

13. Factor pricing ; rent - Ricardian rent-economic rent – Quasi – rent; Wage– marginal productivity theory of wage; Interest - Liquidity preference theory; Profit –Risk-bearing theory of profit.

DISTRIBUTION

The theory of distribution or the theory of factor pricing deals with the determination of factor prices, such as wages, rents, interest and profit.

i) Marginal Productivity Theory of Distribution

According to this theory, the price of a factor of production depends upon its marginal productivity. A factor of production should get its reward according to the contribution it makes to the total output, i.e., its marginal productivity. Change in the revenue resulting from the employment of an extra unit of the factor is called Marginal Revenue Product (MRP) or Value of Marginal Product (VMP) and the change in total cost brought about by using an extra unit of the factor is called Marginal Factor Cost (MFC).

$$\text{VMP} = \text{MRP} = \frac{\text{Change in Total Revenue}}{\text{Change in Input}} = \frac{\Delta \text{TR}}{\Delta X}$$

$$\text{MFC} = \frac{\text{Change in Total Cost}}{\text{Change in Input}} = \frac{\Delta \text{TC}}{\Delta X}$$

In factor market, a firm's equilibrium occurs when $\text{MRP} = \text{MFC}$. In product market, a firm's equilibrium will be at $\text{MR} = \text{MC}$ (MR is the Marginal Revenue and MC is the Marginal Cost).

The **marginal productivity theory** is defective because it indicates how many units of a factor (input) a firm will use at a given price in order to maximize its profit. For example, it tells us how many workers a firm will employ at a given wage rate to maximize its profit. But it does not tell us how the wage itself is determined. Further marginal productivity theory deals only with demand side of the factor pricing and it completely ignores the supply side of the factor pricing.

The **modern theory of distribution** (also known as the supply and demand theory of distribution), on the contrary, provides a more satisfactory explanation of factor pricing than the marginal productivity theory. According to this theory,

the price of the factor is determined by the interaction of the forces of demand and supply of the concerned factor.

ii) Rent

David Ricardo defined rent as “that portion of the produce of the earth which is paid to the land lord for the use of original and indestructible powers of the soil”. Thus, rent is only a payment for the use of land. The following are the theories of rent: (i) Ricardian Theory of Rent, and (ii) Modern Theory of Rent.

a) Ricardian Theory of Rent

According to Ricardo, rent is the payment for the use of only land and is different from contractual rent which includes the returns on capital investment made by the landlord in the form of wells, irrigation structures etc. besides the payment for the use of land. Ricardian rent is also known as pure rent. The true economic rent is only a payment for the use of land. It excludes interest on landlord’s investment. The Ricardian theory of rent is based on the following assumptions:

- i) Land differs in fertility.
- ii) The most fertile lands are limited in supply.

Let us assume that there are four types of land, classified based on its fertility, viz., A, B, C and D. A is the most fertile land and D is the least fertile land. People from the neighbouring place come in batches to settle on the land. The first batch of people will naturally cultivate the most fertile land, i.e., A grade land. Let us assume that one dose of labour and capital on ‘A’ quality land yields 20 quintals of paddy per acre. Then, the second batch of settlers has two alternatives - either to cultivate B quality land, which is free, or to take ‘A’ quality land on rent from the first batch. It is obvious that the rent payable on the ‘A’ quality land would be equal to the differences in the fertilities of A and B quality lands. Let us assume that one dose of labour and capital applied to ‘B’ quality land yields 18 quintals of paddy. Now the rent is equal to 2 quintals, i.e., 20-18 quintals of paddy, because this represents the difference between the fertilities of the two types of lands.

Table 6.1 Returns from Different Qualities of Land

Doses of Labour and Capital	Returns (in quintals of Paddy per acre)			
	A	B	C	D
1st	20	18	16	14

