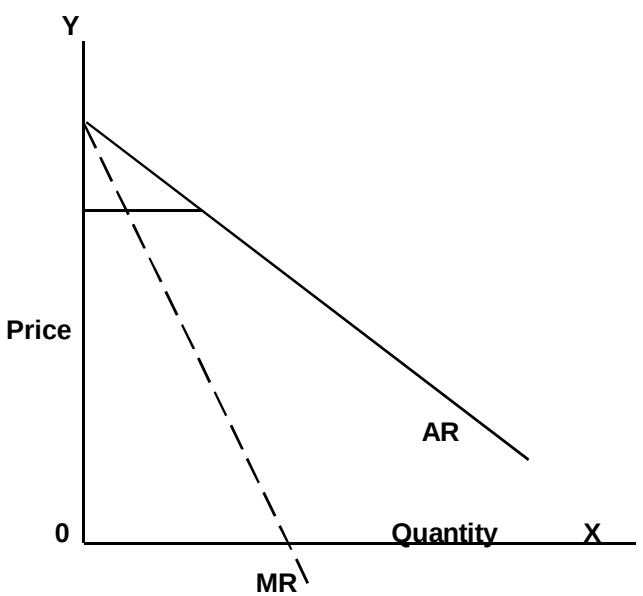


Fig 7.1: AR and MR Curve of a Monopoly Firm

In the above figure 7.1, it can be seen that the monopolist demand curve AR slopes downward. The MR curve also slopes downward and lies below the AR curve. The MR curve slopes at a much steeper rate than the AR curve. We have already discussed in unit 2 that under imperfect competition, the slope of the MR curve is twice as much steeper as the slope of the demand curve.



LET US KNOW

Shape of Cost Curves: The shape of cost curves under monopoly are not much different from those under perfect competition. The only difference is that a firm under perfect competition can purchase any quantity of factors of production at constant price, but the monopolist may have to pay higher prices for more such factors of production. This induces the MC curve of the monopolist to rise at a higher rate than that of the perfectly competitive firm. The monopolist will not have any fixed cost curve in the long run,like perfectly competititve firm, but will have both the variable cost curves and the fixed cost curves in the short run.

7.3.2 Short Run Equilibrium of the Monopoly Firm

The price-output equilibrium can be easily explained with the help of the following figure 7.2. In figure 7.2 , AR is average revenue or demand curve,

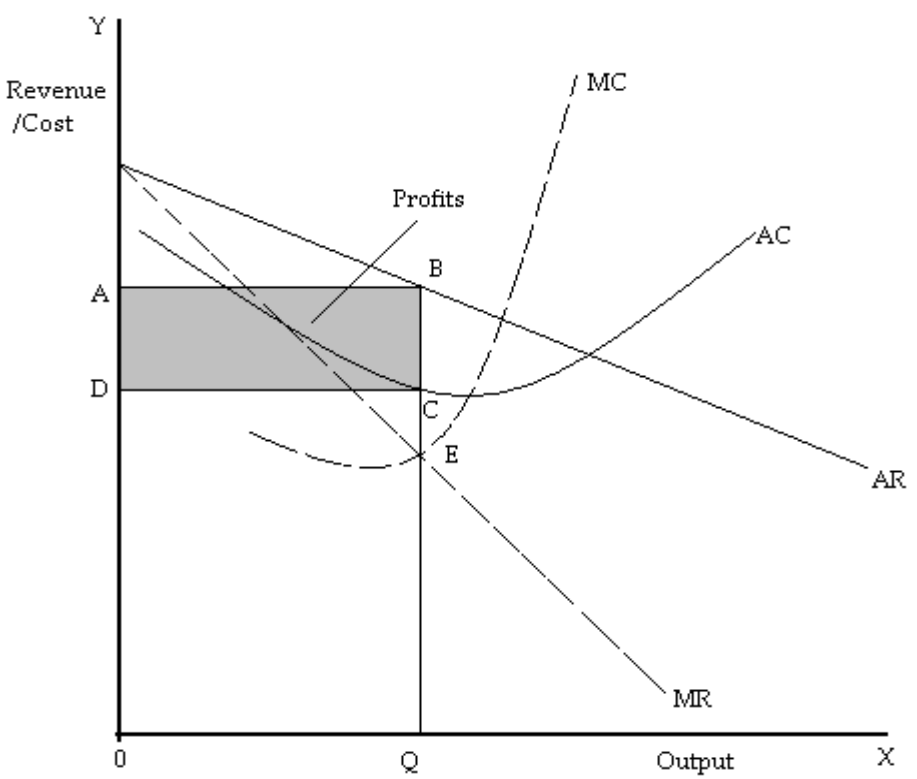


Fig 7.2: Short-run Equilibrium of a Monopoly Firm

MR is the marginal revenue curve, MC is the marginal cost and AC is the average cost curve. In the figure, it has been seen that upto 0Q output, marginal revenue is greater than marginal cost. But beyond 0Q output level, marginal revenue is less than marginal cost, which means losses to the monopoly firm. Therefore, the monopoly will be in equilibrium at 0Q output level, where marginal revenue equals marginal cost.

Therefore, in short-run quilibrium: MR = MC

Again, from the figure it can be seen that corresponding to the equilibrium output 0Q, the equilibrium price is QB (=0A). Now, from this equilibrium price-output levels, we can find out the total amount of profit the monopoly firm earns. In the above figure, we see that the monopoly firm earns QB revenue price (hence average revenue) per unit of output. But QC is the average cost (as point C touches the AC curve; and as cost has been calculated on the vertical axis along with price) per unit of output. Thus the firm earns a profit of BC (QB-QC) per unit of output. Therefore, the total profit of the monopoly firm is:

= BC x 0Q = BC x CD = ABCD

(the shaded rectangle area in the figure).

This is super normal profit as it is over and above normal profit



LET US KNOW

Does the monopoly firm earn profit all the time?

In some rare cases, a monopoly firm may also incur losses. This may happen when the product is newly introduced in the market, and hence consumer does not know about it. Thus, in such initial phases, it is possible that the cost of product is more than revenue earned by it (as demand is low in the market).

7.3.3 Long-run Equilibrium of the Monopoly Firm

We have discussed in the earlier unit how a firm under perfect competition attains long-run adjustment through the entry of new firms into or exit of existing firms from the industry. As compared to the market size, if the short-run average cost of the monpoly firm is not optimal, then to increase profit in the long-run it can opt for adjustment in its scale of operation. Thus, the monopoly firm will choose that operation / production size which will be optimum for its market demand level.



LET US KNOW

How does the monopolist make the adjustment in its long run operation scale? A monopoly firm can make this adjustment in three ways; by setting up a) a plant of the less than optimal scale, b) a plant of optimal scale, or c) a plant of greater than optimal scale.

We have seen in the short-run equilibrium analysis that the monopoly firm attains equilibrium at that output level where MR = MC. Similarly, in the long -run after the adjustment in its operation scale, the monopoly firm will attain equilibrium where long-run marginal cost equals the marginal revenue levels, i.e., where long-run MC curve cuts the MR curve (it is to be noted that only the cost condition of the monopoly firm can vary in the long run, while the revenue condition remains the same. Hence, the revenue curves of the monopoly will remian the same even in the long run). This has been shown graphically with the help of the following figure 7.3.

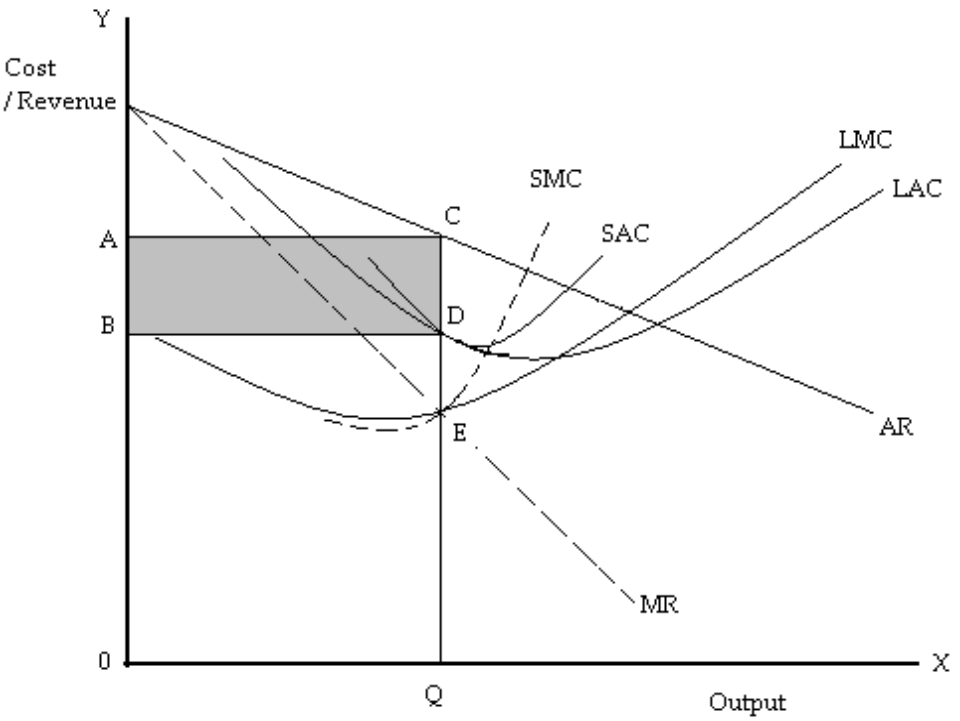


Fig 7.3: Long-run Equilibrium of a Monopoly Firm

From the above figure it can be seen that the long-run marginal cost curve (LMC) and the marginal revenue curve (MR) intersect at point E. So, point E is the long-run equilibrium point. Corresponding to this equilibrium level, equilibrium output is 0Q, and the equilibrium price is 0A.



ACTIVITY 7.2

What profit does the monpoly firm earn in the long-run? We have already seen in section 7.3.2 the total profit the monopoly firm earns while attaining short-run equilibrium. Now with the help of the above figure 7.3 and the previous discussion about the short-run equilibrium of the monpoly firm, find out the total profit the monopoly firm will earn in the long-run.

7.3.4 Price Discrimination : Degree and Possibility

An important feature of monopoly form of market is that the monopolist can charge different prices for the same good at the same time for reasons not associated with differences with cost. This is known as price discrimination. Let us consider the following example. A tea producer has a manufacturing plant in Dibrugarh. He sells tea at a per unit cost of Rs. 12 in Dibrugarh. He also sells it at the Guwahati market at a per unit price of Rs 15. He charges Rs 3 more in the Guwahati market to cover his transportation cost of Rs 3 per unit of the product. As the difference in the prices between these two markets is equal to the difference in the transport cost, hence we can not call this as price discrimination. But if for example, the producer sells tea at a unit price of more than Rs 15 (say Rs 17) in the Guwahati market then we can say that the producer is practising price discrimination.

- **Degree of Price Discrimination**

  British economist, A C Pigou in his book *The Economics of Welfare* (1920) has identified three degrees of discriminating power of a monopoly firm leading to three types of price discrimination.

- **First degree price discrimination**: First degree price discrimination occurs when the monopoly firm charges a different price for each of the individual unit of the product, even to the same consumer. The maximum price that a consumer is willing to pay for a unit of output is called the *reservation price.* The perfectly discriminating monopolist charges the reservation price for each unit of the output. The first degree discriminition is also called *perfect price discrimination.* This type of price discrimination is very difficult to implement.
- **Second degree price discrimination:** This degree of price discrimination occurs when the monopolist is able to charge several different prices for different ranges or groups of output.

For example, we need to pay monthly electricity bills based on different prices charged for different slabs of energy consumption. Say we need to pay Rs. 2 for first 100 units of electricity consumption in a month. Again, a higher price, say, Rs.2.50 can be charged for subsequent units (starting from 101st unit to a certain limit). This type of price discrimination is also seen in case of telephone bills for different units of calls. Magazines also offer different price range for different period of subscription order.

- **Third degree price discrimination:** The third degree price discrimination occurs when the monopolist partitions the market into two or more groups of customers and charges different prices to the different groups (the price is uniform for member within a group). For example, an office stationery supplier can charge different prices from different offices.



ACTIVITY 7.3

You have thus come to know about the concept of price discrimation and its different types. Now, from your own observation, try to give some examples of price discrimination. Also, try to justify as to which type (degree) of price discrimination your examples will fit?

---

n Possibility for Price Discrimination

Operation of price discrimination requires the fulfillment of the following conditions:

- The seller of the product must have monopoly power.

- The market must be divided into sub-markets with different price elasticities (the concept of price elasticity has been discussed in unit 2)
- The buyer of a product can not resell the product to another buyer, or the sub-markets are separate.



CHECK YOUR PROGRESS

Q.1 : Tick whether the following are true (T) or false (F).

(i) Price discrimination is of four degrees. (T / F)

(ii) Differences in prices of a product in two separate markets due to difference in transportation cost is called price discrimination.(T / F)

Q.2 : Fill in the blank:

(i) The word 'monopoly' has come from the Greek words *monos polein,* which means _____.

(ii) *The Economics of Welfare* was written by _____.

(iii) Another name of first degree of price discrimination is _____.

7.4 MONOPOLISTIC COMPETITION : DEFINITION AND ASSUMPTIONS

Monopolistic competition is the mid-way between the two extreme market forms we have already discussed, i.e., perfect competition and monopoly. The term monopolistic competition was first used by E. H. Chamberlin in his book *"TheTheory of Monopolistic Competition".* Monopolistic competition refers to a market structure in which there are many firms selling closely related, similar but not identical products. This market structure is much more realistic than the other two market stuctures we have discussed already. The assumptions of this market form are:

- **Large number of sellers and buyers**:This is the first assumption of monopolistic competition. Presence of large number fo firms/sellers

implies that each seller can satisfy only a small share of the market demand. And the sellers face stiff competition in the market.

- **Differentiated products that are close substitutes**: The producers under monopolistic competition produce differentiated products. But the products offered by individual producer is a close substitute of another.
- **Free entry and exit from the market**: Free entry and exit from the industry is also another important feature of monopolistic competition. This feature though sounds similar with perfect competition, yet is technically different. Because under perfect competition, a firm entering new into the industry has to produce indentical products already existing in the industry. But in case of monopolistic competition, new firms may introduce new products in the market.Such new products may have some difficulty in competing with the established brands.
- **Selling Cost**: Every firm under monopolistic competition may incur individual selling costs (cost on advertisement, etc) to promote its product.
- **Imperfect knowledge**: Imperfect knowledge on the part of the consumers about the products of different sellers is also an important feature. This is important because even when two products of two different sellers may be identical in terms of quality, but the monopolistic firms try to show variabillity in them to attract the consumers towards the product. This becomes possible when the consumer does not have perfect knowledge about the products of different sellers.

7.4.1 Equilibrium of a Firm: Short Run

As in monopoly, firms under monopolistic competition face a downward sloping demand curve. But this does not mean that monopolistically competitive firms are likely to earn large profits. Monopolistic competition is also similar to perfect competition: as there is free entry, the potential to earn profits will attract new firms with competing brands, driving economic profits down to zero. However the condition of short-run equilibrium of a monopolistic competitive firm is similar to that of a monopoly firm, i.e.

Marginal Revenue = Marginal Cost

This has been explained with the help of the following figure 7.4.

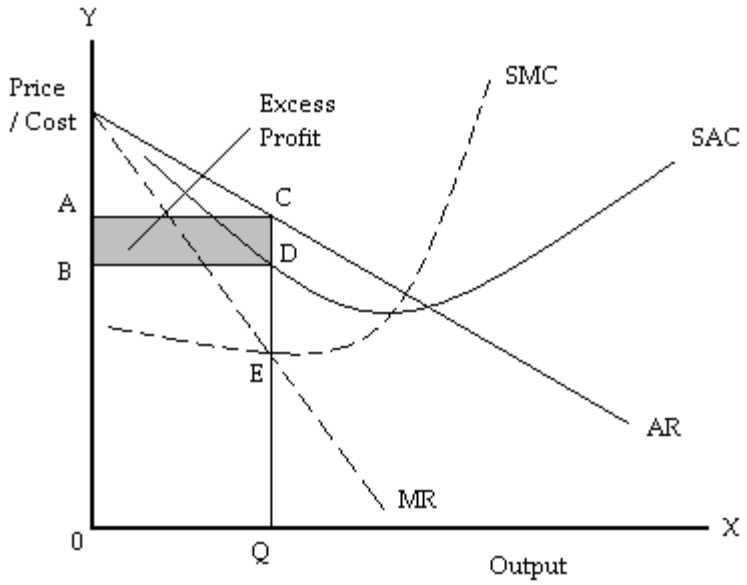


Fig 7.4: Short-run Equilibrium of a Monopolistic Firm

In figure 7.4, AR is the average revenue and MR is the marginal revenue curve. SAC and SMC are short-run average cost and short-run marginal cost curves respectively. The firm attains equilibrium at point E, where SMC curve intersects the MR curve. Corresponding to this equilibrium point E, 0Q is the equilibrium output and QC (or 0A) is the equilibrium price. It can be seen from the figure that the cost per unit of output is QD, while the revenue earned per unit of output is QC. Thus the firm earns CD amount of profit per unit of output. This amounts to a total profit of ABCD (DC X 0Q or BD). Such short-run profit earned by individual firms under monopolistiic firms is termed as excess profits or supernormal profit. However it is also possible that a firm under monopolistic competition can earn either a) normal profit or b) incur losses while attaining short-run equilibrium. These have been shown with the help of figures 7.5 and 7.6.

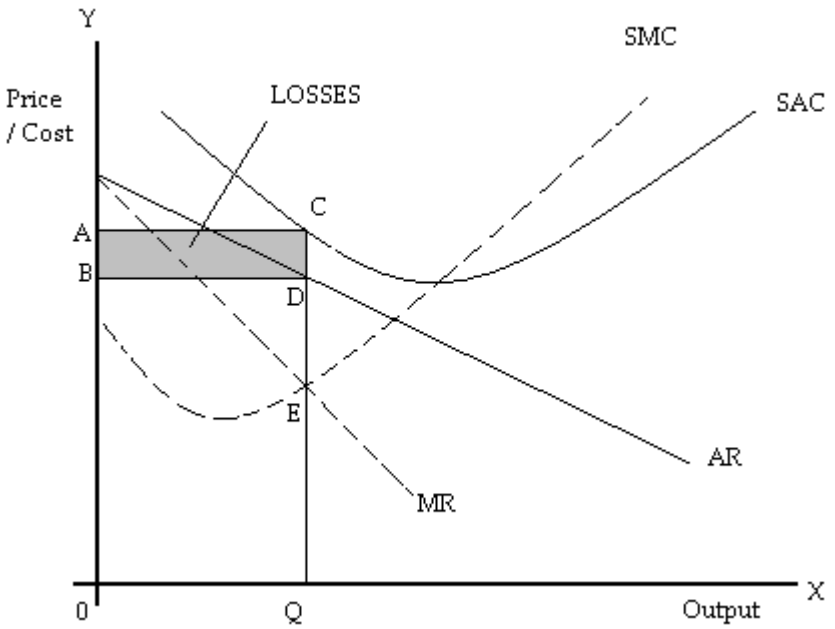


Fig 7.5: Short-run Equilibrium (incurring Losses)

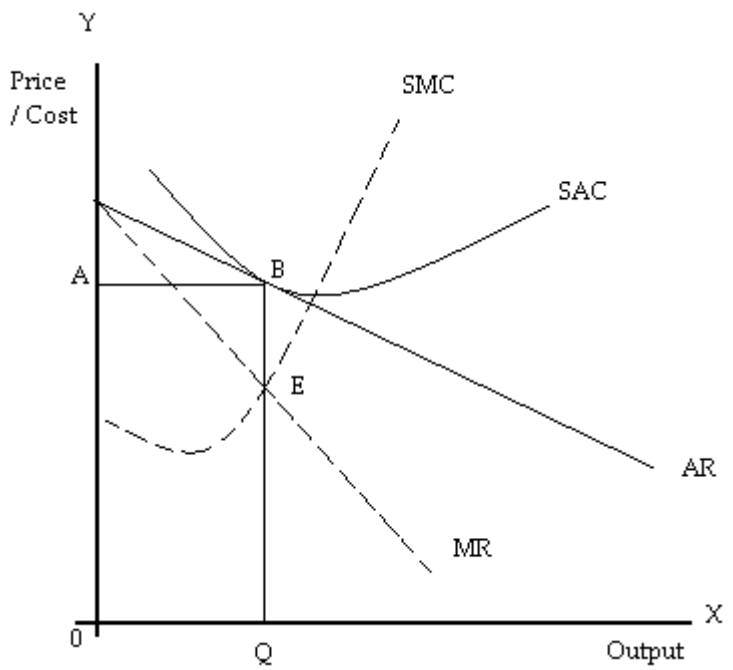


Fig 7.6: Short-run Equilibrium (earning normal profit)



ACTIVITY 7.4

From figure 7.5 you can see that at the monopolistic firm attains equilibrium at point E. Corresponding to this equilibrium point E, the equilibrium quantity is 0Q while the equilibrium price is 0A. You will also notice that at this equilibrium level, the firm incurs total losses of ABCD as price earned per unit (0B) is less than the cost incurred per unit of production (QC). You are to describe this equilibrim (incurring losses) process of the monopolistic firm. *(You can take help of the discussion of firm's equilibrium with excess profit (explained with the help of figure 7.4)) for the purpose.*



ACTIVITY 7.5

From figure 7.6 you can see that the monopolistic firm attains equilibrium at point E. Corresponding to this equilibrium point E, the equilibrium quantity is 0Q while the equilibrium price is 0A. You will also notice that at this equilibrium level, the firms earns normal profit as price earned per unit (0A) is equal to cost incurred per unit of production (QB). You are to describe this equilibrium (earning normal profit) process of the monopolistic firm. *(You can take help of the discussion of firm's equilibrium with excess profit (explained with the help of figure 7.4)) for the purpose.*

7.4.2 Equilibrium of a Firm: Long Run

In the above discussion we have seen how an individual firm may earn profit in the short-run. Such earning of profits encrourages other firms to enter into the industry. As new firms enter the industry and as they introduce competing brands, existing firms will lose market share and sales; its demand curve will shift down. Thus, entry of new firms will ultimately lead to disappering of any super-normal profit. Therefore, firms in the long-run will be earning only normal profit. This has been shown graphically with the help of the following figure 7.7.

