Sem-I; Unit-V

Module - 5: Theory of Distribution

The concepts of Distribution - Marginal Productivity Theory of Distribution - Concept of Rent, Ricardian Theory of Rent – Quasi Rent; Theories of Wage Determination: Subsistence, Theory and Standard of Living Theory - Classical Theory of Interest -Loanable Funds Theory of Interest -Liquidity Preference Theory of Interest; Theories of Profit: Risk and Uncertainty, Dynamic and Innovations Theories.

1. Explain the Marginal Productivity Theory of Distribution?

A: **Introduction:** Marginal Productivity theory of distribution is the general theory of factor pricing as it can be used to determine the price of any factor of production. The theory was systematically evaluated by J.B. Clark. According to this theory, the remuneration of a factor of production will be equal to its marginal productivity.

Assumptions: Before presenting his theory, Clark made some simplifying assumptions abstracting from the real world. He assumed a completely static society where population, stock of capital, and techniques of production are constant. Following are the important assumptions of this theory:

1. Perfect competition exists both in output market and in input market.

2. Every unit of input is homogeneous.

3. Inputs are perfectly mobile.

4. There exists full employment of resources.

5. Employer can measure the marginal product of an input in advance.

6. Law of variable proportions operates.

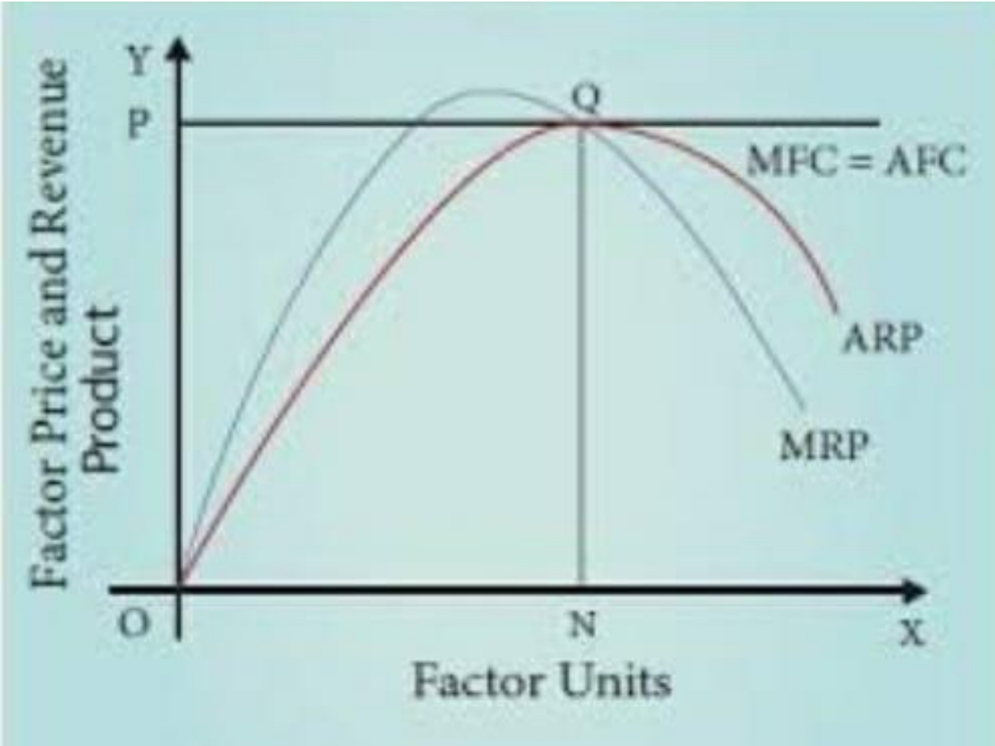
7. Firm hires input with the objective of profit maximization.

J. B. Clark's Marginal Productivity theory of distribution states that price of any input is determined according to the marginal product of that input. Thus, the price of labour the wage rate is determined by the volume of marginal product, or to be more specific, the value of marginal physical product (VMP). Assuming a perfectly elastic supply of labour, wage of labour is determined in accordance with the value of marginal physical productivity of labour (VMPL).

Since product market is characterized by perfect competition, VMPL becomes equal to MRPL. Thus, the wage of labour tends to become equal to VMPL= MRPL. A competitive profit- maximizing firm will go on employing labour until wage equals VMPL = MRPL, i.e., W = VMPL = MRPL. This is the essence of the Clarkian version of the Marginal Productivity theory of distribution.

Labour	**Marginal Physical Product (MPP)**	**Price of product**	**Marginal Revenue Product (MRP)**	**Wage rate**
1	20	5	100	55
2	17	5	85	55
3	14	5	70	55
4	11	5	55	55
5	8	5	40	55

This can be explained with the help of below diagram.