2nd	18	16	14	12
3rd	16	14	12	10
4th	14	12	10	8

Even if the second batch decides not to take up A quality land on rent, rent would still arise on 'A' quality land. Since the market price of paddy will be equal to the cost of production at 'B' quality land, 'A' quality land will have a surplus over 'B' quality land. The surplus return for A quality land arises due to its superior fertility in comparison with the 'B' quality land. Suppose, if 10 doses of labour and capital are available, rent from various qualities of land will be:

$$\begin{aligned}
 \text{Rent of A grade land} &= \text{Total quantity of produce} - \text{Total cost} \\
 &= 68 - 56 = 12 \text{ quintals} \\
 \text{Rent of B grade} &= 48 - 42 = 6 \text{ quintals} \\
 \text{Rent of C grade} &= 30 - 28 = 2 \text{ quintals} \\
 \text{Rent of D grade} &= 14 - 14 = 0 \text{ (no rent)}
 \end{aligned}$$

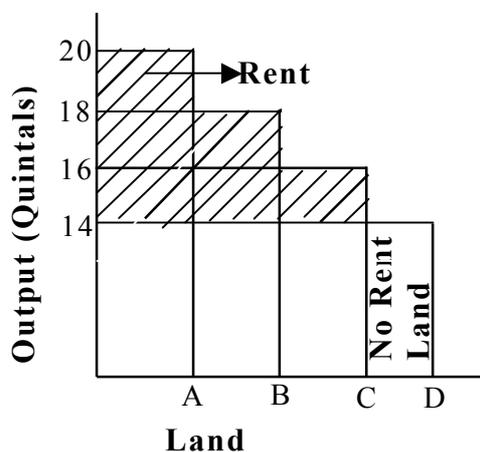
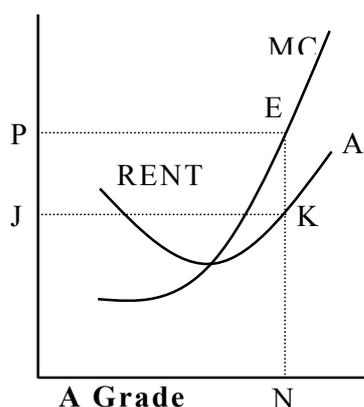


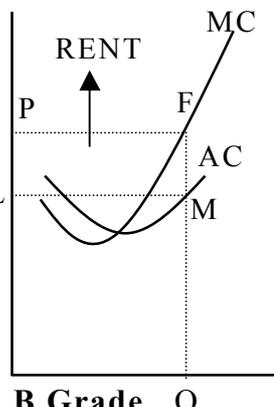
Fig.6.1 (a) Ricardian Rent

In this example, D quality land is the marginal or no-rent land, because it earns no rent. Thus, rent arises on account of natural differential advantages of a piece of land over the marginal land. The natural differential advantages may be due to either superior quality of land or its better situation. In A quality land, OP is the price and OJ is the cost and JPEK represents the rent. The D grade land will be cultivated only when the price of the output and average cost of production are equal, i.e., no rent is

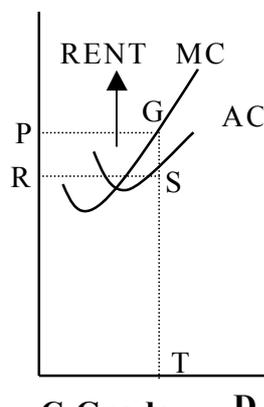
obtained in D quality land. Thus, rent does not form a part of the cost of production. Rent is the earnings over and above the cost of production of the marginal land, but the marginal land has no rent. Therefore, rent is not price determining; it is price determined. To quote Ricardo, **“Corn is not high because rent is paid, but rent is paid because corn is high”**



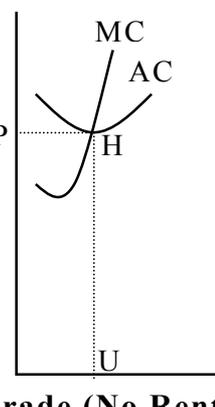
A Grade
Fig.6.1 (b)



B Grade
Fig.6.1(c)



C Grade
Fig.6.1 (d)



D Grade (No Rent Land)
Fig.6.1 (e)

Output

i) Criticisms of the Ricardian Theory of Rent

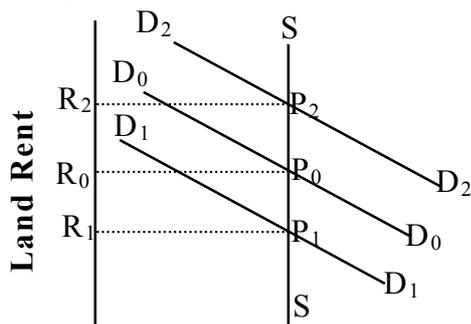
1) According to Ricardo, rent is due to the original and indestructible powers of the soil. But the fertility of the soil can be increased through manuring. Likewise, fertility of the soil can be destroyed through continuous cultivation without manuring.

