

19 MACROECONOMIC OBJECTIVES: LOW UNEMPLOYMENT

REAL-WORLD ISSUE:

Why does economic activity vary over time and why does this matter? How do governments manage the economy and how effective are their policies?

By the end of this chapter, you should be able to:

- Explain what is meant by unemployment
- Define and calculate the unemployment rate
- Explain the difficulties involved in measuring unemployment
- Discuss the costs of unemployment
- Explain and illustrate the labour market
- Distinguish between the different causes of unemployment
- Explain the natural rate of unemployment
- Evaluate measures that may be taken to reduce unemployment
- HL** Explain the concept of “crowding out”.

As we know, a low level of unemployment is one of the main macroeconomic goals of every government. Unemployment is a highly publicized topic; a low and/or falling unemployment rate is widely interpreted as a sign of improved health of an economy.

What is unemployment and how do we measure it?

According to the International Labour Organization (ILO), unemployment is defined as “people of working age who are



without work, available for work, and actively seeking employment.” (International Labour Organization, www.ilo.org)

By definition, the *unemployment rate* is the number of people who are unemployed expressed as a percentage of the total labour force (not the whole population).

$$\text{Unemployment rate} = \frac{\text{Number of unemployed}}{\text{Total labour force}} \times 100$$

The labour force, otherwise known as the workforce, is essentially the “economically active population”. Although it varies from country to country, there is a specified age at which people are eligible to start work and to retire. Anybody outside this age is not part of the labour force. Students attending school are not part of the labour force, as they are not looking for work. Similarly, parents who stay at home to look after children are not considered to be part of the labour force. People who are not considered to be part of the labour force would include children, students, stay-at-home parents, retired people and others who are choosing not to (or are not able to) work. Even though they do not have jobs, such groups are not considered to be unemployed. Because they are not actively seeking employment, they are not part of the labour force.

Why is it difficult to measure the level of unemployment?

It may be surprising to realize that it is actually quite difficult to measure the size of the labour force and the number of people that are unemployed.

Are there institutional differences when measuring unemployment?

Each country has its own national system for measuring the number of people that are unemployed. Information is gathered from national censuses and surveys of the population, along with administrative records such as unemployment insurance records and social security information. It is worth noting that there may be inaccuracies in such data and there may also be inconsistency in the definitions across different countries.

The following gives an example of possible differences in measurement. Unemployment data may be based on the people who are registered as unemployed, as in Austria or Switzerland. Alternatively, it may be calculated as the number of people who are claiming unemployment benefits, as in Britain and Belgium. However, even within these two approaches, there may be problems measuring the true number of people unemployed. For example, the incentive to register as unemployed is likely to depend on the availability of unemployment benefits. A person who is not entitled to any benefits is not likely to register as unemployed.

Economics in action

ATL Thinking, Communication and Research

You have already gathered the data for the unemployment rate in your chosen OECD country. Now find out exactly how the government defines and calculates the unemployment rate.

What is “hidden unemployment”?

One problem that exists in the calculation of unemployment is the existence of hidden unemployment. Hidden unemployment consists of several different groups of people. The first group includes those people who have been unemployed for a long period of time and have given up the search for work. Since they are no longer looking for work, presumably having lost hope, they are no longer considered to be unemployed. These might be referred to as “discouraged” workers.

Another group of people who make up the hidden unemployed are people who have part-time work, or temporary contracts, but would really like to be working full time or on a permanent contract. Since they are working they are obviously not considered as unemployed. They might not be earning as much as they would like, or need, and would like to find a full-time job, but have to stay in the part-time job as it provides a better income than having no job at all.

Yet another group of people hidden from official unemployment figures are people who are working in jobs for which they are greatly over-qualified. Again, such people would like to find work that utilizes their skills and pays higher income, but must stay in the lower-skilled job as it is better than no job at all.

Why does the distribution of unemployment limit the reliability of national unemployment rates?

Along with differences in methods of measurement, and the existence of hidden unemployment, it is worth pointing out another limitation of the unemployment rate. As with many other indicators, a national unemployment rate establishes an average for a whole country, and this is very likely to mask inequalities among different groups within an economy. One should be careful in using the national rate as a basis for making conclusions about different groups of people. These are some of the typical disparities that exist among different groups of people within a country:

- *Geographical disparities:* Unemployment is likely to vary quite markedly among regions in a country, as most countries do have some regions that are more prosperous than others. Inner city unemployment might be quite a bit higher than suburban or rural unemployment.
- *Age disparities:* Unemployment rates in the under-25 age group are higher than the national averages in many countries.
- *Ethnic differences:* Ethnic minorities often suffer from higher unemployment rates than the national average. This may be the result of differences in educational opportunities or possibly due to attitudes and/or prejudices of employers.
- *Gender disparities:* Unemployment rates among women have tended to be much higher than rates for men in many industrialized countries. There may be all kinds of reasons for this: differences in education, discrimination by employers or other social factors.

