UNIT V

THE INVESTMENT FUNCTION

Introduction

We understand about the level of employment and level of income both were depends upon the level of aggregate demand of an economy in the short run. Moreover, the aggregate demand consists of demand for consumption and demand for investment. After going through this lesson, you should be able to understand the concept of investment, demand for investment, Types of investment such as autonomous investment and induced investment, determinants of investment, marginal efficiency of capital and factors affecting marginal efficiency of capital such as short run and long run factors, which will give a comprehensive understanding of the investment function.

Meaning of Capital and Investment

Investment means to buy shares, stocks, bonds and securities which already exist in stock market. But this is not real investment because it is simply a transfer of existing assets.

Hence, this is called financial investment which does not affect aggregate spending. According to Keynes investment refers to real investment which adds to capital equipment. It leads to increase in the levels of income and production by increasing the production and purchase of capital goods. Investment thus includes new plant and equipment, construction of public works like dams, roads, buildings, etc., net foreign investment, inventories and stocks and shares of new companies. Joan Robinson stated that "By investment is meant an addition to capital, such as occurs when a new house is built or a new factory is built. Investment means making an addition to the stock of goods in existence.

Capital refers to real assets like factories, plants, equipment, and inventories of finished and semi-finished goods. It is any previously produced input that can be used in the production process to produce other goods. S The amount of capital available in an economy is the stock of capital. Thus capital is a stock concept.

Investment is the production or acquisition of real capital assets during any period of time. Capital and investment are related to each other through net investment. Gross investment is the total amount spent on new capital assets in a year. But some capital stock wears out every year and is used up for depreciation and obsolescence. Net investment is gross investment

minus depreciation and obsolescence charges for replacement investment. This is the net addition to the existing capital stock of the economy. If gross investment equals depreciation, net investment is zero and there is no addition to the economy's capital stock. If gross investment is less than depreciation, there is disinvestment in the economy and the capital stock decreases. Thus for an increase in the real capital stock of the economy, gross investment must exceed depreciation, i.e., there should be net investment.

Types of Investment

There are two types of investments viz. (i) Autonomous Investment and (ii) Induced Investment.

(i). Autonomous Investment: When income increases but no change in the investment is called as autonomous investment. Autonomous Investment is independent of the level of income and is thus income inelastic. It is influenced by exogenous factors. Such as innovations, inventions, growth of population and labour force, researches, social and legal institutions, weather changes, war, revolution, etc. But it is not influenced by changes in demand. Rather, it influences demand. Investment in economic and social overheads whether made by the government or the private enterprise is autonomous. Such investment includes expenditures on buildings, dams, roads, canals, schools, hospitals, etc. Since investment on these projects is generally associated with public policy, autonomous investment is regarded as public investment. In the long-run, private investment of all types may be autonomous because it is influenced by exogenous factors. The following figure shows the autonomous investment. The curve I_1I' parallel to the horizontal axis, it indicates that all levels of income, the amount of investment OI_1 remains constant. The Upward shift of the curve to I_2I'' indicates an increased steady flow of investment at a constant rate OI_2 at various levels of income. However, for purposes of income determination, the autonomous investment curve is superimposed on the C curve in a 45° line diagram.

(ii). Induced Investment: Real investment may be induced. Induced investment is profit or income motivated. Factors like prices, wages and interest change which affect profits and influence induced investment. Similarly, demand also influences it. When income increases, consumption demand also increases and to meet this, this investment increases. Induced investment is a function of income i.e., I = f(Y). It is income elastic. It increases or decreases with the rise or fall in income. Induced investment may be further divided into (i).

The average propensity to invest, and (ii) the marginal propensity to invest.

11.3 Determinants of investment

Induced investment determined by two factors such as (1) Marginal Efficiency of Capital, and (2) Rate of Interest. Marginal efficiency of capital refers to anticipated rate of profit. An entrepreneur has been compared marginal efficiency of capital with rate of interest, when the profit is higher than rate of interest, he can decide to invest more. If the rate of interest is higher than profit, he never interests more on investment. If the rate of interest is higher than marginal efficiency of capital, he never interest on further investment. If an entrepreneur has invest through borrowed anticipated rate of profit higher than the rate of interest. Therefore the level of investment depends on marginal efficiency of capital and rate of interest. Among these two factors, marginal efficiency of capital is very important. Because, in the short run, the rate of interest is no change. When change the marginal efficiency of capital it leads to demand for investment.

There are three factors that are taken into account while making any investment decision. They are the cost of the capital asset, the expected rate of return from it during its lifetime, and the market rate of interest. Keynes sums up these factors in his concept of the marginal efficiency of capital.

