



**Subject : Business Economics –
Macro Economics**

Unemployment

Unemployment

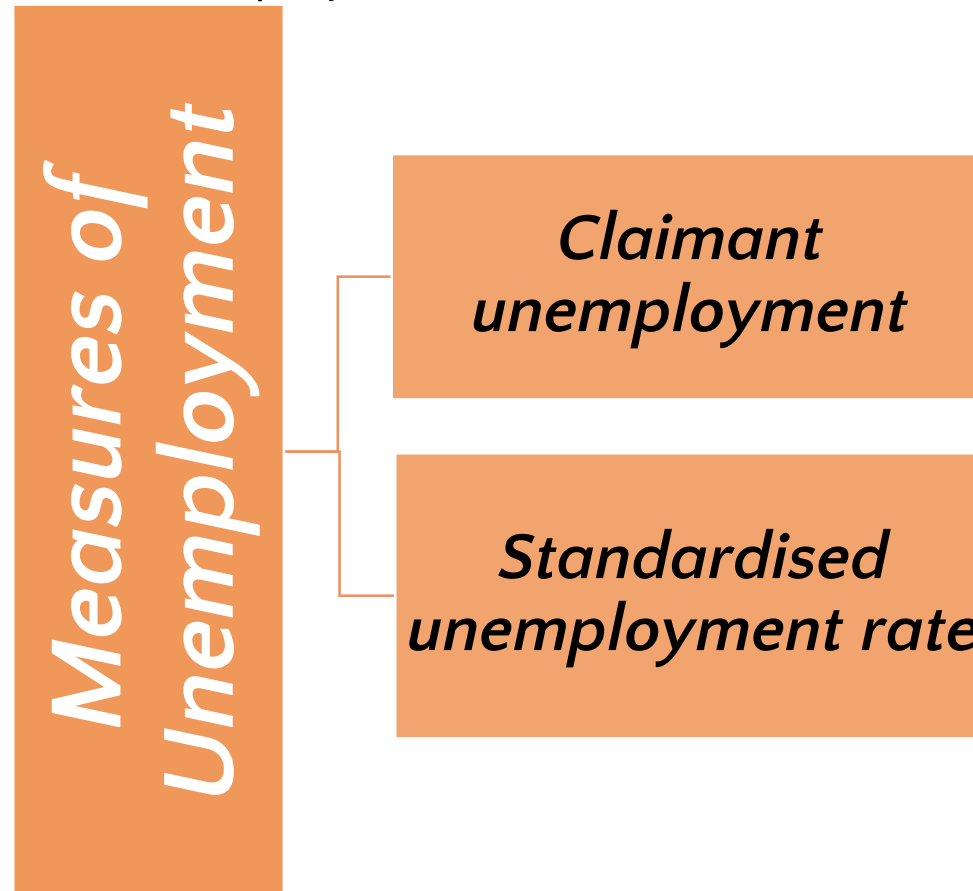
- Unemployment = the number of people in the labour force who are actively looking for work but do not have a job
- Unemployment rate = the number of unemployed people expressed as a percentage of the labour force.
- Unemployment rate = $\frac{\text{number of unemployed people}}{\text{labour force}} \times 100$
- The labour force consists of the number of people who are employed plus the number who are unemployed



Measures of Unemployment

First, we look at how we measure unemployment.

Two common measures of unemployment are used in official statistics.



Claimant unemployment

- This is simply a measure of all those **in receipt of unemployment related benefits**.
- Claimant statistics have the **advantage of being very easy to collect**.
- However, they exclude all those of working age who are available for work at current wage rates, but **who are not eligible for benefits**. The net effect is that the **claimant statistics tend to understate the true level of unemployment**.
- They are also **sensitive to government changes** in the eligibility conditions for unemployment related benefits.

Standardised unemployment rate

- The unemployed are defined as persons of working age who without work, are available to start work within two weeks and either have actively looked for work in the last four weeks or are waiting to take up an appointment.
- This is **the measure used by** the International Labour Organization (**ILO**) and the Organisation for Economic Cooperation and Development (**OECD**), two international organisations that publish unemployment statistics for many countries.
- The **figures are compiled** from the results of **national labour force surveys**.
- A representative cross-section of the population is asked whether they are employed, unemployed (using the above definition) or economically inactive. From their replies, national rates of unemployment can be extrapolated.