In India, Millennials Face A Tough Job Market With Unemployment At 4-Decade High

<https://www.npr.org/2019/07/26/745731801/in-india-millennials-face-a-tough-job-market-with-unemployment-at-4-decade-high?t=1564481971761>



The International Labour Organization

The International Labour Organization (ILO) is the UN specialized agency which seeks promotion of social justice and internationally recognized human and labour rights. It was founded in 1920 and is the only surviving major creation of the Treaty of Versailles which brought the League of Nations into being; it became the first specialized agency of the UN in 1946.

The ILO formulates international labour standards in the form of Conventions and Recommendations setting minimum standards of basic labour rights: freedom of association, the right to organize, collective bargaining, abolition of forced labour, equality of opportunity and treatment and other standards regulating conditions across the entire spectrum of work-related issues. It provides technical assistance primarily in the fields of:

- vocational training and vocational rehabilitation
- employment policy

- labour administration
- labour law and industrial relations
- working conditions
- management development
- cooperatives
- social security
- labour statistics and occupational safety and health.

It promotes the development of independent employers' and workers' organizations and provides training and advisory services to those organizations. Within the UN system, the ILO has a unique tripartite structure, with workers and employers participating as equal partners with governments in the work of its governing organs.

Source: www.ilo.org

Economics in action

ATL Thinking, Communication and Research

1. Read through the description of the ILO in the previous box.
2. Have a look at the homepage of the ILO (www.ilo.org) to develop an awareness of the type of work carried out by this international organization. At the time of writing, some of the flagship programmes include:
 - Occupational Safety & Health – Global Action for Prevention – The OSH-GAP promotes a culture of prevention in occupational safety & health and works to realise the fundamental right of all workers to safe and healthy work.
 - Jobs for Peace and Resilience – Jobs for Peace and Resilience is an employment generation programme for conflict-affected and disaster-prone countries, where decent work for women and men, who are vulnerable to social and political instability, could contribute to peace building, national reconciliation and social cohesion.
 - Social Protection Floors for All – Social Protection Floors for All fosters and supports the design and implementation of social protection systems, with a final goal of making social protection floors (SPFs) a reality for all people.
 - Better Work – Better Work aims to lift millions out of poverty by providing decent work, empowering women, driving business competitiveness and promoting inclusive economic growth.

Source: www.ilo.org

Make your own list and explain four contemporary issues being addressed at the ILO, at the moment.

Economics in action

ATL Thinking, Communication and Research

Investigate the distribution of unemployment in your chosen OECD country by looking at the unemployment rates for:

- different regions
- different age groups
- different ethnic groups
- men and women.

Present the information in the form of tables or graphs. Other than the national statistics office or the OECD, the ILO might be a useful resource.

What are the costs of unemployment?

The reason that governments place such importance on reducing the level of unemployment is because unemployment poses great costs on an economy. It should be pointed out that the costs of unemployment increase the longer that people are unemployed. The costs listed below are really those costs associated with *long-term unemployment*. These costs can be grouped into different categories.

- *Costs of unemployment to the unemployed people themselves:* People who are unemployed face several costs. First of all, unemployed people will receive less income than they would do if they were employed. This is assuming that they receive some unemployment benefits. Clearly if there are no unemployment benefits, then the situation is much worse. A reduction in income implies lower standards of living for those that are unemployed and, in all likelihood, their families as well. The costs worsen the longer the people are unemployed. It is quite likely that a person who remains unemployed for a long period of time could become increasingly dejected and this could contribute to high levels of stress and problems associated with stress, such as anxiety and depression. Erosion of mental health can lead to relationship break-downs and, in the extreme, higher levels of suicide.
- *Costs of unemployment to society:* The social costs of unemployment can most clearly be seen in areas where there are high levels of unemployment in the form of poverty, homelessness, higher rates of crime and vandalism, increased gang activities and so on. While it would be a simplification to blame these problems entirely on unemployment, they are not unconnected.
- *Costs of unemployment to the economy as a whole:* A production possibilities curve can be used to illustrate the key problem facing an economy with unemployment – if actual output is less than potential output due to the unemployment of the factor of production, labour, then the economy is foregoing possible output and would