In above diagram units of labour are measured on the horizontal axis and the price of labour, i.e., wage rate or marginal product is measured on the vertical axis. Negative sloping labour demand curves that is Marginal Revenue Product and Average Revenue Product curves (MRP and ARP) intersects the perfectly elastic labour supply curve that is Average Fixed Cost and Marginal Fixed Cost curves (AFC and MFC) at point ‘Q’.

Point ‘Q’ is the equilibrium point because, at the going wage rate OP, the firm employs labour till wage rate equals MRP = ARP. In other words, the firm maximizes profit by employing ON amount of labour at the wage rate OP.

Perfect competition in input market implies that neither input seller nor the input buyer can influence the price of an input. At a given price, any amount of the input may be supplied. As a result, price of any input becomes equal to its average cost and marginal cost, i.e., P = AC = MC. This means that the input supply curve must be perfectly elastic.

We assume labour as the variable input. So MRP = ARP curve is the labour demand curve. AFC = MFC curve is the supply curve of labour.

ON is the profit-maximizing level of employment because, at the ruling wage rate OP, the firm will not be able to maximize profit if it employs more than ON or stops employment short of ON. If the firm hires less than ON units of labour at the wage rate OP.

2. Explain the Ricardian Theory of Rent?

A: **Introduction:** Ricardian theory of rent is one of the earliest theories of rent. It is named after Ricardo, a great classical economist of the 19^{th} century. According to Ricardo, "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".

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

1. Land is natural gift.
2. Land is fixed in supply (perfectly inelastic).
3. Rent of land arises due to the differences in the fertility of the land.
4. Ricardo assumes the operation of the law of diminishing marginal returns in the case of cultivation of land.
5. Marginal land or last grade land has no rent.

According to Ricardo, rent is the difference between the produce of the superior land and that of the marginal land. The concept of the differential rent applies to both extensive cultivation and intensive cultivation are applied to the same piece of land. Rent is a differential surplus because of difference in the fertility of land.

According to Ricardo, rent of land arises because the different plots of land have different degree of productive power; some lands are more fertile than others. So, there are different grades of land. The difference between the produce of the superior lands and that of the inferior lands is rent, it is called differential rent.

Ricardo assumes that the different grades of lands are cultivated gradually in descending order. He assumed three types of lands.

1. A Grade lands
2. B Grade lands
3. C Grade lands

'A' grade land being cultivated at first, then the 'B' grade, after that the 'C' grade. With the increase in population and with the consequent increase in the demand for agricultural produce, inferior grades of lands are cultivated, creating a surplus or rent for the superior grades. This is illustrated in below Table.

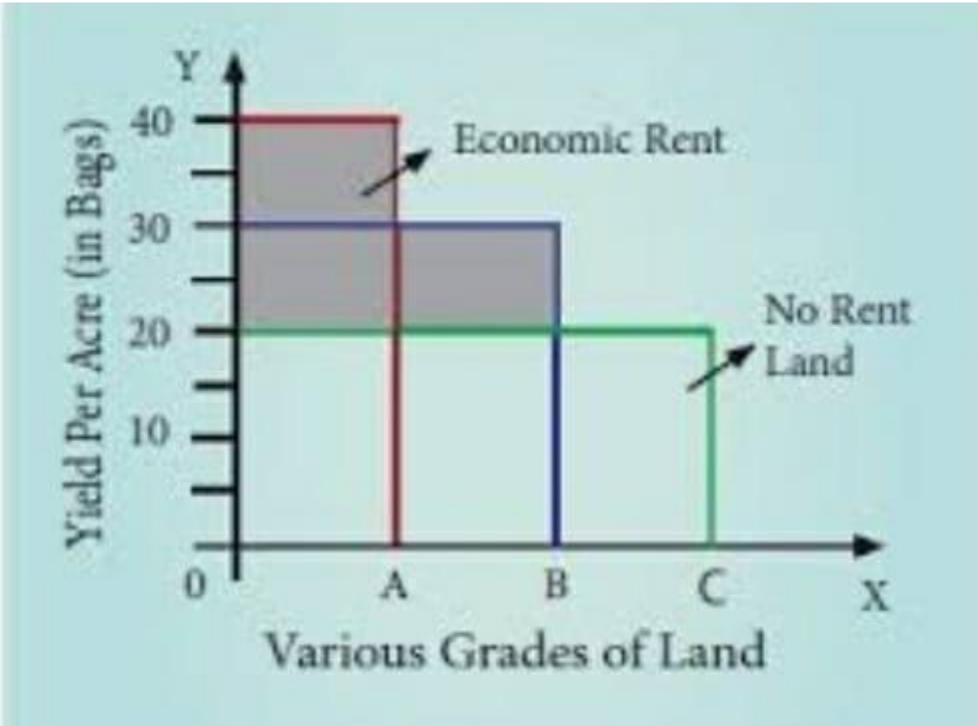
Calculation of Differential Rent:

Grade	Cost of Production (Rs)	Output (in bags)	Rent/Surplus value	
			In bags	In Value (Rs)
A	600	40	20	300
B	600	30	10	150
C	600	20	-	-

The above Table shows the position of 3 different grades of land is equal in size. The total cost is the same for each land. Let us assume that the order of cultivation reaches the 'C' grade when all the three types of land of different grades are cultivated, and the market price has come to the level of Rs. 15 per bag (600/40=15).