Marginal Efficiency of Capital

Marginal efficiency of capital is the highest rate of return expected from an additional unit of a capital asset over its cost. In the words of Kurihara, "it is the ratio between the prospective yield of additional capital-goods and their supply price". The prospective yield (y) is the aggregate net return from an asset during its life-time, while the supply price (p) is the cost of producing this asset. For example, If the supply price of a capital asset is Rs.20,000/- and its annual yield is Rs.2000/-, the marginal efficiency of capital of this asset is MEC$= \frac{2000}{20000} \times \frac{100}{1}$ marginal efficiency of capital is the percentage of profit expected from a given investment on a capital asset.

Keynes relates the prospective yield of a capital asset to its supply price and defines the MEC as "equal to the rate of discount which would make the present value of the series of annuities given by the returns expected from the capital asset during its life just equal to its supply price." Symbolically, this can be expressed as:

$$Sp = \frac{R1}{(1+i)} + \frac{R2}{(1+i)^2} + \cdots \frac{Rn}{(1+i)n} \qquad \ldots\ldots(1)$$

Where Sp is the supply price or the cost of the capital asset, R1,R2...Rn are the prospective yields or the series of expected annual returns from the capital asset in the years 1,2...and n, i is the rate of discount which makes the capital asset exactly equal to the present value of the expected yield from it.

Investment Schedule

If the investment made particular period of time denotes marginal efficiency of capital. This table is called as demand for investment. It explains that the relationship between investment and marginal efficiency of capital.

Investment Schedule depends on Marginal Efficiency of Capital

Investment (I)	Marginal Efficiency of Capital (MEC)
Rs.2000/-	10%
Rs.4000/-	8%
Rs.6000/-	6%
Rs.8000/- Rs.10000/-	4%
	2%

The above table clearly inferred that if the increase in investment on investment asset leads to the diminishing on marginal efficiency of capital. There are two reasons for this, (1).When increase in investment leads to prospective yields will be decline. (2). Supply price will be increases. Because, if the investment increases, it leads to increases in demand for equipments and machinery. Therefore, it's due to increases the price for equipment and machinery. These price increases leads to increase the expenditures. 11.6 Factors affecting marginal efficiency of capital

a) Short run factors

The following short run factors are affecting the marginal efficiency of capital.

1. Anticipated demand
2. Cost and prices
3. Consumption function
4. Change in Income
5. Taxation
6. Believes
7. Current Expectations

b) Long run factors

The following long run factors are affecting the marginal efficiency of capital.

1. Rate of Population growth
2. Development of new territories
3. Inventions, Innovations and Technological Advancements
4. Supply of capital equipment
5. Rate of current investment
6. Economic policy

Relationship between the MEC (Capital Stock) and MEI (Investment)

Prof.Lerner pointed out as early as in 1946 that Keynes referred not only descriptively but also analytically by failure to distinguish between the marginal efficiency of capital (MEC) and the marginal efficiency of Investment.

Inducement factors for private Investment

1. Tax reduction
2. Pump priming
3. Reduce the rate of interest
4. Wage rate Reduction
5. Price Support Policy
6. Abolition of Monopoly

Keynesian Theory of Demand for Money and rate of Interest

In his well-known book, Keynes propounded a theory of demand for money which occupies an important place in his monetary theory.

It is also with noting that for demand for money to hold Keynes used another term what he called liquidity preference. How much of his income or resources will a person hold in the form of ready money (cash or non-interest-paying bank deposits) and how much will he part with or lend depends upon what Keynes calls has “liquidity preference” Liquidity preference means the demand for money to hold or the desire of the public to hold cash.

Demand for Money or Motives for Liquidity Preference

Liquidity preference of a particular individual depends upon several considerations. The question is: Why should the people hold their resources liquid or in the form of ready money when they can get interest by lending money or buying bonds? The desire for liquidity arises because of three motives: (i) the transactions motive, (ii) the precautionary motive and (iii) the speculative motive.

1. The Transactions Motive for Money: The transactions motive relates to the demand for money or the need for money balances for the current transactions of individual and business firms. Individuals hold cash in order "to bridge the interval between the receipt of income and its expenditure". In other words, people hold money or cash balances for transactions purposes because receipt of money and payments do not coincide. Most of the people receive their incomes weekly or monthly while in expenditure goes on day by day. A certain amount of ready money, therefore, is kept in hand to make current payments. This amount will depend upon the size of the individual's income, the interval at which the income is received and the methods of payments prevailing in the society.

The businessmen and the entrepreneurs also have to keep a proportion of their resources in money form in order to meet daily needs of various kinds. They need money all the time in order to pay for raw materials and transport, to pay wages and salaries and to meet all other current expenses incurred by any business firm. It is clear that the amount of money held under this business motive will depended to a very large extent on the turnover (i.e., the volume of trade of the firm in question). The larger the turnover, the larger, in general, will be the amount of money needed to cover current expenses. It is worth noting that money demand for transactions motive arises primarily because of the use of money as a medium of exchange (i.e. means of payment).