Key concept



ECONOMIC WELLBEING

Key concept

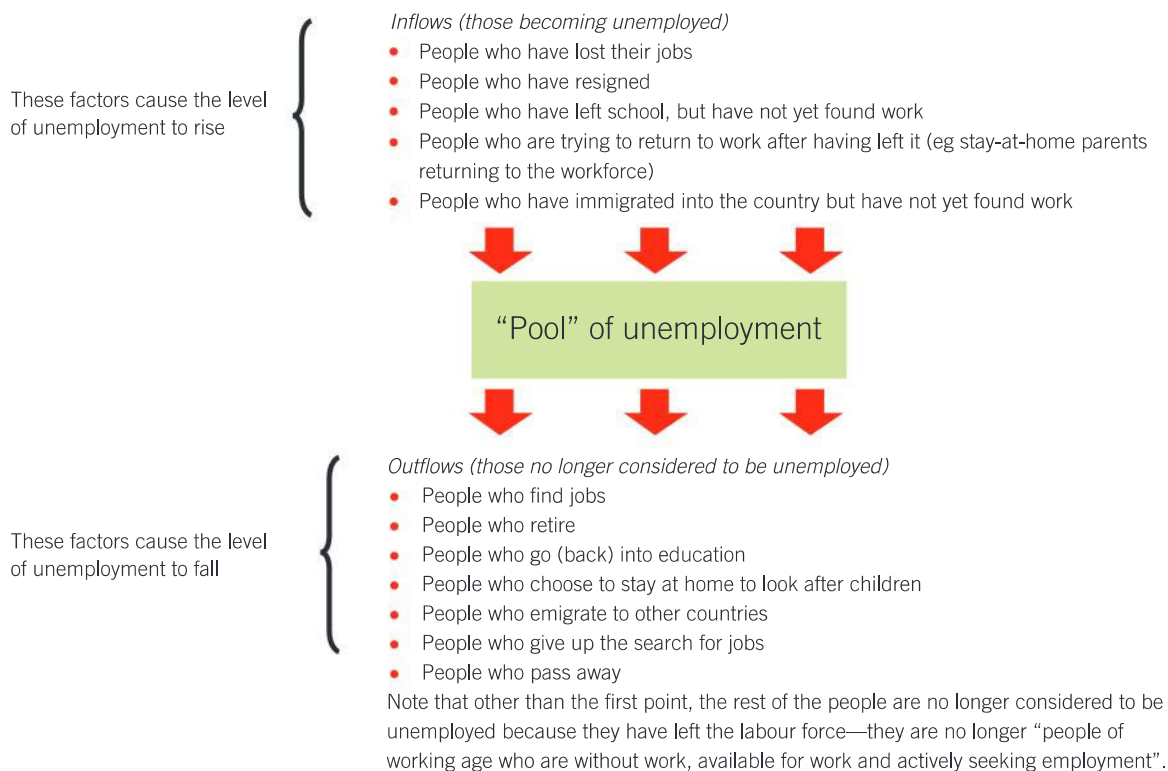


EQUITY

be operating at a point within its production possibility curve. This loss of output and income to the unemployed has other implications for the economy as a whole. For instance, there is the opportunity cost of the government's spending on unemployment benefits. If unemployed people who have lower incomes pay less direct tax and spend less money, the government earns less in indirect taxes as well. The government may have to spend more money to solve the social problems created by unemployment.

What are the main factors affecting the level of unemployment?

At any given point in time there will be a number of people that are unemployed. This may be referred to as the “pool” of unemployment. But this “pool” will be in a constant state of change. Unemployment is a “flow concept”. At any given time people are becoming unemployed while others are gaining employment. The level of unemployment depends on the relationship between these two. If more people are becoming unemployed than gaining jobs, then the level of unemployment will rise. If more jobs are being created so that more people are gaining jobs than losing jobs, then the level of unemployment will fall. These can be referred to as the inflows and outflows into the “pool” of unemployment and are illustrated in Figure 19.1.



▲ Figure 19.1 Inflows and outflows from the 'pool' of unemployment

Key concept



EFFICIENCY

Exercise 19.1

ATL Thinking and Communication

Using a production possibilities curve, explain the costs of unemployment to a country.

Economics in action

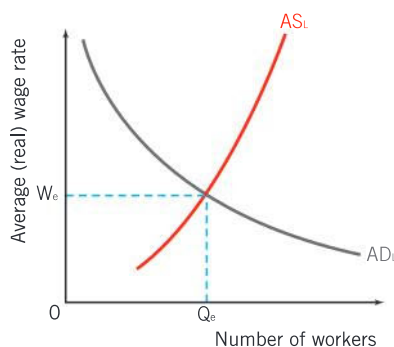
ATL Thinking, Communication and Research

Try to assess some of the problems associated with unemployment in your chosen OECD country.

The movements in and out of the pool of unemployment affect the supply of labour in an economy at any given time. This, along with the demand for labour, will determine the level of employment and unemployment in an economy.

To restate, unemployment is a *flow concept* and the people that governments are concerned about are the workers who do not “flow”, the *long-term unemployed*. It is the people who remain in the “pool” of unemployment and cannot get out.

What is the labour market?



▲ **Figure 19.2** Equilibrium in the labour market

Figure 19.2 shows the macroeconomic labour market. The y -axis on the diagram represents the price of labour, as measured by the average real wage rate. This shows the average level of wages adjusted for inflation. The x -axis represents the quantity of workers.

The labour market represents the demand and supply for all labour in the economy. Thus the demand for labour is more accurately called the aggregate demand for labour (AD_L) as it includes the demand not just for one type of worker but for all the labour that is involved in producing an economy’s goods and services. For example, it includes the demand for teachers, assembly line workers, sales people, pizza deliverers, motorcycle mechanics and bankers, to name a few. The aggregate demand curve shows the total demand for labour at every given average wage rate. The aggregate demand curve slopes downwards, because at a lower real wage level, producers are more willing to take on more labour – ie producers’ demand for workers increases. As the wage level increases, firms attempt to reduce the amount of labour that they use, perhaps by using more capital-intensive production methods.

