### Chapter 51: Types and causes of unemployment (2.3)

#### Key concepts
- **Types of unemployment**
  - Structural unemployment
  - Frictional unemployment
  - Seasonal unemployment
- **Equilibrium unemployment**
  - Full employment and natural rate of unemployment
- **Disequilibrium unemployment**
  - Cyclical unemployment
  - Real wage unemployment
- **Government policies to deal with unemployment**

<table>
<thead>
<tr>
<th>Types and causes of unemployment</th>
<th>Describe, using examples, the meaning of <strong>frictional, structural, seasonal</strong> and <strong>cyclical</strong> (demand-deficient) unemployment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Distinguish between the causes of frictional, structural, seasonal and cyclical (demand-deficient) unemployment</td>
</tr>
<tr>
<td></td>
<td>Explain, using a diagram, that cyclical unemployment is caused by a fall in aggregate demand</td>
</tr>
<tr>
<td></td>
<td>Explain, using a diagram, that <strong>structural unemployment is caused by a fall in demand for a particular type of labour</strong></td>
</tr>
<tr>
<td></td>
<td>Evaluate government policies to deal with the different types of unemployment</td>
</tr>
</tbody>
</table>

- **Types of unemployment**

This ongoing process of in- and outflows into the labour market and available jobs will necessarily mean a degree of unemployment will always exist at any given point in time; this is **equilibrium unemployment** and consists of three main types; **structural, frictional** and **seasonal** unemployment.
(Smaller heading) Structural unemployment

The most difficult type of unemployment to deal with is when it is ‘built-in’ to society by forces inherent to the economy itself. **Structural unemployment** is basically the mismatch of available labour skills and the demands of the economy. The main forces affecting unemployment levels here are labour mobility, declining (‘sunset’) industries and job redundancies resulting from technological advances in production. Any changes of these variables will give rise to structural unemployment since labour is configured to match certain demands in the labour market. There will be job losses when labour demands change, often resulting in very painful long run unemployment for large numbers of workers in a specific industry – e.g. there is structural change in the economy whereby demand falls (permanently) for labour in a certain industry.

(Smaller heading) Frictional unemployment

Labourers leaving/losing one job will mostly set out to find another. This is **frictional (or search) unemployment** and is mostly short term. The speed with which job seekers are able to find new employment depends on their work skills and education, plus the needs of the labour market. In addition to these market forces, there are a number of ‘interventionist’ variables which will affect the ability/willingness of employers to hire and labourers to accept jobs. For example if labour law makes it difficult for employers to lay off workers then there will be greater care – and time spent – in hiring new workers. If unemployment benefits are high, the unemployed will have relatively low incentives in looking for jobs. (See Supply side policies in Chapter 60.) In addition to this, the availability and efficiency of job centres and unemployment agencies will affect time between jobs.

(Smaller heading) Seasonal unemployment

Waiters in holiday resorts; ski instructors; construction workers on North Sea oil platforms will all have to deal with longer periods of inactivity, giving rise to varying patterns of **seasonal unemployment**. Other than these workers finding backup jobs in off-seasons, there is little to be done about this type of unemployment. This type of unemployment will often overlap regional unemployment.

**Definition: Structural, frictional and seasonal unemployment**

- **Structural unemployment** is “built into the very fabric” of society – labour immobility, declining industries and technological advances all contribute to structural unemployment. Three sub-types within structural unemployment are regional, sectoral and technological unemployment.
- When workers are between jobs and actively seeking employment, one speaks of **frictional unemployment**. (Also known as search unemployment.)
- Workers who are unemployed in industries subject to “off-seasons” such as tourism are **seasonally unemployed**.

- Equilibrium unemployment

(Type 4 Smaller heading) Equilibrium unemployment – the natural rate of unemployment

*Figure 51.2, diagrams I and II* illustrate how structural, frictional and seasonal unemployment together make up the **natural rate of unemployment**. The aggregate supply of labour, ASL, shows the quantity of labour supplied at any given wage level, while the total labour force, TLF, shows the potential amount of labour available if everyone who offered their services had a job. (Think of the ASL curve as the “job acceptance curve” – it shows the willingness of labourers to accept a job at a give real wage rate.) The TLF curve is upward sloping since higher wages would induce more people to enter the labour force, for example recent retirees and discouraged workers who would find it increasingly worth their while to offer their labour on the market. Notice that the TLF curve is steeper than the ASL curve, indicating that as the real wage rate increases, ever fewer people will spend time unemployed so the distance between the two curves decreases.
There will always be a degree of unemployment – even when the labour market has cleared. **Equilibrium unemployment** is therefore the same as the **natural rate of unemployment** (NRU) shown as the difference between FE ↔ U*. 