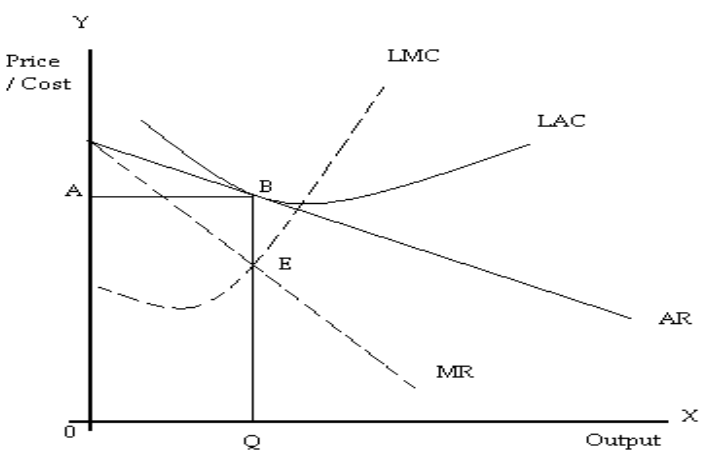


Fig 7.7: Long-run Equilibrium of a Firm

From the above figure it is seen that the firm attains equilibrium at poing E where marginal revenue equals marginal cost. Thus, 0Q is the equilibrium level of output and 0A is the equilibrium level of price. This is, in fact, is also long-run equilibrium because at the equilibrium price (0A), the long-run average cost curve (LAC) is tangent to the the average revenue (AR), which means that the firm earns only normal profit.

Thus, from the above discussion we have seen that a firm under monopolistic market structure will attain equilibrium:
In the short-run when: Marginal Revenue = Marginal cost
In the long-run when : Marginal Revenue = Marginal cost; and
Long-run Average Cost = Average Revenue



CHECK YOUR PROGRESS

Q.3: Tick whether the following are true (T) or false (F).

(i) The firm under monopolistic competition faces a downward sloping demand curve.(T / F)

(ii) A firm under monopolistic competition can earn super normal profits even in the long run.(T / F)

Q.4: Fill in the Blanks:

(i) Monopolistic competition is similar to perfect competition as there are .....and.....

Q.5: Mention the conditions of long-run equilibrium of a monopolistic firm.

7.4.3 Group Equilibrium

So far we have discussed how an indiviudal firm under monopolistic competition attains equilibrium in the short-run as well as in the long-run. Let us now discuss 'group equilibrium'.



LET US KNOW

There is a difference between the concepts 'group' and 'industry'. Group refers to a number of firms producing products which are close substitutes to each other. Industry,on the other hand,refers to the firms which produce identical products. Thus, in the case of perfect competition, we use the term 'industry', while in this unit (in case of monopolistic competition), we have used the term 'group'.

Product differentiation necessitates a redefinition of industry.This is because heterogeneous products cannot be summed to form market demand and supply scedules as in case of homogeneous products.In view of this ,E.Chamberlin uses the concept of 'product group' in lien of industry while analysing equilibrium in a monopolistic market.Such 'product group' includes products which are close technological and economic substitutes .But still, product differentiation allows each firm to charge a different price.There can be no unique equilibrium price but a equilibrium cluster of prices which will reflect the preferences of the consumers for the product of the differnt firms in the group.

However, in this analysis of group equilibrium, Chamberlin shows the determination of a unique equilibrium price.This has been made possible by what he called two 'heroic assumptions'.These are:

i) all firms in the group have identical cost conditions giving rise to identical cost curves;

ii) consumers preferences are evenly distributed among product so that all firms have identical demand curves.

These two assumptions also enabled Chamberlin to analyse the equilibrium of the firm and the group in the same diagram.

Chamberlin develops three distinct models of equilibrium.

First Model: In the first model, it is shown that although firms can earn super normal profit in the short run, in the long run the group equilibrium will occur with new firms entering the market whereby all firms will enjoy only normal profits.

Second Model: In the second model , it is shown how in the long run the group will atain equilibrium with price adjustment, instead of new entry. At the equilibrium level of output all the firms will earn just the normal profit. Here, Chamberlin introduces a new demand curve which is called the 'actual sales curve' or 'share of the market' along with the typical downward sloping individual perceived demand curve.The 'actual sales curve' shows the actual sales of the firm at each price after accounting for the adjustment of price of other firms in the group.

Third Model: The third model is a combination of the above two. Here the group attains equilibrium in the long run by both price adjustment and entry and exit of firms. At the equilibrium level of output , as usual, all firms earn just the normal profit.



LET US KNOW

Chamberlin used a different approach to decsribe group equilibrium. For the analysis he adopted two main assumptions:

'Uniformity assumption': He assumes that the demand and cost curves of all the products in the group are uniform. However, this does not mean that the products of the firms will not differentiate.

'Symmetry assumption': This assumption means that the number of firms in the group are so large that the individual decision of a firm regarding price and output is unlikely to have any effect on its rivals. The name 'symmetry' to this assumption was given by Stigler.

7.4.4 Concept of Excess Capacity

From our long-run equilibrium analysis, it is clear that a firm under monopolistic competition attains equilibrium at the point when the two conditions are satisfied, viz.:

Long-run Marginal Revenue = Long-run Marginal cost; and

Long-run Average Cost = Long-run Average Revenue

Now let us reconsider the following figure 7.10 (a) which represents the long-run equilibrim of a firm under monopolistic competition.

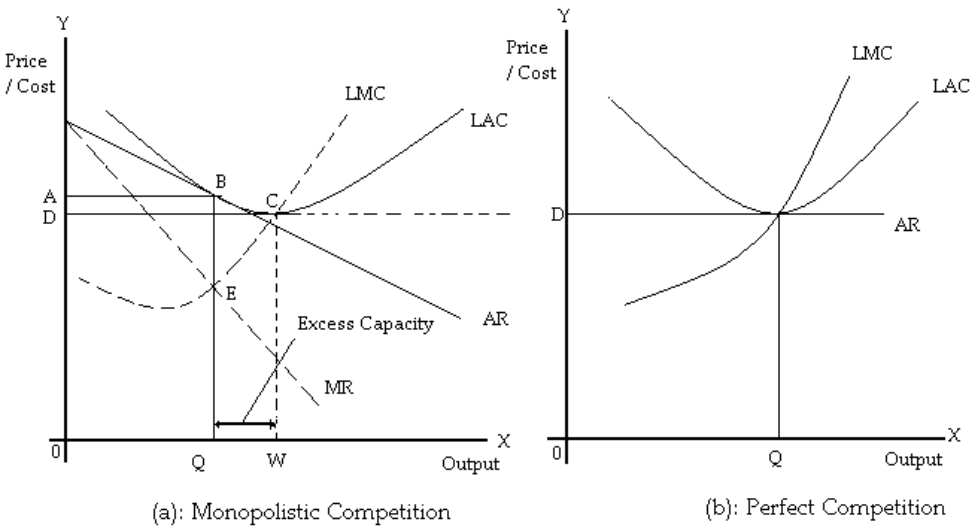


Fig 7.10: Excess Capacity

From the above figure 7.10 (a) we can see that a firm under monopolistic competition attains long-run equilibrium at point E. Again, it can be seen that corresponding to this point, the long-run average cost curve (LAC) is tangent to the average revenue curve (AR) at point B. But at point B, the firm's average cost is not minimum. This means the firm is producing at a point where optimum cost (the lowest possible level of average cost) has not arrived. Hence it can not be said as optimal cost level from society's point of view. Again we can see from the figure that the firm's lowest possible average cost is arrived at point C of the LAC curve. Corresponding to this lowest average cost, the firm's output is 0W. But the firm's equilibrium is 0Q, which is less than the optimal output level by QW. Hence QW represents excess capacity of output which exists under monopolistic competition. Why does it happen? This is because as the demand curve of the firm is downward sloping, it is not possible that the firm's long-run average cost curve be tangent at its optimum point (c) This becomes possible only in case of perfect competition, where the firm faces a horizontal demand curve. This has been shown with the help of panel (b) of the same figure. But as the demand curve of the monopolistic firm becomes flatter in the long-run, the quantum of the excess capacity will get reduced.



CHECK YOUR PROGRESS

Q.6. What is the difference betwee the concepts ' group' and 'industry'?

Q.7. The demand curve of the monopolistic firm does not touch the long-run average cost curve at its lowest point at the point of equiribrium. Why?

7.5 SOME OTHER IMPORTANT CONCEPTS OF PRICING

n Pioneer Pricing

When a company brings an innovation into the market, it enjoys the freedom to set a unique pricing of its own. It does not have to consider any competitor pricing. The pricing decision of the company will depend on the policy of the company: whether it wants to penetrate in the market by volume sales of the product or wants to set a high price taking the advantage of an innovator. Thus two pricing strategies may evolve: penetration pricing and skimming pricing.

Penetration Pricing: This pricing technique is adopted by companies, which want to increase the market share of a product. Companies may believe that a higher sales volume of the product will lead to lower unit cost of it and thereby will yield a higher long-run profit. Penetration pricing may be an effctive pricing strategy, when:

- Ø the market is highly sensitive and a low price of the product will stimulate the consumer to consme more of the product;
- Ø production costs and distribution costs of the product tends to fall in the long-run
- Ø low-pricing strategy is expected to discourage actual and potential competitors

Skimming Pricing: Contrary to penetration pricing, companies may take the strategy of taking the advantage of an innovator and set a high price of the product in the initial phase of the product. As other companies bring similar products in the market in the long-run, companies may lower the price of the product and thereby increase sales in the market. Companies like Sony often uses this technique. Success of this pricing strategy will depend on the following:

Penetration pricing may be an effctive pricing strategy, when:

- Ø sufficient number of consumers have high current demand for the product
- Ø unit cost of production due to low volume production of the product is not too high to get sufficient number of consumers
- Ø high initial prices will not attract competitors to enter immideately in the market
- Ø the high price of the product attaches a superior image.

n Cost-plus Pricing or Mark-up Pricing: In this pricing technique, a certain percentage of the unit cost of production is added with the unit cost to arrive at the unit sales price of the product. Thus suppose a manufacture of soap has the following cost figures:

Variable cost per unit:	: Rs. 8
Fixed Cost	: Rs. 200,000
Expected sales volume	: 100,000

Then, the manufacturer unit cost will be:

$$\text{Unit cost} = \text{variable cost per unit} + \frac{\text{Fixed Cost}}{\text{Expected sales volume}}$$

$$= \frac{\text{Rs } 200{,}000}{100{,}000} \qquad = \text{Rs } 8 + \text{Rs. } 2$$

$$= \text{Rs } 10$$

Now, suppose the manufacturer wants to earn a 25 percent markup on sales. Then, manufacturer's mark-up price (per unit) will be:

Mark-up price = unit cost + desired percentage of return

Mrak-up price = Rs. 10 + 25% of (Rs 10)

= Rs. 10 + Rs 2.50

= Rs. 12.50



7.6 LET US SUM UP

Thus, in this unit we have discussed -

- What a monopoly market structure is. We have discussed that monopoly can be described as the market structure where there is only one supplier of the product, which has no close substitute in the market.
- The equilibriuim of a monopoly both in the short-run and in the long-run.
- The concept of price discrimination and its various types.
- About monopolistic competition.
- The equilibriuim of a monopolistic firm and its group both in the short-run and in the long-run.
- The concept of excess capacity under this market structure.
- Some of the managerial economics pricing techniques: pioneer pricing and cost-plus pricing.



7.7 FURTHER READING

1. Dewett, K.K, (2005), '*Modern Economic Theory*',22nd Ed., S.Chand & Sons.

2. Chopra, P.N. (2008), '*Micro Economics'*, 2nd Ed,. Kalyani Publishers.

3. Ahuja, H L, (2006)*, 'Modern Economics',* 12th Ed., S. Chand.

4. Ahuja, H.L. (2007), '*Managerial Economics'*, 1st Ed., S.Chand.

5. Mankar, V.G. (1999), *'Business Economics'*, MacMillan.



7.8 ANSWERS TO CHECK YOUR PROGRESS

Check Your Progress

Ans to Q No. 1: (i) False (ii) False

Ans to Q No. 2: (i) Alone to sell (ii) A C Pigou

(iii) Perfect price discrimination

Ans to Q No. 3: (i) True (ii) False

Ans to Q No. 4: Large number of sellers in the industry and no entry/exit barrier.

Ans to Q No. 5: A firm under monopolistic firm attains long-run equilibrium when the following two conditions are fulfilled:

Marginal Revenue = Marginal cost; and

Long-run Average Cost = Average Revenue

Ans to Q No. 6: The difference between 'group' and 'industry' is that 'group' refers to a number of firms producing products which are close substitutes to each other. Industry, on the other hand, refers to the firms which produce identical products.

Ans to Q No. 7: As the demand curve of the firm is downward sloping and hence under monpolistic competition, it is not possible that the firm's long-run average cost curve be tangent to its average curve. This becomes possible only in case of perfect competition, where the firm faces a horizontal demand curve



7.9 MODEL QUESTIONS

Short Type of Questions:

1. Discuss the concept of price discrimination.
2. What are the different degrees of price discrimination?
3. What is excess capacity? Why does it arise?
4. Following data are given for a certain product:

   Variable cost per unit: Rs. 11; Fixed Cost: Rs. 275,000; Expected sales volume: 1,15,000 units. The manufacturer aims a profit of 12% per unit. Calculate the Mark-up price of the product.

Essay Type Questions:

1. Describe how monopoly firm attains equilibrium in the long-run.
2. How does a firm under monopolistic competition attain equilibrium in the short run and in the long run?
3. How does a group under monopolistic competion attain equilibrium in the long run?

*** ***** ***

UNIT 8: THEORY OF DISTRIBUTION

UNIT STRUCTURE

8.1 Learning Objectives

8.2 Introduction

8.3 Marginal Productivity Theory of Distribution

8.4 Basic Concept of Rent

8.5 Ricardian Theory of Rent

8.6 Modern Theory of Rent

8.7 Let Us Sum Up

8.8 Further Reading

8.9 Answers to Check Your Progress

8.10 Model Questions

8.1 LEARNING OBJECTIVES

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

- know the marginal productivity theory of distribution,
- define rent and discuss the concept of rent form Economics point of view
- describe the Ricardian theory of rent
- discuss the modern theory of rent.

8.2 INTRODUCTION

In general, the term 'rent' is used in a wide sense - to mean a hiring charge. Thus, we use this term to denote the rent for a house, for a machine etc. But in Economics, the term 'rent' has a special use. In Economics, the term has been widely used in the sense of a surplus. Again the concept of rent as discussed in the modern Economics is somewhat different from its earlier discussion led by David Ricardo. This unit discusses in detail the marginal productivity theory of distribution. Then it discusses the basic concepts of rent. Finally, we shall discuss the concept of rent from the modern point of view.

8.3 MARGINAL PRODUCTIVITY THEORY OF DISTRIBUTION

Marginal Productivity Theory was initially used by Ricardo and West in the determination of rent on land. Later, economists like J.B. Clark, Jevons, Wicksteed and others contributed to it. Among these economists, J.B. Clark was the pioneer in using this theory in wage determination.

Assumptions: Clark's Marginal Productivity Theory rests on the following assumptions:

- Clark assumes a completely static economy. Thus, changes in the form of economic growth, increase in population, technology of production, changes in stock of capital are ruled out.
- There prevails perfect competition in the factor market.
- Labour and capital are perfectly mobile. Labour is homogeneous.
- Form of capital can be varied at will. Thus, capital equipment of production can be adapted to varying quantities and abilities of available labour.

Considering the above assumptions, it can be said that a rational employer will hire maximum units of labour so as to utilize his existing capital equipments to the fullest extent. It can be easily interpreted that given fixed stock of capital equipments as the firm increases labour units, its marginal productivity will decline. In fact, he will go on hiring additional units of labour as long as addition made by the marginal units of labour is above the wage he has to pay for it. Thus, the employer will reach equilibrium at the position where marginal product of labour is equal to the wage rate. This can be shown with the help of Figure 8.1.

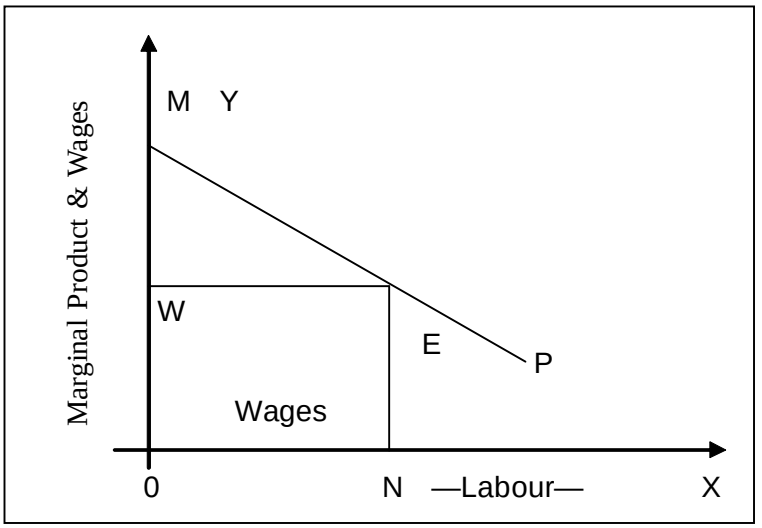


Figure 8.1: Relation between Wage Rate and Marginal Product of Labour

In Figure 8.1 it can be seen that MP curve depicts the downward sloping marginal product of labour. At the existing level of marginal product of labour OW, the firm will employ additional units of labour till the number of labour units reaches ON. The firm will not employ additional labour units after this limit, as the marginal product of labour will be less than prevailing rate OW. Thus, at point E, where the MP curve intersects ON amount of labour units, the firm reaches equilibrium.