The aggregate demand for labour curve is dependent on aggregate demand in the economy. If AD increases, and more output is produced, it may be assumed that more labour is demanded to produce the extra output. Similarly, if AD falls it is assumed that firms will need fewer workers to produce the lower level of goods and services demanded.

The aggregate supply of labour curve (AS_L) illustrates the total number of an economy’s workers that are willing and able to work in the economy at every given average wage rate. As the average wage rate increases, more people are willing to work and so the AS_L curve slopes upwards.

The labour market is in equilibrium where the aggregate demand for labour is equal to the aggregate supply of labour. Although it resembles any microeconomic demand and supply diagram, it is actually a macroeconomic model, as it describes aggregates in the economy. The equilibrium wage for the economy is established by this interaction of AD_L and AS_L and is shown on the diagram as W_e .

What are the causes of unemployment?

There are a number of different causes – types – of unemployment. We will consider four of them:

1. cyclical (demand-deficient) unemployment
2. structural unemployment
3. frictional unemployment
4. seasonal unemployment.

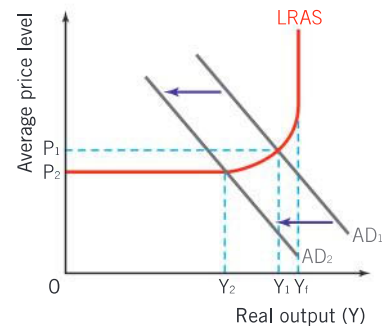
What is cyclical (demand-deficient) unemployment?

This type of unemployment is associated with the cyclical downturns in the economy. (“Cyclical” relates to the business cycle that we looked at in Chapter 13.) As an economy moves into a period of slower growth (or negative growth in the case of a recession), aggregate demand tends to fall as consumers spend less on goods and services. This is shown in Figure 19.3(a). The fall in consumer spending is likely to lead to a fall in the demand for labour. As firms cut back on production, they will need fewer factors of production and, of course, labour is one of the factors. The fall in demand for labour can be shown on a labour market diagram, as illustrated in Figure 19.3(b).

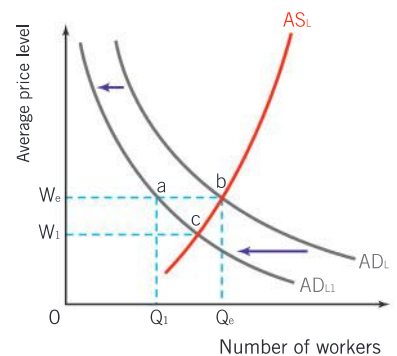
Assume that the economy is initially operating at a high level of economic activity at Y_1 in Figure 19.3(a). There is aggregate demand for labour at AD_L in 19.3(b), so the equilibrium wage will be W_e for Q_e workers. The labour market is in equilibrium.

If the economy slows down, aggregate demand is likely to fall as shown in Figure 19.3(a). To reduce their output, firms will reduce their demand for labour from AD_L to AD_{L1} as shown in Figure 19.3(b). If labour markets functioned perfectly, then the average real wage would fall to W_1 . However, this is not the case, and we say that wages are “sticky downwards”. This means that while workers’ wages can easily increase, it is less likely that real wages will fall. There are several reasons for this wage “stickiness”. First of all, firms realize that paying lower real wages is likely to lead to discontent and reduced motivation among workers. This may result in lower worker productivity and is undesirable. Secondly, firms may not be able to reduce wages due to labour contracts and trade union power. Since wages are likely to remain “stuck” up at W_e , the aggregate supply of labour will be greater than the aggregate demand for labour and unemployment of $a - b$ will be created.

This type of unemployment has a third name – Keynesian unemployment. As discussed in Chapter 16, Keynes observed that it was quite possible for the economy to operate well below full employment, and this was likely to result in high levels of unemployment.



▲ Figure 19.3(a) A decrease in AD



▲ Figure 19.3(b) Demand-deficient unemployment

Exercise 19.2

ATL Thinking and Communication

Using an AD/AS diagram, explain how fiscal policy may be used to decrease demand-deficient unemployment.

How might we cure demand-deficient unemployment?

Given that the problem is due to the low level of aggregate demand, the solution to this type of unemployment should be clear – the government can intervene to bring about an increase in aggregate demand through the use of fiscal or monetary policies. That is, the government can use Keynesian demand management policies.

Since the problem is caused by insufficient aggregate demand in the economy, the government could use fiscal policy by increasing AD itself through increased government spending, or it could lower direct and indirect taxes to indirectly increase consumption by households and investment by firms. The central bank could use monetary policy by decreasing interest rates or increasing the money supply.

What is structural unemployment?

This is by far the worst type of unemployment and occurs as a result of the changing structure of an economy. We can look at two forms of structural unemployment.

1. *A permanent fall in demand for a particular type of labour*

One form of structural unemployment occurs when there is a *permanent* fall in demand for a particular type of labour. This is natural in a growing economy, as while there will always be new types of jobs being created (eg software engineers, financial advisors), other jobs in a country may disappear (eg coal mining), making people unemployed. One reason that it is so harmful is that it tends to result in long-term unemployment as people who lose their jobs in one area lack the necessary skills to take on the newly-created jobs. We say that they lack the *occupational mobility* to change jobs. It may be that jobs are created in one part of the country, while the unemployed are living in another part of the country. Here, we would say that they lack the *geographic mobility*.