(2) In a thickly populated country, even the most inferior land yields rent and there is no marginal land in those countries. Thus, rent is not due to fertility, but to the scarcity of land.

b) Modern Theory of Rent

According to the modern theory of rent, the rent of a factor, from the point of view of any industry, is the difference between its actual earnings and transfer earnings (Rent = Present Earnings minus Transfer Earnings). Transfer earning refers to the amount of money, which a factor of production could earn in its next best-paid use (opportunity cost). Suppose, an hectare of land under cotton cultivation yields an income of Rs.15,000. If the same area is put into its next best use, namely, paddy cultivation, it earns an income of Rs.12,000, then it is its transfer earning(opportunity cost). Then, the rent of that hectare of land is Rs.3,000 (Rs.15,000-12,000). According to the modern theory, rent, in the sense of surplus, arises when the supply of land is less than perfectly elastic. From the point of view of elasticity of supply, there are three possibilities.

1. The supply of land may be perfectly inelastic, i.e., it is represented by a vertical line (Fig.6.2). The demand for land is a derived demand of the products of land. If the population of the country increases, the demand for food will increase, resulting in increased demand for land and a rise in its rent, and vice versa. It is known that the demand for a factor depends upon its marginal productivity, which is subject to the Law of diminishing marginal returns. Therefore, the demand curve of land slopes downward from left to right as shown in the figure 6.2. The supply of land, on the other hand, is fixed so far as the community is concerned, although individuals can increase their land area by acquiring more land from others or reduce it by parting with it. Therefore, the



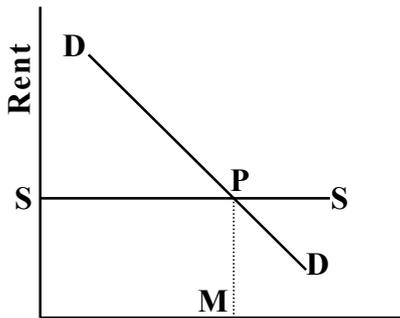
supply of land is perfectly inelastic. The interaction of demand and supply of land determines its rent. If demand for land increases from D_0 to D_2 , Then, the rent also increases from R_0 to R_2 . Similarly, if the demand for land decreases from D_0 to D_1 , then, the rent decreases to R_1 . Here, the transfer earnings will be zero, because the land cannot be transferred to any other use: the supply of total land area is also

O Hectares of Land

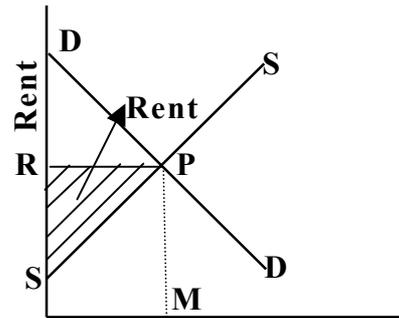
Fig. 6.2 Perfectly Inelastic Supply of Land

fixed and it has only one use. In this case, the entire income from land is surplus and hence, it is called rent.

2. The supply of land may be perfectly elastic to an individual farmer. In that case, it will be represented by a horizontal straight line (Fig.6.3). If any factor has a perfectly elastic supply, it will earn no surplus or reward. Hence, in this



0 Hectare of Land
Fig 6.3 Perfectly Elastic Supply of Land



0 Hectare of Land
Fig 6.4 Relatively Elastic Supply of Land

case, the actual earnings and the transfer earnings would be the same and there would be no surplus (rent). However, in real life, no factor has a perfectly elastic supply.

3. The supply of land may fall between two extremes, i.e., it may be elastic, but not perfectly elastic (Fig.6.4). In this case, a part of income from land is rent (in the sense of surplus over transfer earnings), and remaining part is not rent. The total earnings are ORPM and transfer earnings are OSPM. Then, SRP (the shaded area in the figure) is the surplus or rent.

b) Quasi Rent: Quasi rent is the earning of capital equipments such as machineries, buildings etc., which are inelastic in supply, in short run. According to Marshall, the quasi rent is only a temporary surplus, which is enjoyed by the owner of the capital equipments in the short run. This is due to the increase in its demand and it will disappear in the long run, if supply of the capital equipment is increased in response to the increased demand. The quasi rent is also defined as the excess of total revenue earned in the short run over and above the total variable costs. Thus, Quasi Rent = Total Revenue Earned minus Total Variable Costs.