Now, we shall discuss the application of the above theory in the determination of the wage rate. Clark points out that when there is unemployment in the society, the unemployed labour will compete themselves to get employment. This will reduce the prevailing wage rate. On the other hand, the employers will bid the wage rate up if the prevailing wage rate is lower than the marginal product of available labour force. This happens because when the wage rate is lower than the marginal product of labour, the employers' demand for labour force will be more than the available labour force. In this situation, the employer finds it more profitable to employ more labour units at lower cost. Thus, given the labour supply in the economy, there will be competition among the employers to get more labour units to its firm. Thus, the increased demand for labour will bid up the wage rate. This has been explained with the help of Figure 8.2.

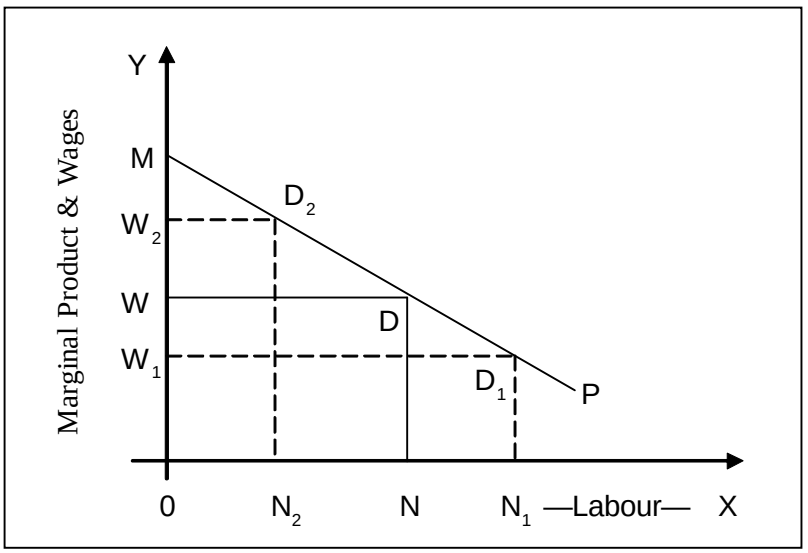


Fig 8.2: Determination of Wage Rate by Marginal Productivity

From Figure 8.2 it can be seen that that ON amount of labour is available in the whole economy. Corresponding to this quantity of labour ON, the marginal product of labour is ND. As we have already discussed, the equilibrium wage rate is determined by the marginal product of labour. Thus, corresponding to the level of marginal product ND, the equilibrium wage rate is OW.

Now, at a wage rate higher than OW, say OW_2, the labour force employed will be ON_2. This is lower than the full employment level ON; hence, there will be competition among the unemployed labour force (NN_2), and consequently, it will bring the wage rate down to OW.

Similarly, at a wage rate lower than OW, say OW_2, employer will find it profitable to employ more units of labour as wage rate (OW_2) is below the marginal product of labour (OW or ND). Thus, the demand for labour will be ON_1, against the total supply of labour ON. This will propel competition among the employers, and given the labour supply, the wage rate will increase to OW.



CHECK YOUR PROGRESS

Q 1: What are the assumptions of Clark's version of the Marginal Productivity theory of Distribution?

.....

.....

.....

Q 2: Why does an employer tend to increase its labour supply when the wage rate is below the marginal productivity curve of labour? What is the consequence?

.....

.....

.....

8.4 BASIC CONCEPTS IN RENT

Before we discuss rent in detail, it will be helpful for us to discuss the meaning of rent and other relevant basic concepts.

We have already said that, in general, the term 'rent' is used in a wide sense - to mean a hiring charge. Thus, we use this term to denote the rent for a house, for a machine etc. But in Economics, the term 'rent' has a special use. Originally in the subject, the term was used to mean the price paid to land for its use. But now, the term is also used for the surplus earnings of any factor of production in excess of the cost incurred to obtain its service. In the modern economic theory, the term rent is used in the following senses:

- *First,* the term refers to the rental made for the use of fixed factors of production whose existence is not dependent on any human effort or sacrifice. We know that land is one such factor, because land is a free gift of nature and its supply can not be increased. Hence, modern economics includes land rent as a part of rent.

- The *second* type of rent relates to economic rent. Economic rent means the surplus earned by a unit of factor of production over and above the minimum earnings necessary to induce it to stay in the present use, industry or occupation.
- *Thirdly*, Marshall used the concept of rent to cover the short-run earnings (net of depreciation and interest charges) of fixed capital equipment. This is because, just like land, supply of fixed capital equipment is also inelastic during the short-run. However, since the capital equipment is not permanently in fixed supply like land, and as their supply is elastic in the long-run (which is not the case with land), hence Marshall preferred to call the short-run earnings from fixed capital equipment as Quasi Rent rather than rent. (We shall later discuss about Quasi Rent in section 8.5 of this unit).

8.5 RICARDIAN THEORY OF RENT

David Ricardo, an English classical economist, first developed a theory in 1817 to explain the origin and nature of economic rent.

Ricardo used the economic and rent to analyse a particular question. In the Napoleonic wars (1805-1815) there were large rise in corn and land prices.the question arises as " Did the rise in land prices force up the price of corn, or did the high price of corn increase the demand for land and so push up land prices"?.

Ricardo defined rent as, **"that portion of the produce of the earth which is paid to the landlord for the use of the original and indestructible powers of the soil."** In his theory, rent is nothing but the producer's surplus or differential gain, and it is found in land only.

Assumptions of the Theory:

The Ricardian theory of rent is based on the following assumptions:

1. Rent of land arises due to the differences in the fertility or situation of the different plots of land. It arises owing to the original and indestructible powers of the soil.

2. Ricardo assumes the operation of the law of diminishing marginal returns in the case of cultivation of land. As the different plots of land differ in fertility, the produce from the inferior plots of land diminishes though the total cost of production in each plot of land is the same.

3. Ricardo looks at the supply of land from the standpoint of the society as a whole.

4. In the Ricardian theory it is assumed that land, being a gift of nature, has no supply price and no cost of production. So rent is not a part of cost, and being so it does not and cannot enter into cost and price. This means that from society's point of view the entire return from land is a surplus earning.

Criticisms of the Ricardian Theory:

Ricardian theory has been criticized on the following grounds:

1. Ricardo considers land as fixed in supply. Of course, land is fixed in an absolute sense. But land has alternative uses, so the supply of land to a particular use is not fixed (inelastic). For example, the supply of wheat land is not absolutely fixed at any given time.

2. Ricardo's order of cultivation of lands is also not realistic. If the price of wheat falls the marginal land need not necessarily go out of cultivation first. Superior grades of land might cease to be cultivated if a fall in the price of its output causes such land being demanded for other purposes (e.g., for constructing houses).

3. The productivity of land does not depend entirely on fertility. It also depends on such factors as position, investment and effective use of capital.

4. Critics have pointed out that land does not possess any original and indestructible powers, as the fertility of land gradually dimi-nishes, unless fertilisers are applied regularly.

5. Ricardo's assumption of no-rent land is unrealistic as, in reality; every plot of land earns some rent, although the amount may be small.

6. Ricardo restricted rent to land only, but modern economists have shown that rent arises in return to any factor of production, the supply of which is inelastic.

7. According to Ricardo, rent does not enter into price (cost) but from the point of view of an individual farm rent forms a part of cost and price.

8.6 MODERN THEORY OF RENT

The Modern Theory of Rent has evolved subsequent to the Ricardian Theory of Rent put forward by Ricardo. As, discussed in the previous section (Sec 8.5), Ricardo maintained that rent is a 'surplus' which accrues to the owner of the land by virtue of relative advantages of fertility or situation or both which a particular plot of land enjoys over less productive plots. He has defined rent in these words: *"Rent is that portion of the produce of the earth which is paid to the landlord for the use of the original and indestructible powers of the soil'*. Thus, rent is the price for the use of land.

The modern economists like Pareto, Mrs. Joan Robinson, Boulding, Sligler, Shepherd, however have tried to apply the concept of the Ricardian theory of rent in a more generalised context. According to them, rent is a 'surplus' earning over ***transfer earnings*** received by a factor of production. Transfer earnings, on the other hand, refer to the amount of money which any particular unit of a factor of production earns in its next best alternative use. For example, a labour receives a wage of Rs. 350.00 per day when he/she works in a private factory. However, if the factory remains closed, he/she can work under the MGNREGA Scheme, where he/she he earns wage of Rs. 300.00 per day. Let us also supplies that in all other alternatives

avenues of job, the wage rate is lower than the MGNREGA scheme. Thus, Rs. 300.00 here is the *transfer earnings* (next best alternative use) and Rs. 50 (the difference between the two, is the rent (surplus)) the labour earns while working in the private factory.

Thus, the modern economists argue that rent as a surplus can be explained as the reward to the other factors of production it earns over and above the transfer earnings. Rent in this sense is nothing by economic rent. They also point out that the general framework of demand and supply should be used to determine the equilibrium situation in the market.

Demand and Supply Analysis:

Demand for a Factor: The demand for a factor of production, be it land, labour or capital is a ***derived demand***. For instance, labour is demanded something to produce. Thus, higher the volume of production, the greater will be the demand for labour. This implies that a firm will pay rent equal to the marginal revenue productively of labour. As more labour is used, rent diminishes. This happens because of the working of the law of diminishing returns. The demand curve of a factor is, therefore, negatively sloped which means more labour will be used only at lower rents, other things of course remaining the same.

Supply of a factor: The supply of labour put to a particular use (say in manufacturing activity of a factory) is quite elastic. 'Elastic' in the sense that labour can be shifted to other uses by offering higher rent than in they are currently engaged into. Thus, supply of a factor (to an industry) is, rent elastic. In case, higher rent is paid to alternative uses, the supply of labour in those uses will be increased. Therefore, the supply curve of a factor (industry) slopes upward to the right.

Determination of Rent (the Demand-Supply Interaction): Determination of economic rent may be explained with the help of simple demand and supply interactions as has been explained with the help of Figure 8.3.

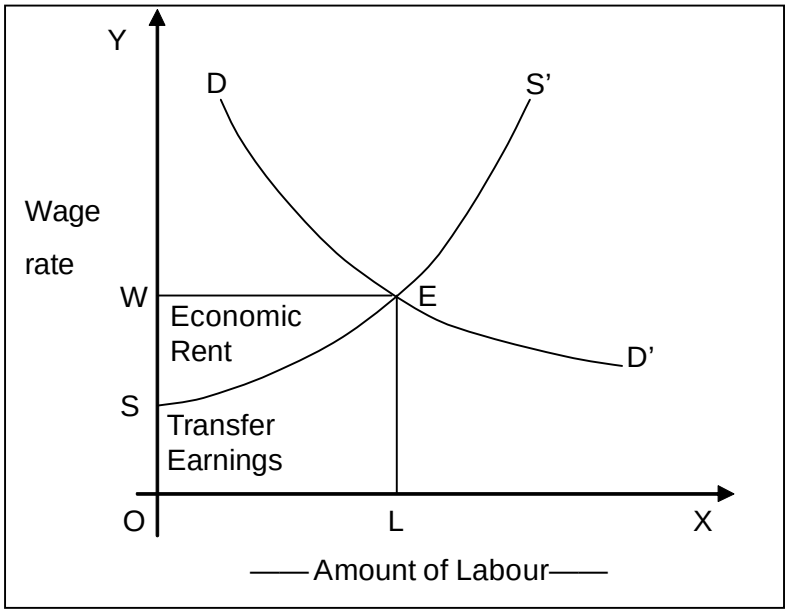


Fig 8.3: Economic Rent and Transfer Earnings for Workers

We have already mentioned that the economic rent is determined by the intersection of demand and supply curves for a factor. It can be seen in Figure 8.3 that the demand curve for labour (or, any factor of production) in a particular industry has been shown with the help of the DD' curve while the supply of labour has been shown with the help of the SS' curve. The wage rate or factor price of labour is determined by the market forces of demand and supply at the wage level OW, where the volume of total workers employed at that wage rate is OL. The total earning of the workers employed is equal to the area OWEL. At that wage rate OW, there are some workers who would work, at lower pay than that. But they are also receiving the same wage rate OW. This means, those workers whose transfer earnings are less than the wage rate OW, will be getting economic rent. The total economic rent earned by all the intra-marginal workers has been shown with the area WES. On the other hand, the area OSEL represents total transfer earnings. However, the marginal worker, i.e., the L^{th} unit of worker will not obtain any rent or surplus.

One of the obvious questions that stems from the above discussion is how the portion economic rent is determined. The economic rent of a factor of production basically depends on the elasticity of supply of that

particular factor of production. Thus, if we consider labour, then we need to examine the relationship between economic rent and labour, especially when: (i) the supply of labour is perfectly elastic, (ii) the supply of labour is totally inelastic and (ii) the supply of labour is less than perfectly inelastic. Let us discuss these three situations with graphical representations as follows:

Determination of economic rent when the supply of a factor of production is perfectly elastic: When the supply of the factor of production is perfectly elastic, entire earnings becomes transfer earnings while economic rent becomes zero. This is because, in such a situation, at a given price or remuneration, the entrepreneur can engage or employ any number of factor units. Thus, if we consider the case of labour: at the lowest wage rate the entrepreneur will engage the maximum units of labour. This also means that as the supply of labour is perfectly elastic, the equilibrium wage rate will be determined at the lowest wage rate. As a result, transfer earnings are equal to actual earnings. No unit of labour will be able to earn more than its transfer earnings. Thus, the scope of earning rent or surplus earnings is ruled out. This has been shown with the help of the following Figure 8.4.

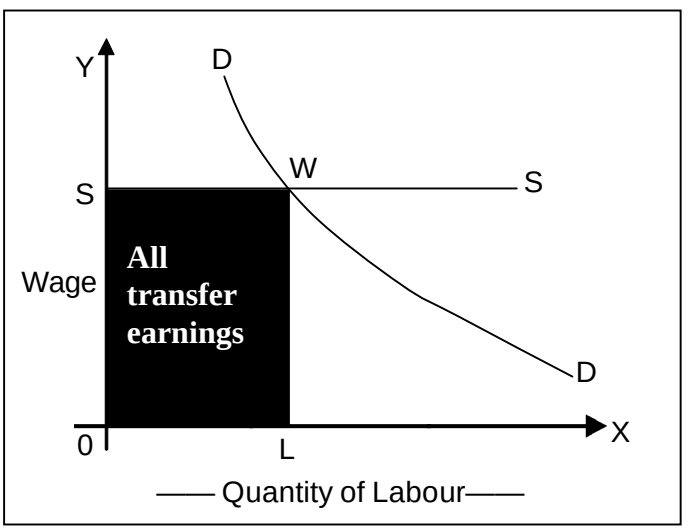


Fig 8.4: Transfer earning of a factor of production when supply is perfectly elastic

In Figure 8.4, supply of labour has been represented by the horizontal SS curve and is perfectly elastic. As the entrepreneur will engage maximum units of labour at its lowest wage rate, the equilibrium wage rate will be determined at the lowest wage rate itself. In such a situation, no unit of labour will be able to earn above the minimum wage rate. Thus, in such a situation, the scope of economic rent or surplus earning is ruled out.

Determination of economic rent when the supply of a factor of production is totally inelastic: When the supply of the factor of production, i.e., labour in our case, is totally inelastic, transfer earnings becomes zero. This means that the entire earnings are economic rents only. This situation arises because when the supply of the factor of production is perfectly inelastic, it violates the very basic definition of transfer earnings. This is true particularly with land. The supply of land is fixed: it neither increases nor decreases with rise or fall in prices. That is why it is said that land has no supply price. Thus, the entire earnings are economic rent only. This has been shown with the help of the following Figure 8.5.

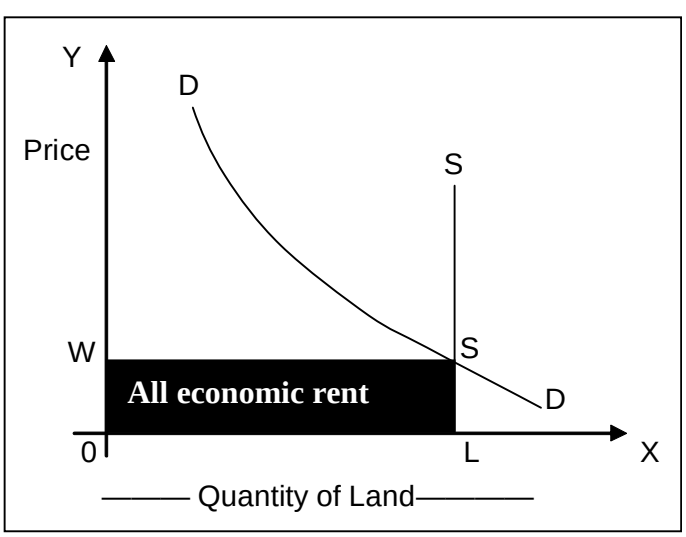


Fig 8.5: Transfer earning of a factor of production when supply is totally inelastic

In figure 8.5, supply of labour has been represented by the vertical SS curve and is totally inelastic. As such, the question of increase or decrease in supply is ruled out, which also means that the transfer earnings of the land are zero. The entire earnings from land 0WSL, therefore happens to be economic rents only.

Determination of economic rent when the supply of a factor of production is less than perfectly elastic: In such a situation, there emerges both economic rent and transfer earnings. This situation is similar to what we have already discussed with the help of Figure 8.3. .



ACTIVITY 8.1

Explain the process of determination of transfer earnings and economic rent when the supply of a factor of production is less than elastic.

_____

_____

_____

_____

_____

_____

_____

_____



CHECK YOUR PROGRESS

Q 3: Express the modern view on rent.

.....

.....

.....

.....

.....

Q 4: How much economic rent does a factor of production earns when its supply is perfectly elastic and why?

.....

.....

.....

.....

.....



8.7 LET US SUM UP

- The term 'rent' was originally used to mean the price paid to land for its use. But now, the term is also used for the surplus earnings of any factor of production in excess of the cost incurred to obtain its service.
- According to the modern economists, rent is a 'surplus' earning over transfer earnings received by a factor of production. Transfer earnings, on the other hand, refer to the amount of money which any particular unit of a factor of production earns in its next best alternative use.
- According to the modern economists, rent is nothing by economic rent. They also point out that the general framework of demand and supply should be used to determine the equilibrium situation in the market.
- Ricardo defined rent as, **"that portion of the produce of the earth which is paid to the landlord for the use of the original and indestructible powers of the soil."**
- Economic rent or transfer earnings are determined based on the elasticity of the supply of production. Economic rent would be nil if the supply of a factor of production is perfectly elastic. In this case, entire portion is accrued to transfer earnings. On the contrary, transfer earnings would be nil if the supply of a factor of production is totally inelastic. In this case, entire portion is accrued to economic rent.

Economic rent and transfer earnings both would be found only when the supply of a factor of production is less than perfectly elastic.



8.8 FURTHER READING

1. Ahuja, H. L. (2007), *'Advanced Economic Theory': Microeconomic Analysis*, New Delhi: S.Chand & Company Ltd.
2. Chopra, P. N. (2008), '*Micro Economics'*. Ludhiana: Kalyani Publishers.
3. Dewett, K. K. (2005), '*Modern Economic Theory'*. New Delhi: S.Chand & Sons.



8.9 ANSWERS TO CHECK YOUR PROGRESS

Ans to Q No. 1: The assumptions of the Clark's Marginal Productivity Theory are:

- There prevails a completely static economy and there also prevails perfect competition in the factor market.
- Labour and capital are perfectly mobile. Labour is homogeneous.
- Form of capital can be varied at will. Thus, capital equipment of production can be adapted to varying quantities and abilities of available labour.

Ans to Q No. 2: Clark points out that when the wage rate is lower than the marginal product of labour, the employer finds it more profitable to employ more labour units at lower cost. However, given the labour supply in the economy, competition among the employers to get more labour units to its firm will increase the demand for labour which in turn will raise the wage rate.

Ans to Q No. 3: According to the modern view, rent is the surplus earnings of any factor of production in excess of the cost incurred to obtain its service. Thus, rent as a surplus can be explained as the reward

to the other factors of production it earns over and above the transfer earnings. Rent in this sense is nothing by economic rent.

Ans to Q No. 4: When the supply of the factor of production is perfectly elastic, entire earnings become transfer earnings while economic rent becomes zero. This is because, at a given price or remuneration, the entrepreneur can engage or employ any number of factor units. This also means that the equilibrium wage rate will be determined at the lowest price. As a result, transfer earnings are equal to actual earnings and no economic rent emerges.