There are different causes of this type of structural unemployment.

- Technological change can make workers redundant. Increasing mechanization and work done by robots has led to significant job cuts in many developed countries. This can be referred to as technological unemployment.
- Globalization has made it increasingly possible for companies to set up their operations in countries where labour costs are lower and/or regulations are less strict. This results in a fall in demand for labour in more developed countries. Globalization has also resulted in increased trade such that producers from countries with lower costs of production have greater access to global markets. This means that demand for particular types of labour in countries with higher costs of production might fall due to lower-cost labour in foreign countries. For example, unemployment in many manufacturing industries in developed countries is blamed on imports from China.

- Changes in consumer taste may lead to a fall in demand for a particular type of labour. For example, people in some areas are increasingly concerned about the negative externalities associated with the production and consumption of coal. This has led to a search for alternatives and a fall in the demand for coal in some countries. As a result, coal miners have become structurally unemployed.

We can use a diagram to illustrate structural unemployment. We can show the fall in demand for labour in a particular market or geographical area. Consider the case of manufacturing workers in Canada, as illustrated in Figure 19.4. Given that the cost of employing labour in manufacturing in emerging/developing economies is lower than in high-income countries there has been a fall in demand (D_1 to D_2) for manufacturing labour in higher-wage countries such as Canada. The consequence of this is that there are fewer manufacturing workers employed (Q_1 to Q_2) and the wage falls from \$16 per hour to \$12 per hour. From this diagram we can assume that unless these workers can find other jobs there is an increase in unemployment of the amount $Q_1 - Q_2$.

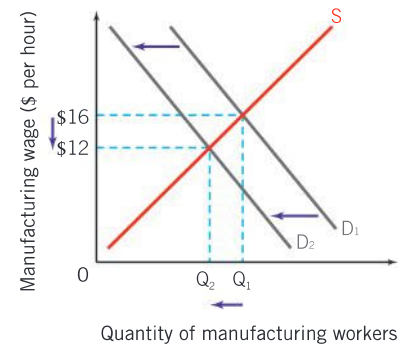
Please note an important distinction between demand deficient unemployment and structural unemployment. Demand deficient unemployment is caused by an overall (and temporary) fall in the demand for all labour in the economy as a result of a slowdown in economic growth or a recession. The expectation would be that once aggregate demand picks up then the aggregate demand for labour should also increase. Structural unemployment is caused by a permanent fall in the demand for one type of labour and requires a different set of solutions.

However, it should be noted that demand deficient unemployment caused by a lengthy period of economic activity could result in structural unemployment. This could occur because, as the economy picks up, it is quite possible that new forms of labour are needed, while workers who were made redundant during a recession do not have the skills needed for the changing economic climate.

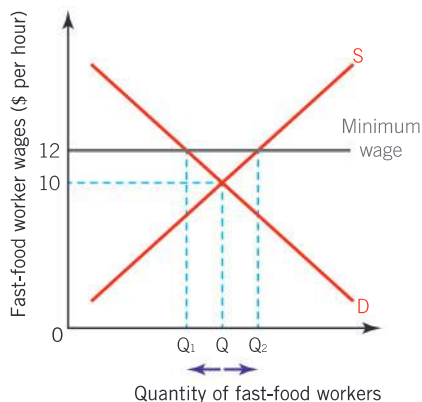
2. A change in the institutional framework of the economy

Another form of structural unemployment occurs when there are changes in the institutional framework of an economy that affect the labour force. Examples of this include laws governing the labour market and trade unions.

- *Laws governing the labour market* – For example, consider the case where there is a law which states that firms may not fire workers unless they give lengthy documentation and proof of inefficiency or malpractice. Most people would agree that this is a very important right that should be given to all workers. However, this law might also prevent some firms from hiring workers, as they fear the costs of dismissing them should the workers not be efficient. This would reduce the demand for labour, causing unemployment.



▲ **Figure 19.4** A fall in employment [structural unemployment]



▲ **Figure 19.5** Minimum wage and structural unemployment

Another example here would be minimum wage legislation, which we came across in Chapter 8. Let us assume that a minimum wage of \$12 per hour is put in place for fast-food restaurant workers in a country. This is shown in Figure 19.5.

Before the imposition of the minimum wage, Q workers were being employed at a wage of \$10 per hour. When the minimum wage of \$12 is legally enforced, the quantity of labour demanded falls to Q_1 workers and so there is an increase in unemployment of $Q_1 - Q$. Interestingly, because of the higher hourly wage, there is also an increase of workers who are prepared to supply their labour from Q to Q_2 .

- *Laws governing trade unions* – A key responsibility of trade unions is to protect their union members. It may be that firms are prevented from hiring certain workers, who might be willing and able to work, because the union does not allow the firms to employ non-union members. In this case the union would be contributing to the unemployment in the economy.