Since the transactions demand for money arises because individuals have to incur expenditure on goods and services during the receipt of income and its use of payment for goods and services, money held for this motive depends upon the level of income of an individual. A poor man will hold less money for transactions motive as he spends less because of his small income. On the other hand, a rich man will tend to hold more money for transactions motive as his expenditure will be relatively greater. The demand for money is a demand for real cash balances because people hold money for the purpose of buying goods and services. The higher the price level, the more money balances a person has to hold in order to

purchase a given quantity of goods. If the price level doubles, then the individual has to keep twice the amount of money balances in order to be able to buy the same quantity of goods. Thus the demand for money balances is demand for real rather than nominal balances.

According to Keynes, the transactions demand for money depends only on the real income and is not influenced by the rate of interest. However, in recent years, it has been observed empirically and also according to the theories of Tobin and Baumol transactions demand for money also depends on the rate of interest. This can be explained in terms of opportunity cost of money holdings. Holding one's asset in the form of money balances has an opportunity cost. The cost of holding money balance is the interest that is foregone by holding money balances rather than other assets. The higher the interest rate, the greater the opportunity cost of holding money rather than non-money assets. Individuals and business firms economise on their holding of money balances by carefully managing their money into bonds or short term income yielding non-money assets. Thus, at higher interest rates, individuals and business firms will keep less money holdings at each level of Income.

2. Precautionary Motive for Money: Precautionary motive for holding money refers to the desire of the people to hold cash balances for unemployment, sickness, accidents, and the other uncertain perils. The amount of money demanded for this motive will depend on the psychology of the individual and the conditions in which he lives.
3. Speculative Motive for Money: The speculative motive of the people relates to the desire to hold one's resources in liquid form in order to take advantage of market movements regarding the future changes in the rate of interest (or bond prices). The notion of holding money for speculative motive was a new and revolutionary Keynesian idea. Money held under the speculative motive serves as a store of value as money held under the precautionary motive does. But it is a store of money meant for a different purpose. The cash held under this motive is used to make speculative gains by dealing in bonds whose prices fluctuate. If bond prices are expected to rise which, in other words, means that the rate of interest is expected to fall, businessmen will buy bonds to sell when their prices actually rise. If however, bond prices are expected to fall, businessmen will buy bonds to sell when their prices actually rise.

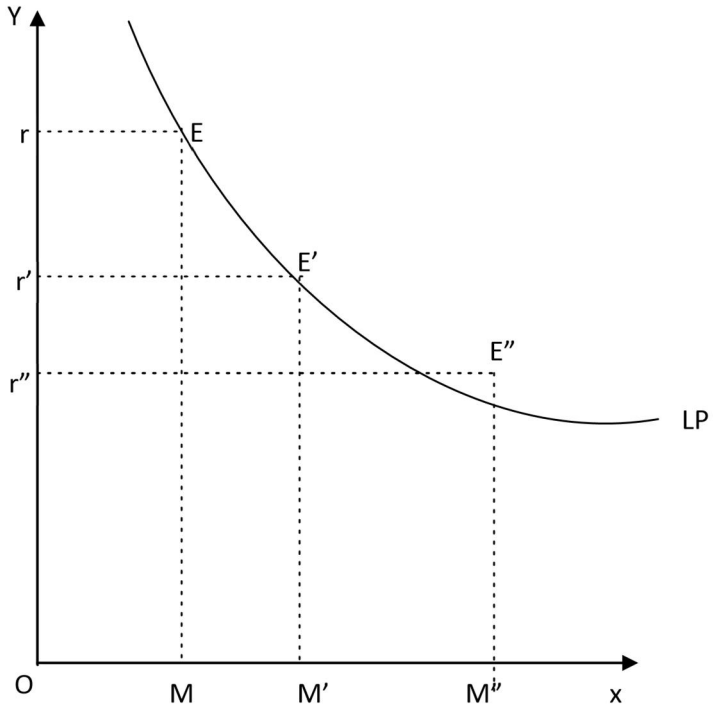
   If,

   However, bond prices are expected to fall, i.e., the rate of interest is expected to rise, businessmen will sell bonds to avoid capital losses. Nothing being certain in the dynamic world, where guesses about the future course of events are made on precarious

basis, businessmen keep cash to speculate on the probable future changes in bond prices (or the rate of interest) with a view to making profits.

Given the expectations about the changes in the rate of interest in future, less money will be held under the speculative motive at a higher current rate of interest and more money will be held under this motive at a lower current rate of interest. The reason for this inverse correlation between money held for speculative motive and the prevailing rate of interest is that at a lower rate of interest less is lost by not lending money or investing it, that is, by holding on to money, while at a higher current rate of interest holders of cash balances would lose more by not lending or investing.