Comparison between the two measures

- The **standardised rate is likely to be higher than the claimant rate** to the extent that it includes people seeking work who are nevertheless not entitled to claim benefits.
- However, it will be lower to the extent that it excludes those who are claiming benefits and yet who are not actively seeking work.
- Generally, the standardised rate is significantly higher than the claimant rate

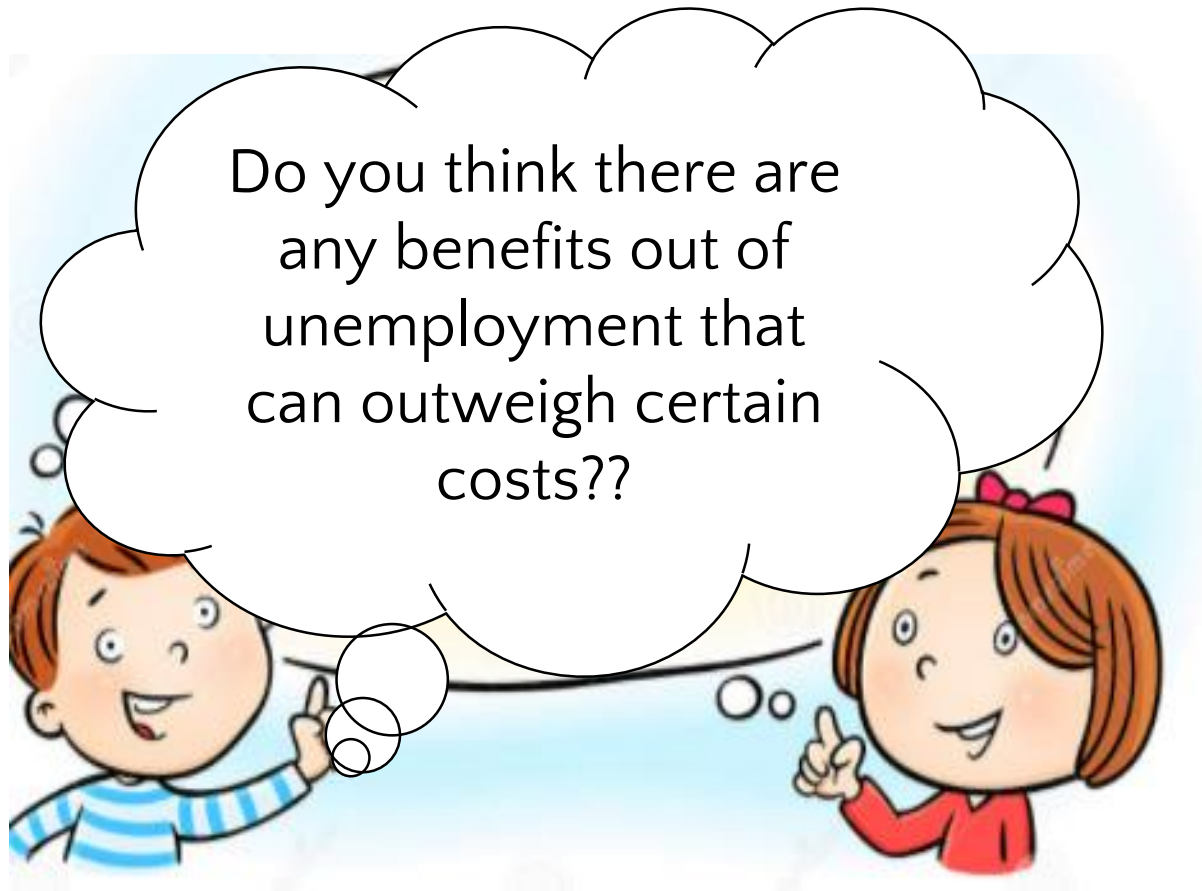
The composition of unemployment

- Unemployment rates can vary enormously **between countries** and **between different groups within countries**.
- Countries and regions within countries can, for example, have very different labour markets. **Countries** often have very **different policies on unemployment, training schemes, redundancy**, etc., and **demonstrate very different attitudes** of firms towards their workers.
- There are **differences in unemployment rates across different age groups**.
- Higher youth unemployment rates can be explained by the suitability (or unsuitability) of the qualifications of school leavers, the attitudes of employers to young people, and the greater willingness of young people to spend time unemployed looking for a better job or waiting to start a further or higher education course