**Figure 51.2 Equilibrium in the labour market**
The curves don’t meet since there will always be someone unwilling to accept a job no matter what the wage level. In *figure 51.1a*, the labour market is in equilibrium at the full employment level, FE. At the going wage rate of \( W^* \), there will still be a number of people in the labour force who are unemployed; the structurally unemployed (\( U_0 \)), the frictionally unemployed (\( U_1 \)) and the seasonally unemployed (\( U_2 \)). The sum of unemployment at the market clearing real wage level \( W^* \) is \( FE \leftrightarrow U^* \). This is the equilibrium level of unemployment.

_Diagram 51.1b_ (note; different scale) shows the sum of the three unemployment types. Structural, frictional and seasonal unemployment together comprise what rather contradictorily is called the full employment level of unemployment. A proportion, e.g. percentage, of the total labour force which chooses not to accept jobs at the going wage rate will vary but exist at all wage levels; thus it is also the natural rate of unemployment.

**Definition: full employment and equilibrium/voluntary/natural unemployment**

I know all the terminology gets confusing, so allow me to do the definitions via another syllogism:

1) If everyone in the labour force who wants a job at the going wage rate has a job, there is full employment.
2) Since these people accept the real wage rate, ASL equals ADL and the labour market is in equilibrium – any existing unemployment is thus equilibrium unemployment.
3) Since there is always an element of voluntary unemployment in the economy, it is natural. The percentage of workers voluntarily unemployed is the natural rate of unemployment.

Hence: Full employment = equilibrium unemployment = natural rate of unemployment.

- Disequilibrium unemployment
  - The Keynesian/demand-side view is that disequilibrium unemployment is caused by too little demand in the economy.
  - The new-classical/supply-side view is that disequilibrium unemployment is caused by market imperfections such as minimum wages and strong unions.

_(Smaller heading) Cyclical unemployment (or ‘demand-deficient’ unemployment)_

We start off by looking at cyclical (or demand-deficient) unemployment. In this view, unemployment is strongly linked to phases in the business cycle, as the demand for labour is derived from the demand for goods and services. This is known as cyclical unemployment since it is connected to cyclical variations of economic activity. When total unemployment is higher than the natural rate of unemployment there is a cyclical addition to total unemployment caused by relatively low aggregate demand.

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1His name is Lars Swahn. I went to university with him.
Figure 51.3 Disequilibrium unemployment – cyclical or demand-deficient unemployment

Definition: Cyclical (or demand deficient...or Keynesian) unemployment

Cyclical unemployment is the addition to equilibrium unemployment (full employment) resulting from a contractionary economy. Since the demand for labour is largely derived from the demand for goods and services, a fall in aggregate demand (and/or aggregate supply) during a recessionary period will decrease the demand for labour. The term derives its name from the cyclical variations in economic activity.
Aggregate demand and demand for labour

The relationship between aggregate demand and the demand for labour should be fairly clear cut; a rise in aggregate demand will lead to an increase in the demand for labour and vice versa – the demand for labour is derived from the demand for goods and services. Figure 51.4 shows how a decrease in aggregate demand during a recession will affect the aggregate labour market.

Figure 51.4 Disequilibrium

- During a recession (figure 51.4, red section in diagram I) aggregate demand falls which is shown in diagram II as a decrease in aggregate demand from $AD_0$ to $AD_1$.

- This will cause a decrease – ultimately, remember that there are lags to take into consideration – in the demand for labour, shown by the decrease in the aggregate demand curve for labour from $AD_L_0$ to $AD_L_1$ in diagram III. This creates a cyclical addition to unemployment of $U_1$ to $FE$ – cyclical unemployment – increasing total unemployment from $FE$ to $U^*$.

Real wage unemployment

Definition: Real wage unemployment (or “classical” unemployment)

Real wage unemployment is the new-classical view that any addition to equilibrium unemployment is due to labour market imperfections such as minimum wage, union bargaining power, high social and unemployment benefits and other labour market rigidities. These imperfections keep real wages too high and disallow market clearing, leading to increased unemployment.

The difference between cyclical and real wage unemployment is worlds apart – since the former is based on Keynesian premises and the latter on new-classical – but you’d have a hard time discovering these differences by simply looking at the
labour market diagrams. You see, the difference lies not so much in the fact that there is an excess of labour supply at a given wage rate but in why there is disequilibrium unemployment – and what should be done about it.

