

The Structure of the Local Economy

Keynes' Law of Consumption:

Keynes propounded a law based on the analysis of consumption function. This law is known as '*Fundamental Law of Consumption*' or '*Psychological Law of Consumption*'. It states that aggregate consumption is a function of aggregate disposable income.

Propositions of the Law:

This law consists of three propositions:

- (a) When aggregate income increases, consumption expenditure will also increase but by a somewhat smaller amount.
- (b) When income increases, the increment of income will be divided in same proportion between saving and consumption. Consumption and saving go side by side. What is not consumed is saved. Savings is, thus, the complement of consumption.
- (c) As income increases, both consumption spending and saving go up. An increment in income is unlikely to lead either to less spending or less savings than before. It will seldom happen that a person may decrease his consumption or his savings when he has got more income.

Assumptions:

- (a) Habits of people regarding spending do not change or that *the propensity to consume remains the same or stable*.
- (b) *The economic conditions remain normal*. There is no hyper-inflation or war or other abnormal conditions.

- (c) The economy is a *free-market economy*. There is no government intervention.
- (d) The important characteristic of the slope of consumption function is that the *marginal propensity to consume (mpc) will be less than unity*. This results in low-consumption and high-saving economy.

Implications:

According to Keynesian theory, the mpc is less than unity, which brings out the following implications:

- (a) Since consumption largely depends on *income and consumption function is more or less stable*, it is necessary to increase investment fill the gap of declining consumption as income increases. If this is not done, the increased output will not be profitable.
- (b) When the income increases, and the consumption are not increased, there is a *danger of over-production*. The government will have to step in to remedy the situation. Therefore, the policy of laissez-faire will not work here.
- (c) *If the consumption is not increased, the marginal efficiency of capital (MEC) will diminish*. The demand for capital will also diminish, and all the economic progress will come to a standstill.
- (d) Keynes' Law explains the *turning points in the business cycle*. When the trade cycle has reached the highest point of prosperity,

income has gone up. But since consumption does not correspondingly go up, the downward cycle starts, for demand has lagged behind. In the same manner, when the business cycle has touched the lowest point, the cycle starts upwards, because consumption cannot be diminished beyond a certain point. This is due to the stability of mpc.

- (e) Since the mpc is less than unity, this law explains the *over-saving gap*. As income goes on increasing, consumption does not increase as much. Hence saving process proceeds cumulatively and there arises a danger of over-saving.
- (f) This law also explains the *unique nature of income generation*. If money is injected into the economic system, it will increase consumption but to a smaller extent than increase in income. This again is due to the fact that consumption does not increase along with increase in income.

Factors Influencing Consumption Function:

There are certain factors affecting the propensity to consume in the long-run:

1. Objective Factors:

- (a) Distribution of income: It is generally observed that the average and marginal propensities to consume of the poor are greater than

those of the rich. This is because the poor has a lot of unsatisfied wants and he is likely to seize every opportunity that comes his way to satisfy them. On the other hand, the rich have already a high standard of living and relatively less urgent wants remain to be satisfied, so that in their case, an addition to their incomes is more likely to be saved than spent on consumption.

- (b) **Fiscal policy**: Fiscal policy of the government will also influence the consumption behaviour of an economy. A reduction in taxation will leave more post-tax incomes with the people and this will stimulate higher expenditure on consumptions. Similarly, an increase in taxes will depress consumption.
- (c) **Changes in business expectations**: Business expectations by affecting the incomes of certain classes of people affect consumption function.
- (d) **Windfall gains and losses**: The windfall losses and gains arising out of changes in capital values affect the 'saving brackets' mostly and not the spending sections. Hence, their influence on consumption function is not so well marked.
- (e) **Liquidity preferences**: Another factor is the people's liquidity preferences. If people prefer to keep their income in liquid form, consumption is reduced correspondingly.
- (f) **Substantial changes in the rate of interest.**

2. Subjective Factors:

(a) Individual motives to save:

- (i) Building of reserves for unforeseen contingencies as illness or unemployment,
- (ii) To provide for anticipated future needs such as daughter's wedding, son's education, etc.
- (iii) To enjoy an enlarged future income by investing funds out of current income, etc.

(b) Business motives:

- (i) The desire to expand business,
- (ii) The desire to face emergencies successfully,
- (iii) The desire to have successful management,
- (iv) The desire to ensure sufficient financial provision against depreciation and obsolescence.

Investment

Investment, in the theory of income and employment, means, an addition to the nation's stock of capital like the building of new factories, new

machines as well as any addition to the stock of finished goods or the goods in the pipelines of production. Investment includes addition to inventories as well as to fixed capital. Thus, investment does not mean purchase of existing securities or titles, i.e., bonds, debentures, shares, etc. Such transactions do not add to the existing capital but merely mean change in ownership of the assets already in existence. They do not create income and employment. Real investment means the purchase of new factories, plants and machineries, because only newly constructed or created assets create employment or generate income.