Thus the demand for money under speculative motive is a function of the current rate of interest, increasing as the interest rate falls and decreasing as the rate of interest rises. Thus demand for money for this motive is a decreasing function of the rate of interest. This is shown in Fig. Along X-axis is represented the speculative demand for money and along Y-axis current rate of interest. The liquidity preference curve LP is a downward sloping towards the right signifying that the higher the rate of interest, the lower the demand for money for speculative motive, and vice-versa. Thus at the higher current rate of interest Or a very small amount OM is held for speculative motive. This is because at a high current rate of interest much money would have been lent out or used for buying bonds and therefore less money would be kept as inactive balances. If the rate of interest falls to Or', then a greater amount OM' is held under speculative motive. With the further fall in the rate of interest to Or", money held under speculative motive increases to OM".



Demand for Money (i.e. Liquidity Preference) for Speculative Motive.

Liquidity Trap: It will be seen from 13.1 that the liquidity preference curve LP becomes quite flat i.e., perfectly elastic at a very low rate of interest; it is horizontal line beyond point E" towards the right. This perfectly elastic portion of liquidity preference curve indicates the position of absolute liquidity preference of the people. That is, at a very low rate of interest people will hold with them as inactive balances any amount of money they come to have. This portion of liquidity preference curve with absolute liquidity preference is called liquidity trap by the economists because expansion in money supply gets trapped in the sphere of liquidity trap and therefore cannot affect rate of interest and therefore the level of investment. According to Keynes, it is because of the existence of liquidity trap that monetary policy becomes ineffective to tide over economic depression.

But the demand for money to satisfy the speculative motive does not depend so much upon what the current rate of interest is, as on expectations about changes in the rate of interest. If there is a change in the expectations regarding the future rate of interest, the whole curve of demand for money or liquidity preference for speculative motive will change accordingly. Thus, if the public on balance except the rate of interest to be higher (i.e., bond prices to be lower) in the future than had been previously supposed, the speculative demand for money will increase and the whole liquidity preference curve for speculative motive will shift upward.

4. Aggregate Demand for Money Keynes'View: If the total demand for money is represented by M_d we may refer to that part of M held for transactions and speculative

motive as M_1 and to that part held for speculative motive as M_2. Thus, $M_d = M_1+M_2$. According to Keynes, the money held under the transactions and precautionary motives, i.e., M_1, is completely interest – inelastic unless the interest rate is very high. The amount of money held as M_1, that is, for transactions together with the contingencies growing out of the conduct of personal and business affairs.

We can write this in a functional form as follows:

$$M_1 = L_1(Y) \ldots. (i)$$

where Y stands for income, L_1 for demand function and M_1 for money demanded or held under the transactions and precautionary motives. The above function implies that money had under the transactions and precautionary motive is a function of income.

On the other hand, according to Keynes, money demanded for speculative motive i.e. M_2 as explained above, is primarily a function of the rate of interest. This can be written as:

$$M_2 = L_2(r) \ldots (ii)$$

Where r stands for the rate of interest, L_2 for demand function for speculative motive. Since total demand of money $M_d = M_1+M_2$, we get from (i) and (ii) above

$$M_d = L_1 (Y) + L_2(r)$$

Thus, according Keynes theory, total demand for money is an additive demand function with two separate components. The one component, L1(Y) represents the transactions demand for money arising out of transactions and precautionary motives and is an increasing function of the level of money income. The second component of the demand for money that is, $L_2(r)$ represents the speculative demand for money, which depends upon rate of interest, is a decreasing of the rate of interest.

5. Critique of Keyne's Theory: By introducing speculative demand for money, Keynes made a significant departure form the classical theory of money demand which emphasized only the transactions demand for money. However, Keynes' theory of speculative demand for money has been challenged. The main drawback of Keynes speculative demand for money is that it visualizes that people hold their assets in either all money or all bonds. This seems quite unrealistic as individuals hold their financial wealth in some combination of both money and bonds. This gave rise to portfolio of wealth consist of money, interest-bearing bonds, shares, physical assets, etc. Further, while according to Keynes' theory, demand for money for transaction purposes is

insensitive to interest rate, the modern theories of money demand put forward by Baumol and Tobin show that money held for transaction purpose is interest elastic. We will discuss the Post-Keynesian theories of demand for money put forward by Tobin, Baumol and Freidman in the next Chapter.

Further, Keynes additive from of demand for money function, namely $M_d = L_1(Y) + L_2(r)$ has now been rejected by the modern economists. It has been pointed out that money represents a single asset, and not the several over. There may be more than one motive to hold money but the same units of money can serve several motives. Therefore, the demand for money cannot be divided into two or more different department of each other.