**Figure 51.6 Disequilibrium unemployment – real wage unemployment**

According to new-classical views, when the real wage rate is above market equilibrium wage, $W^*$ in figure 51.6, there will be more labourers willing to accept jobs than there is demand from firms. More labourers are willing to accept a job (e.g. there is a movement along the ASL curve) at $W_0$ but there is less demand from firms, shown by the quantity demanded for labour at $U_0$. There is now more labour willing to take jobs than there are offers of jobs. According to the new-classical view, *disequilibrium unemployment* (e.g. unemployment above the natural rate) exists because labour market forces have not been able to clear the market by lowering the real wage rate sufficiently. The wage rate of $W_0$ is above the market clearing rate of $W^*$, creating real wage unemployment of $U_0 \ll U_2$. Total unemployment is thus $U_0 \ll U_1$, above what would be the level of unemployment if the labour market cleared at a wage rate of $W^*$ - the natural rate of unemployment of $FE \ll U^*$.

- **Government policies to deal with unemployment**
The two big policy areas are the Keynesian and new-classical approaches to disequilibrium unemployment and will be dealt with in further chapters. Here we will look at possible solutions to the three components of equilibrium unemployment: frictional, seasonal and structural.

**(Smaller heading) Decreasing frictional unemployment**
- Government run work offices with centralised computer systems linking employers to job searchers has worked very well in Sweden, Denmark and Germany.
• **Worker programs** aimed at increasing skill levels, such as apprentice programs and government run **training schemes** have been implemented in many European countries.

• A particularly Scandinavian attempt at lowering search unemployment for young people was to offer firms a “discount” on **labour taxes** when employing under-20s. (Yes, this met with some considerable criticism and it was finally dropped when it turned out that firms’ demand for over-20s labour dropped more than new hiring of youths increased!)

• **Lower income tax rates for low paying jobs** can increase the net wage and thus incentivise workers to take ‘second best’ options while continuing to search.

• Governments can also increase the opportunity costs of remaining unemployed during job searching by **lowering social and unemployment benefits**.

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**(Smaller heading) Decreasing seasonal unemployment**

• Frequently market forces seem to take care of many cases of seasonal unemployment. Many regions simply rely on an influx of temporary labour during peak times and revert to ‘back burner’ levels in the off season. Good examples of this are found in tourist areas (Greece), wine making regions (France) and extensive sheep farms (Australia).

• Central and regional government can offer various forms of **regional incentives** aimed at reallocating labour from areas with highly seasonal demand for labour to areas in need of labour, for example free train fare to job interviews and financial help in moving to another region.

***(Smaller heading) Decreasing structural unemployment***

**Interventionist policies**

- Government-run retraining schemes and tax breaks to firms which supply re-education for redundant workers can increase labour market flexibility.

- Several Nordic countries (Sweden and Finland for example) have ‘outsourced’ government agencies to regions with high levels of structural unemployment. This also goes for universities and R&D institutions. Higher paid jobs create regional multiplicative effects and increases demand for labour in other areas such as services and recreation.

- Subsidies and grants can help firms establish in areas with sectoral/regional unemployment.

- ….other supply-side policies, see Chapters 60 – 62

**Market-based policies**

- Lowering unemployment and social benefits can create incentives for workers to move geographically and/or take jobs at lower wage levels. This was a policy during the Thatcher era in the 1980s.

- Labour market legislation making it easier to hire/fire can increase labour mobility between jobs. This was done in Denmark during the 1990s which has resulted in one of the world’s most mobile labour force and also a consistently lower unemployment level than the rest of the EU.

- ….other supply-side policies, see Chapters 60 – 62
### Summary and revision

1. **Equilibrium unemployment** consists of structural, frictional and seasonal unemployment.  
   a. **Structural** unemployment arises when there is a permanent decline in the demand for labour in certain industries. Three types of structural unemployment exist: *sectoral, regional and technological*.  
   b. **Frictional unemployment** is the result of workers being in-between jobs – they are actively seeking jobs, which is why this type of unemployment is also called *search* unemployment.  
   c. **Seasonal unemployment** arises for workers in off-season in seasonal industries such as tourism.  

2. **Equilibrium unemployment** is also known as the **full employment** level of unemployment…which is also the **natural rate of unemployment**.  

3. There are two types of **dis-equilibrium unemployment**:  
   a. **Cyclical** (or demand-deficient) unemployment – a Keynesian view that the disequilibrium is caused by low aggregate demand.  
   b. **Real wage** (or classical) unemployment – a new-classical view where unemployment above the natural rate of unemployment is caused by too-high real wages in the economy.  

4. **Government policies** to reduce unemployment:  
   a. **Frictional** – examples include improved matching of available labour and firms via centralised job search agencies; training and education; and lower income taxes on low-paying jobs.  
   b. **Seasonal** – not a major policy issue, yet various regional incentives have often been implemented to reallocate labour from low to high demand areas.  
   c. **Structural** – interventionist policies focus on use of government subsidies and tax breaks to increase demand for labour in regions and industries, while market-based policies are intended to increase labour mobility by incentivising workers to move and/or take available jobs and ease the hiring of labour for firms.