8.10 MODEL QUESTIONS

A) Short questions (Answer each question in about 150 words)

Q 1: Write short notes on:

(a) Rent in modern economic theory (b) Economic Rent

Q 2: Show the differences between economic rent and transfer earnings.

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

Q 1: Discuss the marginal productivity of distribution.

Q 2: Explain how rent is determined under different conditions of elasticity of supply of a factor of production.

*** ***** ***

UNIT 9: WAGES

UNIT STRUCTURE

9.1 Learning Objectives

9.2 Introduction

9.3 Basic Concepts of Wages

9.3.1 Meaning of Wages

9.3.2 Nominal wages vs Real Wages

9.4 Wage Determination under Perfect Competition (Basic Concepts)

9.5 Wage Determination under Imperfect Competition

9.6 Wages and Collective Bargaining

9.7 Let Us Sum Up

9.8 Further Reading

9.9 Answers to Check Your Progress

9.10 Model Questions

9.1 LEARNING OBJECTIVES

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

- define wages in economics terminology,
- make a distinction between nominal wages and real wages,
- discuss the basic framework the Modern Theory of Wage Determination,
- discuss the process of wage determination under imperfect competition, and
- aquire the concept of collective bargaining and its role in wage determination.

9.2 INTRODUCTION

For the contribution towards economic activities, the factors of production earn reward. Wage is such a reward obtained by labour. In this unit, you will be able acquainted with the concept of wage and the differnece between nominal wages and real wages. In this unit, we shall discuss the

basic framwork of wage determination under perfect competition. Then we shall discuss the process of wage determination under imperfect market conditions. Apart from that, you will also be able to acquire knowledge about the concept of collective bargaining and its role in wage determination through this unit.

9.3 BASIC CONCEPTS OF WAGES

In this section, we shall basically deal with meaning of wages and the differences between nominal and real wages.

9.3.1 Meaning of Wages

The term 'wages' means payment received by the provider of services of labour. Wages is the reward obtained by labour for its economic activities towards the production process. According to Benham, *"A wage may be defined as a sum of money paid under contract by an employer to a worker for services rendered."*

It is worth mentioning here that many criticize the view of considering labour as a commodity. There is no doubt that labour has many features (emotion, feeling, individual differences, etc.) which set it apart from other factors of production viz., land and/or capital. However, in Economic theory, labour is also considered a commodity. Like a commodity, it is bought and sold in the market. Thus, a labour participates in an exchange process: it provides labour (productive capacity) and time and gets reward in the form of wage.

9.3.2 Nominal Wages vs Real Wages

Nominal wages refer to the price paid in monetary terms to a labour for his services. Thus, if a peon in an office receives Rs 2000 per month, then this is his nominal wage per month for his service. Nominal wages are also called as *money wages*.

Sometimes, a labour gets other facilities, besides his money wages. Such additional facilities may include: festival bonus,

incentives, medical re-imbursement, house rent (or free accommodation), vehicle allowance, study allowance to children etc. Thus, real wage of the labour includes his money wage plus all other goods and services he receives from the organisation.

There is another interpretation of real wage. According to this, the amount of goods and services a labour can buy out of his given money wage at any particular point of time is called the real wage. Thus, real wage is the amount of purchasing power received by a worker through the money wage. In this case, real wage depends on two factors: first, amount of money wage and second, the price level of the economy. Thus, real wage can be measured as:

$$R = \frac{W}{P}$$ where, R = Real wage, W = Money wage and P = Price level.

This means that the standard of living of a labour is determined by the real wage and not by the money wage he receives.

Determinants of Real Wage: Real wage is determined by the following factors:

- **Price Level of the Economy:** It is true that price level determines the purchasing power of money.
- **Money Wage:** Money wage also directly determines the real wage. This is because more goods and services can be bought when money wage is more.
- **Working Condition:** The working condition in which labours work also determines their real wage. Let us consider an example. Two workers get the same monthly salary, say Rs. 6000/-. But the first worker works in an office while the second worker works in a coal mine. Definitely, the first worker is much better in terms of working environment. So, we can very easily say that the real wage of the first worker is above that of the second worker.
- **Nature of the Job:** Nature of the job – whether permanent or temporary–also determines the real wage. Let us consider another example of two labours. The first labour working in a woolen

factory earns Rs 5000/-. Another labour working in a handloom factory earns Rs 4000/-. The first worker gets employment only for 4 months during the winter season only, while the second worker gets his employment throughout the year. Thus, even when the first labour earns more money wage, but his real wage is less as his employment is temporary.

- **Social Status:** The real wage is also determined by the social status assigned to a job. A teacher of a High School and a clerk of a bank may draw the same monthly salary. But in our society the teacher is bestowed with more respect than the bank clerk. Hence, the real wage of the teacher is considered more than that of the bank clerk.
- **Future Prospects:** The future job prospect also determines the real wage. Some reputed Public Sector Undertaking (PSU)s provide better job prospect than others. Thus, the real wage of a worker in such a reputed PSU will be more than that of another worker working in an ordinary organization.
- **Extra Benefits:** The real wage of the workers will be considered more if they get some other extra benefits.



CHECK YOUR PROGRESS

Q 1: State whether the following statements are True (T) or False (F)

(a) Economic theory does not consider labour as a commodity as it is vastly different from other factors of production. (T/F)

(b) Another name of real wage is nominal wage. (T/F)

Q 2: What is real wage? How can you measure it?

.....

.....

.....

.....

.....

Q 3: Mention at least four determinants of real wage.

.....

.....

.....

9.4 WAGE DETERMINATION UNDER PERFECT COMPETITION (BASIC CONCEPTS)

According to modern economists, wages are determined by the intersection of demand for labour and its supply. Hence, this theory has also been termed as "Demand and Supply Theory of Wages". This theore is relevant under the perfect competitive market conditions. We shall not discuss detail about it. However, prior understanding of wage determination under the perfectly competitive market conditions would be helpful to understand the process of wage determination under imperfect competition. Therefore, we shall basically discuss two concepts: 'demand for labour' and 'supply of labour'.

Demand for labour: The demand for labour is a *derived demand*. This is because, an employer engages labours only because there is demand for the goods and services the firm produces through the use of those labours. Thus, demand for labours depends upon the demand for the goods and services which they produce. The more the demand of goods and services of the firm, the more will be its employment of labours and vice versa. Demand for labour also depends on the following factors:

- **The Proportion of the Cost of Labour to the Total Cost of the Product:** The producer will employ more labours in the production process if he finds it more profitable to employ more labour compared to other capital inputs.
- **Productivity of Labour:** The employer will increase his demand for labour so long as marginal productivity of labour is above its cost (wage).

- **Substitutability of Labour by other Factors of Production:** If the producer finds it more profitable to substitute labour with machinery, he will substitute labour for machinery.
- **Supply of Capital:** Employment of labour also depends on the supply of capital. If the firm has more capital, they may opt for mechanization of most of their activities and reduce the employment of labour. On the contrary, a firm with low level of capital will choose to employ more labour than capital inputs.

Supply of labour: Supply of labour depends on two major factors: *first,* the number of workers available for work at different wage rate, and *secondly,* the number of workers available to work per unit of time. It is worth mentioning that the supply of labour to an individual firm in a perfectly competitive market is just a portion of the total supply of labour in the industry/economy. Hence, the supply curve of labour for an individual firm is perfectly elastic; and it is, a horizontal line parallel to the x-axis. However, the supply of labour for the industry as a whole is not perfectly elastic. Supply of labour will be more at higher wages and less at lower wages.

Determination of Wage Rate: We have already mentioned that the wage rate is determined through the intersection of demand for and supply of labour. However, we shall not discuss any further detail. If you are interested, you can follow some of the standard textbooks suggested in the the Further Reading section.

9.5 WAGE DETERMINATION UNDER IMPERFECT COMPETITION

In the previous section, we have discussed that demand for and supply of labour determines the wage rate. However, the real world is far from the 'ideal' perfect competitive market, and hence the general framework of demand and supply does not apply in determination of wages. Thus, market imperfections divert the market outcome away from competitive equilibrium.

Before we discuss the theoretical framework, let us consider some

of the imperfections in the labour market from practical point of view. First, labours are not homogenous. In real life, each labour is different from others in terms of innate factors like capabilities, educational level, training and experience. As a result, their productivity levels differ with each other. Such differences may place them differently in terms of 'individual' bargaining power to obtaining a better/higher wage rate. Similarly, supply of labours are also affected by certain factors like occupational and geographical immobility. The existence of the trade unions and attitude of the Government may also play an important role to make the 'collective' bargaining powers of the labours stronger.

While number of labours are generally greater, the number of firms to employ these workers is relatively smaller though their size are large. While dealing with the imperfect competitive labour market, we are particularly interested with ***monopsonies*** (single large buyer) and ***oligopsonies*** (few large buyers) which enjoy great bargaining position. These firms, along with the labours (trade unions) have much influence in wage rate determination under imperfect competition. Of these two market forms, we shall discuss the case of monopsony.

Wage Determination under Monopsony: As we have already stated, the key difference between the perfectly competitive labour markets that we discussed in the previous section and monopsony is that in the perfectly competitive market, there are many buyers of labour, while under monopsony, there is only one buyer of labour. Again, under perfect competition, the equilibrium wage rate is determined by the interaction of demand for and supply of labour. Under perfect competition, firms that employ labour cannot influence the equilibrium wage rate. This is solely determined by the demand and supply interaction. However, they can employ as much labour as they want at the prevailing wage rate. But under monopsony, the market supply of labour is same as the firm’s supply of labour, because there exists only one firm to employ labour. Monopsony also occurs whena big employer employs proportionately a very number of of a given type of labour so that the firm is in a position to influence the wage rate. Thus, the monopsonist acts as single employer of labour. The process of wager determina-

tion has been explained with the help of Figure 9.1.

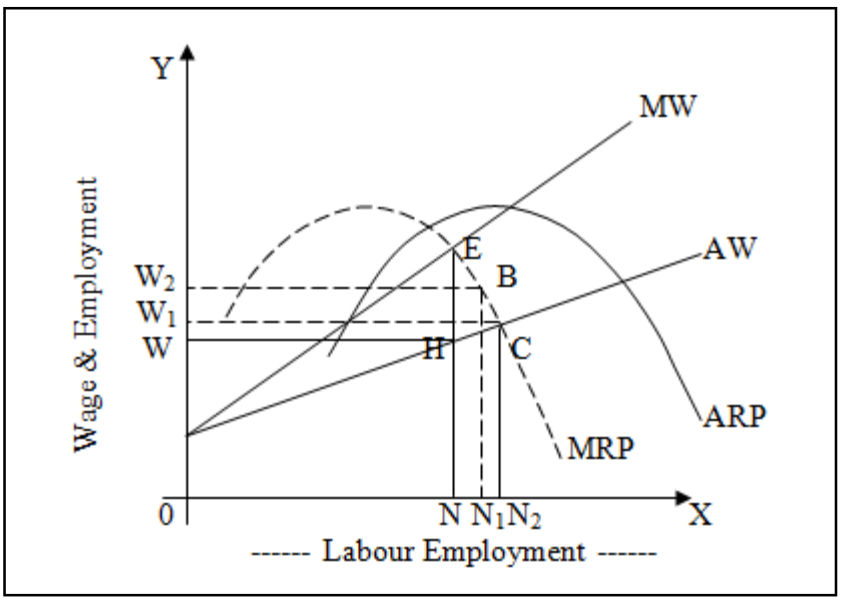


Fig 9.1: Wage Determination under Monopsony

In Figure 9.1 MRP is the marginal revenue productivity curve. This is also the demand for labour curve. The supply curve has been given by AW (Average wage) curve. The upward movement of the AW curve indicates that to engage more labours, the firm has to increase the wage rate. MW is the corresponding Marginal Wage cuve to the AW curve.

The monopsonist firm arrives at equilibrium when the MRP curve intersects the MW curve at point E. At this equilibrium point, the marginal wage is equal to the marginal revenue product with ON level of employment. The wage at this level is NH = OW.

It should be noted that the wage NH or OW is less than the marginal revenue productivity NE. This means that each worker gets EH less than his marginal revenue product. This is nothing but 'labour exploitation'. Professor Mrs. Robinson termed it as 'monopsonist exploitation'.

Thus, under monopsony, wage rate and employment is less than the perfectly competitive labour market. Under perfect competition, the equilbrium point would have been at point C, where the supply curve AW intersects the MRP curve. At this point, the wage would be higher at OW_1 and the labour employed would also be higher with ON_1 amount of labour.



Relation between wage and productivity has been explained at the end of the Unit. Please refer to the Conceptual Note.

Labour Exploitation under Imperfect Competition: Labour expoitation is a serious issue under imperfect competition. We have already discussed the case of monoponist market. Under monopolistic competition, there is perfect competition in the labour market (average and marginal wage curves coincide) but imperfect competition in the product market, i.e., marginal revenue is less than the price of product and therefore the marginal revenue product (MRP) is less than the value of the marginal product (VMP). In equilibrium, the firm will equate wage with marginal revenue product. This means that labour is paid less than the value of the marginal product which shows exploitation.

How to stop exploitation? The two weapons to stop exploitation are (a) Government action and (b) Trade union action. The action of trade union to achieve a better working condition, including better wage rate is known as collective bargaining. In the next section, we shall explore the affects of collective bargaining on wage determination.

9.6 WAGES AND COLLECTIVE BARGAINING

Meaning of Collective Bargaining: Some modern economists discuss determination of wage as a process of collective bargaining. It is obvious that an individual worker is unlikely to affect the determination of wage rate offered to him. However, if the workers are organized and they form a trade union, the bargaining power of the workers increases and they can affect the prevailing wage rate. Thus, *collective bargaining may be defined as the process in which conditions of employment are determined by the mutual agreement between the representative of the trade union on the one hand, and representative of the employers (or employers' association) on the other*.

Collective Bargaining and Wage Rate Determination: Based on different market conditions, there are a number of theories regarding collective bargaining and its effect on determination of the wage rate. In this unit, we shall discuss about William Fellner's model of collective bargaining.

The model of Fellner assumes the market structure of bilateral monopoly. The model discusses wage determination through collective bargaining in two situations: first, the trade union tries to achieve maximum possible wage rate and are indifferent about the effect of such wage rate on employment generation; second, the union seeks to achieve a certain optimum combination between wage rate and employment generation. In this unit, we shall discuss the first situation only. If you are interested to know further, you can refer to a standard textbook suggested in the the Further Reading section.

Situation I: Trade Union Tries to Achieve Maximum Possible Wage Regardless of Its Effect on Employment: In this case, the shape of an indifference curve is a horizontal straight line. And, higher indifference curves from the x-axis indicate higher levels of satisfaction of the trade union. The process of collective bargaining and wage rate determination has been shown with the help of Figure 9.2.

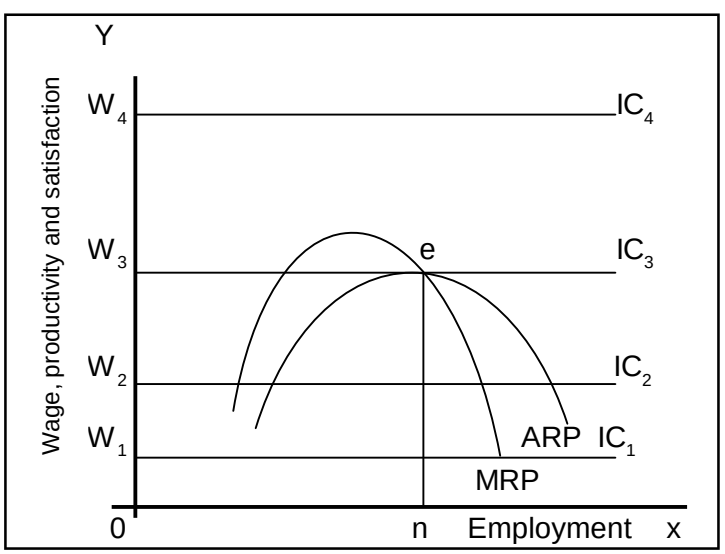


Fig 9.2: Wage Determination under Collective Bargaining (when the Trade Union is Indifferent to the Effect of Wage Rate on Employment Generation)

From Figure 9.2 it can be seen from the above figure that the successive indifferences curves are located at successively higher positions from its previous indifference curve. This means that as we move from IC_1 to IC_2, from IC_2 to IC_3 and from IC_3 to IC_4, the distance

MRPL and ***ARPL:*** please refer to the 'Conceptual Note' at the end of this unit.

between these successive indifference curves increases. Thus, $W_1W_2 > 0W_1$; $W_3W_2 > W_1W_2$ and so on. This happens because, as we move towards higher satisfaction levels, larger increments in wage rate are required to yield a constant rise in satisfaction. This is in fact a basic human nature.

Now, when we have said that the union tries to achieve the maximum possible wage rate, it implies that the trade union will actually face a certain limit with regard to the wage rate. Thus, there is a maximum possible limit and a minimum limit to the wage rate. It is unlikely that the employer will pay wage rate above the maximum level of ARP. Because, the employer will have to suffer losses, as cost (i.e., wage) will be above average revenue (i.e., ARP); better he may opt to close down his firm. This will leave all the workers jobless. Therefore, the trade union will try to achieve the wage rate which is equal to or is near the maximum ARP. Thus, the wage rate which is set at the tangential point of the ARP curve at its maximum point and the indifference curve is the maximum possible wage rate the trade union will be able to achieve. In the above figure, OW_3 is such a wage rate. This is because the ARP, MRP and the IC_3 curves intersect at point e corresponding to this wage rate.

Contrary to this maximum possible wage rate, the lower limit below which the trade union will not work or will go on to strike can not be exactly determined. However, though it cannot be determined precisely, yet it can be understood that practically there will be a lower limit to the wage rate below which the trade union will decline to work. This is because the trade unions are formed to bargain for better wage rates. If this can not be achieved, members of the trade union will find it futile to be part of the union, and as a result, it will break down. So, the trade union will always try to bargain a wage rate above this minimum level and equal to or near the maximum possible wage rate. The lower limit of the wage rate depends on the factors like: a) average revenue productivity, b) the relative strength of the union or the employees, c) the business condition of the economy, d) nature of the demand of the product, e) elasticity of substitution between labour and capital, f) prevailing wage rate, g) cost of living, etc.



CHECK YOUR PROGRESS

Q 4: State whether True (T) or False (F)

(a) The modern theory of determination of wages as determined as a process of collective bargaining has been put forward by Alfred Marshall. (T)/(F)

(b) The modern theory of wage determination as discussed by WilliamFelner contains three parties: a) the labour union, b) the employers and c) mediators between the two. (T)/(F)

Q 5: How is the actual wage rate determined in the bargaining process between the employer and the labour union?

.....

.....

.....

.....

.....

.....

Q 6: Mention the factors which affect the lower limit of the wage rate.

.....

.....

.....

.....



9.7 LET US SUM UP

In this unit, we have discussed the following–

- According to modern economists, wages are determined by the intersection of demand for labour and its supply. Hence, this theory has also been termed as “Demand and Supply Theory of Wages”.

- Demand for labour is *derived demand*.
- Demand for labour and supply of labour depend upon many factors.
- Collective bargaining may be defined as the process in which conditions of employment are determined by the mutual agreement between the representative of the trade union on the one hand, and representative of the employers (or employers' association) on the other.
- The lower limit of the wage rate depends upon several factors.



9.8 FURTHER READING

1) Ahuja, H. L. (2007), '*Advanced Economic Theory': Microeconomic Analysis*. New Delhi: S.Chand & Company Ltd.
2) Chopra, P. N. (2008), '*Micro Economics'*. Ludhiana: Kalyani Publishers.
3) Dewett, K. K. (2005), '*Modern Economic Theory'*. New Delhi: S.Chand & Sons.
4) Sundharam, K. P. M., & Vaish, M. C. (1997), '*Microeconomic Theory'*. New Delhi: S. Chand.



9.9 ANSWERS TO CHECK YOUR PROGRESS

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

Ans to Q No 2: Real wage may be defined as the amount of purchasing power received by a worker through the money wage. Thus, real wage depends on two factors: first, amount of money wage and second, the price level of the economy. Thus, real wage can be measured as:

$$R = \frac{W}{P}$$ where, R = Real wage, W = Money wage and P = Price level.