Key concept



INTERVENTION

How might we cure structural unemployment?

Structural unemployment is best dealt with through the use of supply-side policies. We can look at possible interventionist and market-based policies.

1. *Interventionist policies*

A key here is to try to enhance the occupational mobility of people, so that they become more able to take available jobs.

- A long-term solution involves an education system that trains people to be more occupationally flexible. Evidence suggests that people in more developed economies will have to change jobs several times in their career. Thus it is clear that an education system must make people able to learn the skills to adapt to economic conditions that are changing rapidly.
- Another strategy to improve occupational mobility involves spending on adult upskilling or retraining programmes to help people acquire the necessary skills to match available jobs.
- Another possibility is for the government to give subsidies to firms that provide training for their workers.
- If jobs exist in other parts of a country, a government might provide subsidies or tax breaks to encourage people to move to those areas. This enhances their geographic mobility.
- Governments can also support apprenticeship programmes, such as those available in Germany and Austria, so that potential workers can acquire the skills needed in the labour force.
- Job centres providing information about job vacancies, training opportunities and interview-training can help unemployed people access available jobs.

There are two main disadvantages to such policies. The first is that they are likely to involve a high opportunity cost as governments will have to forego spending in other areas in order to be able to afford the strategies. The second is that these policies are really only effective in the longer term.

2. *Market-based policies*

- Some would argue that people will have little incentive to find a job if the unemployment benefits available to them in their country are generous and allow them to remain unemployed or take their time in looking. Thus, economists who prefer to allow markets to operate freely would say that governments should lower unemployment benefits to encourage unemployed workers to take the jobs that are available rather than allow them the chance to wait for a better one to come along. If unemployment benefits were reduced, then the unemployed workers might become more willing to work, thus shifting the aggregate supply of labour to the right.
- Market-oriented economists feel that government intervention and labour market regulations reduce “labour market flexibility” and discourage businesses from hiring workers. They would argue that regulations about hiring and firing, for example, make businesses less willing to take on new workers, so they would argue in favour of deregulation of labour markets. This would involve reducing or removing the legislation that businesses must follow in their hiring, firing and employment practices.

The burden of such policies falls on two groups of people. First, people who lose their unemployment benefits will have lower living standards, and so such a policy can be said to increase inequity in an economy. Second, it can be assumed that labour market regulations are in place to protect workers from unfair treatment, such as being fired without due cause. Labour market regulations also guarantee certain conditions of work, such as working time, holidays and safety at work. If there is labour market deregulation, it would not be surprising to find worse working conditions for labour. So, although unemployment might fall and the economy’s output might rise, there might be a high cost for the workers themselves. Again, this can contribute to inequity in the economy where the benefits of higher economic growth are not shared by all.

Key concept



EQUITY

Key concept



ECONOMIC WELLBEING

What is frictional unemployment?

This is the short-term unemployment that occurs when people are in between jobs, or they have left education and are waiting to take up their first job. Frictional unemployment is not generally perceived to be a negative outcome in any dynamic economy. If people leave one job, the assumption is that they will move on to a job where they can be more productive. As soon as such members of the labour force get a job, they will be able to contribute more to the economy.

How might we reduce frictional unemployment?

Even though frictional unemployment is not seen as a serious problem in an economy due to its short-term nature, there are ways that governments can reduce this level of unemployment if it is believed that people are remaining unemployed for too long. Some would argue that people will have little incentive to find a job if the unemployment benefits available to them in their country are generous and allow them to take their time in looking. Thus, a market-based solution would be similar to that of structural unemployment – reduce unemployment benefits.

Sometimes people who are frictionally unemployed remain without work because they are not aware of appropriate vacancies that exist. In such a case, frictional unemployment can be reduced by improving the flow of information from potential employers to people looking for jobs. This can be through such things as Internet job sites, newspapers, job centres and employment counsellors. This would reflect a more interventionist approach.

What is seasonal unemployment?

It is natural in many economies for some workers to be employed on a seasonal basis. That is, the demand for certain workers falls at certain times of the year. For example, in temperate climates where there is a cold winter there may be unemployed construction workers or farmers. The tourism industry tends to work in seasons – for example, there is not much call for a ski instructor in Austria in July.

How might we reduce seasonal unemployment?

Such unemployment can be reduced by encouraging people to take different jobs in their “off season”. The methods mentioned above, reduced unemployment benefits and greater flow of information, are appropriate here as well.

What is the natural rate of unemployment?

Theoretically, the labour market may be in equilibrium, with no demand-deficient unemployment, but there might still be unemployed people. This is because some of the types of unemployment occur even when the labour market is in equilibrium.

When the labour market is in equilibrium, the number of job vacancies in the economy is the same as the number of people looking for work. However, although jobs exist, there are some workers who are either unwilling or unable to take them.

This unemployment, which is greater than the equilibrium level of unemployment, the full employment level of output, is known as the *natural rate of unemployment*. It comprises the three types of unemployment that we have encountered above – structural, frictional and seasonal unemployment.