Types of Investment:

1. Gross and Net Investment: Net investment means gross investment minus depreciation. In the theory of income and employment, investment means net investment.
2. Ex-ante and Ex-poste Investment: Ex-ante investment is planned or anticipated investment. Ex-post investment is actually realised investment, or the investment which is not merely planned but which is actually invested or implemented.
3. Private and Public Investment: Private investment is on private account and public investment is by the State or local authorities. The private investment is influenced by marginal efficiency of capital (MEC) i.e., profit expectations and the rate of interest. Therefore, the private investment is profit-elastic. In public

investment, the profit motives do not enter into consideration. It is undertaken for social good and not for private gain.

4. Autonomous and Induced Investment: Autonomous investment is independent of income level, and depends on population growth and technical progress. Such investment does not vary with the level of income. In other words, it is income-inelastic. The influence of change in income is not altogether ruled out. The examples of autonomous investment are 'long range' investments in houses, roads, public buildings and other forms of public investment. Such investment is generally done by the State as necessitated by the growth of population and facilitated by technical progress and not as a result of change in NI. These investments are independent of changes in income and are not governed by profit motive. They are generally made by governments and local authorities for promoting general welfare.

Induced investment varies with NI. Changes in NI bring about changes in aggregate demand which in turn affects the volume of investment. When NI increases, AD too increases, and investment has to be undertaken to meet this increased demand. Thus induced investment is income-elastic.

Investment is made by the people as a result of changes in income level or consumption. It is also influenced by price changes, interest changes, etc., which affect profit possibilities. It is undertaken for the

sake of profit or income and it changes with a change in income.

Thus, induced investment is governed by profit motive.

Factors Affecting Investment:

1. Marginal Efficiency of Capital (MEC) or expected rate of profit:
MEC or expected rate of profit the most important factor affecting private investment. If the business expectations are good or if the MEC is high, more investment will be made. On the contrary, if there is an economic depression in the country or there are bleak prospects of profits, investment will be discouraged. Thus, the fluctuations in investment are mainly caused by the fluctuations in the MEC.
2. Rate of interest: The second important factor affecting investment is rate of interest. The rate of interest does not quickly change; it is more or less sticky or constant. Hence, the inducement to invest, by and large, depends on the MEC. For a suitable investment condition, the rate of return or profit must at least equal to rate of interest. So long as the expected rate of return exceeds the rate of interest, investment will continue to be made. In other words, the MEC must never fall below the current rate of interest, if investment is to be worthwhile.
3. Excess capacity: There are some other factors that affect investment. Excess capacity is one of them. If a firm has already 'excess capacity'

and can easily handle increased future demand, it will not go in for further investment in capital equipment.

4. Technological progress: Technological progress also affects current level of investment. For instance, a new invention may render the present capital stock of a firm obsolete and adversely affect its ability to compete. In this case, further investment will be called for.
5. Political and security conditions: This factor has become one of the major important factors that affect the investment, esp. with reference to under-developed countries including Pakistan. Political instability, poor security arrangements and society's negative attitude towards investment companies can badly damage the investment environment, and the country can be suffered from poverty and unemployment due to lack of investment. Countries like Kenya, Zimbabwe, Sudan, etc. are the worst victims.

Investment-Demand Curve:

The investment-demand schedule is also known as MEC schedule. The MEC schedule shows a functional relationship between MEC and the amount of investment in a given type of capital asset at a particular period of time for the whole economy.

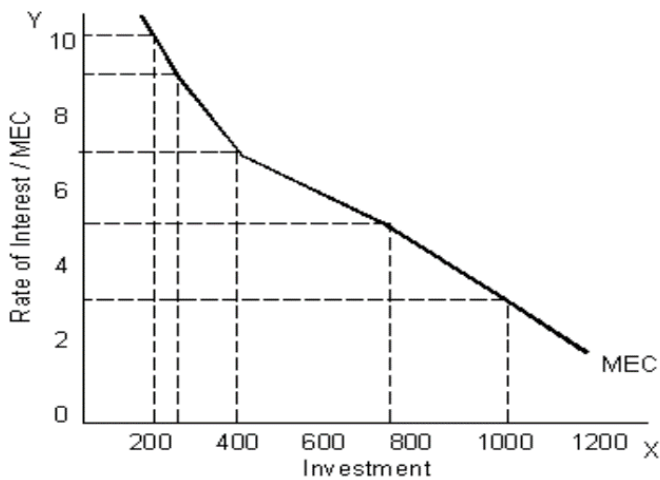


Figure 1 – Marginal Efficiency Curve

In the above diagram, the marginal efficiency of capital is represented by MEC curve. It slopes downward from left to right which means that as investment increased its marginal efficiency goes down.

Investment (In Million US \$)	MEC / Rate of Interest (In %)
200	10
250	9
400	7
750	5
1000	3

Investment at any time depends on the rate of interest prevailing at that time. If the rate of interest is 5%, the investment is US

\$750 million, because, at this level, MEC is equal to the rate of interest. The MEC represents the investor's return and the rate of interest is his cost. Obviously, the return on capital must at least be equal to the rate of interest, which is its cost. Suppose the rate of interest goes down to 3%, then it will become worthwhile to invest US \$1,000 million. Thus, the MEC and the rate of interest move together.