Costs of Unemployment

- **To themselves:** There is the direct **financial cost** of the loss in their earnings. Then there are the personal costs of being unemployed. The longer people are unemployed, they become **dispirited**, **their self-esteem is likely to fall**, and they are more likely to **succumb to stress**.
- **To family and friends:** Personal relations can **become strained**, and there may be an increase in **domestic violence** and the number of **families splitting up**.
- **To the economy:** Unemployment represents a **loss of output**. In other words, **actual output is below potential output**. Apart from the **loss of disposable income** to the unemployed themselves, this underutilisation of resources leads to lower incomes for other people too: 1) The **government loses tax revenues** and **incurs administrative costs** associated with the running of benefit offices. 2) **Firms lose the profits** that could have been made if there had been full employment. 3) Other **workers lose any additional wages** they could have earned from higher national output

Think!!



Costs offset by some Benefits

- The costs of unemployment are to some extent offset by benefits.
- If **workers voluntarily quit their jobs to look for better ones**, then they must reckon that the **benefits of a better job** more than compensate for their temporary loss of income.
- From the nation's point of view, **a workforce that is prepared to quit jobs and spend a short time unemployed will be a more adaptable, more mobile workforce** – one that is responsive to changing economic circumstances.
- Such a workforce **will lead to greater allocative efficiency** in the short run and more **rapid economic growth** over the longer run.

The duration of unemployment

A few of the unemployed may never have had a job and maybe never will. For most, however, unemployment lasts only a certain period. For some it may be just a few days while they are between jobs. For others it may be a few months.

What determines the average duration of unemployment? There are **three important factors** here.

- **The number unemployed (the size of the stock of unemployment).**

Unemployment is a 'stock' concept. It measures a quantity (i.e. the number unemployed) at a particular point in time. The higher the stock of unemployment, the longer will tend to be the duration of unemployment. There will be more people competing for vacant jobs

The duration of unemployment

- The rate of inflow and outflow from the stock of unemployment.

The people making up the unemployment total are constantly changing. Each week some people are made redundant or quit their jobs. They represent an inflow to the stock of unemployment. Other people find jobs and thus represent an outflow from the stock of unemployment.

Unemployment is often referred to as 'the pool of unemployment'.

The duration of unemployment will depend on the *rate* of inflow and outflow. The rate is expressed as the number of people per period of time.

The bigger the flows are relative to the total number unemployed, the less will be the average duration of unemployment. This is because people move into and out of the pool more quickly, and hence their average stay will be shorter.

The duration of unemployment

- The phase of the business cycle.