Ans to Q No 3: Among the determinants of real wages, important ones are:

- Price Level of the Economy: Higher the price level, lower the real wage rate and vice-versa.
- Money Wage: More money wages means higher real wages.
- Working Condition: Better the working condition, higher the real wages.
- Future Prospect of the Job: Better the future job prospect, higher is the real wages and vice-versa.

Ans to Q No 4: (a) False (b) False.

Ans to Q No 5: The actual wage rate is determined by the relative strength of the two parties. If the bargaining power of the industry union is more, the actual wage rate will be on or near the maximum possible upper limit of the wage. Similarly, if the bargaining power of the employer's association more, the actual wage rate will be determined above or on the lower limit below which the union will not work.

Ans to Q No 6: The lower limit of the wage rate depends on the factors like:

- average revenue productivity,
- the relative strength of the union or the employee,
- the business condition of the economy,
- nature of the demand of the product,
- elasticity of substitution between labour and capital,
- prevailing wage rate, and
- cost of living, among others.



9.10 MODEL QUESTIONS

A) Short questions (Answer each question in about 150 words)

Q 1: Write short notes on:

(a) Wage in modern economic theory

(b) Collective Bargaining

Q 2: Show the relation between collective bargaining and wage rate determination.

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

Q 1: Explain the modern theory of wage determination.

Q 2: Discuss how wage rate is determined under imperfect market conditions

*** ***** ***

CONCEPTUAL NOTE: RELATION BETWEEN WAGE AND PRODUCTIVITY

In the third semester course, we have already discussed that in the long-run, under perfect competition, the price of a product equals its marginal and average cost of production. Similarly, in the long-run under perfect competition, the wage rate equals the marginal and average revenue product of labour. Now, before discussing their inter-relationships, let us discuss the concepts briefly.

Marginal Physical Productivity (MPP): MPP refers to the addition made to the total physical product (i.e., production volume) by employing one additional unit of labour, quantity of other factors of production remaining unchanged. This MPP when expressed in revenue (price) terms, is called Marginal Revenue Productivity or Marginal Revenue Product (MRP).

*(***N.B.:** *It is to be noted that there is another concept called Marginal Value Product (MVP). The MPP when expressed in price, it is called MVP. Under perfect competition, however MVP and MRP are same, as price = AR = MR. Under imperfect competition, however, the two will not be same.)*

Average Revenue Productivity (ARP): ARP is the average revenue per unit of factor of production. This is arrived at by dividing total revenue product (TRP) by total volume of production.

The relationship between MRP and ARP is shown with the help of Table 9 A.1 shown in the next page.

Table 9 A.1: Relationship between TRP, ARP and MRP

Labour units	Total Physical Product (TPP) (units)	Total Revenue Product (TRP = price x TPP) *(Rs. 3 per unit)*	Average Revenue Product (ARP)	Marginal Revenue Product (MRP)
(1)	*(2)*	*(3) = (2)x Rs.3*	*(4) = (3) / (1)*	*(5)**
1	5	15	15	15
2	11	33	16.5	18
3	18	54	18	21
4	26	78	19.5	24
5	33	99	19.8	21
6	39	117	19.5	18
7	44	132	18.8	15
8	48	144	18	12
9	51	153	17	9

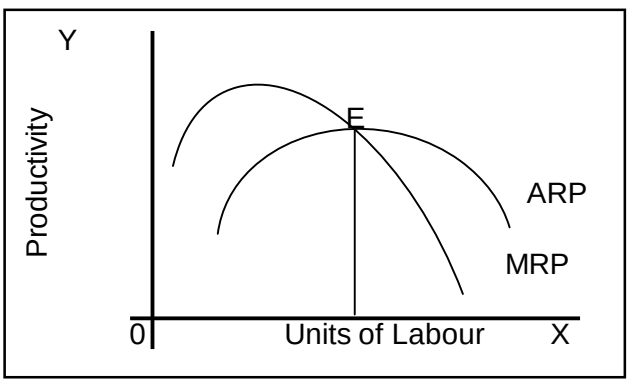


Fig 9 A.1: Relationship between ARP and MRP

Graphically, the relation between ARP and MRP is shown with the help of the following Figure 9A.1:

To some extent, the relationship between ARP and MRP is similar to the relationship between AC and MC as already discussed in previous course. The basic difference between these concepts is that while the AC curve is U-shaped, the ARP curve is inverted U-shaped. The shape of the MRP is also opposite to the shape of the MC curve. This is because, in the initial stages when labour units are increased (up to when 5 units of labour are utilized), ARP increases; but after a stage, it starts declining (after utilization of 6 units of labour and onwards). Similarly, up to 4 units of labour, MRP increases more than ARP; but after utilization of the 5th units of labour and onwards, it falls more sharply than ARP.

*** ****** ***

UNIT 10 : PROFIT

UNIT STRUCTURE

10.1 Learning Objectives

10.2 Introduction

10.3 Basic Concepts in Profit

- 10.3.1 Meaning and Nature of Profit
- 10.3.2 Gross Profit
- 10.3.3 Net Profit
- 10.3.4 Differences between Gross Profit and Net Profit

10.4 Measurement of Profit

10.5 Theories of Profit

- 10.5.1 Innovation Theory of Profit
- 10.5.2 Risk Theory of Profit
- 10.5.3 Uncertainty Bearing Theory of Profit

10.6 Profit Policies

10.7 Let Us Sum Up

10.8 Further Readings

10.9 Answers to Check Your Progress

10.10 Model Questions

10.1 LEARNING OBJECTIVES

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

- define profit and discuss its nature
- distinguish between net profit and gross profit
- discuss the measurement of profit
- explain the Risk Theory of Profit
- discuss the Innovation Theory of Profit
- explain Uncertainty Bearing Theory of Profit.

10.2 INTRODUCTION

We know that there are four factors of production viz., land, labour, capital and entrepreneur get rewards for their contribution to production. Land gets rent and labour gets wages as rewards for their services. Similarly, capital gets reward for its services which is termed as interest. This unit discusses the other such reward, i.e., profit.

Profit is the factor income of the entrepreneur. It is the difference between the income of the business and all its costs/expenses. It is normally measured over a period of time. Profit is called the reward to the owners of the business. They have taken risks with their money and time. If there were no profit, then there would be little point in starting up or putting more money into the business; they might as well put the money into a bank and earn interest on the deposit.

10.3 BASIC CONCEPTS IN PROFIT

Before we discuss profit in detail, it will be helpful for us to discuss the meaning and nature of the term 'profit', and the concepts of gross profit and net profit.

10.3.1 Meaning and Nature of Profit

We have already stated that profit is the factor income of the entrepreneur. The entrepreneur collects the three factors of production – land, labour and capital and coordinates their activities and undertakes risks of production. Profit is the difference between the income of the business and all its costs/expenses. It is normally measured over a period of time.

The nature of income earned by the entrepreneur is different from that earned by the other factors of production. The important differences are:

- First, rent, wages and interest are known beforehand; profit is unknown.
- Secondly, rent, wages and interest cannot be zero, far less

negative; profit may be zero or even negative as well (loss).

- Thirdly, incomes earned by the other factors of production are not residual income, but profit is what remains after making payment to the other factors of production. Thus, profit is a residual income.

10.3.2 Gross Profit

Gross profit is the difference between the revenue earned from the sales of products and the total ***explicit costs*** incurred by the entrepreneur. Thus, costs of purchasing factors of production from the factor markets are excluded from gross profit.

Thus, Gross profit = Total revenue – Total Explicit Cost

Gross profit is used as a performance indicator to help the business make decisions over its pricing policies and use of materials.

Gross profit is composed of a number of elements. These elements are:

- **Wages of Management:** When the entrepreneur himself manages the business, his gross profits will include wages for his management. In reality, wages are not a part of his profits because he could earn them even if he worked in some other firm as a manager. That is why wages for his self management of the business is included in his gross profits; however, the same will be subtracted to derive the net profit.
- **Rent on entrepreneur's own land:** The entrepreneur may start his business on his own land. For utilisation of his land in the business purpose, he is paid rent. Just like wages, rent is also not a part of his profits because he could earn them even if he leases out that piece of land to other entrepreneur as well. That is why rent on entrepreneur's own land for business is a part of gross profit; however, the same will be subtracted to derive the net profit.
- **Interest on his own capital:** When the entrepreneur invests his own capital in the business, he earns interests on them.

Just like the above two, interest is also not a part of his profits because he could earn them even if he lends his capital to other businesses. That is why, interest on his own capital is included in his gross profits; however, the same will be subtracted to derive the net profit.

- **Windfall profit:** The un-expected rise in the price of the commodity produced generates larger profit for the entrepreneur. This additional profit will be included in gross profit.
- **Monopoly profit:** The entrepreneur who enjoys copyright and patent right and who enjoys monopoly right over the quantity and price of the commodity produced will be enjoying a higher income. This income will be a part of gross profit.
- **Production differentiation:** Advertisement, customer service like home delivery of goods and such other factors cause product differentiation. It may lead to an increase in the demand for the commodity and add to the profits of the entrepreneur. This profit will be included in gross profit.



TR = Total Revenue
TC = Total Cost
GP = Gross Profit
NP = Net Profit

10.3.3 Net Profit

It is to be noted that there is no unanimous agreement among the economists regarding the components of gross profits and net profit. While some include the elements of windfall profits, monopoly profit, profits arising out of entrepreneur's abilities to bear risk and uncertainties, innovative spirit and product differentiation as parts of gross profit, some include them as part of net profit. However, it has been observed that modern economists often tend to accept the American view of profits as being the reward for purely entrepreneurial functions, i.e., functions which cannot be performed by paid employees. Thus, entrepreneurial abilities viz., risk bearing, uncertainty bearing, bargaining skill, innovation, etc. result in his net profit.

In terms of ***explicit*** and ***implicit costs***, net profit can be shown as:



Explicit Cost : Cost paid to those factors of production, which are hired from utside sources.



Implicit Cost : Cost paid to those factors of production, which come from within the firm.

Net Profit = Gross profit – Implicit costs of production – Depreciation

Net profit consists of a number of elements. These are:

- **Bearing risks and uncertainties:** The entrepreneur starts production of a commodity in anticipation of its future demand. The future demand may fall or may not rise up to the desired level. For undertaking this risk and uncertainty, the entrepreneur will earn an income which will be a part of his net profit.
- **Gains as superior bargainer:** The entrepreneur may also gain from bargaining with labourers, capitalists, landlords, suppliers of raw materials and consumers. These gains arise because of his superior skill in bargaining.
- **Innovation:** According to Schumpeter, the innovator entrepreneur will earn a higher income than the ordinary entrepreneur. This extra income will be a part of net profit.

It is noteworthy that the joint stock company earns pure profit as the share-holders are the owners of this company and they do not supply land, labour and capital to the company.

10.3.4 Differences between Gross profit and Net profit

We have already stated that there is no unanimous agreement regarding the components of gross profits and net profit. Hence, clear cut differentiation between the two is not always beyond criticism. However, based on our above discussion, the following distinctions between the two have been shown in Table 10.1.

Table 10.1: Distinction between Gross Profit and Net Profit

Sl	Gross Profit	Net Profit
(1)	(2)	(3)
1	Gross profit is a wider concept	NP is in fact a part of gross profit
2	Gross profit includes only explicit costs	NP excludes both explicit and implicit costs
3	*Formula*: GP = TR – Explicit costs	*Formula*: NP = TR – TC



CHECK YOUR PROGRESS

Q 1: State whether the following statements are True (T) or False (F).

(a) The nature of income earned by the entrepreneur is different from that earned by the other factors of production. (T/F)

(b) Rent, wages and interest are known beforehand; profit is unknown. (T/F)

Q 2: Mention any two differences between profit and other factors of production?

.....

.....

.....

Q 3: Why is profit called the reward to the owner of the business?

.....

.....

.....

10.4 MEASUREMENT OF PROFIT

Profits are calculated in the following manner.

Total profit or gross profit= total revenue- total cost

Here, cost means explicit cost i.e. the payments made for different factors.

Net profit is that portion of total profits which remains after the deduction of taxation payments and depreciation provisions.Thus,

Net Profit = Gross Profit- Tax obligation- Depreciation

Accounting profit= total revenue-total explicit cost

Economic profit= total revenue –explicit cost- implicit cost

In the following tables the process of measuring the accounting profit and economic profit is shown

Accounting profit or business profit		in Rs.
Sales		400,000
(Less) cost of goods used	200,000	
(Raw material, power, fuel etc)		
Salaries	10,000	
Depreciation charges	5,000	(-)215,000
	Profit	185,000

Economic profit		in Rs.
Sales		400,000
(Less) cost of goods sold	200,000	
(Raw material, power, fuel etc)		
Salaries	10,000	
Depreciation Charges	5000	
(Plus) implicit Costs		
Imputed salary of the owner manager	30000	
Imputed interest at the market rate on the self owned funds of the owner	8000	
Inputed rental of the self owned premises at the xisting market value	12000	(-)265,000
	Profit	135,000

10.5 THEORIES OF PROFIT

There are many theories of profit – rent theory of profit, wages theory of profit, dynamic theory, innovation theory, marginal productivity theory, risk theory, uncertainty bearing theory and the like. Out of these, we shall discuss here three theories, viz.: the Innovation Theory of Profit, the Risk Theory of Profit and the Uncertainty Bearing Theory of Profit.

10.5.1 Innovation Theory of Profit

We have already stated that innovation is one of the important elements of profit. This theory is associated with *Joseph Schumpeter*. According to him, innovation plays a special role in the earning of profit. It is the innovative spirit of the entrepreneur which can yield the highest profit. *Schumpeter* has considered innovation to be the principal function of the entrepreneur.

Schumpeter has laid a very wide meaning to the term 'innovation'. According to him, innovations refer to any of these:

- introduction of a new product,
- introduction of a new technique of production,
- discovery of a new source of raw materials, and
- discovery of a new market.

Schumpeter points out two types of innovations: *First*, those which bring changes in the production function and, as a result, reduce the cost of production. Innovations in this type include: introduction of new machinery, improved production techniques or process, exploration of new source or type of raw materials, etc.

Second, those innovations, which change the demand or utility function by increasing the demand for the product. Innovation in this type include: introduction of new product or a new variety of old product, new and more effective mode of advertisement, entry into new markets, etc.

Effective innovation in any of the above earns more profit, because through innovation either the cost of production is reduced or the product brings a better price. It is to be noted that profits owing to innovations are temporary. Because, introduction of similar product/technology by competing brands may wipe out the advantages of the initial innovator. However, if the innovation gets patented, the gain remains for a considerable period of time. Thus, the superior entrepreneurs in a dynamic economy gain through innovations.

Another important consideration here is that profits are both

the cause and effect of innovations. Prospecting profits serve as an incentive of innovation; hence, profit is the cause of innovation. Again, profit is resulted out of successful innovations; hence profit is also the effect of innovation.

Criticism of the Innovation Theory of Profit: The innovation theory of profit has been criticised on the following grounds:

- The innovation theory of profit ignores uncertainty as a source of profit.
- The role of bearing risk in profit has also been ignored.

10.5.2 Risk Theory of Profit

F.B. Hawley, in his book *"Enterprise and the Productive Process"*, explains the Risk Theory of Profit. According to this theory, the entrepreneur earns profit for undertaking the risks of production. Not many people like to undertake risks. Entrepreneurs undertake risks because of the incentive they enjoy in the form of profit. Industries which involve a high degree of risk will demand higher rates of profit.

Hawley explains four types of risks, viz., replacement, risk proper, uncertainty and obsolescence.

- *Replacement* is also called depreciation. Depreciation cost is calculable and is included into the costs of the firm.
- *Risk proper* is the risk of marketability of the product.
- *Uncertainty* arises due to unforeseen factors in business
- *Obsolescence* is not measurable. Because, anticipation in change in technology is not always possible.

Apart from the above, there are also some risks like: fire, accident, etc. These are called physical risks and can be protected through insurance. But the risks involved in business are not insurable. The businessmen, therefore, is rewarded in the form of profit for undertaking the uninsurable risks.

Criticism of the Risk Theory of Profit: The risk theory of profit has been criticised on the following grounds:

- According to Carver, it is not because of undertaking risks but for minimising risks that the entrepreneurs earn profit. The entrepreneur reduces the amount to risks by means of his professional competence.
- According to Knight, there are two types of risks – insurable and non-insurable. Insurable risks do not give rise to profit; non-insurable risks do. Insurable risks are anticipated and prior action may be taken against these. Fire insurance, accident insurance, riot insurance and such other facilities offered by the insurance companies are examples of risks which do not give rise to profit as they do not reflect the ability of the entrepreneur himself.
- The entrepreneur earns profit not only for undertaking risks, but also for his competence, monopoly power, windfall gains and so on.
- There may be an entrepreneur who sets up industries not to earn high profits but to enjoy a certain degree of freedom in his own enterprise.
- There are many entrepreneurs who consider risk taking to be of secondary importance and the creation of an industrial empire as the primary objective.

10.5.3 Uncertainty Bearing Theory of Profit

Prof. Frank Knight explains the uncertainty bearing theory of profit in his book *"Risk, Uncertainty and Profit"*. Knight has made strict distinction between risks and uncertainty. According to him, risks are those which are foreseeable and which can be insured. Thus, the risks like: death, fire and sinking of ships can be mitigated through opting for insurance for them. The payment of insurance premium in such cases is included in the cost of production. Thus, risks on such cases, does not lie on the entrepreneur; rather, they rest with the respective insurance

companies. Therefore, he has argued that a business does not earn profit for mitigating such insurable risks. But, uncertainties associated with the factors like: marketability of the product (e.g., change in demand due to change in customers' tastes and preferences, etc.) can not be foreseen and insured. According to Knight, an entrepreneur earns profit precisely for bearing such uncertainties in business.

Knight has gone further to include undertaking of uncertainty as a factor of production. According to him, like other factors of production, uncertainty-bearing has a supply price; i.e., unless certain returns are expected, no entrepreneur will be motivated to face uncertainty. The extent of such motivations, however depend on a) temperament of the entrepreneur, b) total resources he possesses and c) the proportion of these resources he is inclined to expose to uncertainty.



LET US KNOW

Uncertainty may arise because of a number of factors. These factors are:

- The industry may be taken by the government particularly when it enjoys monopoly power and the price charged by it is generally considered to be high.
- The introduction of a new technology may cause a loss to the industries using the old technique of production. This uncertainty is also non-measurable.
- Competition thrown up by the entry of new firms into the industry may also eat into the profits of the existing firms and expose them to uncertainties.
- Cyclical fluctuations also introduce an element of uncertainty and affect the amount of profit.

Criticisms of the Uncertainty Theory of Profit: Knight's theory of uncertainty bearing has been criticised on the following grounds:

- Knight has raised uncertainty bearing almost to the status of an independent factor of production. Actually, uncertainty bearing is a part of the real cost of production.
- Uncertainty bearing is one of the elements of profit but not the only element. Other elements like monopoly price, product differentiation etc. can also generate profit.
- Even after bearing uncertainty, the entrepreneur may, at times, be faced with losses.
- Knight has overlooked the distinction between the proprietorship and the share-holders who are the owners of the unit and they therefore bear the uncertainties. Thus, although Knight's theory marks an improvement over Hawley's theory, yet it is not free from the defects as mentioned above.



CHECK YOUR PROGRESS

Q 4: State whether the following statements are True (T) or False (F).

(a) F.B. Hawley is associated with the Uncertainty-bearing Theory of Profit. (T/F)

(b) According to the Risk-bearing theory of profit, all risks can be insured. (T/F)

(c) According to Knight, an entrepreneur earns profit for bearing unpredictable uncertainties, and not for undertaking insurable risks. (T/F)

Q 5: How does an innovation bring profit to the entrepreneur?

.....

.....

.....

Q 6: What are the physical risks?

.....

.....

.....

Q 7: What are the differences between risks and uncertainties according to Knight?

.....

....

....