Position and Shape of MEC Curve: The elasticity of MEC determines the extent to which the volume of investment would change consequent upon changes in the rate of interest. If MEC is relatively interest-elastic, a little

fall in the rate of interest will result in a considerable expansion in the volume of investment. On the other hand, if the MEC is relatively interest-inelastic, then a considerable fall in the rate of interest may not lead to any increase in the volume of investment.

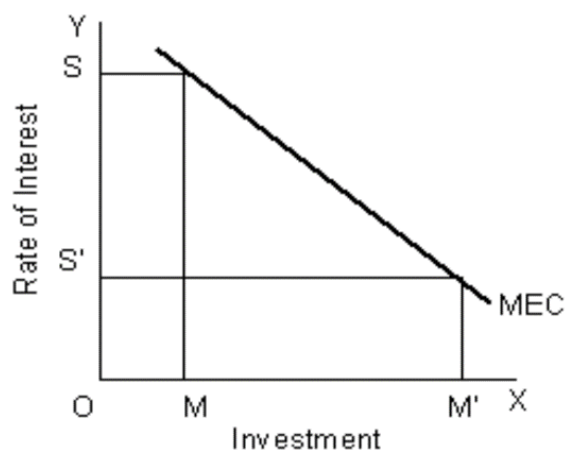


Figure 2 (a) – Interest-elastic MEC Curve

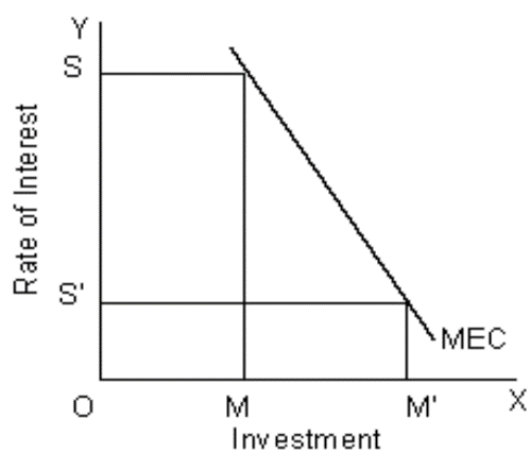


Figure 2 (b) – Interest-inelastic MEC Curve

Influence of Rate of Interest: The rate of interest along with the MEC determines the volume of investment. If the rate of interest is higher than the MEC, it will not be profitable to create a new physical asset. This is because we assume that the aim of individual investor is to maximise the money profits. Two courses of action are open to invest, either he can use his money to create additional physical assets, i.e., he can invest in the Keynesian sense of the term, or else he can lend his money to others at a certain rate of interest. Now, if MEC is lower than the current rate of interest, it is more profitable to lend money rather than use it for creating new assets. On the other hand, if MEC is higher than the rate of interest, it is better to invest more. At the point, where MEC equals the current rate of interest, we have the equilibrium level of investment.

MULTIPLIER AND ACCELERATOR

THE MULTIPLIER:

Keynes' Multiplier Theory gives great importance to increase in public investment and government spending for raising the level of income and employment. Both consumption and investment create employment. But both have complementary relationship with one another. When investment increases, consumption increases too and helps in creating employment. It is only when the level of full employment has been reached that investment and consumption become competitive instead of being complementary; then increase in one will reduce the other, one will be at the expense of the other.

Kahn's Employment Multiplier:

Kahn's Multiplier is known as Employment Multiplier, and Keynes' Multiplier is known as Investment Multiplier. According to Kahn's Employment Multiplier, when government undertakes public works like roads, railways, irrigation works then people get employment. This is initial or primary employment. These people then spend their income on consumption goods. As a result, demand for consumption goods increases, which leads to increase in the output of concerned industries which provides further employment to more people. But the process does

not end here. The entrepreneurs and workers in such industries, in which investment has been made, also spend their newly obtained income which results in increasing output and employment opportunities. In this way, we see that the total employment so generated is many times more than the primary employment.

Suppose the government employs 300,000 persons on public works and, as a result of increase in consumer goods, 600,000 more persons get employment in the concerned industries. In this way, 900,000 persons have been able to get employment, that is, three times more people are now employed. In other words, Kahn's employment multiplier means that by the government undertaking public works many more times total employment is provided as compared with initial employment.

Keynes' Income or Investment Multiplier:

Keynes' income multiplier tells us that a given increase in investment ultimately creates total income which is many times the initial increases in income resulting from that investment. That is why it is called income multiplier or investment multiplier. Income multiplier indicates how many times the total income increases by a given initial investment.

Suppose Rs. 100 million are invested in public works and as a result there is an increase of Rs. 300 million in income. In this case, income has been increased 3 times, i.e., the multiplier is 3. If ΔI represents increase in

investment, ΔY indicates increase in income and K is the multiplier, then the equation of multiplier is as follows:

$$K = \frac{\Delta Y}{\Delta I} \text{----- (i)}$$

The multiplier is the numerical co-efficient showing how large an increase in income will result from each increase in investment. The multiplier is the number by which the change in investment must be multiplied in order to get the resulting change in income. It is the ratio of change in income to the change in investment. If an investment of Rs. 50 million increases income by Rs. 150 million, the income multiplier is 3 and if Rs. 200 million, the multiplier is 4 and so on.