The 'A 'grade land, being the most fertile, produces 40 bags, the 'B' grade 30 bags and the "C' grade land, being less fertile, only 20 bags. So, the 'A' grade land earns a surplus or rent of Rs. 300, the 'B' grades a rent of Rs. 150 and the 'C' grade earns no surplus. The first two grades are called the intra-marginal and the third one is the marginal (or no-rent) land. This simple example shows how the differences in the fertility of the different grades of land create rent for the superior grade of lands.

The concept of differential rent arising due to differences in the fertility of different grades of land is illustrated in below diagram.



In above diagram various grades of land shown on X-axis and yield of crop shown on Y-axis. In above diagram shaded area represents the rent of differential surplus. Rent does not arise on 'C' grade land as it is least fertile. So, it is called Marginal land or no rent land.

3. What is wage? Explain the various Theories of Wage?

A: **Definition:** Wage is a payment made for the services of Labour, either physical or mental work. It should be noted that wage is a remuneration made for labour not only confined for physical strain but also mental strain.

A wage is compensation paid to employees for work for a company during a period. Wages are always paid based on a certain amount of time. This is usually an hourly basis. This is where the term hourly worker comes from.

Theories of Wage: The important theories of wages are as under:

1. Subsistence Theory of Wages.

2. Marginal Productivity Theory of Wages.

3. Modern Theory of Wages.

1. Subsistence Theory of Wages: The subsistence theory of wages was first formulated by Physiocratic School of French economists of 18^{th} century. Further, this theory was developed and improved upon by the German economists. It is also called as the Iron Law of Wages or the Brazen Law of Wages. Ricardo and Malthus also contributed to the theory of wages. Karl Marx made it the basis of his theory of exploitation.

According to this theory, wages of a worker in the long run are determined at that level of wages which is just sufficient to meet the necessaries of life. This level is called the subsistence level. The classical economists called it the neutral level of wages. In this way, the pro-pounders of the theory believed in the bargaining power of the workers. In such a situation, trade unions play an important role in increasing wages.

Wages of labour are equal to subsistence level in the long run. If wages fall below this level, workers will starve. It will reduce their supply. Thus, the wage rate will rise to the subsistence level. On the other hand, if wages tend to rise above the subsistence level, workers would be encouraged to bear more children which will increase the supply of workers, which in turn will bring wages down to the subsistence level.

Criticism: following are the main defects of the subsistence theory of wages:

1. One Sided Theory: This theory examines the wage determination from the side of supply and ignores the demand side.

2. Pessimistic: Subsistence theory of wages is highly pessimistic for the working class. It presents a dark picture of the future of the society.

3. Long Period: This theory assumes of long run. It does not explain the determination of wages at a particular period.

4. No Historical Evidence: This theory has been criticized on the grounds that it has not been correct in conclusions. The case of western countries is different from the conclusions of this theory.

5. No Difference in Wages: This theory explains that all the workers get equal wages. As we know, the workers differ in their productivity, and hence, the difference in their wages is natural.

2. Marginal Productivity Theory of Wages: Marginal productivity theory of wages is an important theory of wages. This theory was first propounded by Thunnen. Later, economists like Wicksteed, Walras, J.B Clark etc. modified the theory. The marginal productivity theory states that labour is paid according to his contribution in production. A producer hires the services of labour because he possesses the ability to contribute to production. If worker contributes more to production, he is paid more wages and if he contributes less, wages also will be low.

Assumptions:

1. All labourers are equally efficient.

2. Constant technology

3. Perfect competition prevails both in factor and product markets.

4. There is full employment in the economy.

5. Law of diminishing marginal returns apply on the marginal productivity of labour.

6. Labour is perfectly mobile.

Explanation of the Theory: Under the conditions of perfect competition, wages are determined by the value of marginal product of labour. Marginal product of labour in any industry refers to the amount by which output increases when one more labour is employed.

Value of marginal product of labour is the price which the marginal product can fetch in the market. Under the conditions of perfect competition, an employer will go on employing more labourers but, due to the operation of the law of diminishing returns, the marginal product of labour will diminish until a point comes when the value of the increase in the product will be equal to the wages paid to that labourer.