Ricardian rent is a payment made for the use of land whereas quasi-rent is a payment for man made factors such as buildings, machineries, etc. Ricardian rent

exists both in short run and long run because supply of land is fixed in long run. But quasi rent is only a temporary earning due to increased demand.

iii) Wage

Wage is defined as the price paid for the services rendered by the labourer in the production process. If wages are paid according to the amount or quantum of work done, it is called piece-wage. E.g. wage for weeding in one acre of paddy field. If wages are paid to a labourer who works for a fixed period of time, it is known as time wage. E.g. wage for weeding per labourer per day.

When payment is made in terms of cash or money, it is known as money wage or nominal wage. Real wage refers to the income of a worker in terms of real benefit. It refers to the amount of necessities, comforts, and luxuries that a labourer can obtain in return for his services. Real wage refers to the purchasing power of money earned by the labourer or wages paid in terms of quantity of commodities. The standard of living of a labourer depends on his real wage. The following are the theories of wages: (i) Subsistence theory of wages, (ii) Wages Fund Theory, (iii) Marginal Productivity Theory of Wages, and (iv) Demand-Supply Theory of Wages.

a) Wage-Fund Theory

The wage-fund theory was propounded by J.S.Mill. According to this theory, wages depend upon the proportion between population and capital. At any time, only a fixed amount of capital is allotted for payment of wages to labour. This is called wage-fund. It is influenced by the demand for labour. Further, at any time, there will be fixed number of workers who are willing to work, which represents the supply of labour. Thus, wages at any time are determined by the ratio between the amount of wage fund and the total supply of labour. In other words, the wage rate is calculated by dividing the wage fund by the number of workers.

$$\text{Rate of Wages} = \frac{\text{Wage Fund}}{\text{Number of Workers}}$$

The wage fund remaining the same, if there is an increase in the supply of labour, the wage will fall. Since the wage fund is fixed, there can be a rise in wages in one industry only at the expense of wages in other industries. Increase in the general level of wages is possible only: i) with an increase in the wage fund or ii) a reduction of labour force.

Criticism: The wage-fund theory is criticised on several aspects:

- 1) In reality, there is no fixed wage fund in any country and it is possible to increase the wages.
- 2) It fails to explain how labourers are able to increase their wages by trade union action, i.e., labour strike.
- 3) It ignores the demand side of labour. The demand for labour is determined by the demand for goods and services and not by the wage fund.
- 4) The theory does not explain the inequality of wages in different occupations.

b) Marginal Productivity Theory of Wages

According to the Marginal Productivity Theory, wages will be equal to the value of marginal productivity of labour. The marginal productivity theory is based on the following assumptions:

- i) It assumes the existence of perfect competition.
- ii) All labourers are homogenous in character.
- iii) The theory is based on the law of diminishing marginal returns.
- iv) It assumes that different factors can substitute each other.

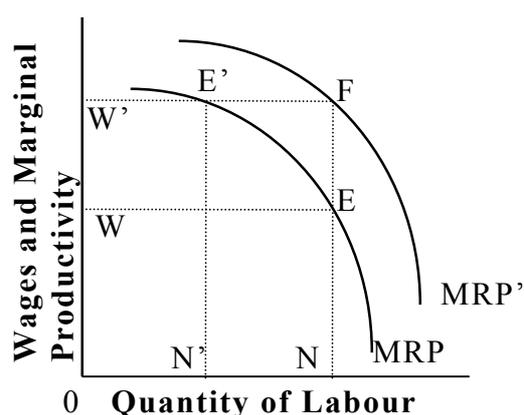


Fig. 6.5 Determination of Wages

According to this theory, wage is equal to the value of marginal product. If the marginal product is more than the wages, then it will be profitable to engage more number of labourers. This is because the total revenue earned due to additional employment is more than the total cost of engaging them. But due to the operation of law of diminishing marginal return, the marginal value product will decline, if labour is engaged beyond a limit. When wages are higher than the marginal value product, then it will be unprofitable to engage more labourers and hence, their engagement will be reduced until wages are equal to the marginal value product.