In the following multiplier equation, the relationship between income and investment is determined through marginal propensity to consume:

$$K = \frac{1}{1 - mpc} \text{----- (iii)}$$

Where:

$$1 - mpc = mps$$

(*mps: Marginal Propensity to Save*)

Therefore, the third multiplier equation is:

$$K = \frac{1}{mps} \text{----- ((iii))}$$

It should be noted that the size of multiplier varies directly with the size of mpc. When the mpc is high, the multiplier is high and when the mpc is low, the multiplier is also low.

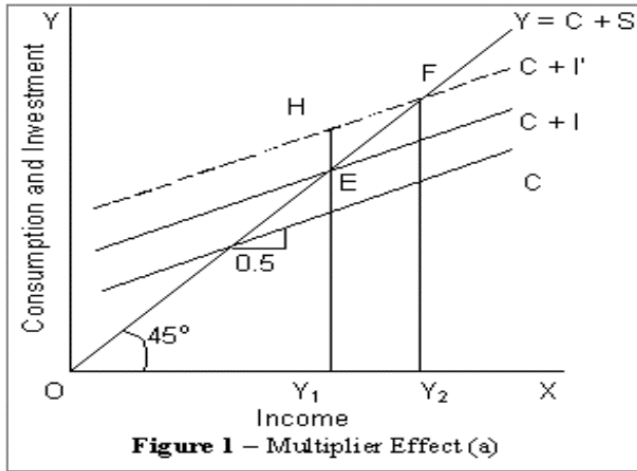
The multiplier works not only in money terms but also in real terms. In other words, the increase in income takes place not only in the form of money but in the form of goods and services.

Keynes multiplier theory is also very helpful in the determination of national income. In his book, '*General Theory of Employment, Interest and Money*', he has contradicted the viewpoint of the classical economists. He is of the opinion that if an economy operates at a level of equilibrium it is not necessary that there should be a high level of employment in a country. It is just possible that there may be millions of people unemployed. So according to Keynes, if any country wishes to achieve level of employment, it can only do so through the changes in the magnitude of investment.

According to Keynes' theory, there are two main methods of measuring the equilibrium level of NI, i.e.:

- (a) The AD-AS Approach, and
- (b) The Saving Investment Approach

(a) AD-AS Approach:



For explaining the determination of level of income in a two-sector economy, we assume an economy in which there is no international trade, no government role and in

which corporations retain no earnings. In this simplest model of economy, the level of income is determined at a point where the AD intersects the AS.

In the above diagram, the national income is determined at the point where AD curve ($C+I$) cuts the AS curve ($C+S$), i.e., at E. The multiplier effect is also shown in this diagram. The curve C represents the mpc which is assumed to be $\frac{1}{2}$. That is why the slope of curve C is 0.5. Since the AD curve ($C + I$) cuts the 45° angle line at E, OY_1 is the level of income determined. If now investment is increased to EH (ΔI) we can find out the increase in income (ΔY). As a result of investment EH, the AD curve shifts upwards to $C + I'$. This new AD curve cuts the AS curve (45° angle line) at F, so that OY_2 income is determined. Thus, income increases by Y_1Y_2 as a result of investment increase of EH, which (Y_1Y_2) is double of EH.

It is clear, therefore, that the multiplier is 2. It is also calculated as below:

$$K = \frac{1}{1 - mpc}$$

$$K = \frac{1}{1 - \frac{1}{2}}$$

$$K = 2$$

(a) **Saving-Investment Approach:** In order to simplify the analysis of income determination we imagine an economy (1) where there are no taxes levied by the government, (2) the corporations retain no earnings, and (3) there are no changes in the level of prices. The equilibrium level of NI is determined at a point where planned or intended saving is equal to planned or intended investment, or in other words, where the saving intersect the investment. It is further explained with the help of following diagram:

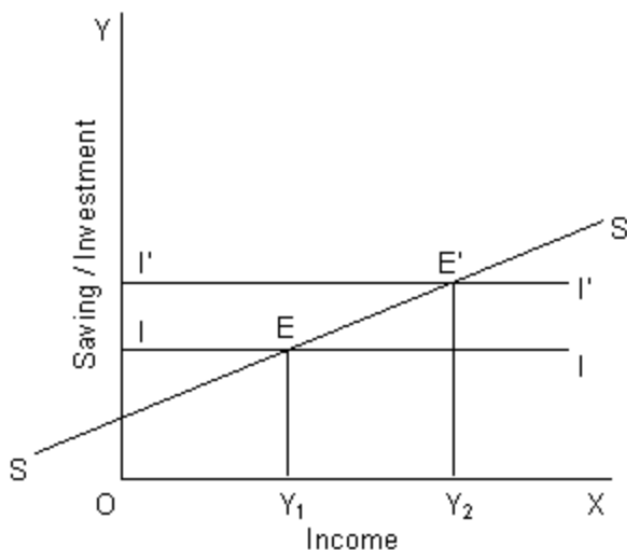


Figure 2 – Multiplier Effect (b)

The above diagram shows the multiplier effect of an increase in investment on the equilibrium level of income. SS is the supply curve and II is the investment curve showing the total level of investment of OI. These two curves intersect each other at the equilibrium point E

where is income is OY₁. If now there is a change in investment from OI to OI', i.e., an increase of II', then the II curve will shift to the

position of $I'I'$ and the two curves $I'I'$ and SS intersect each other at the new equilibrium point E' , where the income is OY_2 . Now it is clear that when mps is $\frac{1}{2}$, an increase in investment by II' (let say Rs. 10 million) has led to the increase in income by Y_1Y_2 (let say Rs. 30 million). Obviously the value of the multiplier is equal to 3.