The Marginal Productivity theory is an improvement over the earlier theories in the following ways:

(i) This theory is not as rigid as the subsistence level theory and other classical theories.

(ii) It takes into consideration the demand for labour by the employers and the supply of labour, although in an indirect form.

(iii) It shows why there are differences in wage rate. Wages according to this theory vary because of marginal productivity differences of different workers.

(iv) It gives importance to the productivity of labour.

Criticism: The marginal productivity theory of wages also suffers from certain defects as:

1. Unrealistic Assumptions: The foremost defect of the theory is that it is based on unrealistic assumptions like perfect competition, homogeneous character of labour etc. All these assumptions do not prevail in the real world.

2. Incomplete: Again, this theory fails to consider that labour is also a function of wages. Less productivity may be the effect of low wages which adversely affects the efficiency of labour and in turn reduces the labour productivity. Thus, the theory is incomplete in all respects.

3. Static Theory: Lord J.M Keynes criticized the theory as it is based on static conditions. It is only true when there occur no changes in the economy. But in real practice it cannot be so. Change is the law of nature, though it may come gradually.

4. One Sided: The marginal productivity theory is one sided. It takes into consideration only the demand side and ignores the supply side.

5. Fails to determine Wages: This theory only guides the employer to employ workers up to the level where their marginal productivity equals price. But it does not tell how the wages are determined.

6. Long Period: The theory concerns itself with the long run. But, the long run like tomorrow never comes. In other words, it does not deal with the short run.

3. Modern Theory of Wages: Modern theory of wages regards wages as a price of labour and all other prices determined by the usual supply and demand analysis. According to this approach, wages are determined by the interaction of market forces of demand and supply.

Demand for Labour: The demand for labour comes from the entrepreneurs as it is used to produce goods and services. Thus, the demand for labour depends upon the productivity of labour i.e., the higher the productivity of labour, the greater will be the demand for it from employers. Thus, demand for labour depends upon the marginal productivity of labour; since the marginal productivity of labour will slope downwards after a stage, the demand curve of labour will also slope downward.

Factors Affecting the Demand for Labour:

1. Technological Changes: Technological changes influence the marginal productivity of labour. Therefore, these changes also influence the demand for labour.

2. Derived Demand: Demand for labour is a derived demand. It means that demand for labour depends upon the demand for goods and services which it produces. If at any given time the demand for a particular commodity produced by the labour is high, it is natural that the demand for labour shall also be high. Hence, the greater is the consumer demand for the product, the higher will be the demand for the labour to produce that commodity.

3. Proportion of Labour: The demand for labour also depends upon the proportion in which labour is mixed with other factors of production. When a small amount of labour is engaged in the production of a product, the demand for that type of labour is inelastic. For instance, the demand for labour for operating automatic machines or latest machines in large scale factories is inelastic.

4. Cost of other Factors: The demand for labour depends upon the cost of other factors of production which can be used as substitute for labour. If substitute factors are costly, the entrepreneur will naturally substitute labour in place of costly factor.

In such a case the demand for labour will be high. If the prices of substitute factors which can be used in place of labour have declined, the substitute factor will be used in place of labour. Hence, the demand for labour will decline.

Supply of Labour: Supply of labour in an economy depends upon both economic as well as non-economic factors. Economic factors influencing the supply of labour comprises of existing employment, desire to increase monetary income, bargaining power of the labourers, size of population, income distribution etc. while the non-economic factors consist of family affection, social conditions, domestic environment etc.

Psychological factors also affect the supply of labour. It is only due to the psychological factors that a worker decides how much time he should devote to work and how much to leisure. Moreover, the supply of labour also depends on the elasticity.

The supply of labour for a firm is perfectly elastic, so, the firm at current wages can employ as many workers as it wishes. On the contrary the nature of supply of labour for an industry is not infinitely elastic. Thus, it cannot employ more and more labourers at the current wage rate. The industry can do so by attracting labourers from other industries by offering them higher wages.

Factors Affecting Supply:

1. Size of Population: The supply of labour depends upon several factors. In the first place, the supply at any given time depends upon the number of labourers in the country. This is a result of the size of population and that proportion of this population which is called working population.

The size of population is determined by the difference in birth rate and the death rate. The proportion of total population which is called working population depends upon occupational distribution, level of technical advancement, conservation, and mobility of labour.

2. Efficiency of Labour: The supply of labour does not merely depend upon the size of population. It also depends upon the efficiency of labour. Efficiency depends upon several factors like hours of working, service and working conditions, wage rates, economic incentives and other conditions that have a bearing upon the working ability of labour.

3. Mobility of Labour: The supply of labour also depends upon the mobility of labour. If the labour is less mobile either because the means of transport are not developed or there is conservatism among the labourers, or because there are climatic, language or traditional hindrances, then it follows that supply of labour shall be highly limited.

