Chapter 23
Market structure

Learning objectives

By the end of this chapter you will be able to:

- analyse the effect of having a high number of firms on price, quantity, choice, profit
- describe the characteristics of a monopoly
- discuss the advantages and disadvantages of monopoly

Introducing the topic

In some markets, there are many firms selling a product, while in others there is only one. Which type of market would you prefer to buy in and why?

KEY TERMS

Market structure: the conditions which exist in a market including the number of firms

Competitive market: a market with a number of firms that compete with each other.

23.1 Competitive markets

Market structure is a term for the conditions which exist in a market. There are a number of categories of market structure from very competitive to a monopoly which does not face any direct competition.

The more competitive a market is, the more sellers and buyers there are. With a high number of sellers, each firm will have a small share of the market, accounting for a small amount of the total market supply. This means that the change in the output of one firm has little or no effect on price. The existence of a number of firms means that consumers can switch between the products of the rival firms.

In **competitive markets**, there is usually relatively free entry into and exit from the market. This means that there must not be anything which makes it difficult for the firms to enter or leave the industry, that is to start or stop producing the product.

A rickshaw driver competes with taxi drivers for customers

GROUP ACTIVITY 1

a Identify three reasons accounting for consumer preference for one firm's products over that of rival firms.

b If a firm's products become more popular than those of its rivals, what will happen to its market share?

The behaviour of competitive firms

In a competitive market, there is pressure for firms to keep prices low. If an individual firm charges a higher price, it runs the risk of losing all of its sales to its rivals as the products are likely to be close substitutes. Firms may seek to gain a competitive advantage by improving their products. They are likely to respond quickly and fully, to any changes in demand.

Easy entry and exit will mean that in the long run firms will probably earn relatively low profits. In some cases, this may be just enough profit to keep them producing the product. In the short run, they may earn more, or less, than this level of profit which is referred to as **normal profit**. If demand for the product rises, the firms in the industry will make higher than normal profit. This level of profit, called **supernormal profit** or abnormal profit, will attract new firms into the industry. Their entry will increase supply which, in turn, will lower the price and return profit to the normal level. If, on the other hand, demand falls, firms would initially make a loss. This will force some firms out of the industry. The exit of the firms will reduce supply, cause prices to rise and restore normal profits.

Performance of competitive firms

A high level of competition is usually expected to promote efficiency. It provides firms with both an incentive and a threat to produce according to consumers' wants at the lowest possible cost. Any firm that can respond more quickly to consumers' demands, or can cut its costs, should gain a competitive advantage and earn higher profits. The threat arises because any firm that is not efficient, produces at a higher cost, or does not respond to changes in consumer tastes, will be driven out of the market. A high level of competition may drive the price down to a level which just covers the cost. That price, however, may not be that low. This is because competitive firms are likely to be small and often production on a larger scale reduces unit costs.

KEY TERMS

Normal profit: the minimum level of profit required to keep a firm in the industry in the long run.

Supernormal profit: profit above that needed to keep a firm in the market in the long run.

Monopoly: a market with a single supplier.

Barrier to entry: anything that makes it difficult for a firm to start producing the product.

Barrier to exit: anything that makes it difficult for a firm to stop making the product.

23.2 Monopoly markets

The usual meaning of a **monopoly** is a sole supplier of a product having 100% share of the market. This is often referred to as a pure monopoly and we will concentrate on this definition. Some governments define a monopoly as a firm that has 25% or more share of the market, and a dominant monopoly when a firm has a 40% share of the market.

Characteristics of a monopoly

- The firm is the industry. It has a 100% share of the market.
- There are high **barriers to entry and exit**, making it difficult for other firms to enter the market.
- A monopoly is a price maker. Its output is the industry's output and so changes in its supply affect the market price.

Why do monopolies arise?

