

demand for products. Thus, an aggregate demand failure involves a vicious circle: if I supply more of my labor-time (in order to buy more goods), I may be frustrated because no-one is hiring – because there is no increase in the demand for their products until after I get a job and earn an income. (Of course, most get paid after working, which occurs after some of the product is sold.)

Keynesian economists also stress the role of money in negating Say's Law. (Most would accept Say's Law as applying in a non-monetary or barter economy.) Suppose someone decides to sell a product without immediately buying another good. This would involve hoarding, increases in one's holdings of money (say, in a savings account). At the same time that it causes an increased demand for money, this would cause a fall in the demand for goods and services (an undesired increase in inventories (unsold goods) and thus a fall in production). This general glut would in turn cause a fall in the availability of jobs and the ability of working people to buy products. This recessionary process would be cancelled if at the same time there were dishoarding, in which someone uses money in his hoard to buy more products than he or she sells. (This would be a desired accumulation of inventories.)

Some classical economists suggested that hoarding would always be balanced by dishoarding. But Keynes and others argued that the hoarding decision are made by different people and for different reasons than the decisions to dishoard, so that hoarding and dishoarding are unlikely to be equal at all times.

Some have argued that financial markets and especially interest rates could adjust to keep hoarding and dishoarding equal, so that Say's Law could be maintained. But Keynes argued that in order to play this role, interest rates would have to fall rapidly and that there were limits on how quickly and how low they could fall (as in the liquidity trap). To Keynes, in the short run, interest rates were determined more by the supply and demand for money than by saving and investment. Before interest rates could adjust sufficiently, excessive hoarding would cause the vicious circle of falling aggregate production (recession). The recession itself would lower incomes so that hoarding (and saving) and dishoarding (and real investment) could attain balance below full employment. Worse, a recession would hurt private real investment, by hurting profitability and business confidence, in what is called the accelerator effect. This means that the balance between hoarding and dishoarding would be even further below the full employment level of production.

Keynesians believe that this kind of vicious circle can be broken by stimulating the aggregate demand for products using various macroeconomic policies mentioned in the introduction above. Increases in the demand for products leads to increased supply (production) and an increased availability of jobs, and thus further increases in demand and in production. This cumulative causation is called the multiplier process.

Most modern advocates of laissez-faire economics have rejected Say's Law, except perhaps in the long run. Instead, the emphasis is on the automatic adjustment of the labor market to get to full employment: if wages are allowed to fall, this increases the availability of jobs and allows full employment. Many advocates of laissez-faire economics are quite activist in their approach, advocating the use of state power to destroy unions, minimum wage laws, and the like in order to make labor markets more "flexible" so that this idealized vision of labor markets can be attained.

FULL EMPLOYMENT AND INVOLUNTARY UNEMPLOYMENT

Economists distinguish between five major kinds of unemployment, i.e., cyclical, frictional, structural, classical, and Marxian. Real-world unemployment may combine different types, while all five might exist at one time. The magnitude of each of these is difficult to measure, partly because they overlap and are thus hard to separate from each other. All but cyclical unemployment can

be seen as existing at full employment, the level of employment and unemployment that represents the inflation barrier to demand-side growth.

According to classical economists, **full employment** is a situation when there is no 'involuntary unemployment', though there may be other types of employment such as frictional, structural or voluntary employment. Thus, full employment is a situation in which the economy's resources are being used fully. In other words, it is zero deflationary unemployment i.e., a situation in which all those who want to work at the current rate of wages are, in fact, employed. A worker is said to be **voluntary unemployed** when he refuses to work at the current wage rate.

Cyclical unemployment exists due to inadequate effective aggregate demand. It gets its name because it varies with the business cycle, though it can also be persistent, as during the Great Depression of the 1930s. Gross Domestic Product is not as high as potential output because of demand failure, due to (say) pessimistic business expectations which discourages private fixed investment spending. Low government spending or high taxes, under consumption, or low exports net of imports may also have this result.