4. Explain the Classical Theory of Interest?

A: Introduction: Classical Theory of Interest was explained by eminent economists like Prof. Pigou, Marshall, Walras, Knight etc. According to this theory, Interest is the reward for the productive use of the capital which is equal to the marginal productivity of physical capital. The economists said that "the rate of Interest is determined by the supply and demand of capital.

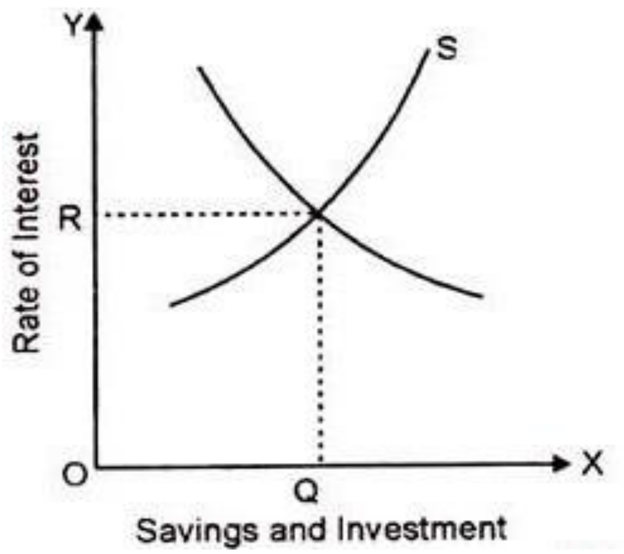
Demand for Capital: Demand for capital implies the demand for savings. Investors agree to pay interest on these savings because the capital projects which will be undertaken with the use of these funds, will be so productive that the returns on investment realized will be more than the cost of borrowing, i.e., Interest.

In short, capital is demanded because it is productive, i.e., it has the power to yield an income even after covering its cost, i.e., Interest. The marginal productivity curve of capital thus determines the demand curve for capital. This curve after a point is a downward sloping curve. While deciding about an investment, the entrepreneur, however, compares the marginal productivity of capital with the prevailing market rate of Interest.

When, the rate of Interest falls, the entrepreneur will be induced to invest more till marginal productivity of capital is equal to the rate of Interest. Thus, the investment demand expands when the Interest rate falls, and it contracts when the Interest rate rises. As such, investment demand is regarded as the inverse function of the rate of Interest.

Supply of Capital: Supply of capital depends on the availability of savings. Savings emerge out of the people's desire and capacity to save. The rate of Interest plays an important role in the determination of savings. The classical economists commonly hold that the rate of saving is the direct function of the rate of Interest. That is, savings expand with the rise in the rate of Interest and when the rate of Interest falls, savings contract. It must be noted that the supply of savings curve is an upward-sloping curve.

Equilibrium Rate of Interest: The equilibrium rate of Interest is determined at that point at which both demand for, and supply of capital are equal. In other words, at the point at which investment equals savings, the equilibrium rate of Interest is determined. This can be explained in below diagram.



In the above diagram 'OR' is the equilibrium rate of Interest which is determined at the point at which the supply of savings curve intersects the investment demand curve, so that 'OQ' amount of savings is supplied as well as invested. This implies that the demand for capital 'OQ' is equal to the supply of capital OQ at the equilibrium rate of Interest OR.

Criticism: The theory of Interest of the classical economists has been severely criticized by Keynes and others. The important criticisms are as under:

1. Interest is purely a monetary phenomenon.

2. The theory of interest is confusing and indeterminate.

3. This theory is unrealistic and inapplicable in a dynamic economy.

4. It is the price which equilibrates the desire to hold wealth in the form of cash."

5. This theory is narrow in scope.

6. Keynes differs with the classical economists even over the very definition and determination of the rate of interest:

With these arguments Keynes has completely dismissed the classical theory of Interest and said it completely wrong and inadequate. He has never been agreeable with the view of classists.

5. Describe the Liquidity Preference Theory of Interest? OR explain the Keynes theory of Interest?

A: According to Keynes, Interest is purely a monetary phenomenon. It is the reward of not hoarding but the reward for parting with liquidity for the specified period. It is not the 'Price' which brings into equilibrium the demand for resources to invest with the readiness to abstain from consumption. It is the 'Price' which equilibrates the desire to hold wealth in the form of cash with the available quantity of cash.

Keynes Liquidity Preference Theory is determined by the supply of and demand for money. Supply of money comes from banks and the government. On the other hand, demand for money is the preference for liquidity. According to Keynes people like to hoard money because it possesses liquidity.

