CHAPTER FIVE

THE KEYNESIAN ECONOMICS

"We are all dead in the long-run….if in tempestuous seasons economists can only tell us that when the storm is long past the sea is flat again"

____ J.M. Keynes

5.1 Overview of the Keynesian School

The Keynesian system of ideas is one of the most significant schools of economic thought. The school began with the publication of Keynes's The General Theory of Employment, Interest and Money in 1936 and remains a major presence in orthodox economics today. It arose out of the neoclassical school, Keynes himself being steeped in the Marshallian tradition. Although Keynes sharply criticized certain aspects of neoclassical economics, which he lumped together with Ricardian doctrines under the heading of "classical economics," he used many of its postulates and methods. His system was based on a subjective psychological approach, and it was permeated with Marginalist concepts, including static equilibrium economics. Keynes disassociated himself from attacks on the neoclassical theory of value and distribution.

Keynes's ideas were given added impetus by the Great Depression of the 1930s, the worst the Western world had ever known. Yet the roots of his ideas can be traced back to before 1929. The work of many economists, including that of Mitchell and his associates in the National Bureau of Economic Research, was within the framework of aggregate economics, or macroeconomics, rather than the microeconomics of the neoclassical school.

In this chapter, we provide a brief overview of the Keynesian school and discuss Keynes's major ideas.

<u>Major Tenets of the Keynesian School</u>

The major characteristics and principles of Keynesian economics are listed next.

●**Macroeconomic emphasis**. Keynes and his followers concerned themselves with the determinants of the total or aggregate amounts of consumption, saving, income, output, and employment. They were less interested, for example, in how an individual firm decides on its profit-maximizing level of employment than in the relationship between total spending in the economy and the aggregate of such employment decisions.

●**Demand orientation**. Keynesian economists stressed the importance of effective demand (now called aggregate expenditures) as the immediate determinant of national income, output, and employment. Aggregate expenditures, said these economists, consist of the sum of consumption, investment, government, and net export spending. Firms collectively produce a level of real output that they expect to sell. But sometimes aggregate expenditures are insufficient to buy all the output produced. As unsold goods accumulate, firms lay off workers and cut back output. That is, effective demand establishes the economy's actual output, which in some cases is less than the level of output that would exist if there were full employment (potential output).

●**Instability in the economy**. According to Keynesians, the economy is given to recurring booms and busts because the level of planned investment spending is erratic. Changes in investment plans cause national income and output to change by amounts greater than the initial changes in investment. Equilibrium levels of investment and saving—those that exist after all adjustments have occurred—are achieved through changes in national income, as opposed to changes in the rate of interest.

Investment spending is determined jointly by the rate of interest and the marginal efficiency of capital, or the expected rate of return above the cost on new investments. The interest rate depends on people's preferences for liquidity and the quantity of money. The marginal efficiency of capital depends on the expectation of future profits and the supply price of capital. The expected rate of profit from new investment is unstable, and, therefore, one of the most important causes of business fluctuations.

●**Wage and price rigidity**. Keynesians pointed out that wages tend to be inflexible downward because of such institutional factors as union contracts, minimum wage laws, and implicit contracts (understandings between employers and their workers that wages will not be cut during downturns judged to be temporary). In periods of slack aggregate demand for goods and

services, firms respond to lower sales by reducing production and discharging or laying off workers, not by insisting on wage cuts. Prices also are sticky downward; declines in effective demand initially cause reductions in output and employment rather than declines in the price level. Deflation occurs only under conditions of extremely severe depression.

● **Active fiscal and monetary policies**. Keynesian economists advocated that the government should intervene actively through appropriate fiscal and monetary policies to promote full employment, price stability, and economic growth.

To combat recession or depression, government should either increase its spending or reduce taxes, the latter increasing private consumption spending. It also should increase the money supply to drive down interest rates in the hope that this will bolster investment spending. To counter inflation caused by excessive aggregate expenditures, government should reduce its own spending, increase taxes to reduce private consumption spending, or reduce the money supply to raise interest rates, which will dampen excessive investment spending.

Whom Did the Keynesian School Benefit or Seek to Benefit?

The great success of Keynesian economics came partly because it addressed a pressing problem of its day: depression and unemployment. Also, it offered something for almost everyone and rationalized what was already being done out of necessity. Society gains from full or fuller employment, and those individuals or groups who lose because of it (say, administrators of unemployment compensation programs) can be easily ignored.

How Was the Keynesian School Valid, Useful, or Correct in Its Time?

Keynes geared economic theory to policymaking. World wars, worldwide depressions, and the growing complications of modern life undermined laissez-faire. Demands that something be done about business fluctuations grew more insistent, and Keynes provided both an explanation of fluctuations and a program to mitigate them. The role of economists and economic analysis in shaping the direction of government policy was thus greatly increased.

The Keynesian view that there are alternative means to reductions in nominal wages to achieve full employment was particularly timely. This policy prescription, which had emerged from neoclassical thinking, found little support as a politically practical solution to massive

unemployment. More important, according to Keynes, a deep and general reduction of nominal wages makes for bad economic policy. He held that a single firm can increase sales and employment through wage cuts because the demand for its products will remain unaffected. A whole economy, however, cannot easily increase sales by cutting nominal wages (assuming it is isolated from international trade) because wages are a source of demand for goods as well as a cost of production. If wages begin to fall, people may come to expect them to fall still further; this may cause businesses to postpone investment spending, making the depression worse.