In the figure 6.5, If ON is the available supply of labour, OW is the equilibrium wage rate. Now, if the wage rate is increased to OW' by a collective bargaining of trade unions, NN' number of workers become unemployed. Thus, trade unions cannot enhance wages without creating unemployment. But, if the rise in wage brings about a sufficient increase in efficiency and productivity so that the marginal productivity curve shifts upward (MRP'), then unemployment will not be created.

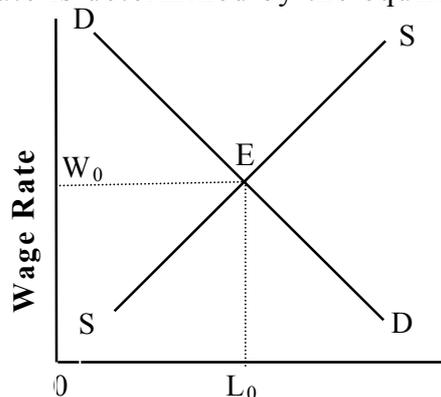
Criticism: 1) Labourers may not be uniform in quality.

- 1) This theory ignores supply side of the labourers.

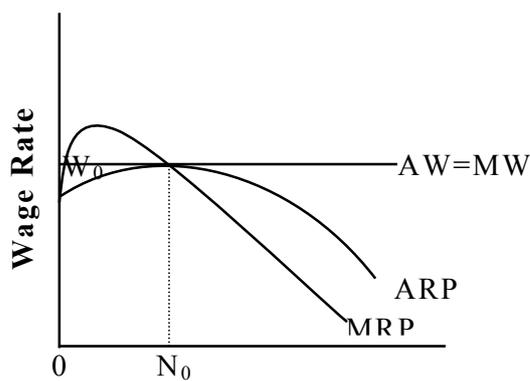
- 2) The individual entrepreneur may operate without the knowledge on law of diminishing marginal return

c) Demand-Supply Theory of Wages

According to this theory, wages are determined by the forces of demand and supply of labour. When there is a perfect competition in labour market, wage rate is determined by the equilibrium between the demand for and supply of



Number of Units of Labour
Fig. 6.6 (a) Wage Determination in Industry



Number of Units of Labour
Fig. 6.6 (b) Wage Determination in Firm

labour. The wage determination in the industry is depicted in the fig.6.6 (a). The producer will employ more units of labour at lower wage rates. Demand for labour is governed by the marginal revenue product of labour (MRP). Hence, the demand curve for labour slopes downward from left to right. However, there is a positive relationship between wage rate and supply of labour, i.e., higher the wage rate, more will be the supply of labour and vice-versa. At the point E, where demand for labour equals supply of labour, the wage rate (OW_0) gets determined. Thus, in equilibrium, OL_0 units of labour will be employed at the wage rate of OW_0 . In the long run, wage rate under perfect competition = $MRP = ARP$. Since marginal revenue product (MRP) and average revenue product (ARP) are equal only at the former's highest point, the equilibrium employment of labour by the firms in the long run will be corresponding to the highest point of the marginal productivity curve as shown in the figure 6.6 (b). In this, the firm has to accept the market wage OW_0 settled by the industry. Therefore, in this long run equilibrium situation, wage rate, $OW = MRP = ARP$.

d) Role of Government in Regulating Wages: The real wages affect the standard of living of labourers. Hence, every country fixes the minimum wages to be given to labourers in order to: i) avoid labour unrest, ii) improve standard of living, and iii) increase production capacity in the country.

e) Labour union and wages: The classical economists assumed that wages would not rise above marginal productivity of labour. They also said that labour unions could increase wages under the following situations: 1) When wages are less than that of marginal value product. 2) When the general price level increases, money wage will be increased. 3) The labour unions can increase their marginal value product and increase the wage rate. However, there is a limit to the bargaining power of labour unions to increase the wage rates because machinery can be substituted for labour.

iv) Interest

Interest is the price paid for the use of loanable funds (capital) used in the production process.

a) Pure Interest and Gross interest: Pure interest or net interest is the payment made only for the services of capital or for the services of money borrowed. Gross interest includes the following items besides pure interest.