10.6 PROFIT POLICIES

The business firms have many objectives and among them the most important one is to earn profit. Traditional theories of economics are based on the assumption of maximization of profit. But presently many managerial economists believe that the objective of a firm is not maximization of profit but earning satisfactory profit. Various views have been offered in support of each of these policies. A rational decision can be taken after studying the views.

a) Policy of maximization of profit :

Most of the economic theories are developed on the basis of the assumption that business firms are to maximize its total profits. It has been considered a the base for success of a firm. A firm is in the equilibrium position when it is earning maximum profit. In this state of equilibrium the firm does not have any incentive for change in its products or prices. To maximize the profit is considered as a proper and effective object because the profit is the basis of inspiration for entrepreneur. An entrepreneur prepares himself to take risks, invests capital and to work hard only with the objective of getting more profits. On the basis of the policy of maximizing profit a firm's success is evaluated. Profit attracts even the non entrepreneurs to invest in the shares of the firm.

Criticisms against the policy of maximization of profit

The policy of maximization of profit has been criticized on the following grounds:

1. The policy of maximization of profit is vague because what profit is to be maximized is not indicated in the policy. Whether it is gross profit or net profit or the profit after interest and tax is not clear.
2. It ignores time value of money. Rupee received today is more valuable than the rupee that will be received on a future date.
3. It ignores risks. The policy ignores the risk inherent in the business decisions. One investment decision can minimize both, the profit and the risk while in some other decisions, the profit may be somewhat more in comparison to the first but the risk may be higher.
4. Business firms may pursue other goals like sales maximization, increased market share, better reputation and so on instead of only profit maximization.

   Due to the above stated reasons, the policy of maximization of profit is not always good for practical purposes.

b) Satisfying or Reasonable profit policy :

Now a days, business firms are using satisfying or reasonable profit policy. Reasonable profit policy is that policy in which a firm is motivated to remain in the business, it remains competitive and can pay off its liabilities on time.

The satisfying profit policy is considered better than the maximum profit policy because of the following reasons:

1. When the objective of the producer is to maximize profit then new firms are attracted towards the industry on account of highly abnormal profit of the existing producer. This increases competition. New firms can develop new products. They can copy the design of the product by infringing the patent rights. A producer, in order to avoid future competition, chooses a reasonable profit policy in place of profit maximization. Reasonable profit policy is more important for a firm which is in the state of weak monopoly.

2. A firm's long term profits depend upon its good relation with the consumers. A firm which would like to keep its consumers satisfied will not charge a very high price of its products. This firm does not increase the price even if the cost increases and has to cut down its profits. But those firms which take unjust advantage of market conditions and exploit the customers get out of the market.
3. Many firms keep trying to achieve leadership in the field of production. So, in order to achieve leadership in the industry, these firms produce good things and sell them at reasonable prices.
4. Many a time it has been noticed that when a monopolistic firm asks for a very high price for its products and exploits the customers, the government has to intervene in the firm's activities. Therefore, the firm keeps the price low and earns reasonable profit to avoid government intervention.
5. If the labourers find that the firm is earning abnormal profits they start demanding higher wages and bonus. In order to keep the wages low, firms sell at low price and earn reasonable profit.
6. Because of the high risk involved in the investment, professional managers would not appreciate an investment which gives high profit at present but more uncertainty and risk in future.
7. Many of the managers prefer liquidity instead of more profits. This means they prefer to invest firm's resources in works with less profit and ready access to cash.
8. Many modern managers believe that social service should be firm's first objective and profit earning second. Firms can serve the society by producing good quality products and selling them at a reasonable price.



10.7 LET US SUM UP

In this unit, we have discussed the following–

- Profit is the income of the entrepreneur.
- Profit is a residual income.
- Net profit is a part of gross profit.

- When the total explicit cost of the entrepreneur is deducted from total revenue, we get gross profit.
- Similarly, when the total cost (explicit cost and implicit cost) is deducted from total revenue, we get net profit.
- Effective innovation earns more profit, because through innovation either the cost of production is reduced or the product brings a better price.
- Profits owing to innovations are temporary. Because, introduction of similar product/technology by competing brands may wipe out the advantages of the initial innovator.
- However, if the innovation is patented, the gain remains for a considerable period of time. Thus, the superior entrepreneur in a dynamic economy gains through innovations.
- Another important consideration here is that, profits are both the cause and effect of innovations. Prospective profits serve as an incentive of innovation; hence, profit is the cause of innovation. Again, profit is the result of successful innovations; hence profit is also the effect of innovation.
- According to the Risk theory of production, the entrepreneur earns profit for undertaking the risks of production.
- Entrepreneurs undertake risks because of the incentive they enjoy in the form of profit. Industries which involve a high degree of risk will demand higher rates of profit.
- Hawley explains four types of risks, viz., replacement, risk proper, uncertainty and obsolescence.
- According to Knight, risks are those which are foreseeable and which can be insured. Therefore according to him, a business does not earn profit for mitigating such insurable risks.
- Uncertainties, on the other hand, are associated with the factors like marketability of the product (e.g., change in demand due to change in customers' tastes and preferences, etc.) which can not be foreseen and insured.
- According to Knight, an entrepreneur earns profit precisely for bearing such uncertainties in business.

- Knight has gone further to include undertaking of uncertainty as a factor of production. According to him, like other factors of production, uncertainty-bearing has a supply price; i.e., unless certain returns are expected, no entrepreneur will be motivated to face uncertainty.
- Profit is the factor income of the entrepreneur.
- Entrepreneurs undertake risks because of the incentive they enjoy in the form of profit.
- According to Knight, there are two types of risks – insurable and non-insurable. Insurable risks do not give rise to profit; non-insurable risks do.
- Although Knight's theory marks an improvement over Hawley's theory, yet it is not free from defects.



10.8 FURTHER READING

1) Ahuja, H. L. (2007), '*Advanced Economic Theory: Microeconomic Analysis'*, New Delhi: S.Chand & Company Ltd.
2) Chopra, P. N. (2008), '*Micro Economics'*, Ludhiana: Kalyani Publishers.
3) Dewett, K. K. (2005), '*Modern Economic Theory'*, New Delhi: S.Chand & Sons.
4) Sundharam, K. P. M., & Vaish, M. C. (1997), '*Microeconomic Theory'*, New Delhi: S. Chand.



10.9 ANSWERS TO CHECK YOUR PROGRESS

Ans to Q1: (a) True (b) True

Ans to Q2: The nature of income earned by the entrepreneur is different from that earned by the other factors of production. The important differences are:

First, rent, wages and interest are known beforehand; profit is unknown.

Secondly, rent, wages and interest cannot be zero, far less negative; profit may be negative as well (loss).

Ans to Q3: Profit is called the reward to the owners of the business. They have taken risks with their money and time. If there is no profit, then there would be little point in starting up or putting more money into the business; they might as well put the money into a bank and earn interest on the deposit.

Ans to Q4: (a) False (b) False (c) True

Ans to Q5: Effective innovation brings higher profit to the entrepreneur, because through innovation either the cost of production is reduced or the product brings a better price.

Ans to Q6: Risks like: fire, accident, etc. are called physical risks. Damaged caused by such risks can be calculated and can be protected through insurance.

Ans to Q7: According to Knight, risks are those which are foreseeable and which can be insured. For example: fire, accidents etc. Uncertainties, on the other hand, are associated with the factors like marketability of the product (e.g., change in demand due to change in customers' tastes and preferences, etc.). Uncertainties cannot be foreseen and insured.



10.8 MODEL QUESTIONS

A) Short questions (Answer each question in about 150 words)

Q 1: Write short notes on:

(a) Gross profit & Net profit (b) Innovation & earning of profit

(c) Knight's concept of Risk & Uncertainty

Q 2: Show the differences between gross profit and net profit

Q 3: Why according to Knight does an entrepreneur not earn profit as reward for bearing risks?

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

Q 1: Critically discuss the Innovation Theory of Profit.

Q 2: Explain the Risk-bearing Theory of Profit. What are the limitations of the theory?

Q 3: Discuss the Uncertainty-bearing theory of profit. Why has the theory been criticised?

*** ***** ***

UNIT: 11 ECONOMIC ENVIRONMENT

UNIT STRUCTURE :

11.1 Learning Objectives

11.2 Introduction

11.3 Nature and Significance of Economic & Non Economic Environment in India

11.4 Macro Economic Environment

- 11.4.1 Government Budget
- 11.4.2 Industrial Policy
- 11.4.3 Monetary Policy

11.5 Role of Banking and other Non- Banking Financial Institutions And their Impact on Business

11.6 Planning In India- Achievements and Failures

11.7 Let Us Sum Up

11.8 Further Reading

11.9 Answers to Check Your Progress

11.10 Model Questions

11.1 LEARNING OBJECTIVES

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

- learn the meaning and significance of economic and non-economic environment in India
- discuss about Government budgets
- discuss Industrial policy
- discuss monetary policy
- identify types of banking and non-banking institutions
- role of banking and non-banking financial institutions and their impact on business
- know about planning and its achievements and failures in India

11.2 INTRODUCTION

This unit is concerned with familiarizing the student with Economic Environment. It includes economic and non-economic environment in India, macro economic environment in India, and role of banking and non-banking financial institutions and their impact on business and achievements and failures of planning in India.

Economic and non-economic environment implies all the economic and non-economic activities. Economic activities are those activities which can be valued in terms of money and those which cannot be valued in terms of money are termed as non-economic activities.

Macro economic environment means the economic environment in the country as a whole. It includes Government budget, industrial policy and monetary policy etc.

A bank is an institution that accepts deposits of money from the public which is withdrawable by cheque and used for lending. Non-banking financial institutions are those institutions which accept deposits from the public and lend them to the ultimate spenders, not the general public.

Economic planning consists of the totality of arrangement decided upon so as to carry out a project related economic activity for a particular period of time.

11.3 NATURE AND SIGNIFICANCE OF ECONOMIC & NON-ECONOMIC ENVIRONMENT IN INDIA

By the term economic and non-economic environment, we understand economic and non-economic activities.

Economic activities are those activities which are produced and consumed with undergoing monetary transactions. On the other hand; non-economic activities mainly include house-wives, services, repair of household premises and equipment, basket making, weaving, knitting, sewing etc for own consumption. Now, how does non-monetized sector of the economy compare with the recorded economy?

The non-monetary sector, historically the oldest, is new from the point of view of economic studies; it was until recently almost totally neglected. If we analyze economic and non-economic environment in India; activities can be grouped into three main categories.

1) Personal activities.
2) Productive non-market activities (mostly for own consumption).
3) Productive market-oriented activities.

The importance and contribution of non economic activities towards the country is immense. For example, in India housewives' services constituted one of the largest single items in the non-economic activities. But there are numerous problems associated with their measurement.

Then again, we have barter system in some remote areas where goods are traded for goods. This activity cannot be expressed in monetary terms. Again, we have a lot of other non-economic activities such as house-hold activities, weaving, knitting, sewing which cannot be valued in terms by monetary transactions. Although, non-economic activities cannot be expressed in money, it does not imply that non-economic activities do not have any significance. No one can ignore the contribution of the house-wives' activities towards the family.



Disbursement: The act of spending or disbursing money

Similarly, other non-economic activities have their significance. If these non-economic activities can be expressed in terms of money, their real contribution towards national income can be known and National Income will be more than what conventional estimates project. In India, there is a large non-monetized sector. This is the subsistence sector in rural areas in which a large portion of the production is partly exchanged for the other goods and is partly kept for personal consumption. Such production and consumption cannot be calculated in national income. On the other hand, by the term Economic Environment, we include all those activities such as production and consumption of goods and services, government budget, monetary policy, planning etc. Economic activities can be expressed in terms of money and as a result their contribution towards national incomec can be known. In the next section, we will discuss the macro-economic environment in India.

11.4 MACRO ECONOMIC ENVIRONMENT

Macro Economics is the study of aggregates or averages covering the entire economy, such as total employment, national income, national output, government budget.

According to Prof. Ackley, Macroeconomics deals with economic affair 'in the large'; it concerns the overall dimensions of economic life.

11.4.1 Government Budget

Government budget, in general, can be expressed as a plan for future course of action and is a statement of income and expenditure of public authorities. We can also express government budgets as estimated receipts and expenses during a fixed period of time. It includes both taxation and public expenditure. One important thing that we have to remember is that, although budget is framed for a year, it presents a picture of the details of expenditure, taxation and borrowings for the three consecutive years, i.e.; the actual receipt and disbursement of the previous year, the revised estimate of the current year and estimated receipt and expenditure of the coming fiscal year.

The public budget may either be presented as a whole or in parts. The countries having a unitary system of government generally presents one single unified budgetary document. In federal countries like India, it is presented in parts. In India, according to the article 112 of the constitution, an annual financial statement will be placed before parliament (Lok sabha and Rajya Sabha) and Article 202 of the constitution provides that a similar financial statement for each state will be placed before the legislature of respective state. In India, the fiscal year comprises the period from 1st April to 31st march.



LET US KNOW

The two basic elements of any budget are the **revenues** and **expenses.** In the case of the government, revenues are derived primarily from taxes. Government expenses include spending on current goods and services, which economists call government consumption; government investment expenditures such as infrastructure investment or research expenditure; and transfer payments like unemployment or retirement benefits. Budgets have an economic, political and technical basis.

11.4.2 Industrial Policy

By the term industrial policy we mean a comprehensive package of policy measures which covers various issues connected with different industrial enterprises of a country. This policy is essential for devising various procedures, principles, rules and regulations for controlling such industrial enterprises of the country. The pace, pattern and structure of industrialization in a country is highly influenced by its industrial policy. So, industrial policy incorporates the fiscal policy, the monetary policy, the tariff policy, the labour policy and the government attitude towards the public and private sectors of the country.

In India, it was on April 6, 1948, the government of India adopted the industrial policy resolutions for accelerating the industrial development of the country. The policy resolution reflects mixed economies which include both the public sector and the private sector.

On April 30, 1956, a new industrial policy resolution was adopted in India replacing the policy resolution of 1948.In the 1956 industrial policy; industries were classified into three schedules.

In the schedule A, seventeen industries were included and the future development of these industries was to be the exclusive responsibility of the state.

In schedule B, 12 industries were placed which will be progressively state-owned. The state would gradually set up new units and the private enterprises would also be expected to supplement the effort of the state in this regard.

In schedule C, the state would gradually set up new units and the private enterprises would also be expected to supplement the effort of the state in this regard. In this schedule all the remaining industries were included and their future development would be left to the initiative and enterprise of the private sector. The state would facilitate and encourage the development of all these industries in the private sector as per the programme finalized in the five year plans of the country.

In December 1977, the Janata Government announced its new New Industrial policy through a statement in the Parliament.

On 3rd July, 1980 the Congress (I) Government announced its new industrial policy. This new policy seeks to promote the concept of economic federation. The aim of the new industrial policy was to raise the efficiency of public sector. It reaffirmed its faith in the Monopolistic and Restrictive Trade Practices (MRTP) Act and Foreign Exchange Regulation Act (FERA).While preparing this policy statement, the 1956 resolution was considered as its basis.

The congress (I) led by Narasimha Rao Government announced a path breaking new industrial policy on July 24, 1991.In line with the liberalization process introduced during the 1980s, the new policy radically liberalized the industrial policy itself and de-regulated the industrial sector substantially. The aim of the industrial policy was to free the Indian Industrial economy from unnecessary bureaucratic control. It introduced liberalization with a view to integrating the Indian economy with the world economy, to remove restrictions on direct foreign investment as also to free the domestic entrepreneur from the restriction of the MRTP Act. Besides, the policy aimed to reduce the load of the public enterprises which has shown a very low rate of return or is incurring losses over the years. All these reforms of industrial policy led the government to take a series of initiatives in respect

of policies in industrial licensing, foreign investment, foreign technology policy, public sector policy and MRTP Act.



LET US KNOW

The objectives of the new industrial policy are enumerated below:

1. Accelerate development of the backward areas of the State.
2. Creation of large scale employment opportunities to absorb the swelling ranks of unemployed.
3. Increase the total flow of investment to industrial sector.
4. Accelerating the development of infrastructure and human resources to sustain the long term growth.
5. Achieving sustainable development.
6. Encouraging entrepreneurship and developing technology to promote Swadeshi Spirit.

11.4.3 Monetary Policy

Monetary policy is primarily concerned with the management of the supply of money. The Central bank of a particular country controls the supply of money. The aim of the monetary policy is to control money supply for controlling inflation and stabilizing the general price level. It also aims to stabilize the exchange rate and to achieve equilibrium in the balance of payments. In India, Reserve bank of India (RBI) controls the monetary policy. The RBI since 1952 has emphasized the twin aims through monetary policy, they are:

(i) Speed up economic development of the country to raise national income

(ii) To control inflationary pressures in the economy.

The instruments of monetary policy are broadly classified into three categories:

(i) Quantitative Control policy

(ii) Selective Control Policies

(iii) Qualitative Control Policies

1. **Quantitative policy:** The quantitative instruments of monetary policy are :

(a) Bank rate: The bank rate is the minimum interest rate charged by the central bank on the loans given to the commercial bank against approved securities. When there is a problem of inflation, the central bank raises the bank rate and reduces the bank rate when there is problem of deflation.

(b) Cash reserve requirement: Every commercial bank is required by law to keep a certain percentage of their deposits in the form of cash with RBI. This percentage is known as the cash reserve ratio (CRR). The RBI raises or reduces the CRR, to influence the volume of cash with the commercial banks.



Inflation: A general and progressive increase in price

(c) Open Market Operations: The deliberate and direct buying and selling of securities in the money market by the central bank is known as open market operations. The central bank buys securities during deflation to infuse liquidity in the market and sells securities during inflation to mop up excess liquidity from the market.

(d) Statutory Liquidity Ratio: Banks in India are required statutorily to maintain a prescribed minimum proportion of its daily demand and time deposits in the form of excess reserves, un- encumbered government and other approved securities and current account balances with other banks. This proportion is called Statutory Liquidity Ratio (SLR). By increasing the SLR, the RBI can restrict the credit creating capacity of the commercial banks and can expand it by lowering the SLR.



Deflation:
A contraction of economic activity resulting in decline of price.

2. **Selective Policy:** Along with quantitative measures, RBI has some selective measures of credit control used to influence specific types of credit for particular purposes. Generally RBI uses three kinds of selective credit controls

(a) **Ceiling on the amount of credit for certain purposes:** The purpose of this method of credit control is to diversify the credit to different sectors. The commercial banks generally provide credit to those sectors which are profitable and neglect the other sectors such as agriculture. By imposing a ceiling the RBI prevents excessive liquidity in a particular sector.



Mop: To wash or wipe.

(b) **Maintain margins for lending against specific securities:** This method is employed to prevent excessive use of credit to purchase or carry securities by speculators. The central bank fixes minimum margin requirement on loans for purchasing or carrying securities.

(c) **Discriminatory rate of interest charged on certain types of advances:** Under this method, the central bank advises the commercial bank to charge different rates of interest on different types of loans. So, commercial banks charge a low rate of interest on loans for priority sectors and high rate for non-priority sectors.

The quantitative credit controls are used to control the total volume of credit in the economy and impartial as regards sectors. The selective credit controls, on the other hand, are used to influence the composition or distribution of credit. Since mid 1950's the RBI has made full use of selective credit controls to check speculation and inflation.

3. Qualitative Policy: Apart from these two methods , there are a number of instruments of credit control at the hands of the central bank which can be called Qualitative Policy, e.g. Moral Suasion, Credit Rationing and Direct Action

a. Moral Suasion: It is a combination of persuasion and pressures which a Central Bank uses on commercial banks through discussion, letters, speeches etc. to follow the credit policy of Central Bank.

b. Credit Rationing: During the time of monetary scarcity, the central Bank can fix a limit on the credit accommodation to each applicant. This is called credit rationing.

c. Direct Action: This is a coercive ineasure by which the Central Bank can refuse to rediscount bills for banks who do not obey the directive of the central bank to follow an appropriate credit policy.



CHECK YOUR PROGRESS

Q.1: State True or False

a) Government Budgets can be expressed as plan for future course of action (True/false)

b) Housewives activities are non-economic activities. (True/ False)

c) Bank rate is a quantitative instrument of monetary policy. (True /False)

Q.2: Human activities can be grouped into

i) 3 Categories

ii) 2 categories

iii) 4 categories

11.5 ROLE OF BANKING AND OTHER NON- BANKING FINANCIAL INSTITUTIONS AND THEIR IMPACT ON BUSINESS

Before we discuss the role of banking and non-banking financial institutions we have to know the distinction between them.