If falling wages result in falling prices, this again worsens matters, because the real burden of debts increases, transferring wealth from the entrepreneur to the rentier. In addition, profit margins become smaller, thus choking off new investments. Because wage cuts hurt wage earners who have high marginal propensities to consume and help employers who have low ones, the overall propensity to consume is diminished, and this further worsens the situation. A practical man, Keynes also objected to wage cuts because they would touch off labor troubles. He was quite successful in converting people to the idea that wage policy should be divorced from policies to counter depression. There are better ways to create full employment, Keynes said.

The Keynesian approach became immensely useful even to those who did not accept Keynes's policy conclusions. It established a new set of analytical tools through which to view the economy, encouraged the further development of national income accounting, stimulated a vast and fruitful effort at empirical studies of the real world, hastened the development of econometrics, and created a new liberalism on which reformers could pin their hopes for aiding those who benefited least from unfettered capitalism.

Which Tenets of the Keynesian School Became Lasting Contributions?

Numerous ideas developed by Keynes and his followers have become orthodox elements of contemporary macroeconomics. In fact, contemporary economics could be said to be a combination of neoclassical microeconomics and Keynesian inspired macroeconomics. Keynesian concepts such as the consumption function; the marginal propensity to consume; the saving function; the marginal propensity to save; the marginal efficiency of capital; the transaction, precautionary, and speculative demands for money; the multiplier; ex post and ex

ante saving and investment; fiscal and monetary policy; IS-LM analysis, and so forth are now standard fare in economics textbooks. Several of the earlier Keynesian precepts, such as the view that the economy can be "fine-tuned" to a position of noninflationary full employment, have been largely discredited, but Keynesianism as an analytical method and as a system of ideas still dominates macroeconomics.

This is not to say that all of the ideas of Keynes and his followers proved to be correct. Some general criticisms of Keynes's thinking are discussed in the final section of this chapter.

5.2 John Maynard Keynes (1883-1946)

John Maynard Keynes was born on June 5, 1883. His father John Neyille Keynes was a distinguished writer on political economy and logic and was for many years the registrar of the Cambridge University. Keynes was in college at Eton. He won scholarship to king's college in mathematics and classics and graduated from Cambridge University in 1905. He was the president of Cambridge union, won the member's English Essay prize for an essay on the political opinions of Burke and was twelfth wrangler in the mathematical tripods.

He studied in philosophy and economics and such men as Sedgwick, white head, W.E. Johnson, G.E. Moore and Alfred Marshall, influenced him. In 1906, he passed second in to the civil service, in India, getting his worst marks in economist. During his two years there, from 1906-08 he worked on his fellowship dissertation on "probability," which gained him a prize fellowship at kings. He lectured on money in the Cambridge University.

From 1913-1914, he was a member of the Royal commission on Indian currency and finance. During the period from 1915 – 1919, he served in the British Treasury. Till 1940 he resigned and returned to teaching at King's. In 1940 he was made a member of the Chancellor of the Exchequer's Consultative Council and played an important part in treasury business. He was made a director of the Bank of England. In 1942 he was created Lord Keynes. In 1943, he was made steward of Cambridge.

He was the leader of the British experts in the preparatory discussion of 1943 and was the author of the "Keynes plan" – the proposal for establishing an international monetary authority. In July, 1944 he led the British delegation of the monetary conference on the united and associated

nations at Britton woods. In February 1946, he was appointed as the Governor of the International Monetary Fund and the International Bank for Reconstruction and Development. He died on April 21, 1946.

Generally during forty out of these sixty-three years, that is, from his leaving the University to his death, he was continually active as an Economist, in Every form which was open to her: as thinker, writer, teacher Public servant, and statesman. He was one of the most brilliant conservative economists of the 20ths.With A. Smith and K. Marx, Keynes stands as one of the **three Giant** figures in the history of economics;

→ **Smith** can be viewed as **optimist of this trio**

→ **Marx** can be viewed as the **pessimist** i.e. capitalism is **self-destroying**

→ **Keynes** can be viewed as the **pragmatic savoir** of capitalism

- Keynes:
  → His first book "***The Economic Consequence of the Peace***" (1919), a book about the **Versailles peace treaty**.

He did not approve of the outcome of the treaty and provided an angry critique of the peace treaty. He claimed that the crushing reparations that Germany was forced to pay the Victorians of the **allies** would disable Germany's economic recovery. His best known book "***The General Theory of Employment, Interest, and Money***" was published in 1936. This work has been responsible for the development of a whole branch of economics (**Macroeconomics**). In the book, he attempted to show what had happened to capitalism. So that measures could be taken to **preserve the system**.

5.3 The Myth of Self-Adjusting Market: Classicals

- The **three principal ideological elements** of neo-classical utilitarianism were;
  1. The marginal productivity theory of distribution, which pictured competitive capitalism as an ideal of **distributive justice**.
  2. The "**invisible hand**" argument, which pictured capitalism as an ideal of rationality and efficiency
  3. The faith in the **automatic**, self-adjusting nature of the market