1) Payment for risk: The lender has to face the risk of loss of capital due to trade risk and personal risk. Trade risk faced by the borrower arises from the uncertainty of profit in the business and therefore, he may not be able to repay the loan amount in time. Personal risk is due to dishonesty of the borrower.

2) Payment for inconvenience: After lending the money, the lender may urgently need the money for some other purpose. Sometimes, the borrower may return the money at the time when the lender may not be able to reinvest it in any other purpose. These are some of the inconveniences faced by the lender.

3) Payment for work and worry: The lender has to maintain proper accounts. He has to keep the securities (documents, jewels, etc.) safely. Some times, the lender sets legal proceedings against defaulters. All these cause worries to the lenders.

By way of compensating all these, the lender charges some thing over and above the pure interest and it is called gross interest.

b) Differences in interest rates: In the money market, the interest on borrowed money varies due to following reasons:

(1) Interest rate is low, if the offered securities are easily realizable (E.g. Gold). If securities are difficult to realize quickly, the interest will be high (E.g. Land).

(2) Interest for long-term loan will higher than that of short-term loan. This is because of the fact that the lender loses his command over his money for a long

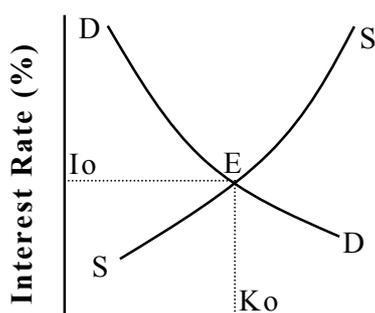
period of time in the case of long-term loan. So he expects higher interest rate for such loans.

(3) Interest rates vary according to purpose for which loan is obtained. Nationalized banks charge lower interest for agricultural loans when compared to consumption loan.

c) Theories of Interest: The following are the theories of interest: (1) Loanable Fund Theory of Interest, (2) Keynes ‘Liquidity Preference Theory of Interest and (3) Modern Theory of Interest or Neo-Keynesian Theory of Interest.

1) Loanable Funds Theory of Interest

According to this theory, rate of interest is determined by demand and supply of loanable funds. The supply of loanable funds consists of (i) savings of people out of their disposable income, (ii) dishoarding by people from past savings, (iii) disinvestments and (iv) bank credit. The supply of loanable fund is positively related to the rate of interest and hence, the supply curve of loanable funds is



Demand and Supply of Loanable Funds

Fig. 6.7 Determination of Interest

related to rate of interest and it is a downward-sloping curve from left to right. The equilibrium interest rate gets determined at the point (E) where supply of loanable funds equals demand for loanable funds, i.e., at equilibrium point the demand and supply curves cut each other. Thus, this theory states that savings of people depend upon the interest rate. But Keynes has shown that savings of people depend upon money income and their preference to keep liquid cash.

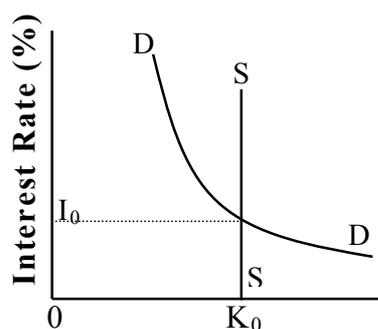
upward sloping. In other words, larger amount of loanable funds will be available at higher rates of interest and vice-versa.

Loanable funds are demanded for the following three purposes: (i) for making investment by entrepreneurs, (ii) for hoarding money, (iii) for consumption purposes. The demand for loanable funds is inversely related to rate of interest. So the demand curve of loanable funds is inversely