In view of all these arguments, the Keynesian total demand for money functions is written in the following modified form

$M_d = L\ (Y,r)$

Where it is conceived that demand for money function (M3) is increasing function of the level of income, it is decreasing function of the rate of interest. The presentation of the demand for money function in the above revised and modified form, $M_d = L\ (Y,r)$ has been a highly significant development in monetary theory.

Keynes's Liquidity Preference theory of Rate of Interest

In his book "The General Theory of Employment, Interest and Money", J.M. Keynes gave a new view of Interest. According to him, the rate of interest is purely monetary phenomenon and is determined by demand for money and supply of money. According to him "interest is a reward for parting with liquidity for a specified period". Since people prefer liquidity or want to hold money to meet their various motives, they need to be paid some rewards for surrendering liquidity or money. And this reward is the rate of interest that must be paid to them in order to induce them to part with liquidity or money. Further, according to Keynes, rate of interest is determined by liquidity preference or demand for money to hold and the supply of money. Therefore, the Keynes, theory of interest is also known as Liquidity Preference Theory.

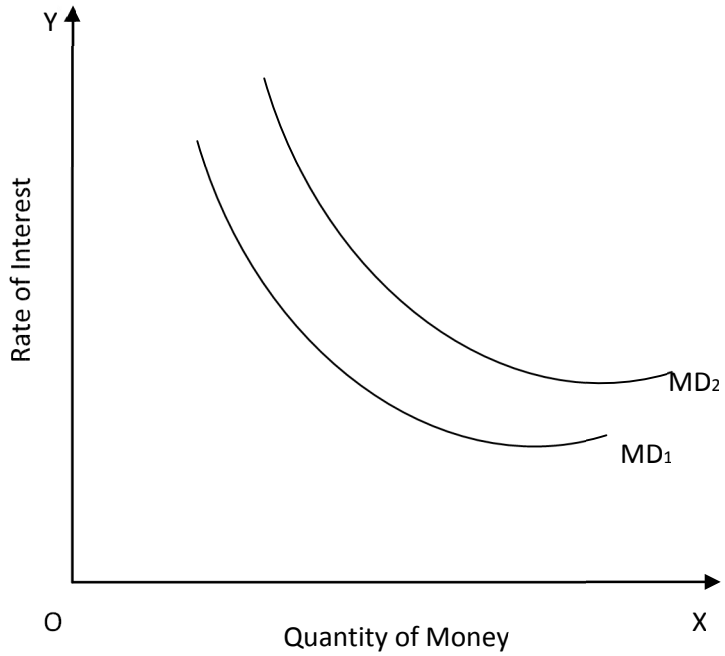
1. The Demand for Money in a Two Asset Economy: In order to explain the demand for money and interest rate determination, Keynes assumed a simplified economy where there are two assets which people can keep in their portfolio balance. These two assets are: (1) money in the form of currency and demand deposits in the banks which earn no interest, (2) long term bonds. It is important to note that rate of interest and bond

prices are inversely related. When bond prices go up, rate of interest rises and vice versa. The demand for money by the people depends upon how they decide to balance their portfolios between money and bonds. This decision about the portfolio balances can be influenced by two factors.

First, the higher the level of nominal income in a two asset economy people would want to hold more money in their portfolio balance. This is because of transactions motive according to which at the higher level of nominal income, the purchases by the people of goods and services in their daily life will be relatively larger which require more money to be kept for transactions purposes.

Second, the higher the nominal rate of interest, the lower the demand for money for speculative motive. This is firstly because a higher nominal rate of interest implies a higher opportunity cost for holding money. At higher rate of interest holders of money can earn more incomes by holding bonds instead of money. Secondly, if the current rate of interest is higher than what is expected in the future, the people would like to hold more bonds and less money in their portfolio. On the other hand, if the current rate of interest is low (in other words, if the bond prices are currently high), the people will be reluctant to hold larger quantity of bonds (and instead they would hold more money in their portfolio) for the fear and bond prices would all in the future causing capital losses to them.

2. Money Demand Curve: It follows from above that quantity of money demanded increases with the fall in the rate of interest or with the increase in level of nominal income. At a given level of nominal income, we can draw a money demand curve showing the quantity of money demanded at various rates of interest. As demand for money is inversely related to the rate of interest, the money demand curve at a given level of income say, Y_1 will be downward-sloping as is shown by the curve MD1 in Figure 13.2 when the level of money income increases, suppose from Y_1 to Y_2, the curve of demand for money shifts upward to the new position MD_2.