- Each of these three of **utilitarian conservatism** promoted the general acceptance of **unfettered profit making**.
- The argument for self-adjusting markets (Say's law) was an effective argument for limiting the function of existing governments.
- But the capitalism market system has never adjusted **smoothly** and **automatically** to **full employment** equilibrium.
- The capitalist market system has always been **anarchical**; the history of capitalism is a history of **economic instability**.
- During the first half of 19th c **USA** had **two sever economic crises** while **England** had **four**. Increasingly frequent depressions plagued capitalism, culminating in the depression of the 1930s. What had happened to reduce the output of goods and services so drastically in 1930's
- During those times;
  - → Natural resources were still as plentiful as ever
  - → The nation still had as many factories, tools, and machines
  - → The people had the same skills &wanted to put them work
  - → Yet millions of workers and their families stood & begged, borrowed, stole, lined up for a pittance from charity, etc. While thousands of factories stood idle & operated at far below capacity.
  - → Factories could have been opened and men put to work, but they were not because it was not profitable for businessman to do this.
- In capitalist economy, production decisions are based primarily on **profit not on people's needs**. But neo-classical economists, with its automaticity of the market, offered **no cure for the malady of capitalism**. ***In neo-classical theory depressions did not occur, so there was no need to remedy them***

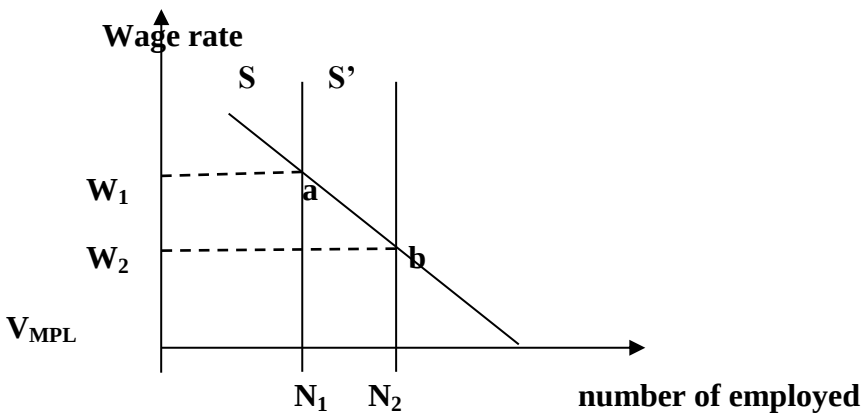
5.4 The Theoretical Setting of Keynes's Analysis

- Keynes's theory was set in a conceptual contest that was basically the **same as Warlasian General Equilibrium theory**. In the neoclassical vision of how competitive capitalism normally functioned; **Leakages equals Injections**. The three **leakages**

(saving, imports & taxes) may be offset by **three spending injections** into income-expenditure flow;

1) Imports can be offset by exports
2) Taxes can be offset by government spending
3) Saving can be offset by investment

In the neo-classical in the short run period, with a **given amount of capital existence**, the **demand for labor** was determined by the $\mathbf{V_{MPL}}$

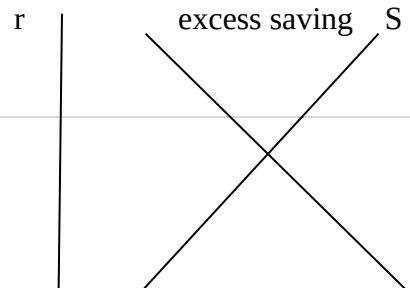


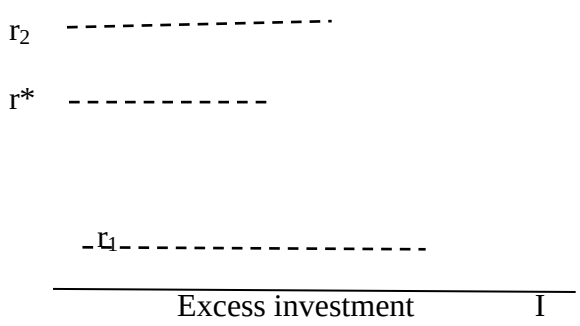
Illustrations;

→ If labor supply increase from **S→S'** wage rate decreases from $\mathbf{W_1 \rightarrow W_2}$

→ If $\mathbf{W_2}$ **were not accepted by the workers then they are voluntarily unemployed (**neoclassical). But Keynes calls this **involuntarily unemployed** because wage rate is fixed in the short-run. Rather for Keynes it is better to decrease the real wage ($\frac{W}{P}$) by increasing **price of good than cutting nominal wage** (W)(**neo-classical**)

- **For neo-classical all income would normally be spent**. The three injections into the income-expenditure flow would normally equal the three leakages.
- This was because;
    1) Neo-classical theory showed the free play of supply and demand would balance in the international transactions.
    2) Sound fiscal policy (Balanced Budget)
    3) The **rate of interest would always bring saving and investment into equality**.





- Hence, in neo-classical theory, competition automatically created an interest rate at which saving & investment were equal i.e.;
  - → All three leakages from the income-expenditure flow would automatically be bought into equality with all three injections into the flow.
  - → **Aggregate demand would automatically equal aggregate supply**.

Theory of Employment

Unlike the classical macroeconomic theory in which the real and monetary sector of the economic reminded dichotomized, in the Keynesian model they remain integrated forming parts of a compact whole. In the Keynesian theory, all the different sectors of the system remain tied together and all the variables are determined together. Not within standing the money crudities and rough edges present in the Keynesian macroeconomic model. We owe it largely to Keynesian s' original pioneering work for the tremendous advances that have taken place in the field of macroeconomic analysis following the publication of Keynes' magnum opus entitles **The General Theory of Employment, Interest, and Money in 1936.**

Simple Keynesian Model

The simple Keynesian model of income and employment determination can be studied either through the aggregate income-expenditure approach in the form of Y = C + I or through the aggregate selling investment approaches in the form of S = I. The later approach, aggregate saving-aggregate investment, is going to be considering studying the simple Keynesian model of income determination.