2) Liquidity Preference Theory of Interest or Keynesian Theory of Interest

People demand money to keep it as liquid (cash). Keynes calls this demand or preference for money or liquidity preference. Lending involves a decline in the stock of money held as liquid (cash). In other words, lending involves surrender of liquidity by the lender. Interest is the payment made to induce people to surrender their liquidity. In the words of Keynes, “rate of interest is

the reward for parting with liquidity for a specific period". Keynes has given three reasons for the liquidity preference of people. They are (i) transaction motive (ii) pre-cautionary motive and (iii) speculative motive. There is a gap between receipt of income and spending. In order to bridge this gap, people keep liquid money (cash) and this is known as transaction motive. People keep liquid money (cash) to spend during unforeseen or unexpected events. This is known as precautionary motive. People may keep cash on hand to make profit out of anticipated changes in the prices of bonds and shares. This is called speculative motive. When the rate of interest falls, the demand for money will increase and when the rate of interest rises, the demand for money will decrease. Thus, the demand for money is negatively related to the interest rate and the demand curve for money will slope downward from left to right. Supply of money is from two sources namely, (i) government and (ii) the banking system. Money put into circulation by the government is called legal tender money. The depositors can withdraw their money from the bank and the deposited money is called bank



Demand and Supply of Money

Fig.6.8 Determination of Interest

(3) Modern Theory of Interest or Neo-Keynesian Theory of Interest

According to the modern theory, the four determinants, namely, saving, investment, liquidity preference and the supply of money are integrated along with income and determine the rate of interest. In order to achieve this, the modern theory has evolved two curves- the IS curve and LM curve- the former shows the equilibrium in the real sector or product market, while the latter indicates the equilibrium in monetary sector or money market. IS curve indicates the various rates of interest which equalize saving and investment at the corresponding levels of income. Higher the level of income, greater is the volume of saving. Greater the volume of saving, lower will be the rate of interest. Thus, as the level of income rises, the rate of interest falls down. Hence, the IS curve slopes downward from left to right (Fig.6.9). The LM curve shows

the various rates of interest, which equalize the demand for cash (liquidity preference) of the people with the supply of cash at various levels of income. As the level of income increases, the liquidity preference (or the demand for cash) of the people increases and consequently the interest rate also increases. On

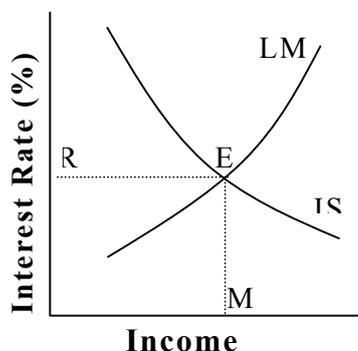


Fig.6.9 Determination of Interest

v) Profit

Profit is the reward to an entrepreneur for the functions he renders in productive activity. Out of the income earned by the firm, land owner is paid rent, labourer is paid wage and capitalist is paid interest. Whatever is left over goes to the entrepreneur as profit. Hence, profit is also called a residual income.

a) Net profit and Gross profit: Gross profit is the total amount of money that the entrepreneur gets. Gross profit consists of the following components: (1) rent for land that belongs to the entrepreneur, (2) interest for capital owned by the entrepreneur, (3) wage for managerial functions performed by the entrepreneur, (4) monopoly or semi-monopoly gains (if the entrepreneur happens to be a monopolist he may get some profit), (5) wind-fall gains (these are due to favourable circumstances or pure luck), (6) money earned through the introduction of new innovations and (7) money earned by bearing risks and uncertainties.

The net profit or the pure profit is the reward for the following three functions performed by the entrepreneur: (1) reward for organization and coordination of various factors of production. (2) reward for bearing risk and uncertainties and (3) reward for introducing new innovations in the business.

ii) Profit Theories: The following are the important theories of profit (i) Rent theory of profit, (ii) Wage theory of profit (iii) Dynamic theory of profit, (iv) Risk theory of profit, (v) Uncertainty theory of profit, (vi) Innovation theory of profit and (vii) Marginal Productivity theory of profit.

1. Marginal Productivity Theory of Profit: It is possible to measure marginal productivity of entrepreneurs engaged in an industry. Let us assume that there is no much difference between entrepreneurs engaged in an industry. It is further