The banking institutions accept deposits of money from the public which is withdrawable by cheque and used for lending. The banking institution includes all the commercial and cooperative banks such as State Bank of India, State Cooperative Bank, Regional Rural Bank, Commercial Banks generally provides short term loans.

On the other hand, Non-Banking Financial Institutions (NBFI) are heterogeneous group of financial institutions other than commercial and cooperative banks. They include a wide range of financial institutions other than commercial banks and cooperative banks .They include wide variety

of financial institution, which raise funds from the public, directly or indirectly to lend them on a long-term basis for investment. The development banks such as IDBI, IFCI, SFCs, land development banks fall in this category. The other all-India term lending institutions such as the LIC, the GIC and its subsidiaries and UTI are also non-banking financial intermediaries. The provident funds and post offices are also included in this category.



LET US KNOW

The Industrial Development Bank of India (IDBI) was established on July 1, 1964 under an Act of Parliament as a wholly owned subsidiary of the Reserve Bank of India. In February 1976, the ownership of IDBI was transferred to the Government of India and it was made the principal financial institution for coordinating the activities of institutions engaged in financing, promoting and developing industry in the country.

To meet emerging challenges and to keep up with reforms in financial sector, IDBI has taken steps to reshape its role from a development finance institution to a commercial institution.

In all kinds of business, the most important requirement is credit. If we want to undertake business on a large scale, we need credit for financing. The banking and the non-banking financial institutions are the only reliable option for credit. For the enhancing of a business plant, we need large amount of fund .Now for a businessman, it may not be possible to accumulate the fund himself. So he has to take loan from the bank. Thus, the development or improvement of business activity largely depends on the availability of credit or finance. The importance of banking and non-banking financial institution is increasing day by day. This is reflected by the fact that, since nationalization of the banks, the number of bank offices has multiplied rapidly-from 8300 in July 1969 to more than 62881 at the end of June 1996 showing an increase of 761 percent. This has improved substantially the availability of banking facilities in India. Commercial banks play a very important role in

respect of supply of credit to the businessmen. The non-banking financial institutions also accumulate a large amount of savings from the public and help to increase the savings rate. If we cannot increase the rate of savings, there will be less investment. The business activity of a particular country depends on the rate of investment. The LIC, GIC and various development banks such as IDBI, ICICI accumulate a large amount of savings from the public and make it available to the Government for investment in productive activities.

11.6 PLANNING IN INDIA- ACHIEVEMENTS AND FAILURES

In this section we will discuss economic planning and its successes and failures. We know that planning in general implies systematic effort to achieve certain goals within a period of time. Planning is considered as a panacea for all economic ills. Economic development of the country is closely linked with economic planning. Planning consists of totality of arrangements decided upon so as to carry out a project related to economic activity. The Indian National Congress, under the inspiration of Jawaharlal Nehru, set up the National Planning Committee, produced a series of studies on subjects concerned with economic development. . In India, the real beginning of planning was made in march 1950 when the Indian planning commission submitted its draft outline of the first five year plan to be effective from 1951-52 to 1955-56.Since then India has completed ten five year plans.

The major objectives of economic planning in India can be summarized as follows:

(a) Attainment of higher rate of economic growth.
(b) Reduction of economic inequalities
(c) Achieving full-employment
(d) Attaining economic self-reliance
(e) Modernisation of various sectors.

(f) Redressing imbalance in the economy

During the last fifty years of planning, Indian economy has attained considerable progress on different fronts. There has been some satisfaction with the economic progress made by India on certain fronts- the rate and diversity of economic growth, the increase in saving and investment, the almost entire self-reliance realized in food-grains production, the big transformation in the structure of the industry, the capacity to train highly skilled manpower so as lead to exportable surplus in certain lines. But despite these progresses, we are still lagging behind in many fronts such as unemployment, inflation, inequality of income and wealth etc.



Panacea: Something that solves all the problems of a particular situation; remedy.

The following are some of the achievements of Indian economy after independence:

i. During the fifty years of planning, the per-capita income of the India at 1980-81 prices has maintained its increasing trend but at a slower pace due to high growth of population. During the period from 1950-51 to 1996-97, the per-capita income of India at 1980-81 prices increased by 145 percent.

ii. National Income being an indicator of development can show the progress of the economy achieved during the plans. During the fifty years of planning, the national income of the country has been increasing on an average growth rate of 3.8% per annum.

iii. Capital formation has been playing an important role in the attainment of economic development of the country. During the last fifty years of planning, the rate of gross capital formation as percent of GDP increased from a mere 11 % in 1950-51 to 32.2 % in 2005-06.

iv. The industrial sector of the country has attained a considerable progress during the period of planning. The total amount of investment in the public sector enterprises increased from Rs. 29 crores in 1950-51 to Rs. 3, 49, 209 crores in 2004. Consequently, industries like steel, engineering goods, fertilizer, aluminum, petroleum goods have recorded significant progress.

v. During the last fifty years of planning, the infrastructure facility of the country has attained a considerable progress, particularly in respect of transport and communication, irrigation facilities and power generation capacity.

vi. During the fifty years of planning, social services like education, health, family planning etc. have improved considerably. There is significant improvement in life expectancy at birth, the birth rate, death rate, education and also health in general.

However, economic planning has failed in certain areas. The followings are some of the areas where planning has encountered failure.

i. The five year plans in India have failed to attain a considerable rise in the standard of living of the people. In general, economic planning has also failed to provide the basic necessities of life to a huge section of the population. As on date, about 25% of Indians live below the poverty line.

ii. Five year plans in India have also failed to generate adequate employment opportunities to the growing numbers of unemployed. This has resulted in increase in the backlog of unemployment in the country from 53 lakh persons during the first plan to 565.8 lakh persons in 1999- 2000, out of which rural and urban un-employed stood at 195 lakhs and 71.1 lakhs respectively.

iii. The five year plans in India have become unsuccessful in realizing the required growth rate in the production sectors. Both the agriculture and industrial sectors have failed to attain the required growth rate consistently.

iv. Another important failure of planning in India is its inability to contain the continuous rise in the price level of the country. Excepting the first five year plan, all other plans have experienced a continuous rise in the price level.

v. Attaining equality in the distribution of income and wealth has been one of the important objectives of five year plans in India. But the economic planning has failed to realize this objective. Inequality in

the distribution of income and wealth has rather aggravated with the increasing gap between the rich and the poor.

vi. The level of implementation of the plan projects particularly in respect of rural development, agriculture and social welfare sector has remained all along poor as the benefits of the plan projects are not reaching the target group of people in proper time and in adequate quantity. This is due to huge leakages in the plan fund at the implementation level arising out of growing dishonesty and corruption at the administrative level.

vii. Indian planning is subjected to shortfalls in attaining its targets as a result of paucity of resources, faculty implementations, inefficient administrative machinery .Five year plans in India have not only failed to attain the sectoral plan targets but also in attaining the targets in overall economic growth rate in a consistent manner.



CHECK YOUR PROGRESS

Q.3: State True or False:

a) India has already completed 10 five year plans. (True/False).

b) Development banks such as IDBI, IFCI are non-banking financial institution (True/False)

c) The five years plans in India have failed to attain a considerable rise in the standard of living of the people. (True / False)



ACTIVITY 11.1

State the achievements and failures of planning in India.

.....

.....

.....



11.7 LET US SUM UP

In this unit, we have discussed the following aspects

- Human activities can be broadly divided into two categories, economic and non-economic.
- Economic activities can be valued in terms of money; non-economic activities cannot be expressed in terms of monetary values.
- Government budget can be expressed as a plan for future course of action and it provides an estimate of the income and expenditure of three consecutive years.
- In modern times, planning is considered to be panacea for all economic ills. The real beginning of planning in India started in 1950 under the leadership of Jawaharlal Nehru.



11.8 FURTHER READING

1) Suraj B. Gupta (2010), '*Monetary Economics Institution, Theory and Policy*', S. Chand & Company Limited.

2) Ruddar Dutt and K.P.M.Sundharam (2004), '*Indian Economy*' S. Chand and Company Limited.

3) R.K.Choudhury (2009), '*Public Finance and Fiscal Policy*' Kalyani Publishers .



11.9 ANSWERS TO CHECK YOUR PROGRESS

Ans to Q1: a) True, b) True, c) True

Ans to Q2: (i)

Ans to Q3: a) True, b) True, c) True



11.10 MODEL QUESTIONS

1. How are economic activities different from non-economic activities? Explain the importance of economic and non-economic activities.

2. What are the instruments of monetary policy? In what ways does monetary policy affect the supply of money?

3. What are the objectives of planning? Do you think economic planning helps to attain high rate of economic growth?

4. What do you mean by Industrial policy? Explain how industrial policy helps to attain industrial growth.

*** ***** ***

UNIT 12: MONETARY POLICY

UNIT STRUCTURE

12.1 Learning Objectives

12.2 Introduction

12.3 Concept of Monetary Policy

12.4 Objectives of Monetary Policy

12.5 Instruments of Monetary Policy

12.6 Limitations of Monetary Policy

12.7 Concept of Fiscal Policy

12.8 Fiscal Policy and Economic Stability

- 12.8.1 Discretionary Fiscal Policy
- 12.8.2 Non- Discretionary Fiscal Policy

12.9 Instruments of Fiscal Policy

12.10 Limitations of Fiscal Policy

12.11 Let Us Sum Up

12.12 Further Readings

12.13 Answers To Check Your Progress

12.14 Model Questions

12.1 LEARNING OBJECTIVES

After going through this unit, you will able to-

- explain the concept and objectives of monetary policy
- discuss the instruments of monetary policy
- describe the limitations of monetary policy
- discuss the concept of fiscal policy
- describe the relationship between fiscal policy and economic stability
- explain the instruments and limitations of fiscal policy

12.2 INTRODUCTION

Monetary and fiscal policies are the startegies for economic development of a nation. Monetary policy helps in controlling the economic

fluctuations like, inflation and deflation. Fiscal policy regulates the government income and spending. Stable economic conditions accelerate economic growth and promotes social wellbeing. Though the role of monetary and the fiscal policies are different in developed and developing countries, the governments of all countries give due emphasis on these policies.

In this unit we will focus on the concept of monetary policy and its objectives and the limitations of monetary policy. We will also discuss the concept, instruments and limitations of fiscal policy besides the relationship between fiscal policy and economic stability.

12.3 CONCEPT OF MONETARY POLICY

Monetary policy aims at promoting general economic activities by focusing on (a) money or credit supply and (b) the rate of interest. Monetary policy influences the availibility, cost and use of money and credit in the economy. The monetary policy is pursued by the central bank of the country. Perhaps you are aware about the various techniques adopted by the Reserve Bank of India for credit control like, bank rate, open market operations, cash reserve ratio etc. These techniques are same with the techniques of monetary policy. Monetary policy refers to the credit control measures adopted by the central bank of a country.

According to K. P. Kent monetary policy is “The management of the expansion and contraction of the volume of money in circulation for the explicit purpose of attaining a specific objective such as full employment.” According to D. C. Rowan, “The monetary policy is defined as discretionary action undertaken by the authorities designed to influence (a) the supply of money, (b) cost of money or rate of interest and (c) the availibility of money.

Now, we will discuss about the objectives, instruments and limitations of monetary policy.

12.4 OBJECTIVES OF MONETARY POLICY

Various objectives of monetary policy are as follows–

- **Neutrality of money :** The principle of neutrality of money seeks to control the disturbing effect of changes in the quantity of money on important economic variables, like income, output, employment and prices. According to this principle, money supply should be controlled in such a way that money should be neutral in its effects. In other words, the changes in money supply should not change the total volume of output and total transactions of goods and services in the economy. The policy of neutralily of money is based on the assumption that money is purely a passive factor. It functions only as a medium of exchange.
- **Exchange Stability :** Exchange rate stability has been the traditional objective of monetary policy under gold standard. It was considered the primary objective, while stability in prices was considered secondary because of the great importance of international trade among the leading countries of the world. Main arguments made in favour of exchange stability and against exchange instability are given below–
  (a) Stable exchange rates are essential for the promotion of smooth international trade.
  (b) Fluctuations in the exchange rates lead to lack of confidence in a particular currency and might result in the flight of capital from the country whose currency is unstable in value.
  (c) Frequent changes in the exchange rates encourage speculation in the exchange markets.
  (d) Fluctuations in exchange rates also lead to fluctuations in the internal price level.
  (e) Fluctuations in the exchange rates adversely affect the economic and political relationship among the countries.
  (f) International lending and investment is seriously affected as a result of fluctuating exchange rates.

  The objective of exchange stability is achieved through establishing equilibrium in the balance of payment.

- **Price stability :** With the abandonment of gold standard after the World War II, exchange stability was replaced by price stability as an objective of monetary policy. Some Economists suggested price stabilization as a main objective of monetary policy. Stable prices repose public confidence because cyclical fluctuations are totally eliminated.

  It promotes business activity and ensures equitable distribution of income and wealth. It is admitted that price stability doesnot mean price rigidity' or price stagnation. A mild increase in the price level provides a tonic for economic growth.

- **Full Employment :** During world depression years, the problem of unemployment had increased rapidly. It was regarded as socially dangerous, economically wasteful and morally deplorable. Thus, full employment assumed as the main goal of monetary policy.

  With the publication of Keynes 'General Theory of Employment, Interest and Money' (1936), full employment became the ideal goal of monetary policy. Keynes emphasised the role of monetary policy in promoting full employment of human and natural resources in the country. He advocated cheap monetary policy i.e expansion of currency and credit and reduction in rate of interest, to achieve the goal of full employment. Full employment of labour and full utilisation of other productive resources are important from the point of view of maximising economic welfare in the country.

- **Economic Growth :** In recent years, economic growth is the basic issue to be discussed among economists and statesmen throughout the world. Prof. Meier defined 'Economic growth as the process where by the real per capita income of a country increases over a long period of time.' It implies an increase in the total physical or real output, production of goods for the satisfaction of human wants.

  Monetary policy promotes sustained and continuous economic growth by maintaining equilibrium between the total demand for money and total production capacity and further creating farourable conditions for saving and investment. For bringing equality between demand and supply, flexible monetary policy is the best course.

- **Equilibrium in the Balance of Payments :** Equilibrium in the balance of payments is another objective of monetary policy which emerged significant in the post war years. This is simply due to the problem of international liquidity on account of the growth of world trade at a more faster speed than the world liquidity.

It was felt that increasing deficit in the balance of payments reduces the ability of an economy to achieve other objectives. As a result, many less developed countries have to curtail their imports which adversely effects development activities. Therefore, monetary authority makes efforts that equilibrium should be maintained in the balance of payments.



CHECK YOUR PROGRESS

Q 1: What is monetary policy?

.....

.....

Q 2: State two objective of monetary policy.

.....

.....

12.5 INSTRUMENTS OF MONETARY POLICY

The instruments of monetary policy are used to control credit by the Central Bank. These instruments can be classified into two broad catagories:

a) The quantitative or general methods of credit control; and

b) The qualitative or selective methods of credit control.

The quantitative methods regulate the lending ability of the financial sector of the whole economy and do not discriminate among the various sectors of the economy. The important quantitative methods are– (i) Bank rate, (ii) Open Market Operation, (iii) Cash Reserve Ratio.

The qualitative methods are designed to regulate the flow of credit in particular directions. Unlike the quantitative methods, which affect the total volume of credit, the qualitative methods affect the types of credit extended by the commercial banks. The important qualitative instuments are–

(i) marginal requirements, (ii) regulation of consumer credit, (iii) control through directives, (iv) credit rationing, (v) moral suasion and publicity, (vi) direct action. Now we will discuss these instruments.

a) Quantitative Methods of Credit Control:

(i) Bank rate : The bank rate is the rate at which a Central Bank is prepared to discount the first class bill of exchange. Bank rate is defined in section 49 of the Reserve Bank of India Act as 'the standard rate at which the Bank is prepared to buy or rediscount bill of exchange or other commercial paper eligible for purchage under this Act.' The bank rate policy of the Central Bank, therefore, implies the varying of the rate by the Central Bank on which it is willing to rediscount bills and to make advances.

(ii) Open Market Operation : Open market operation refer to the deliberate and direct buying and selling of government securities in the money market by the Central Bank. If RBI wants to induce liquidity or more funds into the monetary system, it will buy government securities and inject funds. If it wants to curb the amount of money in the monetary system, it will sell government securities to banks, thereby reducing the amount of cash that banks have. RBI uses this tool actively even outside of its monetary policy review to manage liquidity on a regular basis.

(iii) Cash Reserve Ratio : According to 'Reserve Bank of India Act, 1934' every bank is required to deposit a certain proportion of their deposits/ liability with the Reserve Bank of India compulsorily. This is known as Cash Reserve Ratio (CRR). A high percentage means banks have less to lend, which curbs liquidity. On the other hand, a low CRR does the opposite. The RBI can reduce or raise CRR to tighten or ease liquidity as the situation demands.

b) Qualitative Methods of Credit Control:

(i) Marginal Requirements : The term 'marginal requirements' refer to the proportion of the price of securities which banks and other security dealers are not permitted to lend. In other words, the difference between the 'loan value and the market value is known as the margin. A change

in a margin implies a change in the loan size. This method is used to encourage credit supply for the needy sector and discourage it for other non-necessary sectors. This can be done by increasing margin for the non-necessary sectors and by reducing it for other needy sectors. For example– If the RBI feels that more credit supply should be allocated to agriculture sector, then it will reduce margin to increase credit supply to the sector.

(ii) Regulation of Consumer Credit : This method was first used in the U.S.A. in 1941 to regulate the terms and conditions under which the credit repayable in instatments could he extended to the consumers for purchasing the durable goods. Under the consumer credit system, a certain percentage of the price of the durable goods is paid by the consumer in cash. The balance is financed through the bank credit which is repayable by the consumer in instalments.

(iii) Control through directive : The Central Bank may issue directives to the commercial banks from time to time. These directives may be in the form of oral or written statements, appeals or warnings. The objective of these directives is to guide the commercial banks in formulating their lending policies. Mostly, the Central Banks have been armed with statutory powers to issue such directives to the commercial banks in general or to a particular bank against entering into any particular transactions or class of transactions.

(iv) Rationing of credit : Central Bank fixes credit amount by limiting the amount available for each commercial bank. This method controls even bill rediscounting. For certain purpose, upper limit of credit can be fixed and banks are told to stick to this limit. This can help in lowering banks' credit exposure to unwanted sectors.

(v) Moral suasion and publicity : Moral suasion means advising, requesting and persuading the commercial banks to co-operate with the Central Bank in implimenting its general monetary policy. Through this method, the Central Bank merely uses its moral influence to make the Commercial Bank to follow its policies. For instance, the Central Bank may request the commercial banks not to grant loans for

speculative purposes. Similarly, the Central Bank may persuade the commercial banks not to approach it for financial accomodation.

The Central Banks also use publicity as a method of credit control. Through publicity, the Central Bank seeks to educate people regarding the economic and monetary condition of the country. The Central Banks regularly publish the statement of their assets and liabilities, reviews credit and business conditions, reports on their own activities, money market and banking conditions etc.

(vi) Direct Action : Direct action refers to the directions issued by the Central Bank to the commercial banks regarding their lending and investment policies. The method of direct action is most extensively used by the Central Bank to enforce both quantitative as well as qualitative credit control. Direct action may take different forms : (a) the Central Bank may refuse to rediscount the bill of exchange, (b) the Central Banks may charge a penal rate of interest, over and above the bank rate for borrowings beyond the prescribed limit, (c) the Central Bank may refuse to grant more credit to the banks whose borrowings are considered to be in excess of their capital and reserves.



CHECK YOUR PROGRESS

Q 3: What is bank rate?

.....

.....

12.6 LIMITATIONS OF MONETARY POLICY

In the above section we have discussed the various instruments of monetary policy. Though it controls inflation and it works for the economic development it has some limitations also. Now, we will discuss the limitations of monetary policy-

I Limited role in controlling prices : The monetary policy of Reserve Bank of India has played only a limited role in controlling the inflationary

pressure. It has not succeeded in achieving the objective of growth with stability.