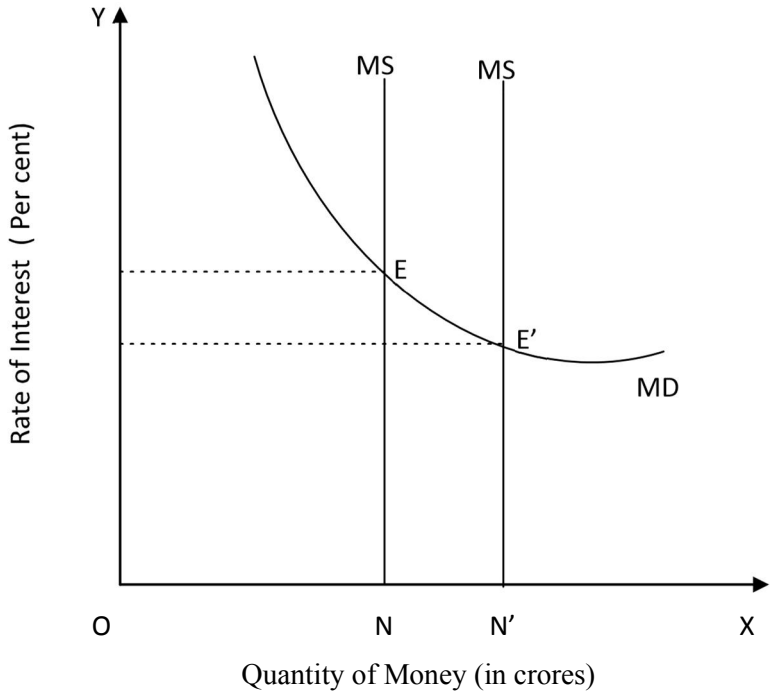
Equilibrium in the Money Market

The rate of interest, according to J.M. Keynes, is determined by demand for money (Liquidity Preference) and supply of money. The factors which determine demand for money has been explained above. The supply of money, at a given time, is fixed by the monetary authority of the country. In Figure 11.3, MD is the demand curve for money at a given level of nominal income. MS is the money supply curve which is a vertical straight line showing that 200 crores of rupees is the money supply fixed by the monetary authority. It will be seen that quantity demanded of money equals the given money supply at 10 per cent rate of interest. So the money market is in equilibrium at 10 per cent rate of interest. There will be disequilibrium if rate of interest is either higher or lower than 10 percent.

Suppose the rate of interest is 12 per cent. It will be seen from figure that at 12 per cent rate of interest, supply of money exceeds the demand for money. The excess supply of money reflects the fact that people do not want to hold as much money in their portfolio as the monetary authority has made it available to them. The people holding assets in the present two-asset economy would react to this excess money supply with them by buying bonds and thus replace some of money in their portfolios with bonds. Since the total money supply at a given moment remains fixed, it cannot be reduced by buying bonds by individuals. What the bonds-buying spree would lead to is the rise in prices of bonds. The rise in bond prices mean the fall in the rate of interest. As will be seen from the Figure with the fall in the interest rate from 12 per cent of 10 per cent, quantity demand of money has increased to be once again

equal to the given supply of money and the excess supply of money is entirely eliminated and money market is in equilibrium.

On the other hand, if the rate of interest is lower than the equilibrium rate of 10 per cent, say it is 8 per cent, and then as will be seen from figure there will emerge excess demand for money. As a reaction to this excess demand for money, people would like to sell bonds in order to obtain a greater quantity of money for holding at lower rate of interest. The stock of money remaining fixed, the attempt by the people to hold more money balances at a rate of interest lower than the equilibrium level through sale of bonds will only cause the bond prices to fall. The fall in bond prices implies the rise in the rate of interest. Thus, the process started as a reaction to the excess demand for money at an interest rate below the equilibrium will end up with the rise in the interest rate to the equilibrium level.



1. Effect of an increase in the Money Supply

Let us now examine the effect of increase in money supply on the rate of interest. In Figure 13.4, MD is the demand for money for satisfying various motives. To begin with, ON is the quantity of money available. Rate of interest will be determined where the demand for money is in balance or equal to the fixed supply of money on. It is clear from Figure 13.4 that demand for money is equal to ON quantity of money at Or rate of interest. Hence Or is the equilibrium rate of interest. Assuming no change in expectations and nominal income, an increase in the