Limitations of Multiplier:

(a) **Efficiency of production:** If the production system of the country cannot cope with increased demand for consumption goods and make them readily available, the incomes generated will not be spent as visualised. As a result, the mpc may decline.

(b) **Regular investment:** The value of the multiplier will also depend on regularly repeated investments. A steadily increasing investment is essential to maintain the tempo of economic activity.

(c) **Multiplier period:** Successive doses of investment must be injected at suitable intervals if the multiplier effect is not to be lost.

(d) **Full employment ceiling:** As soon as full employment of the idle resources is achieved, further beneficial effect of the multiplier will practically cease.

Leakages of Income Stream and Their Effect on the Multiplier:

As we know that as income increases, consumption does not increase to the same extent or proportionately, because a part of the income is saved.

The part of the income that is saved is as if a leakage from the flow of income stream. These leakages obstruct the growth of national income. In the absence of these leakages, mpc would have been unity. The consumption expenditure would have increased 100 per cent of the increase in income and there would have been full employment. The following are the principal leakages:

(a) **Paying off debts:** It generally happens that a person has to pay a debt to a bank or to another person. A part of his income goes out in repaying such debts and is not utilised either in consumption or in productive activity. Income used to pay off debts disappears from the income stream. If, however, the creditor uses this amount in buying consumer goods or in some productive activity, then this sum will generate some income, otherwise not.

(b) **Idle cash balances:** It is well known that people keep with them ready cash which is neither used productively nor in purchasing consumer goods. Keynes has mentioned three motives for holding ready cash for liquidity preference, viz., transactions motive, precautionary motive and speculative motive. This means that the re-spent part of income goes on decreasing. In this way, a part of the initial expenditure leaks out of the income stream.

(c) **Imports:** The part of the money spent by country for importing goods also leaks out of the country's income stream. It does not encourage or support any business or industry in the country. This is specially so if the

imports do not help the trade and industry of the country or if they are not used for export promotion. The net import is a leakage.

(d) Purchase of existing securities: Some people purchase securities (saving certificates) from others and the seller of securities can hoard this money. This money also leaks out of the income stream. This may also be valid in case of purchase of shares, debentures, bonds, insurance policy, or some other financial investment. If this invested money is not used in productive areas, there will be a leakage in the income stream.

(e) Price inflation: Inflationary situation is also responsible for leakage. In such a situation, investment does not help in generating employment or increasing income. If there is already full employment in the country, increase in investment, far from increasing demand for consumer goods, it decreases it as a result of which employment in the consumer goods industries contracts and demand for capital goods decreases. Whatever increase in income there is, it is spent in high prices and it does not help in creating income and employment.

As a result of leakages of income from the main income stream of the country, the multiplier effect of the primary or initial investment in increasing income is reduced. If somehow these leakages are plugged, the multiplier effect of investment in generating income and employment would increase. If they cannot be plugged altogether, they should be reduced or the propensity to consume should be increased or propensity

to save should be reduced, otherwise the new investment will not have full effect in increasing income and employment.

Importance of Multiplier:

Keynes' principle of multiplier has a great role in removing the Great Depression of 1929-34. These days governments are actively interfere in the economic affairs of the community through multiplier. Its importance is further explained as below:

1. The multiplier principle *focuses on the importance of public investment*, which is the key to remove unemployment during the days of depression. An investment of Rs. 1 million can create income and employment worth many times, and can help the government to remove unemployment from the country.
2. During the days of depression, the private entrepreneurs are discouraged to invest in the economy. Therefore, to fill this gap, *the government comes forward and undertakes the investment* in her own hands. Hence, the demand for consumer goods increases and also the level of NI and employment increases on account of the working of the multiplier.
3. When the demand for goods increases and incomes rise owing to government investment, the *profit expectations of the entrepreneurs go up* and as a result the MEC rises.

4. When the government makes investment in public works to fight depression and unemployment, *private investment is encouraged* on account of the operation of the multiplier. The confidence of private investors is restored, and hence helps in further removing the economic depression of the country.

Assumptions of Multiplier:

The following certain essential conditions / assumptions for the operation of multiplier:

1. *The supply curve of output should be elastic.* In other words, when demand for certain goods or services increases, its supply can be increased without much difficulty.
2. *There is excess productive capacity in consumer goods industries,* so that the supply of goods can be easily increased when demand increases.
3. *The supply of raw materials and working capital should also be elastic.*
4. *There should be 'involuntary unemployment'.* That is, there are people who want work at the prevailing wage rate, but are not getting it.

