Subject – Macroeconomics

Notes Unit 3 Part B

By -

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Pigou Effect on Wage Flexibility and Full Employment:

Keynes argument that the liquidity trap would prevent wage price flexibility from restoring full employment has not gone unchallenged.

The distinguished economist A C. Pigou argued that even though the liquidity trap might bar the way to an increase in employment—via changes in interest rates and investment—falling wages and prices would sooner or later restore full employment because a decline in the price level would cause the consumption function to shift up.

The mechanism by which consumption rises is commonly called 'Pigou Effect'. The essence of 'Pigou Effect' is that an overall reduction leads to increased spending on goods and services.

Pigou effect is based on the following assumptions:
(i) That individuals hold money, balances and spend them according to a desired ratio between these and their incomes,

(ii) Fall in prices increases the real value of money holdings which can now buy more goods,

(iii) The ratio between real balances and expenditures is disturbed because individuals have an excess supply of liquid assets, and

(iv) They spend a part of this excess supply on goods and services.

We can now easily understand why Pigou effect operates in the commodities market only. Prof. A C. Pigou introduced an additional variable into the classical saving function, namely "the real value of cash balance." Thus, Pigou's neo-classical saving function should be written as: S = F(r, Y, m/p), where r is the rate of interest, Y the level of income, M represents the quantity of money in circulation (consisting of government-issued currency and government securities owned by consumers); P stands for the average price level or the cost of living index, so that M/P represents the "real value of cash balances."

According to Prof. Pigou, there is a direct relation between the real value of liquid assets and the propensity to consume. His contention is that a fall in wages and prices will raise the "real value of cash balances" and other forms of accumulated savings (mainly government securities). This will, in turn, lead to an increase in the propensity to consume, thereby expanding investment and employment.

Just as people spend more on consumption with a rise in the value of their liquid assets, so they consume more if value of their liquid assets is increased as a result of a fall in the price level. As the level of prices falls, the real value of assets whose prices are fixed in nominal terms rises. A fall in the price level makes debtors worse off and creditors better off.

The magnitude of Pigou Effect is determined by the difference between the spending propensities of debtors and creditors in response to a change in the price level. The difference in the consumption responses to wealth changes is due to the fact that the government is a net creditor. If, then, it is assumed that the marginal propensity of the government to spend wealth is zero while the marginal propensity of the people to consume wealth is positive, a transfer of wealth from one section to the others due to a change in the price level will cause the level of total spending to change.

Thus Professor Pigou's argument is that a fall in wages and prices may lead to a rise in the real value of money assets affecting propensity to consume favorably. This contention is based on the assumption that as the real value of cash balances increases, the desire to save out of real income is lowered.

Limitations of Pigou Effect:

To the extent the Pigou effect can raise the income level, it may be said that Pigou met Keynes on the latter's own ground. At least in terms of pure theory Pigou seems to have 'triumphed' over Keynes in establishing the possibility of full employment through wage cuts. But economists, in general, concede no such victory to Pigou and classical theory.

Pigou Effect has been criticised on the following grounds:

1. Altogether Uncertain and Neglects Expectations:

Prof. K.K. Kurihara contends that falling wages and prices instead of increasing the propensity to consume may increase propensity to save. With wages and prices declining unchecked consumer's overall asset position can be so adversely affected as to strengthen their desire to add more to their assets and less to their consumption, especially when the real value of consumer durables and such non-monetary assets is reduced much more than that of liquid assets is increased. The individuals who save seem to be rather rare birds, just the kind of people whose appetite for saving would grow as their stockpile of liquid assets is increased. Pigou Effect assumes too much about our knowledge of how an increase in the real value of money assets affects the propensity to save.

2. Very Weak:

Prof. Patinkin has stressed that "the stimulating effect of larger real cash balances on consumption may well be offset by the discouraging effect of increased debt burden (in real terms) has on consumption due to lower prices to leave the net effect very small, if any."