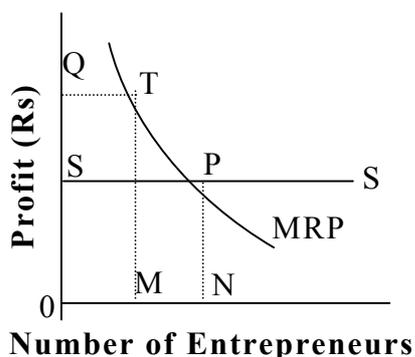


Fig.6.10 Determination of Profit

assumed that the marginal productivity of entrepreneurs can be measured. The marginal productivity curve represents the demand for entrepreneurs of an industry. Then the profit is determined by the marginal productivity of entrepreneurs and it is shown in the Figure 6.10. MRP curve shows the marginal revenue product of entrepreneurs and it slopes downward from left to right. The reason for this is, as the number of

entrepreneurs increases, the profit available to an individual entrepreneur decreases. The SS curve represents the supply of entrepreneurs to the industry. It is an horizontal line, as it has already been assumed that there is no much difference between the entrepreneurs. OS profit represents the transfer earnings of entrepreneurs. When the profit decreases less than OS, the entrepreneurs shift from the present industry to another industry. This is because the entrepreneurs can earn OS profit in any other industry. The demand for entrepreneurs (MRP) and the supply curve (SS) intersect at a point P. Hence, PN (=OS) is the average profit in the industry. In the long run, all the entrepreneurs will realise this normal profit (OS). However, in the short run, the supply of entrepreneurs is OM and the profit will be OQ. Hence, QS will be the abnormal profit that will vanish in the long run. The main criticism against this theory is that it does not explain the monopoly profit and windfall gain.

2. Risk Bearing Theory of Profit

According to Professor Hawley, profits are the rewards for risk taking, which is an important function of an entrepreneur. Production is carried on in anticipation of demand. However, the risks due to theft, accidental damages, price changes (which may again be due to change in fashion, tastes, preferences, etc), labour strike and so on may cause losses. Hence, the entrepreneur has to reduce these risks wherever it is possible. The risk taking is an unpleasant work, though an essential job, for which the entrepreneur has to be suitably rewarded. That reward is called profit. However, there are certain risks for which the consequences are not known well in advance and such risks cannot be insured against. The remuneration for known risks is not profit. Profit arises on account of assumption of unknown risks and it is explained by the uncertainty theory.

3. Uncertainty-Bearing Theory of Profit

This theory was propounded by F.H. Knight. Knight divided risks into (i) foreseeable risk-a risk that can be foreseen by the entrepreneur and (ii) unforeseeable risk-a risk, which cannot be foreseen by the entrepreneur. Knight calls this unforeseeable risk as uncertainty. According to Knight, profit does not arise on account of foreseeable risk, since such risks can be insured. Hence, risk taking is not the function of the entrepreneur, but of the insurance companies. Profit, according to Professor knight, is due to non-insurable risk (or, unforeseeable risk). A loss due to fire accident in a factory is an insurable risk. A few cases of non-insurable risks are: (i) Loss due to labour strike, (ii) loss due to heavy competition from rival companies, (iii) Loss due to changes in tastes and preferences of the consumer which in turn would result in low demand for the product. It is the primary function of the entrepreneur to anticipate and provide alternative arrangements to tackle non-insurable risks or uncertainties. Thus, profit is paid to the entrepreneur for his ability to bear uncertainty and not for risk-taking.

Chapter 6: Questions for Review:

1. Define the following:

- i) Perfect competition.
- ii) Monopoly.
- iii) Duopoly.
- iv) Oligopoly.
- v) Monopolistic competition.
- vi) Monopsony.
- vii) Oligopsony.
- viii) Duopsony.
- x) Monopsonistic competition.

2. Differentiate the following:

- i) Ricardian rent and Economic rent.
- ii) Ricardian Rent and Quasi rent.
- iii) Real wage and Money wage.

- iv) Gross interest and Net interest.
- v) Transaction and Pre-cautionary demand for money.
- vi) Gross profit and Net profit.
- vii) Risk and Uncertainty.

3. Write short notes

- i) Marginal Value Productivity of Factor.
- ii) Wage fund theory.
- iii) Impact of labour trade union and policies of the government on wages.
- iv) Marginal Productivity Theory of Profit.
- v) Uncertainty-Bearing theory of profit.

4. Answer the following:

- i) Show how economic rent theory is superior to Ricardo's rent theory.
- ii) Define wage. Mention the theories that explain the determination of wages. Explain briefly any two important theories of them.
- iii) What is interest? State the theories that explain the determination of interest. Describe in detail the liquidity preference theory of interest and Modern theory of interest.
- iv) What is net profit? State the theories that explain the determination of profit. Briefly explain risk bearing theory and uncertainty bearing theory of profit.