- **Unfavourable Banking Habits :** An important limitation of the monetary policy is unfavourable banking habits of Indian people. People in India prefer to make use of cash rather than cheque. This means that a major portion of the cash generally continues to circulate in the economy without returning to the banks in the form of deposits. This reduces the credit creation capacity of the banks.
- **Restricted Scope of Monetary Policy in Economic Development :** In reality the monetary policy has been assigned only a minor role in the process of economic development. The monetary policy is not given any predominant role in the process of economic development. The Reserve Bank is expected to see that the process of economic development should not be hindered for want of availability of funds.
- **Underdeveloped Money Market :** Another limitation of monetary policy in India is underdeveloped money market. The week money market limits the coverage, as also the efficient working of the monetary policy.

  The money market comprises of two parts, the organised money market and unorganised money market. The monetary policy works only in organised money market. It fails to achieve the desired results in unorganised money market.
- **Existence of Black Money :** The existence of black money in the economy limits the working of the monetary policy. The black money is not recorded since the borrowers and lenders keep their transactions secret.
- **Conflicting objectives :** An important limitation of monetary policy arises from its conflicting objectives. To achieve the objective of economic development, the monetary policy is to be expansionary but contrary to it, to achieve the objective of price stability, a curb on inflation can be realised by controcting the money supply. The monetary policy generally fails to achieve a proper co-ordination between these two objectives.

- **Influence of Non-Monetary Factors :** An important limitation of monetray policy is its ignorance of non-monetary factors. The monetary policy can never be the primary factor in controlling inflation originating in real factors, deficit financing and foreign exchange resources.
- **Limitations of Monetary Instruments :** Another important limitation of monetary policy is related to the inherent limitations in the various instruments of credit control. There are limitations regarding freguent and sharp changes in the bank rate as these are supposed to conflict with the development objectives. Most bank rates are virtually fixed and mutually unrelated so that the scope far adjustment is very limited. The CRR and SLR have also been fixed very high locking most of the funds in low yielding assets. These limitations of monetary instruments hamper the smooth working of monetary policy.
- **No Proper Implementation of the Monetary Policy :** Successful application of monetary policy is not merely a question of availability of instruments of credit control. It is also a question of judgement with regard to timing and the degree of restrain employed or relaxation allowed.

However, a past experience shows that Reserve Bank's credit restrictions have always fallen short of the required extent of restraint. The Bank has adopts a hesitant attitude in the fiedl of monetary control.

In short the monetary policy of the Reserve Bank suffers from many limitations. It requires improvements in many directions.



CHECK YOUR PROGRESS

Q 4: State two limitations of moneatry policy.

.....

.....

12.7 CONCEPT OF FISCAL POLICY

Fiscal Policy concerns with the aggregate effect of government expenditure and taxation on income, production and employment. In other

words, it refers to the instruments by which a government tries to regulate or modify the economic affairs of an economy keeping in view certain objectives.

The concept of Fiscal Policy has been defined by different economists as follows–

Arthar Smithies defines Fiscal Policy, 'As a policy under which the government uses its expenditure and revenue programme to produce desirable effects and avoid undesireable effects on the nation income, production and employment.'

Fiscal Policy differs from monetary policy in its mode of operation. Gardner Ackley points out 'Unlike monetary policy these measures involve direct government entrance into the market for goods and services (in case of expenditure) and a direct impact on private demand (in case of taxes).'

In a developing country where monetary policy alone cannot be effective due to the prevalence of under- developed money and capital market, fiscal policy along with monetary policy can play a vital and comprehensive role in accelerating the economic growth and bringing about stability in the economy. According to Raja J. Chellioh, 'The implementation of the financial plan and the achievement of balances in real and money terms obviously will have to rely largely in fiscal measures.'

There are some objectives of fiscal policy. Now, we will discuss about these objectives–

Objectives of fiscal policy :

- **Full employment :** Full employment is a common objective of fiscal policy in both developed and developing countries. Fiscal policy should aim at reducing the extent of unemployment and under- employment. Public expenditure on social overheads, public sector enterprises all help to create employment opportunities. Tax holidays and subsidies to start industries in rural areas help to generate employment.
- **Price Stability :** Price stability is an important objective for all countries in general. Fiscal policy should aim at avoiding both recessions and inflation. Little rise in prices is considered as an incentive for capital formation and investment but high rate of inflation would remove the

gains of development. There will be imbalance between aggregate demand and aggregate supply.

- **To accelerate the rate of economic growth :** Primarily, fiscal policy in a developing economy, should aim at achieving an accelerated rate of economic growth. But high rate of economic growth cannot be achieved and maintained without stability in the economy. Therefore fiscal measures should be used properly, so that production, consumption and distribution may not be adversely affected. It should promote the economy as a whole which in turn helps to raise national income and per capita income.
- **Optimum allocation of resources :** Resources are scarce in developing economy. Hence, optimum allocation of such scarce resources becomes a primary objective of fiscal policy. Fiscal measures can greatly affect the allocation of resources in various occupations and sectors.
- **Equitable distribution of wealth and income :** Extreme inequalities of income and wealth are harmful to economic development. Such inequalities exist in a large extent in developing countries. Suitable fiscal policy of the government can be devised to bridge the gap between the incomes of the different sections of the society.
- **Economic Stability :** Fiscal measures promote economic stability in the face of short-run international cyclical fluctuations. These fluctuations cause variations in terms of trade, making the most favourable to the developed and unfavourable to the developing economies. So, for the purpose of bringing economic stability, fiscal methods should incorparate flexibility in the budgetary system so that income and expenditure of the government may automatically provide compensatory effect on the rise or fall of the nation's income.
- **Capital Formation and Growth :** Fiscal policy can be adopted as a crucial tool for the promotion of the highest possible rate of capital formation. A newly developing economy is encompassed by a vicious circle of poverty' on account of capital deficiency. Therefore, a balanced growth is needed to breakdown the vicious circle which is only feasible

with higher rate of capital formation.

- **Encouraging investment :** Investment can be increased from capital accumulation. More investment requires more saving or foreign assistance voluntary savings of people are not enough. The capacity of people to save, particularly in developing countries, is very low. It is, therefore, the fiscal policy programmes which will have to make savings and investment possible.



CHECK YOUR PROGRESS

Q 5: State two objectives of fiscal policy.

.....

.....

12.8 FISCAL POLICY AND ECONOMIC STABILITY

You may have come across some news about the fluctuations in the economy. These fluctuations in the economic activities can be presented through a cycle which is known as 'trade cycle'. There are four stages in the trade cycle. There are–

1) Boom/prosperity
2) Recession
3) Depression
4) Recovery

During recession, there is a lot of idle or unutilised productive capacity, that is available machines and factories are not working to their full capacity. As a result, unemployment of labour increases along with the existence of excess capital stock. Again sometimes inflation occurs in the economy which means price rising. Thus, in a free market economy, the condition of economic instability prevails.

Fiscal policy is an important instrument to stabilise the economy, that is to overcome recession and control inflation in the economy. Fiscal Policy is of two kinds :

– Discretionary Fiscal Policy; and
– Non-discretionary Fiscal policy.

By discretionary fiscal policy we mean deliberate change in the government expenditure and taxes to influence the level of national output and prices. On the other hand, non-discretionary fiscal policy of automatic stabilisers is a built-in tax or expenditure mechanism that automatically increases aggregate demand when recession occurs and reduces aggregate demand when there is inflation in the economy.

12.8.1 Discretionary Fiscal Policy

At the time of recession the Government increases its expenditure or cuts down taxes or adopts a combination of both. On the other hand, to control inflation the Government cuts down its expenditure or raises taxes. Let us discuss the fiscal policy from two perspectives-

- **Fiscal Policy to Cure Recession**

  The recession in an economy occurs when aggregate demand decreases due to a fall in private investment. There are two fiscal methods to get the economy out of recession.

  a) Increase in Government Expenditure

  b) Reduction in Taxes.

We will discuss below both these methods–

a) Increase in Government Expenditure to Cure Recession : For a discretionary fiscal policy to cure recession, the increase in Government expenditure is an important tool. Government may increase expenditure by starting public work– such as roads, dams, telecommunication links, irrigation works, electrification of new areas etc. For undertaking all these public works, Government buys various types of goods and materials and employs workers. As a result, income increases of these who sell materials and supply labour for these projects. Those who get more income spend them further on consumer goods. The increase in demand for different goods brings about expansion in their output which further generates employment and incomes for the unemployed workers.

b) Reduction in taxes : Alternative fiscal policy measure to overcome recession and to achieve expansion in output and employment is reduction in taxes. The reduction in taxes increases the disposable income of the society and causes the increase in consumption spending by the people.

- **Fiscal Policy to Control Inflation**

Because of large increases in consumption demand by the households or investment expenditure by the entrepreneurs or bigger budget deficit caused by Government expenditure, agreegate demand increases. It gives rise to the situation of excess demand which results in inflation pressures in the economy. These inflationary pressures can be controlled by fiscal policy. The fiscal measures to control inflation are as follows–

1) Reducing government expenditure
2) Increasing taxes.

If there is a balanced budget to begin with and the Government reduces its expenditure, say on defence, subsidies, transfer payments, while keeping taxes constant, this will also create budget surplus and result in removing excess demand in the economy.

As an alternative to reduction in Government expenditure, the taxes can be increased to reduce agreegate demand. For this purpose personal direct taxes such as income tax, wealth tax, corporate tax can be raised. The hike in taxes reduces the disposable incomes of the people and thereby force then to reduce their consumption demand.

12.8.2 Non-Discretionary Fiscal Policy

There is an alternative to the use of discretionary fiscal policy which generally involves problems in recognising the problem of recession or inflation and taking apprapriate action to tackle the problem. In this non-discretionary fiscal policy, the tax structure and

expenditure pattern are so designed that taxes and Government spending vary automatically in appraprate direction with the changes in national income. That is, these taxes and expenditure pattern without any special deliberte action by the Government automatically raise aggregate demand in times of recession and reduce aggreagate demand in times of boom and inflation and there by help in ensuring economic stability. These fiscal measures are therefore called automatic stabilizers or built in stabilizers. Since these automatic stabilizers do not require any fresh deliberate policy action or legislation by the government, they represent non-discretionary fiscal policy. Important automatic fiscal stabilisers are– Personal Income Tax, Corperate Income Tax, Transfer Payments etc.

12.9 INSTRUMENTS OF FISCAL POLICY

The various instruments of fiscal policy are as follows–

- **Public Expenditure :** Public Expenditure is an important tool of fiscal policy. The appropriate variation in public expenditure can have more direct effect upon the level of economic activity than even taxes. The increased public spending will have a multiple effect upon income, output and employment exactly in the same way as of increased investment has its effect on them. Similarly, a reduction in public spending, can reduce the level of economic activity through the reverse operation of the government expenditure multiplier.
- **Taxation :** Taxation is a powerful instrument of fiscal policy in the hands of public authorities which greatly affect the changes in disposable income, consumption and investment. An anti- depression tax policy increases disposable income of the individual, promotes consumption and investment. Obviously, there will be more funds with the people for consumption and investment purpose at the time of tax reduction. This will ultimately result in the increase of spending activities.
- **Government Borrowing :** The third fiscal instrument is government borrowing. Public debt policy influences aggregate demand through

the volume of liquid assets. When the government floats a loan there is a transfer of liquid funds from the public to the government which reduces the purchasing power of the public. At the time of interest payments and repayment of debt, there is transfer of funds from the government to the public which increases the purchasing power in the hands of the public.

- **Budget :** The budget of a nation is a useful instrument to assess the fluctuations in an economy. Different budget principles have been formulated by the economist. These are–
  1) Annual budget
  2) Cyclical budget
  3) Fully managed compensatary budget.

The classical economists propounded the principle of annually balanced budget. However, this principle is subject to certain objections.

The cyclical balanced budget is termed as the 'Swedish budget'. Such a budget implies bdgetary surrpluses in prosperous period and employing the surplus revenue receipts for the retirement of public debt. The cyclically balanced budget can stabilise the level of business activity.

Fully managed compensatory budget implies a deliberate adjustment in taxes, expenditures, revenues and public borrowings with the motto to achieving full employment. It lays down the emphasis on maintenance of full employment and stability in the price level.

- **Public Works :** Keynes has highlighted public works programme as the most significant anti-depression device. There are two forms of expenditure. These are – Public Works and Transfer Payments. The public works include - roads, rail-tracks, schools, parks, buildings, aitports, hospitals, irrigation canals etc. Transfer payments are payments like interest on public debt, subsidy, pension, relief payment, insurance, social security benefits etc.

Public works are supported as an anti-depression device on the following grounds :

a) They reduces unemployment

b) They increase the purchasing power of the community and thereby

stimulate the demand for consumption goods.

c) They help to create economically and socially useful capital assets.

12.10 LIMITATIONS OF FISCAL POLICY

The theoritical side of fiscal policy is very sound. But its practical application has a number of limitations.

- The first and most serious limitation of fiscal policy is the practical difficulty of observing the events of economic instability. Unless they are correctly observed, the amount of revenue to be raised, the amount of expenditure to be incurred or the nature and extent of budget balance to be framed cannot be suitably planned.
- Since there are many fiscal ways of achieving a particular purpose, the choice of the most efficient combination of fiscal programme components is difficult.
- The timing of application of fiscal measures is very important. If the correct timing of economic events like inflation, recession, depression etc. cannot be foreseen, the purpose of fiscal policy will be defeated.
- Normally, the fiscal policy is assumed to have no significant effect on private investment. But, if public and private investments are pursuing the same objectives, the anticipated results can not be obtained.
- Only fiscal policy cannot cure either inflation or deflation, particularly if they are acute in nature. Therefore, a monetary policy is often needed to supplement the fiscal policy.
- The object of anti-depression fiscal policy may be frustrated if additional incomes created are used for purchase of foreign good. In such a case, the fiscal measures may lead to adverse balance of payment difficulties.
- The use of fiscal instruments during unemployment and depression is often associated with the subsequent problem of debt management. Because deficit budgeting is the normal fiscal cure, public debt is made for financing it. If the process of recovery from depression is long, the creation of budget deficit year after year will create a huge problem of debt repayment and debt management.

- The purpose of fiscal policy will be defeated if the policy cannot maintain a rising supply level of work effort. The national income will rise with increase in productive efficiency and increased supply of work effort. But if the tax measures are stringent and too high, they will certainly affect the incentive to work. This is an important limitation of fiscal policy.
- Large deficit programmes financed by borrowings bring about adverse psychological reactions. Rumours of government bankruptcy discourage investors and often flight of capital takes place.
- In a democracy, fiscal policy measures is a time consuming process. Legislative actions, administrative tasks and the executive process are often delayed and the original estimates of revenue earnings and government expenditures often become irrelevant.



CHECK YOPUR PROGRESS

Q 6: State two limitations of fiscal policy.

.....

.....



12.11 LET US SUM UP

In this unit we have discussed the following aspects-

- Monetary policy refers to the credit control measures adopted by the Reserve Bank of India.
- Monetary policy influences the availibility, cost and use of money and credit.
- The objectives of monetary policy are- neutrality of money, exchange stability, price stability etc.
- The instruments of monetary policy can be categorised as quantitative credit control and qualitative credit control measures.
- Quantitative credit control measures are- bank rate, open market operation and cash reserve ratio.

- Qualitative credit control measures include marginal requirements, regulation of consumer credit, rationing of credit etc.
- The scope of monetary policy are limited because of unfavourable banking habits of people, under- developed money market, existence of black money etc.
- Fiscal policy aims at regulating the economic affairs of an economy. It concerns with the aggregate effect of government expenditure and taxation on income, production and employment.
- Fiscal policy along with the monetary policy plays an important role in the economic development of an economy.
- Objectives of fiscal policy are- optimum allocation of resources, to accelerate the rate of economic growth, economic stability etc.
- Instruments of fiscal policy are- public expenditure, taxation, government borrowings etc.

  Fiscal policy suffers from certain limitaions like, fiscal policy alone can not control inflation or deflation, use of fiscal instruments during unemployment and depression is associated with the problem of debt management etc.



12.12 FURTHER READING

1) Paul R. R. (2007), '*Money, banking and international trade'* Kalyani Publishers, New Delhi.

2) Singh S. K. (2010), '*Public finance in theory and practice*'. S. Chand and Company Limited, New Delhi.

12.13 ANSWERS TO CHECK YOUR PROGRESS

Ans to Q No 1: Monetary policy aims at promoting general economic activities by focusing on money or credit supply and the rate of interest. It influences the availibility, cost and use of money and credit in the economy. The monetary policy is pursued by the central bank of the country.

Ans to Q No 2: (1) Neutrality of money: According to this principle, money supply should be controlled in such a way that money should be neutral in its effects on income, output, employment and prices

(2) Price Stability: It promotes business activity and ensures equitable distribution of income and wealth.

Ans to Q No 3: The bank rate refers the rate at which the Central Bank is willing to rediscount bills and to make advances to the commercial banks .

Ans to Q No 4: (1) Limited role in controlling prices : The monetary policy plays a limited role in controlling the inflationary pressure. It has not succeeded in achieving the objective of growth with stability.

(2) Existence of Black Money : The existence of black money in the economy limits the working of the monetary policy. The black money is not recorded since the borrowers and lenders keep their transactions secret.

Ans to Q No 5: (1) Full employment : Fiscal policy should aim at reducing the extent of unemployment and under- employment. Public expenditure on social overheads, public sector enterprises all help to create employment opportunities. Tax holidays and subsidies to start industries in rural areas help to generate employment.

(2) Optimum allocation of resources : Resources are scarce in developing economy. Hence, optimum allocation of such scarce resources becomes a primary objective of fiscal policy. Fiscal measures can greatly affect the allocation of resources in various occupations and sectors.

Ans to Q No 6: (i) The fiscal policy is assumed to have no significant effect on private investment. However, if public and private investments are pursuing the same objectives, the anticipated results can not be obtained.

(ii) The use of fiscal instruments during unemployment and depression is often creatyes the problem of debt management.



12.14 MODEL QUESTIONS

Q 1: What is meant by monetary policy?

Q 2: Discuss the limitations of monetary policy.

Q 3: Discuss the objectives of monetary policy.

Q 4: What is meant by fiscal policy?

Q 5: Discuss the limitations of fiscal policy.

*** ***** ***



REFERENCES

1) Ahuja, H. L. (2006), *Modern Economics* (12th Ed.), S. Chand and Company Ltd.
2) Ahuja, H. L. (2007), *Managerial Economics* (1st Ed.), S. Chand and Company Ltd.
3) Choudhury, R. K., *Public Finance and Fiscal Policy*. Kalyani Publishers.
4) Chopra, P. N. (2008), *Micro Economics* (2nd Ed.), Kalyani Publishers.
5) Dewett, K. K. (2005), *Modern Economic Theory* (22nd Ed.), S. Chand & Sons.
6) Dutt, Ruddar and Sundharam, K. P. M., *Indian Economy*. S. Chand and Company Limited.
7) Gupta, G. S. (2006), *Managerial Economics*, Tata McGrew Hill Publishing.
8) Gupta, Suraj B., *Monetary Economics Institution, Theory and Policy*. S. Chand & Company Limited.
9) Jhingan, M. L. (2000), *Micro Economic Theory*, Konark Publishers Pvt. Ltd., Delhi.
10) Keat, Paul, G. & Young, Philip, K.Y. (2003), *Managerial Economics* (1st Edition), Pearson Education, Delhi.
11) Keats and Young (2004), *Managerial Economics*, Pearson Education.
12) Koutsoyiannis, A. (1994), *Modern Economics*, Macmillan Business Books.
13) Kumar, Arun & Sharma, Rachna (1998), *Managerial Economics*, Atlanta Publishers and Distributors.
14) Mankar, V. G. (1999), *Business Economics*, MacMillan Business Books.
15) Mehta, P. L., *Managerial Economics*, S. Chand.
16) Mithani, D. M., *Managerial Economics*, Himalaya Publishing House.

17) Peterson, Craig H. , Lewis, W. Cris & Jain, Sudhir K. (1999), *Managerial Economics* (4th Edition), Prentice Hall, New Delhi.

18) Peterson et al. (2008), *Managerial Economics*, Pearson Education.

19) Pindyck, R. S. and Rubinfeld, D. L. (2004), *Microeconomics*, Prentice-Hall India.

20) Roy, Uddipto (2004), *Managerial Economics* (1st Edition), Asian Books Private Ltd., New Delhi.