The Keynesian system, unlike the classical model, has a different setting. The saving-investment relationship is no longer immaterial for determining the aggregate output. In fact as a determinant of income, the saving-investment relationship exerts a dominating influence.

According to Keynes, saving is a function of income and is related to income through the marginal propensity to save (MPS = ds/dy). MPS is positive but less than one, i.e. $0<ds/dy<1$. The saving supply function for the simple aggregate saving – investment Keynesian model can, therefore, be written as: $S = s(y)$ and $ds/dy>0$.The investment demand may be treated as wholly autonomously determined being unrelated to income. Alternatively it may be treated as functionally dependent, on income increasing as income increases vice versa. Accordingly the investment demand function can be written as: $I = I(y)$ and $dI/dy>0$

For the stability of the system it is also necessary to assume that $dI/dy< ds/dy$.

The Effect of Change in Money Wage

The effect of a given change in money wage consequent upon a given rise in money wage, although prices must also rise but the rise in price must be relatively more than the rise in the money wedges. This is necessary for the total employment and output to increase because unless the entrepreneur find it profitable to increase employment and output they will not do so. And this is possible only if the prices rose relatively more than the corresponding rise in money wage so that the real wage falls. Stated differently, there must be a rise in prices relative to money wage leading to fall in real wage.

Keynes' argument against general wage-cutting as effective and practical remedy against unemployment was based on the fact that while a policy of wage-cut in one single industry might help to increase the demand for the product of that industry, to jump from this to the conclusion that an economy-wide general cut in wage will likewise also increase the aggregate effective demand was logical error.

Theory of Interest

In Keynesian terminology the rate of interest is the price paid for parting with cash or liquidity and using it for investment in assets. * Interest, thus, is determined by the liquidity preference. It is not the price, which brings into equilibrium the demand for reassures 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. In other words the rate of interest in the Keynesian sense, it is determined by the demand for and the supply of money. This theory is therefore, is characterized as the monetary theory of interest, as distinct from the real theory of the classical.

Supply of money: Of the two determinants of the rate of interest, the supply of money referees to the total quantity of money in the country of all purposes at any time. Though the supply of money is a function of the rate of interest to a desk, yet it is considered to be fixed by the monetary authorities, that is, the supply of money is taken as perfectly inelastic.

Demand for money: for the second determinant, the demand for money, Keynes coined a new term 'liquidity preference' by which his theories of interest is commonly known. Liquidity preference is the desired to hold cash. Thus the higher the liquidity preference, the higher will be rate of interest that will have to be paid to the lower the liquidity preference, the lower will be the rate of interest that will be paid to the cash – holders.

The preference of an individual of a group of individuals for cash to assets is known as liquidity preference. This preference may be for meeting:

a) The daily needs of life; which according to Keynes is the 'transaction motive'
b) Contingent needs; and
c) Business needs, chiefly influenced by the strength of "the speculation motive'.

The rate of interest is, thus, the price paid to an individual for parting with his liquidity preference. In the event of a moderate rate of interest, the community may not be prepared to part with its liquidity, whereas if the rate of interest is high enough, it may be inclined to do so. But the cost of holding cash will have a very limited influence on the first two motives stated above. These two motives are fairly stable in a particular socio-economic setups with a particular level of income. Obviously the higher the liquidity performance, the higher will be the rate of interest and vice versa.

Theory of Money

Keynes approach to the demand for money is contained in his well-known book entitled The General Theory of Employment, Interest and Money. The classical Economists did not stress the permanent store of value function of Money. According to Keynes, the classical approach to the demand for money was incomplete because it ignored the possibility of people choosing to hold money as an asset instead of other financial assets.

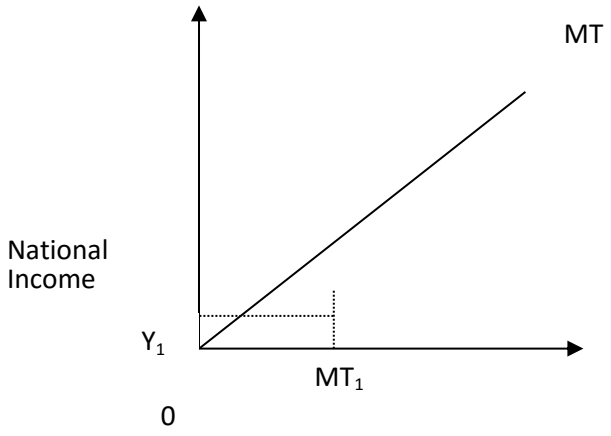
According to Keynes an individual's aggregate demand for money in the given circumstances is the result of a single decision, which is the composite of transactions, precautionary, and the speculative motive for holding money.

Transaction Demand for Money

It is the demand by firms and individuals households for holding of money to finance day-to-day transactions. The amount of money which consumers need for transactions purpose mostly for buying and selling of goods and services depends on the level of their money income, their spending habits and the time interval after which income is received. Given their spending habits and the duration of the pay period, higher the money income higher will be the amount of money which will be required for the transaction purpose. Consequently the transactions demand for money and the level of money income are positively correlated.

According to Keynes, the transaction demand for money was interest inelastic. It is, however, possible to expect the transactions demand for money to vary inversely with changes in the rate of interest.

Graphically,



Transaction demand for money (MT)

Precautionary Demand for Money

It is the demand for money, which arises out of uncertainty and the desired not to be caught short of ready cash. That is to say, apart from demanding money for transaction purposes, individuals and businessmen require money to meet unforeseen contingencies. One finds it convenient to hold some cash on which he can lean readily when some unforeseen need arises.