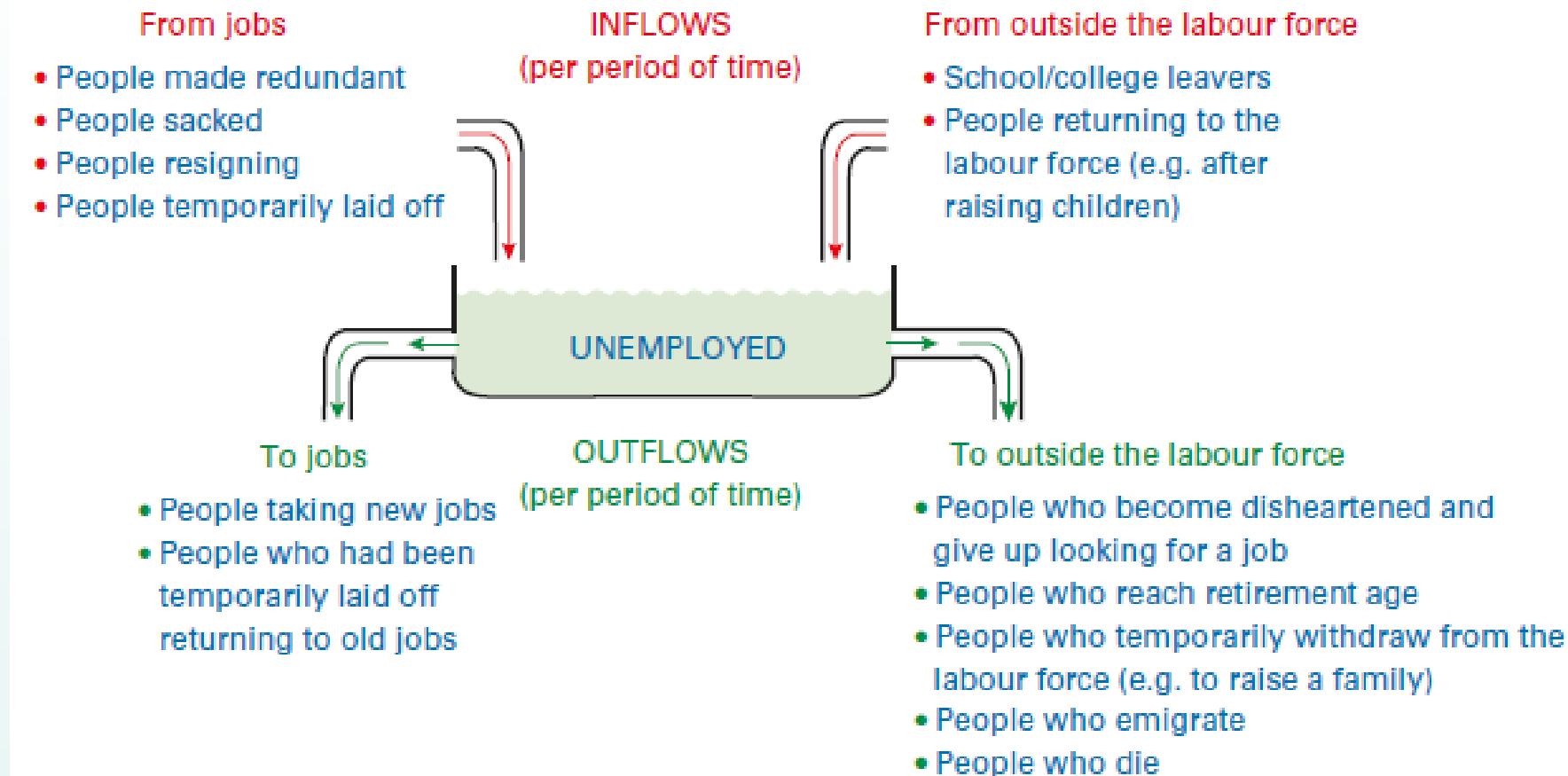
The duration of unemployment also depends on **the phase of the business cycle**.

At the **onset of a recession, unemployment will rise**, but as yet the average length of unemployment is likely to have been relatively short.

Once a recession has lasted for a period of time, however, people will on average have been out of work longer, and this long-term unemployment is likely to persist even when the economy is pulling out of recession.

Inflow and Outflow from the stock

The various inflows and outflows are shown in the figure below:



Average duration of unemployment

The average duration of unemployment (D_U) will equal the stock of unemployment (U) as a proportion of the outflow (F) from unemployment.

$$D_U = \frac{U}{F}$$

Try to Calculate!

If the number unemployed (U) was 1.78 million and the total outflow from unemployment (F) was 3.44 million. Find the average duration of unemployment.

Ans. 0.533 years or 195 days

Causes of unemployment

There are various possible causes of unemployment.