Workers who are structurally unemployed may be unable to take jobs that are on offer because they do not have the requisite skills (occupational immobility) or because they are living in one area and the jobs are in another area (geographical immobility) or because the institutional framework relating to employment prevents them. For example, perhaps there are job vacancies in the financial services industry, but the unemployed assembly line workers are not able to take the jobs because they lack the appropriate education and skills. Or perhaps there are job vacancies in the domestic services industry, but the unemployed mechanical engineers are unwilling to take them. Or perhaps there are jobs available for computer programmers, but the unemployed computer programmers are not aware that these jobs are available. In each of these three examples, the unemployed workers are either unable (the assembly line workers and the computer programmers) or unwilling (the mechanical engineers) to take the jobs that are available.

Workers who are frictionally unemployed have voluntarily left their jobs, or are new to the labour market. This type of unemployment is easily recognizable as natural unemployment as it is natural for people to leave jobs in the hopes of finding better ones. They are searching for new and/or better jobs.

Workers who are seasonally unemployed may be unable to take jobs because their expertise is not applicable at the time of year or because they are unwilling to take jobs outside of their existing range of skills.

$$\text{NATURAL RATE OF UNEMPLOYMENT} = \text{Structural unemployment} + \text{frictional unemployment} + \text{seasonal unemployment}$$

Are demand-side policies or supply-side policies more effective in reducing unemployment?

It should be clear that the solutions to unemployment depend very much on the type of unemployment. If an economy is experiencing a downturn in economic activity, then it is likely that demand-deficient unemployment will rise, making demand-management policies suitable.

There are of course concerns associated with such policies. In order to use expansionary fiscal policy, a government may have to run a budget deficit and spend more than it takes in revenues. While not necessarily a problem, particularly in the short run, this may lead to fiscal problems in the longer run. If governments reduce taxes, there is no guarantee that people will spend their extra disposable income; if consumer confidence is low then people might prefer to save and aggregate demand might remain depressed. If governments reduce interest rates to encourage spending, there is no guarantee that it will have the desired effect of increasing consumption and/or investment. Once again, if consumer or business confidence is low then there is unlikely to be an increase in borrowing to finance consumption and investment.

Economics in action

ATL Thinking, Communication and Research

Research the labour market of the government in your chosen country. Consider the following questions:

1. How extensive are the labour market regulations (eg minimum wage, hiring and firing rules (job security), safety standards, length of work day, paid holidays)?
2. What does the government do to reduce the level of unemployment? Try to identify the policies that are interventionist and the policies that are market-oriented.

By now, you should have a complete picture of unemployment in your chosen country, including the nature of unemployment, the distribution of unemployment, the costs of unemployment and the solutions being employed to reduce unemployment.

Even when successful, there is likely to be a lag before they come into effect. It is possible that aggregate demand will increase, but by the time that it does, the economy may have already recovered, and the extra impetus can then be inflationary.

Another problem that occurs is due to the fact that even when the economy is at full employment, there will be some unemployment. We now know that this type of unemployment is natural unemployment and the solutions to these types are best found in supply-side policies. Using demand management policies to cure this type of unemployment will be unsuccessful. At full employment, the economy is producing near full capacity. Increases in aggregate demand at this point would result in inflationary pressure. We will address this further in the next chapter.

Fiscal policy – discretionary policy versus automatic stabilizers

We distinguish between discretionary fiscal policy and automatic stabilizers when discussing fiscal policy. Discretionary fiscal policy is a deliberate change to a government policy in order to manage aggregate demand, such as a decision to increase spending on infrastructure to expand the economy or to reduce spending on health care as a means of deflating the economy.

Automatic stabilizers, on the other hand, do not require any deliberate change to government policy in order to change the level of aggregate demand. These affect both government revenue and government expenditure. If there is high unemployment then government tax revenues will fall, as fewer people will be earning an income. It will not take any deliberate action on the part of the government to increase AD by lowering taxes. As far as the other tool

of fiscal policy, government expenditure, is concerned, there will also be an increase in government spending. If there is high unemployment then there will be an increase in transfer payments to the unemployed (depending on the ability or willingness of the government to pay unemployment benefits). The government does not have to deliberately increase its own spending to increase AD, as this will happen automatically through the increased spending on unemployment benefits.

Automatic stabilizers are seen as important measures of controlling fluctuating economic activity because, since they automatically operate to increase aggregate demand when there is a slowdown in economic activity, they are not influenced by political decision making and not subject to the same time lags as discretionary policy would be.

The problem facing policy makers is that in practice it might be very difficult to distinguish between the different types of unemployment. Moreover, an economy may be suffering from several different types of unemployment. At any rate, it would be most common to see governments using a mix of demand-side and supply-side policies. Demand-side policies, particularly the manipulation of interest rates, are commonly used to narrow possible business cycle fluctuations and reduce output gaps. Supply-side policies are vital to ensure that labour is suitably skilled and flexible to adapt to changing economic conditions so that the LRAS is always shifting to the right.

What is crowding out?