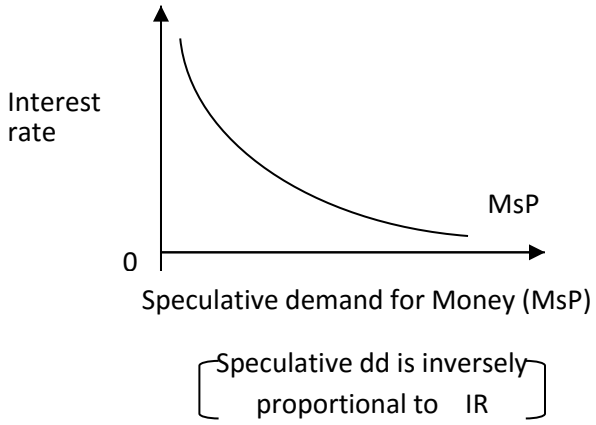
The demand for money is also likely to depend on National income: the higher the total value of transactions, the more money will be needed to guard against unexpected transactions. Rate of interest also influence the precautionary demand. The rate of interest is the opportunity cost of holding money: thus if interest rates rises, consumers and firms may be tempted to reduce their precautionary holdings and hold interest-bearing assets instead.

Speculative Demand for Money

It is the demand for money as a financial asset and therefore part of a wealth portfolio. It was in his analysis of the speculative demand for money that Keynes differed fundamentally from his predecessors.

Keynes argued that individuals would have some expectations or conceptions of the "normal" rate of interest. If the prevailing interest rate is low, the theory predicts a low demand for bonds and consequently, a higher demand for speculative money balances.

In this way, Keynes derived an inverse relationship between the rate of interest and the speculative demand for money.



Theory of Prices

Keynesian analysis of price is quite close to classical analysis. While agreeing with the orthodox view that an increase in the quantity of money in circulation leads to an increase in the price lead, Keynes has differed with traditional economists in one respect and, that is regarding the process through which this effect is caused. As a matter of fact, the classical quantity theory of money failed to analyze the process through which the price would be affected.

Keynes tried to fill the gap. According to him, the finding out of the exact process through which the quality of money affects the price level, would involve the following measures:

a) Finding the relation between money and aggregate demand

b) Assessing the effect of changes in aggregate demand on output and

c) Taking into account the change in the wage rates.

Increase in the supply of money is likely to increase the availability of funds to a certain extent, for speculative purposes. As already stated earlier, an increase in money supply tends to lower the rate of interest and increase the demand for investment, which ultimately leads to an increase in income, employment and output. This increased output can only be possible at an increasing cost beyond a certain point. Price will accordingly rise. "Supply price will increase as output from a given equipment is increased".

Thus, prices do not increase because the quantity of money has increased and the relation between the two is only remote. It would, thus, be observed that Keynes has established the relation between quantity of money and the price through output.

Wages form the most important constituent of the cost of production and since price varies with cost of production, it will ultimately be affected by the cost of labor i.e wage rate. During the period of expanding output, labor will become increasingly scarce and the money wage rates will rise, depending, of course, on the bargaining capacity of the laborers. Such an increase in wage rate would automatically lead to an increase in prices. What portion of this increase would go to wage earners and what proportion the entrepreneurs, would take away, will depend up on their relative bargaining strength.

Theory of Wage Rate

It may be possible that a change in money wage rates may cause a change in the real investment. But if the investment itself is dependent on the level of real income or the volume of real consumption expenditure, it is not clear how such a change would take place. Similarly, the marginal efficiency of capital is not changed by a change in money wage rate. The rate of real investment can be affected in three ways: It may, in the first instance, affect the business confidence. The individual businessmen may think that a cut in the money wage rate reduces their costs.

On the other hand, a cut in wage rates and prices increase the real burden of the debt of the entrepreneurs. A cut will stimulate demand for exports and lead to increased consumption of home goods as compared to foreign goods. This would result in an increase in the real investment and finally in the real income and total employment in the currently. A rise in money wage rates would lead to an opposite situation. It may be possible that these effects may be neutralized by corresponding change in the wage rates of exchange rates in other countries.

A change in the money wage rates, prices and money incomes brings out a change in the demand for cash balances for transportation purpose, in the same direction. If the quantity of money in circulation remains the same, a reduction in the money wage rates would leave a larger supply of money to satisfy the demand for cash balances. The rate of interest would fall and thus, the rate of real investment would increase. Likewise; an increase in money rate would increase the interest rate and diminish the rate of real investment.

This is how Keynes could justify the relationship between money wage rates and implement, in a closed economy, which was really a far-fetched idea. It would be interesting to look at the wage problem in the context of the general theory. Keynes tried to establish first, that there may be involuntary unemployment of labor, and second, that labor may not be able to remove such unemployment by making new money wage bargains. Keynes held that involuntary unemployment may be because additional labor would be offered at the falling money wage rate at the same of lower real wage rates. "Labor upset by a money illusion" will permit its real wage to be reduced by price rises without leaving the market, even when it will not accede to the same reduction in its real wage by a money wage cut. At the same time, labor is powerless to take advantage of potential demand for its services at lower real wage rates, because a reduction in the money wage may not lead to a reduction in the real wage.

Concept of Multiplier

The concept of multiplier was first developed by R.F. Kahnvide his article: "The Relation of Home Investment to unemployment", Economic Journal, June 1931. Keynes has also acknowledged this fact.