In this case, the number of unemployed workers exceeds the number of job vacancies, so that if even all open jobs were filled, some workers would remain unemployed. This kind of unemployment coincides with unused industrial capacity (unemployed capital goods). Keynesian economists see it as possibly being solved by government deficit spending or by expansionary monetary policy, which aims to increase non-governmental spending by lowering interest rates.

Frictional unemployment is a situation when a worker is unemployed because he lacks the required skills or placed in wrong jobs. This type of unemployment is caused by immobility of labour, seasonal nature of work, short-term scarcity of raw materials, collapse of machinery etc. In other words, it involves people being temporarily between jobs, searching for new ones; it is compatible with full employment. (It is sometimes called **search unemployment** and is seen as largely voluntary.) It arises because either employers remove workers or workers quit, usually because the individual characteristics of the workers do not fit the individual characteristics of the job.

This type of unemployment coincides with an equal number of vacancies and cannot be solved using aggregate demand stimulation. The best way to lower this kind of unemployment is to provide more and better information to job-seekers and employers. In theory, an economy could also be shifted away from emphasizing jobs that have high turnover, perhaps by using tax incentives or worker-training programs. But some frictional unemployment is beneficial, since it allows workers to get the jobs that fit their wants and skills best and the employers to find employees who promote profit goals the most. One kind of frictional unemployment is called **wait unemployment**: it refers to the effects of the existence of some sectors where employed workers are paid more than the market-clearing equilibrium wage. Not only does this restrict the amount of employment in the high-wage sector, but it attracts workers from other sectors who *wait* to try to get jobs there. The main problem with this theory is that such workers will likely "wait" while having jobs, so that they are not counted as unemployed.

Structural unemployment is said to exist when large number of persons are unemployed because the co-operant factors of production which engage them fully are not sufficiently available. There may be scarcity of land, capital, in the economy causing structural unemployment. In other

words, it involves a mismatch between the workers looking for jobs and the vacancies available. Even though the number of vacancies may be equal to the number of the unemployed, the unemployed workers lack the skills needed for the jobs — or are in the wrong part of the country or world to take the jobs offered. That is, it is very expensive to unite the workers with jobs.

Structural unemployment is a result of the dynamic changes of a capitalist economy such as technological change and capital flight. Workers are “left behind” due to costs of training and moving, and inefficiencies in the labour markets.

Structural unemployment is hard to separate empirically from frictional unemployment, except to say that it lasts longer. It is also more painful. As with frictional unemployment, simple demand-side stimulus will not work to easily abolish this type of unemployment. Some sort of direct attack on the problems of the labor market — such as training programs, mobility subsidies, or anti-discrimination policies are better solutions. These policies may be reinforced by the maintenance of high aggregate demand, so that the two types of policy are complementary.

NOTE ON MARXIAN UNEMPLOYMENT

As Karl Marx noted, some unemployment — the **reserve army of the unemployed** — is normally needed in order to maintain work discipline in jobs, keep wages down, and protect business profitability. If profitability suffers a sustained depression, capitalists can and will punish people by imposing a recession via their control over investment decisions (a *capital strike*). To the Marxian School, these strikes are rare, since in normal times the government, responding to pressure from their most important constituencies, will encourage recessions before profits are hurt.

To Marxists, this kind of unemployment cannot be abolished without overthrowing capitalism as an economic system and replacing it with democratic socialism — or running capitalism using a fascist state, under which profitability is protected by the systematic use of direct force.

As with cyclical and classical unemployment, with Marxian unemployment, the number of jobless exceeds the availability of vacancies. (It's the scarcity of jobs that gives unemployment such a motivational effect.) However, simple demand stimulus in the face of the capitalists' refusal to hire or invest simply encourages inflation: if profits are being squeezed, the only way to maintain high production is via rising prices.