3. Depends upon the Distribution of Assets:

Pigou Effect must be weighed quantitatively. It will depend upon the actual distribution of assets among different income groups and the extent to which the consumption function responds to an increase in the real value of liquid assets. The point to be remembered is that unless the lower income groups, the high consumers, own large money wealth (governments securities, etc.), Pigou Effect will have little importance: the scope for the operation of Pigou Effect is really small if assets are **"continued to be owned by wealthy individuals and financial institutions rather than by broader consuming public."**

Even if the Pigou Effect could prove quantitatively significant, automatic full employment might not be the necessary outcome of wage-price flexibility. This is exactly the position in under developed countries having poor money and bill market. People do not have assets preference and do not possess securities, assets, or bills, so that when prices fall Pigou Effect is almost nil in such economies.

4. Operates only During Deflation:

Taking into consideration the short-term cyclical effects let us assume that the reduction in wage cost has been completed. What is the guarantee that the larger real value of money assets raises the consumption function, so that full employment is ensured? The reply is in the negative since as recovery progresses, prices will begin to rise and the real value of money assets progressively falls. Instead of acting as a reinforcing factor, the real-asset effect begins to vanish once the lower turning point in the cycle is reached.

5. MPC is Less than Unity:

The Pigou Effect can never work to bring full employment in the economy. Referring to it Hansen writes: "On the basis of Keynesian theory, it is possible to argue that reliance for stimulating effects of general wage reductions on consumption alone is bound to be self-defeating, because the marginal propensity to consume is less than one. Thus, optimistic expectations on the part of businessmen induced by the general wage fall are inevitably disappointed, unless the wage cuts stimulate investment as well as consumption. Any increase of output induced by a fall in wages will fail to generate enough consumption to absorb the entire increment in national income (so long as MPC is less than one)."

Thus, non-possession of money assets and those who possess, their desire to possess still more, change of consumption in response to permanent wealth appreciation and presence of money illusion are factors limiting the effectiveness of Pigou Effect. All things considered, the Pigovian argument appears impractical as an approach to the solution of the unemployment problem. In fact, Professor Pigou himself did not really see it being used for this purpose. He described certain aspects of his argument as **"academic exercises of some slight use for clarifying thought, but with very little chance of ever being used on the chequer board of actual life."**

Keynes’ Theory of Employment: The Concept of Effective Demand:

According to classicists, there will always be full employment in a free enterprise capitalist economy because of the operation of Say’s Law and wage-price flexibility. This classical theory came under severe attack during the Great Depression years of 1930s at the hands of J. M. Keynes.

He rejected the notion of full employment and instead suggested full employment as a special case and not a general case. Full employment is a temporary phenomenon, an astrological coincidence! He claimed his theory to be **‘general’**, i.e., applicable at any point of time. That is why he christened his epoch-making book: The General Theory of Employment, Interest and Money (1936). Thus, Keynes’ theory is **“general”**.

In this book, he not only criticized the classical macroeconomics, but also presented a **‘new’** theory of income and employment. He is often described by economists as a revolutionary one in the sense that it was Keynes who salvaged the capitalist economy from destruction in the 1930s. Critics, however, label him as a **‘conservative revolutionary’**.

Keynes’ theory of employment is a demand-deficient theory.

This means that Keynes visualized employment/unemployment from the demand side of the model. His theory is thus known as demand-oriented approach. According to Keynes, the volume of employment in a country depends on the level of effective demand of the people for goods and services. Unemployment is attributed to the deficiency of effective demand.

It is to be kept in mind that Keynes’ theory is a short run theory when population, labour force, technology, etc., do not change. Once Keynes remarked that since **“in the long run we are all dead”**, it is of no use to present a long run theory. In view of this, one can argue that the volume of employment depends on the level of national income/output.

Higher (lower) the level of national output, higher (lower) is the volume of employment. Thus, Keynesian theory of employment determination is also the theory of income determination. In this section, we intend to determine the level of employment in terms of the principle of **‘effective demand’**.

(a) Meaning of Effective Demand:

Keynes' theory of employment is based on the principle of effective demand. In other words, level of employment in a capitalist economy depends on the level of effective demand. Thus, unemployment is attributed to the deficiency of effective demand and to cure it requires the increasing of the level of effective demand.