The aggregate income of the community, thus, is determined by the rate of investment together with the propensity to consume. The ratio between an increment of investment and the resultant increment of the total income, the propensity to consume remaining the same, is called by Keyes as "multiplier". The creation of one gives rise to a number of waves, similarly in Economy, each injection of money gives rise to a series of new money.

The multiplier is, thus, a number by which the increase in investment must be multiplied in order to give the resulting increase in income. If an investment of Birr 1 causes an increase in the total income by Birr 3, then the multiplier is 3. In case the increased income amount to Birr 2 the multiplier is 2. Thus multiplier, in short, is a numerical co-efficient, indicating how great an increase in income result from each increase in investment. The question is: How and why the increase in the total income is more than in proportion to the increase in the investment? The reason is that with each investment, the result and expansion in production and national income is much more than the primary investment.

A part of this increased income will be spent by the wage earners and by the recipients of profits and interest, leveling do increased income to others in the economy. Thus increased income will again be spent and the process will go on repeating.

If the total of all these secondary incomes were immediately spent, the increase in secondary income would be so rapid at each turn-over that it would result in a maximization of income and full employment. If the process continues, the result would be inflation. In case, with an increase in income, there is no increase in consumption, the multiplier effect would be Zero

Thus, the relative proportions of spending and saving, out of the increased income determine the amount of the multiplier. Multiplier depends upon the propensity to consume, which in turn, determines the proportion of savings out of each investment. Whatever the multiplier, the total of savings during all the turnovers will necessarily be equal to the original investment. It would, thus, be observed that investment will result in an increase in income up to the point at which the

saving would be equal to it. The propensity to save being stronger, the increase in income would be small and vice versa. The higher the consumption function or spending, the greater will be the multiplier. If the marginal propensity to consume is 2/3, the multiplier would be 3. If it is ½, the multiplier would be 2, if it is ¾, the multiplier would be 4.

Multiplier always reciprocates with the marginal propensity to save (MPs).

It can be explained as under:

Change in Income = 1/MPs x Change in investment OR

Change in Income = 1/1 -MPc x Change in investment

If the marginal propensity to save is 1/3 or the marginal propensity to consume is 2/3, the equation would be as follows:

1 x Birr 1000 = Birr 3000 (total income) OR

1/3

1 x Birr 1000 = Birr 3000 (total income)

1- 2/3

Theory of Trade Cycle

Keynes never formulated a theory of trade cycle. His purpose was to build up a theoretical structure applicable to all phases of the economy. Since his idea were formulated mostly under the impact of the great depression, these are most suited as cures of depression, from his general theory, one can draw inter encase regarding his views on businesses cycle. To Keynes, the cycles express the relationship between current aware of interest and the marginal efficiency of capital. He believed that fluctuations occur in the economy, throughout the variations in the marginal efficiency of capital. Keynes observed that during the nineteenth century the fluctuations in the marginal efficiency of capital occurred in a rhythmic fashion i.e. a cyclical fashion.

In his words, “there so some recognizable degree of regulation in the time sequences duration of the up word & down ward movements.” Prior to Keynes it was generally be lived that an initial rise in income employment & price would stimulate the economy at an accelerated rate, until the

entire resources of the community are employed or until the point of full employment in reached, or until an artificial check in put by some outside force. Those economists hold that such a break can be put by the inability of money market to make available the required funds Keynes, however, emphasized that it is the effective demand' that play an important role.

His analysis is like this during the period of prosperity of the habit and consumption of people being relatively fixed, they tend to spend less than their income. This is because a relatively large part of an increase income goes to businessmen, whose prosperity to consume in relatively lower than that of other classes in the community. The overall prosperity of the entire community to consume tends to fall. Consequently, the businessmen's expect action decline, while at the same time, the increase of business activity has already increased the price of capital goods. Since the marginal efficiency of capital is the ratio between the anticipated earning of future investment and their supply price, the investment shows a declining tread. Thus it is the schedule of marginal efficiencies of capital which creates an imbalance between savings and investments.

In case, savings are more than investments, the growth in checked and vice versa. As soon as this expectations of the businessmen regarding the future profitability of new investment fall, their liquidity preference increase leading to a rise in the rate of interest. This worsens the situation all the more the result would be that the contraction of investments would be at an accelerated rate and when investments fall, the "multiplier" works in the reverse direction and employment in greatly reduced.

Hence, the chronic under- investment and under-consumption lead to depression. The phase of recovery can only start when consumers' demand goes up, without any addition to the present output. This can be possible only through public investments in producing non-market goods or services, where in the rate of profit, expected or actual, no are consideration. The return to recovery may take some time and it depends upon how soon the marginal efficiently of capital in re-established to businessmen's faith in revived.

The concept of multiplier establishes a precise relationship between aggregate income and the rate of investment (which is a function of marginal propensity to save), the marginal propensity to consume remaining the same. The multiplier explains the level of employment expected from a given fluctuation in investment. As Keynes said, "Given the propensity to consume and the

rate of new investment, there will be only one level of employment consistent with "equilibrium". This concept gives an insight into the working of the economy and the part played by the psychological desire among men to save or to consume. Creator savings during depression are likely to make depression worst and reduce the level of income. High consumption and high investment should, however, go hand in hand and should not compete with each other. This is why Keynes thought that government spending on productive purposes may produce or multiplied increase in employment.