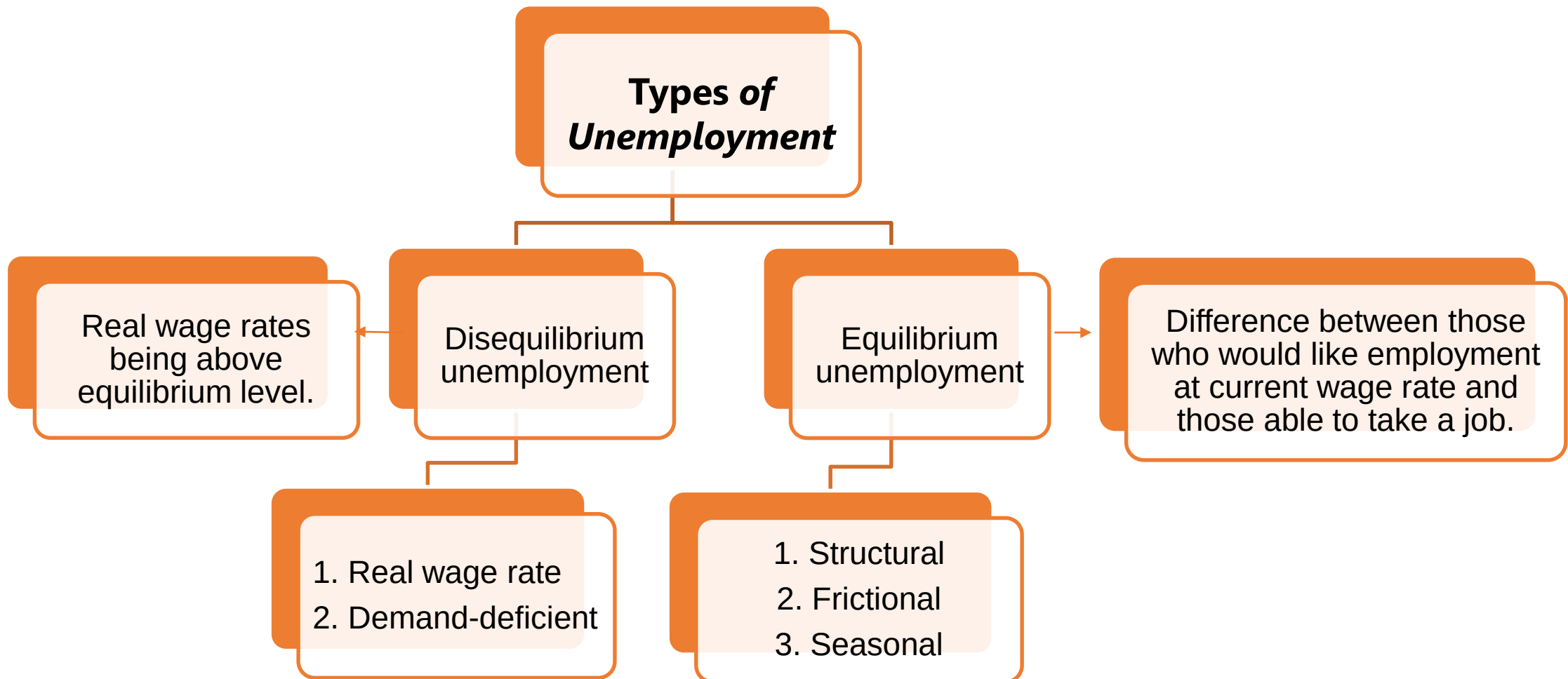
It is important when thinking about policies to tackle unemployment to understand its determinants.

What causes unemployment?



Types of Unemployment

It can be broadly divided into two with further different types.



Real wage rates

- **Real-wage unemployment** Disequilibrium unemployment caused by real wages being driven up above the market-clearing level.
- It occurs when **trade unions use their monopoly power to drive wages above the market-clearing level**. It could also be **caused by the government setting the national minimum wage too high**.
- A rise in real wage rates **increases the effective cost to firms of employing workers**.
- One **effect of high real wage rates**, however, **may help to reduce real-wage unemployment**. The extra wages paid to those who are still employed could lead to extra consumer expenditure. Higher real wage rates increase the purchasing power of workers. This addition to aggregate demand could, in turn, lead to firms demanding more labour, as they attempt to increase output to meet the extra demand

Real wage rates – Calculation

- **Nominal wage rates are the actual value** of wage rates paid to workers.
- The real wage rate is the wage rate expressed in terms of its purchasing power to workers and the purchasing cost to employers.
- In other words, the **real wage is the nominal wage corrected for inflation.**
- $W_t = \frac{W_n}{P}$
- Where W_t is the real wage rate; W_n is the nominal wage rate; and P is the price index (e.g. the CPI).