By **'effective'** demand, Keynes meant the total demand for goods and services in an economy at various levels of employment. Total demand for goods and services by the people is the sum total of all demand meant for consumption and investment. In other words, the sum of consumption expenditures and investment expenditures constitute effective demand in a two-sector economy.

In order to meet such demand, people are employed to produce all kinds of goods, both consumption goods and investment goods. However, to complete our discussion on effective demand we need another component of effective demand—the component of government expenditure. Thus, effective demand may be defined as the total of all expenditures, i.e.,

C + I + G

Where, C, I and G stand for consumption, investment, and government expenditures.

Here we ignore government expenditure as a component of effective demand. According to Keynes, the level of employment is determined by effective demand which, in turn, is determined by aggregate demand function or aggregate demand price and aggregate supply function or aggregate supply price.

In Keynes' words:

"The value of D (Aggregate Demand) at the point of Aggregate Demand function, where it is intersected by the Aggregate Supply function, will be called the effective demand."

i. Aggregate Supply (AS):

Employers hire and purchase various inputs and raw materials to produce goods. Thus, production involves cost. If sales revenue from the sale of output produced exceed cost of

production at a given level of employment and output, the entrepreneur would be induced to employ more labour and other inputs to produce more.

At any given level of employment of labour, aggregate supply price is the total amount of money that all entrepreneurs in an economy expect to receive from the sale of output produced by given number of labourers employed. For each particular level of employment, there is an aggregate supply price.

Here, by **'price'** we mean the amount of money received from the sale of output, i.e., sales proceeds. Thus, aggregate supply prices refer to the proceeds from the sale of output at each level of employment and there are different aggregate supply prices for different levels of employment. If this information is expressed in a tabular form, we obtain **"aggregate supply price schedule"** or aggregate supply function.

The aggregate supply function is a schedule of the minimum amounts of proceeds required to induce varying quantities of employment. Simply, it shows various aggregate supply prices at different levels of employment. Plotting this information graphically, we obtain aggregate supply curve.

According to Keynes, aggregate supply function is an increasing function of the level of employment. Aggregate supply (AS) curve slopes upward from left to the right because volume of employment increases with the increase in sale proceeds.

But there is a limit to increase output level. This is called full employment level of output beyond which output cannot be increased. It is because of full employment that AS curve becomes vertical or perfectly inelastic. This means that the level of employment cannot exceed full employment (N_f) even by increasing aggregate supply price. This is shown in Fig. 10.4.

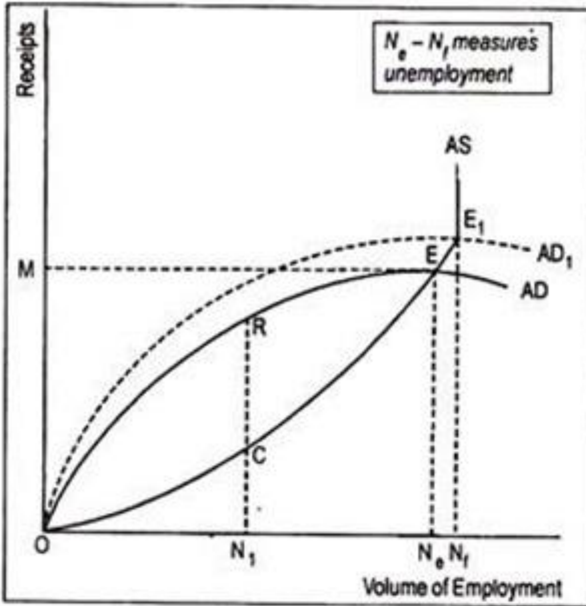

Fig. 10.4: Effective Demand and Determination of Employment

ii. Aggregate Demand (AD):

Aggregate demand or aggregate demand price is the amount of money or price which all entrepreneurs expect to receive from the sale of output produced by a given number of men employed. Or it refers to the expected revenue from the sale of output at a particular level of employment.

Each level of employment is associated with a particular aggregate supply price and there are different aggregate demand prices for different levels of employment. Like the aggregate supply schedule, aggregate demand schedule shows the aggregate demand price for each possible level of employment.