Keynes's Analysis of Capitalist Depressions

- He **rejected the notion** that if a capitalist economy started from a situation of **full employment**, then the rate of **interest would automatically equal saving and investment**.
- His major departures from the doctrines that comprised the neo-classical theory of **automaticity were two fold**;
    1) Although he accepted the neoclassical notion that saving was influenced by the rate of interest, he insisted that the level of aggregate income was a far more important influence on the amount of saving than was that of interest.
    2) He argued that saving and investment did not determine the rate of interest rate. The rate of interest was a price that equalized the demand and supply of money.
- The first one is related to the notion of **effective demand** while the latter one is related to the notion of **liquidity preference**.

Effective demand and Employment

- Let us ignore "NX" & "G", hence

  $\mathbf{Y=C+I}$

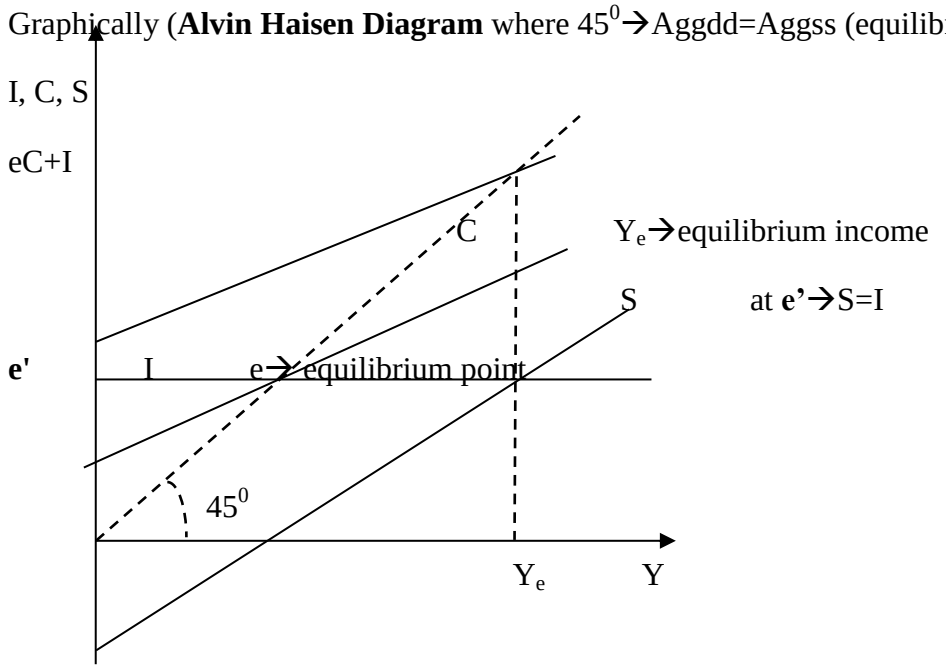
  $\mathbf{C=C_0+cY}$

  $\mathbf{S=-C_0+sY}$

  - C_0→ autonomous consumption (never depend on income)
  - c→MPC
  - Y→income
  - s→MPS
  - C→consumption
  - S→saving

- **Since "C_0" is small**, the consumption function is called "**Induced component**" similar to that of saving
- $I = \bar{I}$→autonomous component (given) because it is assumed not affected by income (not dependent on income)

Graphically (**Alvin Haisen Diagram** where 45^0→Aggdd=Aggss (equilibrium line)



- **"e" should not be necessarily full employment point for Keynes but necessary for neoclassical**
- For neo-classicals saving determines investment
- But the greatest revolution in Keynesian economics is that investment determine saving ($I \rightarrow S$)
- Example; if a businessman increase investment through borrowing of $100, the increase in income will be by more than $100 because of the multiplier effect (M)

  $M = \frac{1}{1-MPC}$ If MPC=80%=0.8 then MPS=20%=0.2
- M=1/1-0.8=5 then income increase by =$100X5=$500 and the amount saved= 20% of $500=$100
- Hence investment determines saving

5.5 Classical Economics Vs. Keynesian Economics

To some, Keynesian Economics is just the classical Economics restated and further developed. To others, it represents a genuine break. The following are the general departures from the classical Economics.

- Because output and employment are supply determined, the level of aggregate demand will have no effect on output. As J.S. MILL said so "the legislator, he did not give himself concern over the demand for output."
- All demand side factors have no role in determining output and employment. Like: -
  - ⊗ Quantity of money
  - ⊗ Level of government spending
  - ⊗ Level of investment demand by business sector
- In general
  - ✓ The sticking feature of classical model is the supply determined nature of output and employment. This property follows from the vertical aggregate supply curve.
  - ✓ The classical aggregate supply curve is vertical due to the assumption we have made about the labor market.
  - ✓ Two assumptions implicit in classical representation of labor market are
    - I. Perfectly flexible prices and wages
    - II. Perfect information about prices by the participants of the market
  - ✓ If such a model is to explain employment and output in the short run, prices and wages must be perfectly flexible in that time period.
- These two assumptions are the elements of classical theory that **KEYNES** attacked.
- By 1930's our world face great economic depression. The economy was unable to adjust or came at full employment level
- According to Keynesian school of thought: -
  - Wages and price are inflexible down ward at least in the short run.
  - Wages, rents and other production costs are set by contracts in the short run and cannot be reduced until the contract is expired sometime in the future.