Criticism on Keynes' Multiplier Theory:

Many economists including the classical economists and the economists from third world countries have strongly criticised the Keynes' Multiplier Theory. It is explained in brief as below:

1. Keynes' multiplier theory assumes that the supply of output, raw materials and working capital is elastic, i.e., it can be increased whenever required. But, according to critics, this condition cannot be fulfilled in an under-developed country (UDC), where there is a continuous vicious cycle of poverty. The whole economy is based on agriculture, and there is a dearth of capital equipment, skill labour and technology. *The existing industries cannot fulfill the increased demand. Moreover, the government is so poor to invest in public works.*
2. According to Keynes' multiplier theory, there is excess productive capacity in consumer goods industries. But according to critics, *there is a little excess productive capacity in poor countries;* therefore, this theory cannot be applied to UDCs.
3. Another condition of Keynes' theory is that there should be '*involuntary unemployment*'. That is, there are people who want work at the prevailing wage rate, but are not getting it. Whereas, *in UDCs, there is 'disguised unemployment'*, and most of the workers are self-employed, therefore, this condition cannot be fulfilled in such countries.

4. According to critics, *this theory can only be applied to economically advanced and highly industrialised countries, and cannot be applied to under-developed countries*, which are pre-dominantly agricultural countries. In UDCs, the heavy plant and machineries, and skilled labour are not easily available and the supply cannot be increased quickly.

THE ACCELERATOR:

The multiplier describes the relationship between investment and income, i.e., the effect of investment on income. The multiplier concept is concerned with original investment as a stimulus to consumption and thereby to income and employment. But in this concept, we are not concerned about the effect of income on investment. This effect is covered by the 'accelerator'. The term 'accelerator' should not be confused with the accelerator in cars. It does not make the investment to grow faster and faster.

The term 'accelerator' is associated with the name of J.M. Clark in the year 1914. It has been proved a powerful tool of economic analysis since then. Keynes, astonishingly, has altogether ignored this concept. That is why, the concept of accelerator is not considered the part of Keynesian theory.

According to the principle of accelerator, when income increases, people's spending power increases; their consumption increases and consequently the demand for consumer goods increases. In order to meet this enhanced demand, investment must increase to raise the productive capacity of the

community. Initially, however, the increased demand will be met by over-working the existing plants and machinery. All this leads to increase in profits which will induce entrepreneurs to expand their plants by increasing their investments. Thus a rise in income leads to a further induced investment. The accelerator is the numerical value of the relation between an increase in income and the resulting increase in investment.

Assumptions of the Accelerator:

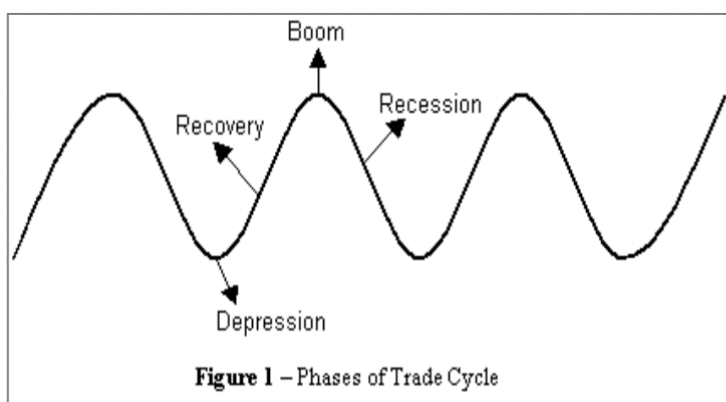
1. Under the principle of accelerator, it is assumed that *there is no excess capacity existing in the consumer goods industries*. No machines are lying idle and shift working is not possible.
2. *In capital goods industries, it has been assumed that there is an existence of surplus capacity*. If there is no excess capacity in capital goods industries, increased demand for machines could not lead to increase in the supply of machines.
3. *Output is flexible*. The machine-making industry or capital goods industry can increase its output whenever desired.
4. *The size of the accelerator does not remain constant over time*. Its value will be affected by the businessmen's calculations regarding the profitability of installing new plants to make more machines on the basis of their probable working life.
5. *The demand for machines will remain stable in the future*, although the increase in demand has suddenly cropped up.

Business Cycles

Trade cycles refer to regular fluctuations in the level of national income. It is a well-observed economic phenomenon, though it often occurs on a generally upward growth path and has a variable time span, typically of three years.

In trade cycles, there are upward swings and then downward swings in business. The periods of business prosperity alternate with periods of adversity. Every boom is followed by a slump, and vice versa. Thus, the trade cycle simply means the whole course of trade or business activity which passes through all phases of prosperity and adversity.

Phases of Trade Cycles:



Typically economists divide business cycles into two main phases – depression and recovery. Boom and slump mark the turning points of the cycles:

(a) **Depression:** In this phase, the whole economy is in depression and the business is at the lowest ebb. The general purchasing power of the community is very low. The productive activity, both in the production of consumer goods and the production of capital goods, is at a very low level. Business settles down at a new equilibrium point with a low level of prices, costs and profits. It may last for a number of years. Following are the characteristics of depression:

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- (i) The volume of production and trade shrinks,
- (ii) Unemployment increases,
- (iii) Overall prices fall,
- (iv) Profits and wages fall, thus, the income of the community falls to a very low level,
- (v) Aggregate expenditure and the effective demand come down,
- (vi) There is a general contraction of credit and little opportunity to invest,
- (vii) Stock markets show that prices of all shares and securities have fallen to a very low level,
- (viii) Interest rates decline all round,
- (ix) Practically, all construction activity – whether in buildings or machinery, comes to an end.