Hence, when somebody lends money, he must sacrifice this liquidity. A reward which is offered to make him prepared for parting with liquidity is called Interest. Therefore, in the eyes of Keynes ‘‘Interest is the reward for parting with liquidity for a specific period.”

Demand for Money: Liquidity preference means demand for money. People prefer to keep their resources in “Liquid” form. It is because of this reason that among various forms of assets money is the most liquid form. Money can easily and quickly be changed in any form as and when we like. Suppose you have a ten rupee note now you can change it into either wheat, rice, sugar, milk, book or in any other form you like. It is because of this feature of liquidity of money, people generally prefer to have cash money.

The desire for liquidity arises because of three motives:

1. The transaction motives

2. The precautionary motives; and

3. The speculative motives.

1.Transactions Motive: The transactions motive relates to “the need of cash for the current transactions of personal and business exchanges”. It is further divided into the income and business motives. The income motive is meant “to bridge the interval between the receipt of income and its disbursement”, and similarly, the business motive as “the interval between the time of incurring business costs and that of the receipt of the sale proceeds.” If the time between the incurring of expenditure and receipt of income is small, less cash will be held by the people for current transactions and vice-versa.

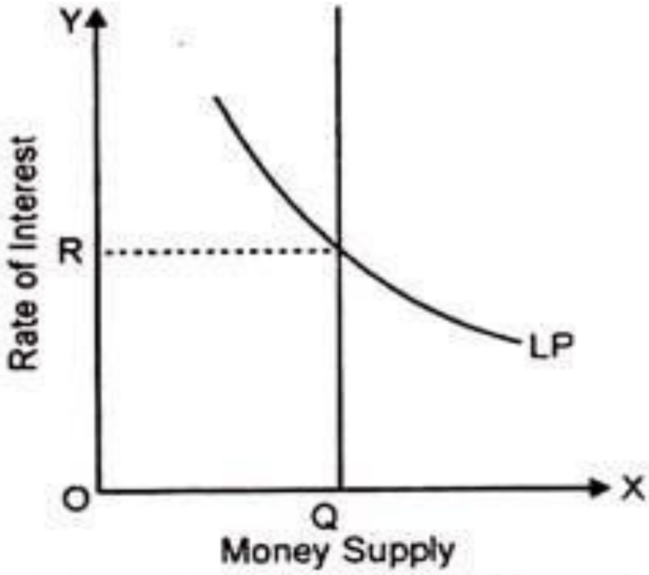
2. Precautionary Motive: The precautionary motive relates to "the desire to provide for contingencies requiring sudden expenditures and for unforeseen opportunities of ad-vantageous purchases." Both individual and businessmen keep cash in reserve to meet unexpected needs. Individuals hold some cash to provide for illness, accidents, unemployment and other unforeseen contingencies. Similarly, businessmen keep cash in reserve to tide over unfavorable conditions or to gain from unexpected deals.

3.Speculative Motive: Money held under the speculative motive is for "securing profit from knowing better than market what the future will bring forth." Individuals and businessmen have funds, after keeping enough for transactions and precautionary purposes, like to gain by investing in bonds. Money held for speculative purposes is a liquid store of value which can be invested at an opportune moment in Interest bearing bonds on securities. There is an inverse relationship between interest rate and the demand for money i.e., more demands for money at lower Interest rate and less demand at higher interest rate. Hence, the liquidity preferences curve becomes a downward sloping curve.

Supply of Money: The supply of money refers to the total quantity of money in the country for all purposes at any time. The supply of money is a function of the rate of Interest. The supply curve of money is perfectly inelastic.

The supply of money in an economy is determined by the policies of the government and the Central Bank of the country. It consists of coins, currency notes and bank deposits. The supply of money is not affected by the Interest rate; hence, the supply of money remains constant in the short period.

Determination of Interest Rate: According to the Liquidity-Preference Theory the equilibrium rate of interest is determined by the interaction between the demand for money and the supply of money. This can be explained in below diagram:



OR is the equilibrium rate of interest

In above diagram 'OR' is the equilibrium rate of interest. The theory further states that any change in the liquidity preferences function (LP) or change in money supply or changes in both respectively cause changes in the rate of interest. Thus, as shown in figure1 below, it given the money supply the liquidity preference curve (LP) shifts from LP_1 to LP_2 implying thereby an increase in demand for money, the equilibrium rate of interest also rises from R_2 to R_1.