Plotting the aggregate demand schedule we obtain aggregate demand curve as there is a positive relation between the level of employment and aggregate demand price i.e., expected sales receipts. This is shown in Fig. 10.4. It rises from left to right.

(b) Equilibrium Level of Employment —the Point of Effective Demand:

We have studied separately aggregate demand and aggregate supply as the two determinants of effective demand. Now we will describe how equilibrium level of employment is determined in an economy by using the concept of effective demand.

The level of employment in an economy is determined at that point where the aggregate supply price equals the aggregate demand price. In other words, the intersection of the aggregate supply function with the aggregate demand function determines the volume of income and employment in an economy.

It is thus clear that so long as expected sales receipts of the entrepreneur (i.e., aggregate demand schedule) exceed costs (i.e., aggregate supply schedule), the level of employment should be increasing and the process will continue until expected receipts equal costs or aggregate demand curve intersects aggregate supply curve.

Note that the AS curve starts from the origin. If aggregate receipts (i.e., GNP) are zero, entrepreneurs would not hire workers. Likewise, AD curve also starts from the origin. The equilibrium level of employment is determined by the intersection of the AS and AD curves.

This is the point of effective demand—point E in Fig. 10.4. Corresponding to this point, ON_e workers are employed. At the ON_1 level of employment, expected receipts exceed necessary costs by the amount RC. Entrepreneurs will now go on hiring more labour till ON_e level of employment is reached.
At this level of employment, entrepreneurs' expectations of profits are maximized. Employment beyond ON_e is unprofitable because costs exceed revenue. Thus, actual employment (ON_e) falls short of full employment (ON_f). Keynesian system shows two kinds of equilibria—actual employment equilibrium determined by AD and AS curves and underemployment equilibrium.
Keynes made little emphasis to the aggregate supply function since its determinants (such as technology, supply or availability of raw materials, etc.,) do not change in the short run. Keynes was examining the possibility of unemployment in a capitalistic economy against the backdrop of the Great Depression of 1930s.

After diagnosing the problem, Keynes recommended policy prescription so as to create more employment in the economy. Indeed, for curing unemployment problem, he did not subscribe to the classical ideas— the supply-oriented policies.

Keynes attached great importance to demand-stimulating policies to cure unemployment. In other words, Keynes paid emphasis on the aggregate demand function. That is why Keynes' theory is known as a **'theory of aggregate demand'**.

Fig. 10.4 shows the situation of equilibrium at less than full employment level. Actual equilibrium, ON_e, is short of fill employment equilibrium, ON_e. Thus, the distance $ON_f - ON_e$ measures unemployment. This is called involuntary unemployment— a situation at which people are willing to work but do not find jobs. This unemployment, according to Keynes, is due to deficiency of aggregate demand.

This unemployment can be removed by stimulating aggregate demand. Aggregate demand is the sum total of consumption and investment demand or expenditures in the economy. By raising consumption expenditure, level of employment can be raised. But there is a limit to consumption expenditure. So what is needed is the raising of (private) investment demand.

Anyway, increase in consumption demand and investment demand will raise the level of employment in the economy. The point of effective demand has been changed in Fig. 10.4 because of the shifting of AD curve from AD to AD_1. New effective demand is now given by E_1. Corresponding to this point, equilibrium level of employment is ON_f—the level of full employment.

Thus, in Keynes' theory, unemployment is due to the deficiency of effective demand. Only by stimulating effective demand can a higher level of employment be achieved. However, Keynes goes on arguing that equilibrium level of employment will not necessarily be at full employment.

A capitalist economy will always experience underemployment equilibrium—an equilibrium situation less than full employment. Full employment, according to Keynes, can never be achieved. In Keynes' scheme of things, both consumption and investment cannot be raised enough to employ more work force.

Therefore, he recommends government to come forward and take appropriate action to cure unemployment problem. This means that aggregate demand is now the sum total of all consumption, investment and government expenditures.

It is because of the multiplier effect of both private investment expenditure and government expenditure that there will be larger income, output and employment**.**

But, equilibrium in the economy will be established at less than full employment situation because of:

(i) Wage rigidity

(ii) Interest inelasticity of investment

(iii) Liquidity trap.

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