- Government role is important to influence aggregate demand to ensure full employment.
- The key to Keynes analysis was the role of aggregate demand
- The equilibrium level of GNP determined by the volume of expenditure planned by:
    - Consumers
    - Inventors
    - Government
    - Foreigners

5.6 Keynesian Economics and Underdeveloped Countries

- The Keynesian postulate that the economy is determined by the forces of demand & supply is a useful piece of theory for analyzing the problem of underdeveloped countries.
- But we must not forget that, no matter how pure a piece of economic theory is, it rests on some political assumptions.
- Aggregate demand and supply functions may not have much meaning in an economy where private motivation is far less important than the social motivation, where producers are given to think of the next rather than the present life.
- We know that some underdeveloped countries prefer to have a **socialistic bias** in their economic planning
- The producer in the agricultural sectors of underdeveloped countries often included to think in terms of salivation rather than maximization of material satisfaction in the present life.
- For Keynesian, due to labor unions the laborers inclined to resist reduction in wage, hence equality between aggregate demand & supply would not be guaranteed.
- However there is an assumption in the Keynesian model that there could be a change decrease/increase the real wage rate because most of the time the laborers are ignorant about the real wage rates
- But in this regard most underdeveloped agricultural sectors are being paid near minimum of subsistence; do not admit of any reduction at all.
- For Keynesians the is employers and laborers, the employer will be at equilibrium when aggregate demand and supply prices are equal but as stated earlier the labors would resist any

kind of reduction in wage rated that would make difficult the equilibrium for the laborers market. In this regard the problem with underdeveloped nation is most of the people are self-employed hence the above situation even do not work for them.

- The taxation policy proposed by the Keynesian economics is progressive tax hence it will encourage people to consume more than save less or it may distribute income from high income group to low income group which makes them beneficiary. This raises the total consumption demand of the economy and help to sustain effective demand
- Effective demand for Keynesian can be increased by using either increased investment or consumption. But for economies like underdeveloped nations in which there is excess labor supply a progressive tax which inclined to increase effective demand through consumption is highly improbable. This is due to the fact that the excess labor needs more to save latter to invest (inconsistent **with Keynesian investment led saving theory**) which is reduced by progressive tax.
- Again from monetary side Keynes proposed easy of finance in time of trouble in order to use idle capital. But in underdeveloped countries easy finance may create excessive demand for capital which is already in short supply.
- This may create undue encouragement to capital intensive biases in production situation where, owing to lot of surplus labor, the nee may be more for a capital-saving bias.
- Deficit financing too is a method of utilizing idle capital through easy fiancé.
- When the private sectors are not in a position to invest, the state may undergo through borrowing or creating money. Once the people are employed, no matter even if in digging holes and filling them up again, they get income hence they will demand more production which encourage the reluctant private investor to invest. And thus the tempo of the economy is maintained.

- But in underdeveloped economies first of all capital stock has to be increased finance itself, it is obvious, is not capital.
- Keynesian economics proposed foreign investment through surplus BOP that results from protective trade when the home investment is lacking but the protectionist policy may lead to inflationary pressure at home and again if a given economy wants to invest in foreign economy it has to have the same currency like the foreign country or gold metals.

- A Keynesian investment Multiplier suggest that if more demand for machines has been created, more machines will be immediately produced and made available. If more food is being demanded, more food would be immediately produced and supplied. And so on. In underdeveloped economies we cannot dream of having such automaticity
- But Keynesian consumption Multiplier is more valid for such underdeveloped economies. It does not require elastic supply like investment multiplier because little changes consumption goods due to tax or foreign aid can make the ball to role.

5.7 Criticism of Keynesians

- The Keynesian theory of income, output and employment determination has been criticized on several grounds.

- **Firstly** it has been grounded by the critics that the Keynesian model is too aggregative. It has fewer those necessary variables and relationships. It does not disaggregate the variables involved into their various component parts.
- **Secondly** the Keynesian model has been criticized as being **"too static"** in the sense of being concerned with equilibrium conditions during the short period in which technology and capital stock are given and are benefit of changes **"On the one hand, the model cannot deal with the short-run dynamics of income change; on the other it is not studied to the analysis of problems of long-term growth."**
- **Thirdly** the Keynesian assumption of autonomously determined rigid money wage is analytically unsatisfactory and practically unattainable.
- **Fourthly** the Keynesian analysis of money and interest rate is defective.
- **Fifthly** Keynes limits the composition of the asset-portfolios of wealth-holders to money bonds and goods completely ignoring that there are corporate shares, debentures and myriads of other securities, which wealth-holders acquire as a part of their asset-portfolios.
- **Sixthly** the Keynesian model ignores lagged relationships with the result that it excludes discussion of both the dynamic multiplier and acceleration.
- **Seventhly** Keynes offered no imperial evidence for making some crucial assumption in his model. These critics are based on Gardner Ackeley's discussion of the criticism of the Keynesian model of income and employment.

- His analysis is like this during the period of prosperity of the habit and consumption of people being relatively fixed, they tend to spend less than the increase in their income. This is because a relatively large part of an increase income goes to businessmen, whose prosperity to consume in relatively lower than that of other classes in the community. The overall prosperity of the entire community to consume tends to fall. Consequently, the businessmen's expect action decline, while at the same time, the increase of business activity has already increased the price of capital goods. Since the marginal efficiency of capital is the ratio between the anticipated earning of future investment and their supply price, the investment shows a declining tread. Thus it is the schedule of marginal efficiencies of capital which creates an imbalance between savings and investments.
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- The return to recovery may take some time and it depends upon how soon the marginal efficiently of capital in re-established to businessmen's faith in revived.

Self-Exercises

1. Explain the neo-classical mentality regarding full employment level of production.
2. Explain the essence of Keynesian revolution.
3. Discus the functional relationship of employment, consumption and investment.
4. Explain, using Keynes's concept of the marginal efficiency of capital, how it is Possible for investment spending to decline, even though the market rate of interest remains unchanged?