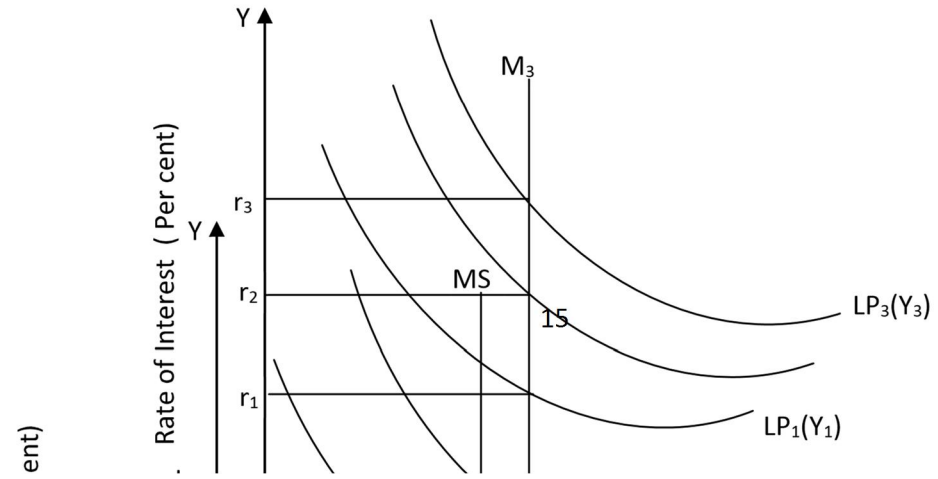
quantity of money (through buying securities by the Central Bank of the country, from the open market), will lower the rate of interest. In Fig. 13.4 when the quantity of money increase from ON to ON, the rate of interest fall from Or to Or because the new quantity of money ON is in balance with the demand for money at Or rate of interest. In this case we move down the curve. Thus given the money demand curve to curve of liquidity preference, an increase in the quantity of money brings down the rate of interest.

Let us see how increase in money supply leads to the fall in the rate of interest. With initial equilibrium at Or, when the money supply is expanded from ON to ON', there emerges excess supply of money at the initial Or rate of interest. The people would react to this excess quantity of money supplied by buying bonds. As a result, the bond prices will go up which implies that the rate of interest will decline. This is how the increase in money supply leads to the fall in rate of interest.

2. Shifts in Money Demand (MD) Curve

The position of money demand curve depends upon two factors: (1) the level of nominal income, (2) the expectations about the changes in bond prices in the future which implies changes in rate of interest in future. As has been explained above, a money demand curve is drawn by assuming a certain level of nominal income. With the increase in nominal income, money demand for transactions and precautionary motives increase causing an upward shift in the money demand curve.

Shift in money demand curve (or what Keynes called liquidity preference curve) can also be caused by changes in the expectations of the people regarding changes in bond prices or movements in the rate of interest in the future. If some changes in events leads the people on balance to expect a higher rate of interest in the future than they had previously supposed, the



LP 2(Y 2)

money

demand or

liquidity preference for speculative motive will increase which will bring about an upward shift in the money demand curve or liquidity preference curve and this will raise the rate of interest.

In Figure 13.5, assuming that the quantity of money remains unchanged at ON, the rise in the money demand or liquidity preference curve from Md1 to Md2, the rate of interest rises from Or to Oh because at Oh, the new speculative demand for money is in equilibrium with the supply of money ON. It is worth noting that when the liquidity preference curve rises from DM1 to DM2, the amount of money held does not increase; it remain ON as before. Only the rate of interest rises from Or to Oh to equilibrate the new liquidity preference or money demand with the available quantity of money ON.

Thus we see that Keynes explained interest in terms of purely monetary forces and not in terms of real forces like productivity of capital and thrift which formed the foundation, stones of both classical and loanable fund theories. According to him, demand for money for speculative motive together with the supply of money determines the rate of interest. He agreed that the marginal revenue product of capital tends to become equal to the rate of interest but the rate of interest is not determined by marginal revenue productivity of capital. Moreover, according to him, interest is not a reward for saving or thriftiness or waiting but for parting with liquidity. Keynes asserted that is not the rate of interest which equalizes saving and investment.

But this equality is brought about through changes in the level of income.

Critical Appraisal of Keynes's Liquidity Theory

Preference Theory of Interest

1. Keynes ignored the role of real factors in the determination of interest. Firstly, it has been pointed out that rate of interest is not purely a monetary phenomenon. Real forces like productivity of capital and thriftiness or saving also play an important role in the determination of the rate of interest. Keynes makes the rate of interest independent of the demand for investment funds. In fact, it is not so independent. The cash-balances of the businessmen are largely influenced by their demand for capital investment. This demand for capital-investment depends upon

the marginal revenue productivity of capital. Therefore, the rate of interest is not determined independently of the marginal revenue productivity of capital (marginal efficiency of capital) and investment demand. When investment demand increases due to greater profit prospects or, in other words, when marginal revenue productivity of capital rises, there will be greater demand for investment funds and the rate of interest will go up. But Keynesian theory does not account for this. Similarly, Keynes ignored the effect of the availability of savings on the rate of interest. For instance, if the propensity to consume of the people increases, savings would decline. As a result, supply of funds in the market will decline which will raise the rate of interest.