Structural unemployment may also be encouraged to rise by persistent cyclical unemployment: if an economy suffers from long-lasting low aggregate demand, it means that many of the unemployed become disheartened, while finding their skills (including job-searching skills) become ‘out of form’ and obsolete. Problems with debt may lead to homelessness and a fall into the vicious circle of poverty. This means that they may not fit the job vacancies that are created when the economy recovers. The implication is that sustained *high* demand may *lower* structural unemployment. However, it also may encourage inflation, so some kind of income policies (wage and price controls) may be needed, along with the kind of labor-market policies.

Much **technological unemployment** (e.g., due to the replacement of workers by machines) might be counted as structural unemployment. Alternatively, technological unemployment might refer to the way in which steady increases in labor productivity mean that fewer workers are needed to produce the same level of output every year. The fact that aggregate demand can be raised to deal with this problem suggests that this problem is one of cyclical unemployment.

Seasonal unemployment might be seen as a kind of structural unemployment, since it is a type of unemployment that is linked to certain kinds of jobs like construction work, migratory farm work etc.

Involuntary unemployment is the situation in which people are willing to work at current or slightly lower level of wages, but do not find jobs due to deficiency of aggregate effective demand. When involuntary unemployment exists, equality between aggregate demand and aggregate supply is at a point less than the level of full employment. In other words, equilibrium attained is underemployment equilibrium.

J.M. Keynes defined full employment as a level of employment where increase in **effective demand** does not lead to an increase in the level of output and employment. In other words, full employment is a level of employment where given capacity of an economy is fully utilized. It is a situation beyond which an increase in effective demand does not result in an increase of employment and output. Effective demand is the total money spent on consumption and investment. It is the demand for output as a whole. A full employment situation is shown in Fig. 19.1. At full employment level, note that $AD = AS$. Point E where aggregate demand and aggregate supply are equal is the point of effective demand. In any economy, effective demand represents the money actually spent by people on the products produced in the economy. The money received by producers from sale of their products is distributed to factors in the form of wages, rent, interest and profit. Therefore, effective demand is equal to national income/national output. Thus,

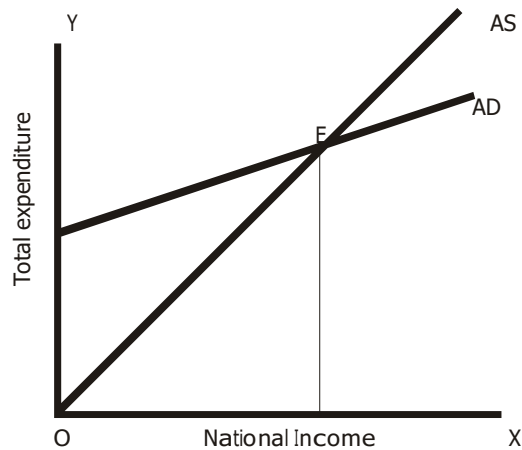


Fig. 19.1

$$\begin{aligned} \text{Effective demand (E)} &= \text{national income (Y)} = \text{national output (O)} \\ &= \text{expenditure on investment goods (I)} + \text{expenditure} \\ &\quad \text{on consumption goods (C)}. \end{aligned}$$

Therefore,

$$E = Y = C + I = O = \text{Employment.}$$

Hence, effective demand determines employment at a particular time. In modern days, the role of government has increased significantly. Therefore, we have to include government sector also so that,

$$E = C + I + G$$

The principle of effective demand occupies an important place in the Keynesian theory of employment since total demand in the economy determines employment level. A deficiency of effective demand causes the situation of unemployment.