The phase of the business cycle

- We have seen how volatile economies are. **Changes in output associated with the business cycle** will result in **changes in employment and unemployment**. In a recession, unemployment is likely to rise, whereas in a boom, it is likely to fall.
- **Demand-deficient or cyclical unemployment** Disequilibrium unemployment **caused by a fall in aggregate demand with no corresponding fall in the real wage rate**. As aggregate demand begins to grow again and firms increase output, so demand-deficient unemployment will start to fall again.
- Because demand-deficient unemployment fluctuates with the business cycle, it is sometimes referred to as **cyclical unemployment**.
- But what affects the amount that unemployment rises following a fall in aggregate demand? One consideration is the **magnitude and persistence of the fall in aggregate demand**. Another consideration is the **extent to which, if at all, the real average wage rate falls**.

Information

- The problem is that **information is imperfect**.
- **Frictional (search) unemployment** Equilibrium unemployment that occurs as a result of imperfect information in the labour market. It often **takes time for workers to find jobs** (even though there are vacancies) and in the **meantime they are unemployed**.
- **Both employers and workers, have to search:** employers searching for the right labour and workers searching for the right jobs

Remedies for Frictional Unemployment

- One obvious remedy for frictional unemployment is **to provide better job information** through government job centres, private employment agencies or the media.
- Another much more controversial remedy is for the **government to reduce the level of unemployment benefit**. This will make the **unemployed more desperate to get a job** and thus **prepared to accept a lower wage**.

Structural change

Structural unemployment Equilibrium unemployment that arises from changes in the pattern of demand or supply in the economy. People made redundant in one part of the economy cannot immediately take up jobs in other parts (even though there are vacancies)

Causes of structural unemployment

- **A change in the pattern of demand.** Some industries experience **declining demand**. This may be due to a change in consumer tastes or it may be due to competition from other industries or from competition overseas. For example, consumer demand may shift away from coal and to other fuels. This will lead to structural unemployment in mining areas.
- **A change in the methods of production (technological unemployment).** New techniques of production often allow the same level of output to be produced with fewer workers. This is known as '**labour-saving technical progress**'. Unless output expands sufficiently to absorb the surplus labour, **people will be made redundant**. This creates **technological unemployment**.
- Structural unemployment often occurs in particular regions of the country when industries located in those regions decline or introduce labour-saving technology. When it does, it is referred to as **regional unemployment**.

Level of structural unemployment

The level of structural unemployment depends on three factors:

- **The degree of regional concentration of industry.** The more that industries are concentrated in particular regions, the greater will be the level of structural unemployment if particular industries decline.
- **The speed of change of demand and supply in the economy.** The more rapid the rate of technological change or the shift in consumer tastes, the more rapid will be the rate of redundancies.
- **The immobility of labour.** The less able or willing workers are to move to a new job, the higher will be the level of structural unemployment. **Geographical immobility** is a particular problem with regional unemployment. **Occupational immobility** is a particular problem with technological unemployment where old skills are no longer required

Tackling structural unemployment

There are two broad approaches:

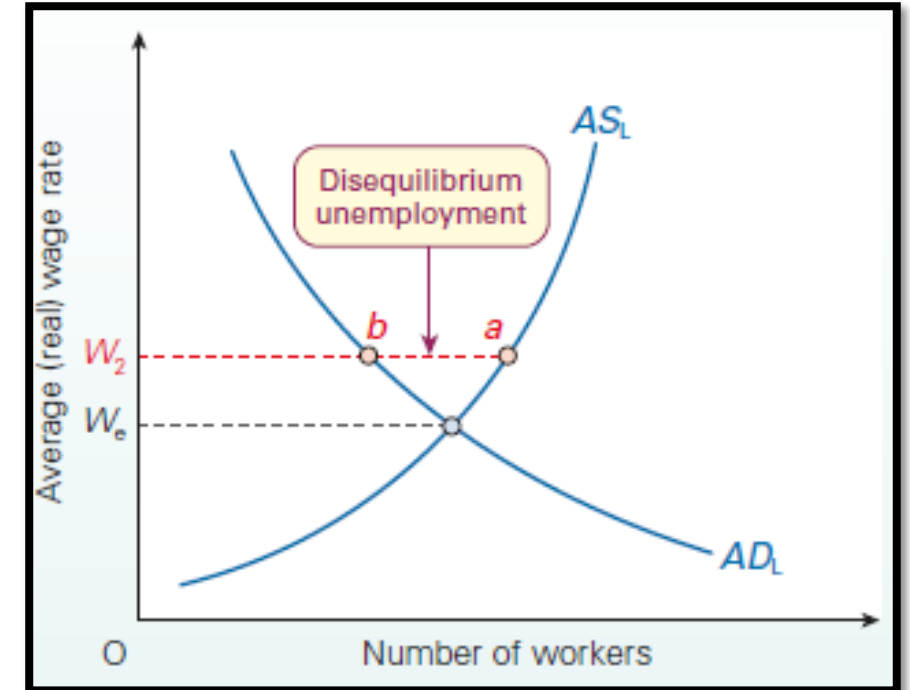
- **A market-orientated approach** involves encouraging people to look more actively for jobs, if necessary in other parts of the country. It involves encouraging people to adopt a **more willing attitude towards retraining**, and if necessary to accept some reduction in wages.
- **An interventionist approach** involves direct government action to match jobs to the unemployed. Two examples are **providing grants to firms** to set up in areas of high unemployment (regional policy), and **government-funded training schemes**.

Seasonal factors

- **Seasonal unemployment** occurs when the demand for certain types of labour fluctuates with the seasons of the year.
- This problem is particularly severe in holiday areas.
- Policies for tackling seasonal unemployment are similar to those for structural unemployment.

Modelling the labour market

- **Aggregate demand for labour curve** A curve showing the total demand for labour in the economy at different average real wage rates.
- **Aggregate supply of labour curve** A curve showing the total number of people willing and able to work at different average real wage rates.
- The figure shows the total demand and supply of labour in the whole economy.
- The labour market is in equilibrium at a real wage of W_e – where the demand for labour equals the supply.



The Labour Curves

- The **aggregate supply of labour curve** (ASL) shows the number of workers willing to accept jobs at each real wage rate. This curve is **relatively inelastic**, since the size of the labour force at any one time cannot change significantly.
- The **aggregate demand for labour curve** (ADL) **slopes downwards**. This is an extension of the microeconomic demand for labour curve and is **based on the assumption of diminishing returns to labour**. For a given capital stock, the more people are employed, the lower their marginal productivity. Thus firms take on more labour only if there is a fall in the real wage rate to compensate them for the lower output produced by the additional workers.

Disequilibrium unemployment

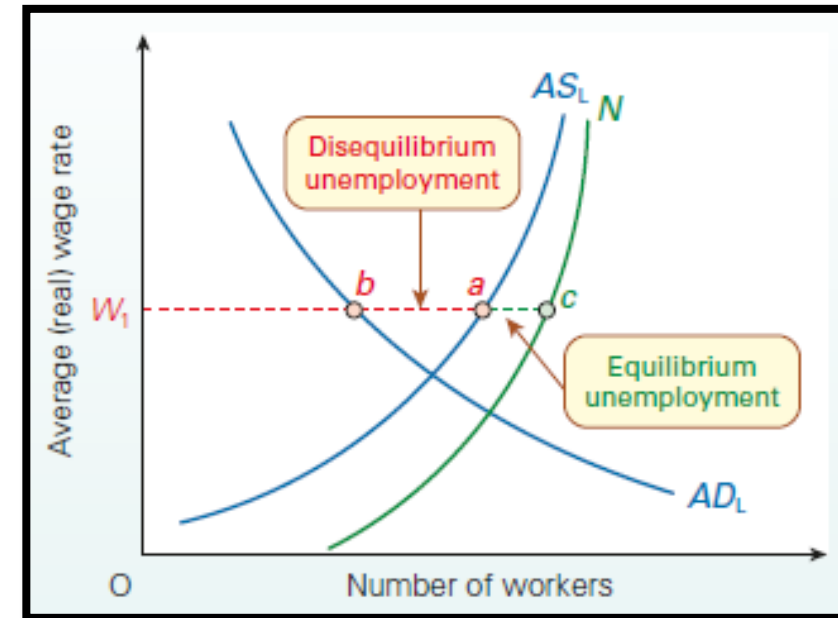
Unemployment resulting from **real wage rates in the economy being above the equilibrium level.**