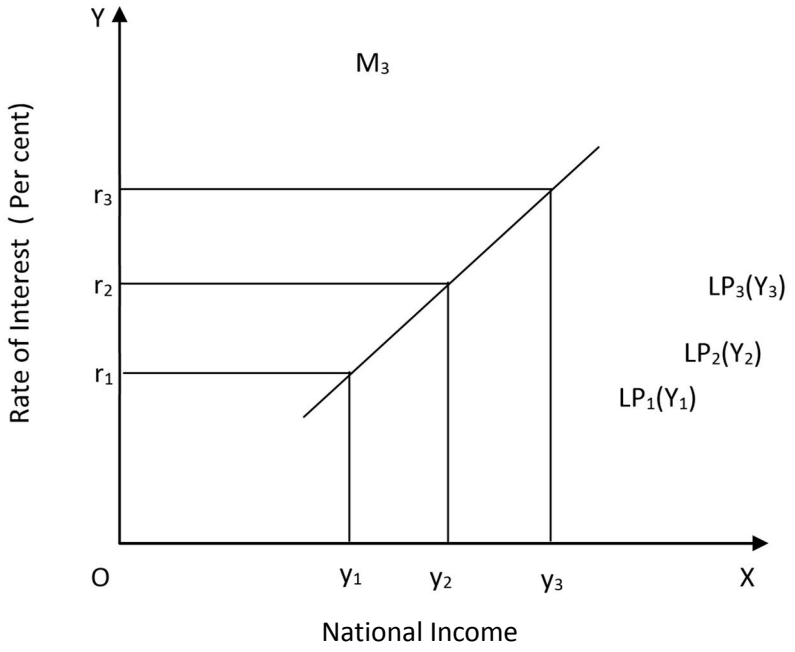
2. Keynesian theory is also indeterminate. Now, exactly the same criticism applies to Keynesian theory itself on the basis of which Keynes rejected the classical and loanable funds theories. Keynes's theory of interest, like the classical and loanable funds theories is indeterminate.

According to Keynes, rate of interest is determined by liquidity preference (i.e demand for money) and supply of money. However, as we have seen, liquidity preference, especially demand for money for transactions motive depends on level of income. Now, when income increases, liquidity preference curve (that is, money demand curve will shift to the right and, given the supply of money, new equilibrium rate of interest will be obtained. Thus at different levels of income, Y_1, Y_2, Y_3, as shown in Figure (a) there will be different liquidity preference curve or money demand curve such as LP_1, LP_2, LP_3. As a result, at different levels of income, there will be different equilibrium rates of interest. Thus, we cannot know the rate of interest unless we know the level of income. However, we cannot know the level of income unless we first know the rate of interest. This is because rate of interest influences investment which in turn determines the level of income. Thus,

Keynes's theory is indeterminate, that is, we are not able to arrive at a single determinate rate of interest; rate of interest varies as incomes varies. It will be seen from Figure 13.6(a) that at different levels of income Y_1,Y_2,Y_3 there are different liquidity preference curves LP_1, LP_2, LP_3 and therefore different equilibrium rates of interest r_1,r_2,r_3. In Figures 13.6(b) we have plotted these different rates of interest against different levels of income and get a curve known as LM curve. Thus, Keynes's analysis at the most help us to obtain LM curve showing what will be the rates of interest at different levels of income and not any unique or particular rate of interest. Thus, the Kynesian theory, like the classical theory, is indeterminate. "In the

Keynesian case the supply and demand for money schedules cannot give the rate of interest unless we already know the income level; in the classical case the demand and supply schedules for saving offer no solution until the income is known.

Precisely the same is true of loanable funds theory. Keynes' criticism of the classical and loanable funds theories applies equality to his own theory.



(a)

No liquidity without savings: According to Keynes, interest is a reward for Parting with liquidity and in no way a compensation and inducement for saving or waiting. But without saving how can the funds be available to be kept as liquid and how can there be the question of surrendering liquidity if one has not already saved money. Jacob Viner rightly maintains, "Without Saving there can be no liquidity to surrender". Therefore, the rate of interest is vitally connected with saving which is neglected by Keynes in the determination of interest.

It follows from above that Keynesian theory of interest is also not without flaws. But importance Keynes gave to liquidity preference as a determinant of interest is correct. In fact, the exponents of loanable funds theory incorporated the liquidity preference in their theory by laying greater stress on hoarding and dishoarding. We are inclined to agree with

Prof. D. Hamberg when he says, "Keynes did not forge nearly as new a theory as he and others at first thought. Rather, his great emphasis on the influence of hoarding on the rate of interest constituted an invaluable addition to the theory of interest as it had been developed by the loanble funds theorists who incorporated much of Keynes' ideas into their theory to make it more complete.