The important **determinants of effective demand** are the following:

- (a) *Aggregate demand function*: It represents a schedule of proceeds or money expected from the sale of the output produced at different levels of output. In other words, aggregate demand price at any level of employment is the amount of money which all producers in the economy expect that they will receive by sale of output produced by the employed workers. Thus, aggregate demand is measured in terms of the quantity of labour employed and not in terms of a unit of commodity, as in case of determination of demand for products of an individual firm. Aggregate demand schedule is an increasing function of the amount of employment. It shows increase in aggregate demand price as the amount of employment increases.
- (b) *Aggregate supply function*: It is a schedule showing the minimum amounts of proceeds required to induce producers to give varying amounts of employment. In other words, the minimum expected proceeds or money out of sale of the output resulting from a given amount of employment is called aggregate supply price. Thus, these are minimum expected money from sale that producers must receive so that they are induced to provide a certain level of employment. This is also an increasing function of the employment.

The determination of equilibrium level of employment in the economy is explained in the next section.

DETERMINATION OF INCOME AND EMPLOYMENT

The equilibrium level of income in an economy is determined at the point where aggregate demand (AD) is equal to aggregate supply (AS).

The following table describes the determination of equilibrium level of income and employment in the economy.

<i>Level of income (Y)</i>	<i>Aggregate expenditure (C + I)</i>	<i>Aggregate supply (C + S)</i>
0	20	0
10	25	10
20	30	20
30	35	30
40	40	40
50	45	50
60	50	60

It is seen in the table that the aggregate demand is equal to aggregate supply when the level of income in the economy is Rs. 40 crore. This is the equilibrium level of income and employment. It is also known as the level of effective demand. There may be cases when aggregate demand is more or less than the aggregate supply. In either case, there is imbalance and this needs to be corrected by adopting various measures under the hands of monetary authority of the country.

The equilibrium level of income and employment is illustrated in the Fig. 19.2. AS and AD are the aggregate supply and aggregate demand curve respectively. Because the sum of all income received corresponds to the sum of all production, AS is drawn as a 45 degree line. Both these curves intersect each other at point E, which is the equilibrium point. At this point of equilibrium, income, the aggregate demand and aggregate supply-all amounts to Rs. 40 crore.

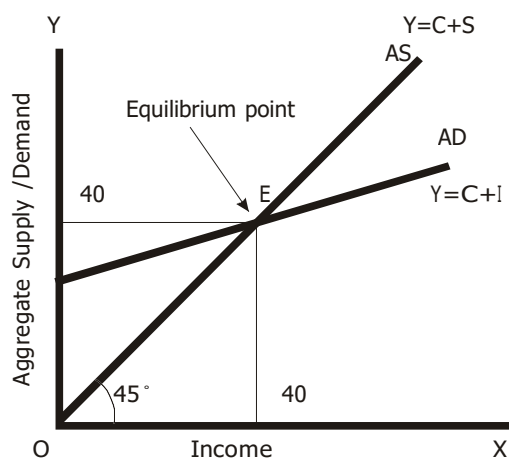


Fig. 19.2

The movement toward equilibrium is mostly via changes in inventories inducing changes in production and income. If current output exceeds the equilibrium, inventories accumulate, encouraging businesses to cut back on production, moving the economy toward equilibrium. Similarly, if the level of production is below the equilibrium, then inventories run down, encouraging an increase in production and thus a move toward equilibrium. This equilibration process occurs when the equilibrium is stable, i.e., at point E.

It may be noted that the economy is no doubt in equilibrium at point E because the producers have no tendency to either increase or decrease employment, but this may not be the point of full employment. Aggregate demand and aggregate supply might be equal to full employment. This is so when investment happens to equal the gap between aggregate supply price and the amount spent on consumption. According to Keynes, investment is never sufficient to fill up such gap. Thus, there is every likelihood that aggregate demand and aggregate supply meet each other at a point less than full employment level, which is called underemployment equilibrium. If any of the components of aggregate demand rises at each level of income, for example because business becomes more optimistic about future profitability, that shifts the entire AD line *upward*. This raises equilibrium income and output. Similarly, if the elements of AD fall, that shifts the line downward and lowers equilibrium output.