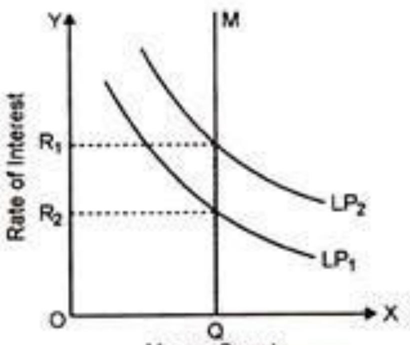


Fig. 1

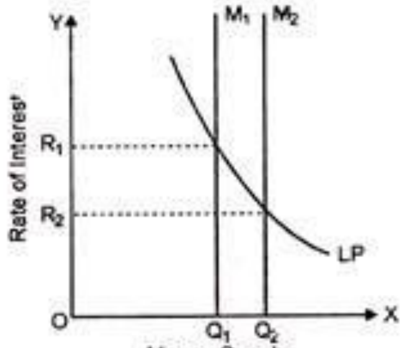


Fig. 2

Similarly, assuming a given liquidity preference function (LP) as in figure2, when the money supply increases from M_1 to M_2 rate of interest falls from R1 to R2.

6. Explain the various Theories of Profit? OR Explain the Risk and Uncertainty, Dynamic and Innovations Theories of Profit?

A: Definition of Profit: A profit in the business sense is the difference between the selling prices of the goods and services and its total cost. The businessperson produces goods and services for his customers with the hope of earning a profit by efficient operation.

Profit is the financial benefit realized from the business activity when the revenues generated exceeds the costs and expenses incurred in the operation of such activities. Simply, the total cost deducted from total revenue yields profit.

Several economists have given their varied views on origin, nature, and role of profit. Till date, there is no complete consensus among the economists with respect to the true nature and origin of profit. Due to this, several theories of profit came into existence. The important theories are:

1. Risk Theory of Profit
2. Uncertainty Theory of Profit
3. Dynamic Theory of Profit
4. Innovation Theory of Profit

1.Risk Theory of Profit: This theory is associated with American economist Hawley. According to him profit is the reward for risk-taking in business. Risk-taking is supposed to be the most important function of an entrepreneur. Every production that is undertaken in anticipation of demand involves risk. Risk profit is paid to entrepreneur. No entrepreneur will be willing to undertake risks if he gets only the normal return.

The reward for risk-taking must be higher than the actual value of the risk. If the entrepreneur does not receive the reward, he will not be prepared to undertake the risk. Thus, higher the risk greater is the possibility of profit.

According to Hawley the entrepreneur can avoid certain risks for a fixed payment to the insurance company. But he cannot get rid of all risks by means of insurance. If he does so he is not an entrepreneur and would earn only wages of management and not profit.

Criticism: 1. Risk-taking is not the only entrepreneurial function which leads to emergence of profits. Profits are also due to the organizational and coordinating ability of the entrepreneur. It is also reward for innovation.

2. According to Carver profit is paid to an entrepreneur not for bearing the risk but for minimizing and avoiding risk.

3. This theory assumes that profit is proportional to risk undertaken by entrepreneurs. But this is not true in practical life because even entrepreneurs who do not take any risk are paid profit.

4. Knight says that it is not every risk that gives profit. It is unforeseen and non-insured risks that account for profit. According to Knight risks are of two types viz., foreseeable risk and unforeseeable risk. The risk of fire in a factory is a foreseeable risk and can be covered through insurance. The premium paid for the fire insurance can be included in the cost of production. The entrepreneur can foresee such a risk and insures it. An insurable risk is no risk and profit cannot arise due to insurable risk.

5. There is little empirical evidence to prove that entrepreneurs earn more in risky enterprises. In a way all enterprises are risky, for an element of uncertainty is present in them and every entrepreneur aims at making large profits.

2. Uncertainty Theory of Profit: This theory was propounded by an American economist Prof. Frank H. Knight. This theory starts on the foundation of Hawley's risk bearing theory. Knight agrees with Hawley that profit is a reward for risk-taking. There are two types of risks viz. foreseeable risk and unforeseeable risk. According to Knight unforeseeable risk is called uncertainty beaming.

Knight regards profit as the reward for bearing non-insurable risks and uncertainties. He distinguishes between insurable and non-insurable risks. Certain risks are measurable, the probability of their occurrence can be statistically calculated. The risks of fire, theft, flood, and death by accident are insurable. These risks are borne by the insurance company.

The premium paid for insurance is included in the cost of production. According to Knight these foreseen risks are not genuine economic risks eligible for any remuneration of profit. In other words, insurable risk does not give rise to profit. According to Knight profit is due to non-insurable risk or unforeseeable risk. Some of the non- insurable risks which arise in modern business are as follows:

1. Competitive risk: Some new firms enter the market unexpectedly. The existing firms may have to face serious competition from them. This will inevitably lower down the profit of the firms.

2.Technical risk: This risk arises from the possibility of machinery becoming obsolete due to the discovery of new processes. The existing firm may not be able to adopt these changes into its organization, and hence suffer losses.

3.Risk of government intervention: The government, in course of time, interferes into the affairs of the industry such as price control, tax policy, import and export restrictions, etc., which might reduce the profits of the firm.