The curve N shows the total number in the labour force.

For disequilibrium unemployment to occur, **two conditions must hold:**

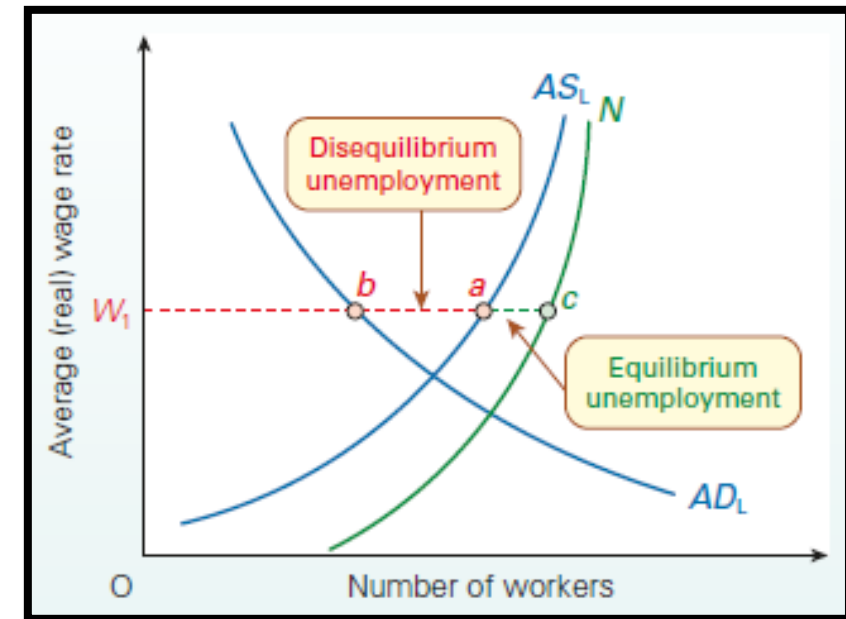
- The **aggregate supply of labour must exceed the aggregate demand** for labour.
- There must be a '**stickiness**' in wages. In other words, the wage rate must not immediately fall to W_e the market clearing wage.

Real wage unemployment and **demand-deficient unemployment** are types of disequilibrium unemployment.



Equilibrium ('natural') unemployment

- The **difference between** those **who would like employment** at the current wage rate and **those willing and able to take a job** is equilibrium unemployment.
- The horizontal difference between N and the aggregate supply of labour curve (AS_L) represents the excess of people looking for work over those actually willing to accept jobs. Q_e represents the equilibrium level of employment and the distance $d - e$ represents the **equilibrium level of unemployment**.
- **Structural, frictional and seasonal unemployment** are types of equilibrium unemployment.



Demand-deficient unemployment

- Demand-deficient or cyclical unemployment is associated with fluctuations in aggregate demand.
- Assume initially that the economy is at the peak of the business cycle. The aggregate demand for and supply of labour are equal at the current wage rate of W_1 . There is no disequilibrium unemployment.
- Now assume that the economy moves into recession. Consumer demand falls and as a result firms demand less labour. The demand for labour shifts to AD_{L2} . If there is a resistance to wage cuts, such that the real wage rate remains fixed at W_1 , there will now be disequilibrium unemployment of $Q_1 - Q_2$.