(b) **Recovery:** This phase is also known as '*expansion*'. The depression period of trade cycle ends in the recovery period. The economic situation has now become favourable. Money is cheap and so are the other materials and the factors of production. Productive activity has been increased. The entrepreneurs have now sufficient financial backing. Constructional and allied industries are receiving orders and employing more workers, thus creating more income and employment. This stimulates further investment and production. The whole economy is moving faster towards the boom.

(c) **Boom:** Boom or peak is the turning point of the trade cycle. It is the highest point of economic recovery. The typical features of boom are as follows:

- (i) A large number of production and trade,

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- (ii) A high level of employment and job opportunities in sufficient amount to permit a good deal of labour mobility,
 - (iii) Overall rising prices,
 - (iv) A rising structure of interest rates, so that a bullish tendency rules stock exchanges,
 - (v) A large expansion of credit and borrowing,
 - (vi) High level of investment, i.e., manufacturing or machinery
 - (vii) A rise in wages and profits so that the community's income rises, and
 - (viii) Operation of the economy at optimum capacity.
- (d) Recession:

It is a sharp slow down in economic activity, but it is different from depression or slump which is more severe and prolonged downturn.

Just as depression created the conditions of recovery, similarly, the boom conditions generate their own checks. All idle factors have been employed and further demand must raise their prices, but the quality is inferior. Less efficient workers have to be taken on higher wages.

Rate of interest rises and so also of the necessary materials. The costs have after all started the upward swing. They overtake prices ultimately and the profit margins are first narrowed and then begin to disappear. The boom conditions are almost at an end.

Then starts the downward course. Fearing that the era of profits has come to a close, businessmen stop ordering further equipment and materials.

The prudent businessmen want to get out altogether and cuts down his establishment ruthlessly. The government applies the axe mercilessly. The bankers insist on repayment. The bottlenecks appear, stocks accumulate. Desire for liquidity all round. This accentuates the depression.

Theories of Trade Cycle:

(a) Climatic Theory: It is said that there are cycles of climate. For some years the climate is favourable and then comes an unfavourable turn. Changes in climate bring about changes in agricultural production. The cycle of agricultural production results in a cycle of industrial activity, for industry is deeply affected by the state of agricultural production.

One of the famous climatic theories is '*Jevons' Sunspot Theory*'. According to Stanley Jevon, spots appear on the face of the sun at regular intervals. These spots affect the emission of heat from the sun, which, in turn, conditions the degree of rainfall. The rain affects agriculture, which, in turn, affects trade and industry. That is how trade cycles are caused.

(b) Psychological Theory: According to psychological theory of trade cycle, there are moods of optimism alternating the moods of pessimism in the economy, without any tangible basis. At some stage, people just think that trade is good and that it is going to remain good. Business activity is intensified and becomes feverish. Then, all of a sudden, people start thinking that the period of prosperity has lasted long enough and adversity is round the corner. Thus, although there was no valid reason

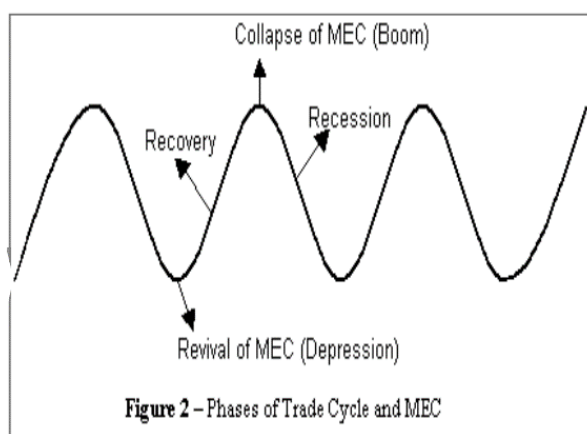
for depression to come about, but it is brought about by the people themselves. It is all psychological.

(c) Under-Consumption Theory: According to under-consumption theory, there is too much of saving during a boom and further additions to saving reduce the level of consumption. A reduction in the level of consumption, in the face of increasing productive capacity, must sooner or later lead to the collapse of the boom. This theory is associated with the names of J. A. Hobson and Major Douglas.

(d) Monetary Theory: R.G. Hawtrey was a firm believer in monetary theory. According to him, variations in flows of money are the sole and sufficient determinants of business activity and account for alternating phases of prosperity and depression. When the business prospects are good, the banks freely extend credit facilities. The businessmen go on expanding their business, entering into further and further commitments with the banks. A huge superstructure of credit is built up and this superstructure can be maintained by cheap money conditions. But a point reached, when banks think that they have gone a bit too far in the matter of advances. Probably their reserve ratio fallen dangerously low. In self-defence, they apply the brake, curb further expansion of credit, and begin to recall advances. This sudden suspension of credit facilities proves a bombshell in the business community. Businessmen have to sell their stocks in order to repay. This general desire for liquidity depresses the market, and may even led to bankruptcy for certain firms.