4.Cyclical risk: This risk emerges from business cycles. Due to business recession or depression, consumer's purchasing power is reduced, consequently demand for the product of the firm also falls.

5. Risk of demand: This is generated by a shift or change of demand in the market. Prof. Knight calls these risks as 'uncertainties' and 'it is uncertainties in this sense which explains profit in the proper use of the term'.

Criticism: 1. According to this theory, profit is the reward for uncertainty bearing. But critics point out that sometimes an entrepreneur earns no profit despite uncertainty bearing.

2. Uncertainty bearing is one of the determinants of profit and it is not the only determinant. Profit is also a reward for many other activities performed by entrepreneur like initiating, coordinating, and bargaining, etc.

3. It is not possible to measure uncertainty in quantitative terms as depicted in this theory.
4. In modern business corporation's ownership is separate from control. Knight does not separate ownership and control and this theory becomes unrealistic.
5. Uncertainty bearing cannot be looked upon as a separate factor of production like land, labour or capital. It is a psychological concept which forms part of the real cost of production.

Knight's theory of profit is more elaborate than other theories because it combines the conception of risk, of economic change and of the role of business ability.

3.Dynamic Theory of Profit: Prof. J.B. Clark propounded the dynamic theory of profit in the year 1900. To him profit is the difference between the price and the cost of production of the commodity. Profit is the result of progressive change in an organized society.

The progressive change is possible only in a dynamic state. According to Clark the whole economic society is divided into organized and unorganized society. The organized society is further divided into static and dynamic state. Only in dynamic state profit arises.

In a static state, the five generic changes such as the size of the population, technical knowledge, the amount of capital, method of production of the firms and the size of the industry and the wants of the people do not take place; everything is stagnant and there is no change at all. The society has always been dynamic. Several changes are taking place in a dynamic society.

Criticism: 1. It is wrong to say that there is no profit in static state because every entrepreneur is paid profit irrespective of the state of an economy.
2. This theory does not fully appreciate the nature of the entrepreneurial function. If there are no profits in a static state, it means there is no entrepreneur. But without an entrepreneur it is not possible to imagine how different factors of production would be employed.

3.This theory assumes the existence of perfect competition and static state. But they are far from reality.

4. This theory states that profit arises because of dynamic changes. But Knight says that it is only unforeseen changes that give rise to profit.

4. Innovation Theory of Profit: This theory was propounded by Schumpeter. This theory is like that of Clark's theory. Instead of five changes mentioned by Clark, Schumpeter explains the change caused by innovations in the production process. According to this theory profit is the reward for innovations. He uses the term innovation in a sense wider than that of the changes mentioned by Clark.

Innovation refers to all those changes, in the production process with an objective of reducing the cost of commodity to create gap between the existing price of the commodity and its new cost. Innovation may take any shape like introduction of a new technique or a new plant, a change in the internal structure or organizational set up of the firm or change in the quality of raw material, a new form of energy, better method of salesmanship, etc.

Schumpeter makes a distinction between invention and innovation. Innovation is brought about mainly for reducing the cost of production and it is cost reducing agent. Profit is the reward for this strategic role, Innovations are not possible by all entrepreneurs. Only exceptional entrepreneurs can innovate. They can tap new resources, technical knowledge and reduce the cost of production. Thus, the main motive for introducing innovation is the desire to earn profit. Profit is therefore the cause of innovation.

Profits are of temporary nature. The pioneer who innovates earns abnormal profit for a short period. Soon other entrepreneurs, "swarm in clusters", compete for profit in the same manner. The pioneer will make another innovation. In a dynamic world innovation in one field may induce other innovations in related fields.

The emergence of motor car industry may in turn stimulate new investments in the construction of highways, rubber, tyres, and petroleum products. Profits are thus causing and effects of innovation. The interest of profit leads entrepreneur to innovate and innovation leads to profit. Thus, profit tends to appear, disappear, and reappear.

Prof. Schumpeter also explained his views on the functions of the entrepreneur. The entrepreneur organizes the business and combines the various factors of production. But this is not his real function, and this will not yield him profit. The real function of the entrepreneur is to introduce innovations in business. It is innovations which yield him profit.

Criticisms: 1. This theory concentrates only on innovation, which is only one of the many functions of the entrepreneur and not the only factor.

2. This theory does not consider profit as the reward for risk-taking. According to Schumpeter it is the capitalist not the entrepreneur who undertakes risk.

3. This theory has ignored the importance of uncertainty bearing which is one of the factors that determines profit.

4. This theory attributes profit only to innovation ignoring other functions of entrepreneur.

5. Monopoly profits are permanent in nature while Schumpeter says that innovate profits occur temporarily.

6. It is an incomplete theory because it has failed to explain all the factors that influence profit.