When governments run budget deficits in order to stimulate an economy and reduce unemployment, there is a potential problem known as “crowding out”. To run a budget deficit, the government has to borrow money. Governments do this by selling government bonds such as treasury bills or treasury bonds to financial institutions who then sell them on to people who want to save their money. What the government is essentially doing is increasing demand for the savings, or loanable funds, that are in the economy. We illustrate the consequences of this increase in demand in Figure 19.6.

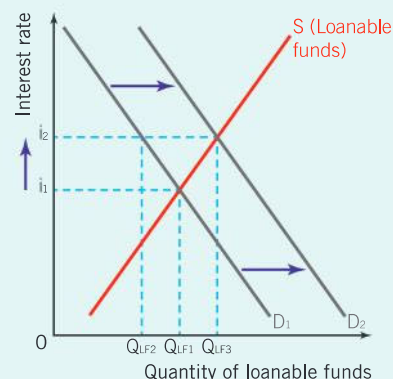
There is a given amount of savings in the economy and this is represented by the supply of loanable funds curve, S_{LF} . The price of these loanable funds is the interest rate. The demand curve for private business borrowing is D_1 . There is increased demand for loanable funds from D_1 to D_2 in order to finance a government spending deficit. This results in an increase in the interest rate from i_1 to i_2 . Overall, total borrowing increases from Q_{LF1} to Q_{LF3} . However, the increase in government borrowing is $Q_{LF2} - Q_{LF3}$, the horizontal distance between D_1 and D_2 . The higher interest rate will reduce the incentive for private businesses to invest and so their borrowing will fall from Q_{LF1} to Q_{LF2} . Private businesses will have been “crowded out” of the market.

So we have a situation where the government wished to increase aggregate demand by increasing government spending, but the higher interest rate causes interest-sensitive private investment to fall, which may reduce aggregate demand. The final effect on aggregate demand will depend upon whether the increase in government spending outweighs the fall in private investment or not.

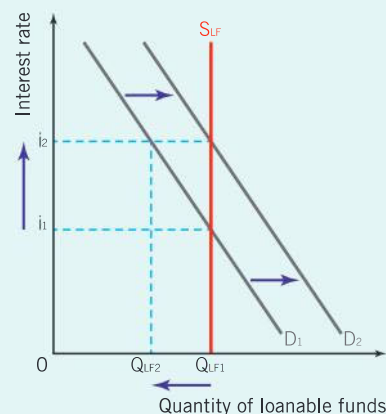
Whether or not crowding out does occur and the extent to which it might occur is a subject of much debate in economics. Yet again, there is disagreement among Keynesian economists and new classical economists. To simplify the argument, Keynesian economists say that it will not occur, if the economy is producing at less than full employment. The new classical economists, who are opposed to the use of demand management policies, argue that crowding out is a significant problem of increased government spending.

Extreme new classical economists argue that the crowding out effect is even more pronounced because, at any given time, the supply of loanable funds is fixed, ie perfectly inelastic. Thus any increase in government spending leads only to an increase in interest rates and no increase at all in total borrowing. This is shown in Figure 19.7.

If the supply of loanable funds is perfectly inelastic, then the increase in government demand for borrowing leads to a large increase in interest rates from i_1 to i_2 . The quantity of borrowing stays at Q_{LF1} but, with the higher interest rates, the quantity of private business borrowing falls to Q_{LF2} . There is even greater crowding out than in the moderate view.



▲ Figure 19.6 Crowding out – moderate view



▲ Figure 19.7 Crowding out – extreme view

Exercise 19.3

ATL Thinking and Communication

You have come across a number of types of unemployment in this chapter. Create a table that will show all of the different types of unemployment, their causes and their cures.

EXAMINATION QUESTIONS

Paper 1, part (a) questions

1. Explain the cause of demand deficient unemployment. [10 marks]
 2. Explain **two** possible causes of structural unemployment. [10 marks]
 3. Explain the costs associated with unemployment. [10 marks]
 4. Explain the difficulties involved in measuring the exact level of unemployment. [10 marks]
 5. Explain **two** policies that might be used to reduce the natural rate of unemployment. [10 marks]
- HL 6.** Explain crowding out. [10 marks]
- HL 7.** Explain how automatic stabilizers may reduce the effectiveness of fiscal policy. [10 marks]

Paper 1, part (b) questions

1. Using real-world examples, evaluate the effectiveness of demand-side policies in reducing unemployment.
2. Using real-world examples, evaluate the effectiveness of supply-side policies in reducing unemployment.

Paper 2 – 4-mark question**Unemployment increases as technology blossoms**

Over the past five years, improvements in technology and increased investment by a large proportion of the major companies in the garment industry have led to a significant decrease in employment. This is a concern for the government.

Using a labour market diagram, explain the type of unemployment that has occurred in the garment industry.

Paper 2 – 4-mark question**Economy is moving into recession**

In the last two quarters, economic growth has been -0.25% and -0.5% , respectively. This is proof that the economy is now in recession. The biggest effect of this is to be seen in the labour market, where the unemployment rate has increased from 12% to 13.5% in the last year. It is essential that the government addresses this problem.

Using an AD/AS diagram, explain the type of unemployment that has occurred in the economy.