(e) **Over-Investment Theory**: According to over-investment theory, fluctuations in the rate of investment are the main causes of trade cycles. Investment becomes excessive during the boom. That investment during the boom is borne out by the fact that investment goods industries expand faster than consumption goods industries during the upward phase of the cycle. During the depression, investment goods industries suffer more than consumption goods industries.

(f) **Keynes' Theory**: According to Keynes, the business cycle is a rhythmic fluctuation in the overall level of income, output and employment. According to him, fluctuations in economic activity are caused by fluctuations in the rate of investment. And fluctuations in the



rate of investment are caused mainly by fluctuations in the marginal efficiency of capital. The

rate of interest, which is the other determinant of investment, is more or less stable and does not play a significant role in cyclical fluctuations in investment.

Fluctuations in MEC or the expected rate of profit on new investment are due to:

- (i) changes in the prospective yields, and
- (ii) changes in the cost or supply price of the capital goods.

Towards the end of the boom, the decline in the prospective yields on capital is due, in first instance, to the growing abundance of capital goods which lowers the MEC. The turning point from expansion to contraction is, thus, explained by the collapse of MEC. As investment falls, because of the decline in MEC, income also falls. The multiplier works in reverse direction.

Just as the collapse of MEC is the main cause of the upper turning point in the trade cycle, similarly the lower turning point, i.e., change from recession to recovery, is due to the revival of MEC. The interval, between the upper turning point and the start of recovery, is conditioned by two factors:

- (i) the time necessary for wearing out of durable capital assets, and
- (ii) the time required to absorb the excess stocks of goods left over from the boom.

Policy for Trade Cycle:

- (a) **Monetary Policy:** A country must always formulate and follow an appropriate monetary policy so as to avoid the occurrence of booms and slumps. Monetary policy embraces banking and credit policy relating to loans and interest rates as well as the monetary standard and public debt and its management. It influences the volume of

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credit base and, through it the volume of bank credit and thus the general level of prices and of economic activity. When boom conditions are developing, bank rate is raised and thus credit is contracted with the consequent brake upon the undue expansion of business activity. In a depression, a policy of cheap money may be adopted to stimulate business investment and thus assist recovery.

The bank credit policy involves two types of controls, i.e., the qualitative and the quantitative. The quantitative control is aimed at general tightening or easing of the credit system as the situation may demand. It is exercised by influencing the reserves of the banks. The qualitative or selective control seeks to regulate particular type of credit. Its object is to stimulate, restrict or stabilise bank advances for specific business schemes.

But there are limitations of monetary policy relating to bank rate and open market operations. Its success will depend on how far certain assumptions are true. For example, how far the various member of the banking system are prepared to accept the lead given by the central bank; how far the banks can make their borrowers use their credits for purposes for which such credits have actually been created; further, how far monetary causes are responsible for the economic fluctuations; and still further, and most important, whether the business community will adjust their investment exactly in accordance with the altered rates of interest.

(b) Fiscal Policy: Since public expenditure in all modern states constitutes a fairly respectable proportion of the total national income, fiscal policy is bound to affect the level of prices, production and employment, irrespective of the fact whether this policy is deliberately aimed at this or not. Fiscal policy consists of two elements, i.e., public spending or the policy of public works, and appropriate taxation.

In a year of depression, that is, when private investment is at a low ebb, the deficiency in investment will have to be made up by large capital outlay by the state, and conversely, during the upward swing of the cycle, the state will have considerably to cut down its spending programme. Thus, during the depression years, the state must be ready to spend beyond its current revenues. In other words, the state should be prepared to have deficit budgets during depression. Conversely, there should be surplus budgets during the years of prosperity. To put it another way, instead of having balanced budgets every year, the state should aim at budget-balancing over a series of years.

On the revenue side, rates and taxes should be lowered during depression, while they should be raised during boom years. To stimulate business investment during depression, not only the rates of taxes should be lowered but also more liberal allowances for depreciation and obsolescence, etc., should be granted.

Thus, fiscal policy, which is also known as the contra-cyclical management of public finance, may be operated both through public revenues and public expenditure.

(c) International Measures: So far we have discussed individual national efforts at economic stabilisation. But trade cycle is an international phenomenon and no country is hermetically sealed from the rest of the world. In fact, this international aspect creates complications and makes crisis control all the more difficult.

The measures which are suggested to be adopted on an international scale are: International Production Control, International Buffer Stocks and International Investment Control. International Production Control envisages control of production and prices of the important primary products. The difficulties of such control are indeed formidable, notably because agriculture in countries like India and Pakistan is usually carried on a small scale and more as a mode of living than business, so that even though it ceases to be profitable, it will be continued. But production control, as far as possible, combined with buffer stocks to counteract sudden changes in supply and demand, will go a long way in preventing rise or fall in their prices, which give rise further to serious fluctuations in the entire economy.

An international investment control for developing backward regions would help in raising the standards of living of their people and thus reduce the inequalities in the standard of living of different peoples. Such reduction in those inequalities is bound to strengthen the forces of stabilisation.

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