It may be worthwhile to consider the causes which lead to a firm having total control of a market. In some cases, a monopoly may develop over time. One firm may have been so successful in cutting its costs and responding to changes in the consumer tastes in the past, that it has driven out rival firms and captured the whole of the market. Also, mergers and takeovers may result in the number of firms being reduced to one.

Alternatively, a monopoly may exist from the start. One firm may own, for example, all the gold mines in a country or it may have been granted monopolistic powers by a government, which makes it illegal for other firms to enter the market. A patent would also stop other firms from producing the product.

TIP

Identify a monopoly in your country and evaluate its performance so that you can use it as an example.

KEY TERMS

Scale of production: the size of production units and the methods of production used.

Sunk costs: cost that cannot be recovered if the firm leaves the industry.

Why do monopolies continue?

Another important question to be asked is 'What stops new firms from breaking into the market and providing competition to a monopoly?' It is the existence of barriers to entry and exit. One type of barrier is a *legal barrier*. As mentioned above, this may be in the form of a patent or a government act.

Another important barrier to entry is the **scale of production**. If the monopoly is producing on a large scale, it may be able to produce at a low unit cost. Any new firm, unable to produce as much, is likely to face higher unit costs and therefore will be unable to compete. It can also be expensive to set up a new firm, if large capital equipment is required. Other barriers to entry include the creation of brand loyalty through branding and advertising, and the monopoly's access to resources and retail outlets.

Barriers to exit can also stop new firms from entering the market. One barrier to exit may be a *long-term contract* to provide a product. Some firms may be reluctant to undertake such a commitment. A significant barrier to exit is the existence of **sunk costs**. These are the costs, such as advertising and industry-specific equipment, which cannot be recovered if the firm leaves the industry.

GROUP ACTIVITY 2

In each case, consider what type of barriers to entry and exit may exist in the following markets:

a airlines

b film production

c steel production

d window cleaning.

The behaviour of a monopoly

The existence of barriers to entry, means that a monopoly can earn supernormal profits in the long run. Firms outside the industry may not be aware of the high profits being earned. Even if they do know about the high profits and want to enter the industry, they are kept out by the high barriers to entry and exit.

A monopoly has control over the supply of the product, but although it can seek to influence the demand, it does not have control over it. In fact, a monopoly has to make a choice. It can set the price, but then it has to accept the level of sales that consumers are prepared to buy at that price. If, on the other hand, it chooses to sell a given quantity, the price will be determined by what consumers are prepared to pay for this quantity. Figure 23.1 shows that if a firm sets a price P, the demand curve determines that it will sell amount Q. If it decides to sell amount Q_1, it will have to accept a price of P_1.

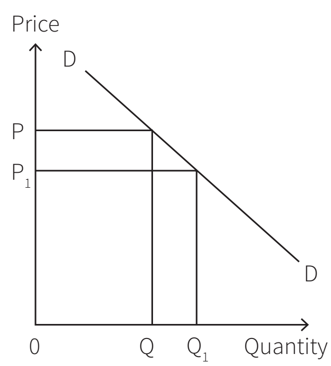


Fig. 23.1: The choice facing a monopolist

The performance of a monopoly

Monopolies are often criticised. This is because there are concerns that the absence of competition may lead to inefficiency. A monopoly may restrict the supply to push up prices and may produce a poor quality product, knowing that consumers cannot switch to rival products. It may also fail to respond to changes in consumer tastes and develop new products.

It is possible, however, that a monopoly could be relatively efficient and actually benefit consumers. If it produces on a large scale, its unit cost and price may be lower than that in a more competitive market. In fact, in some cases a monopoly would definitely be more efficient than competition. This would be the case when it prevents the wasteful duplication of capital equipment. For example, it would be expensive, and possibly unsafe, to have a number of different firms laying and operating rail tracks.

A monopoly's high profits would also enable it to spend on research and development and, therefore, it may introduce new, improved variations. Although it does not have direct competitive pressure to do this, it knows that it will receive all the profits resulting from any successful introduction of new methods and products. In addition, the need to overcome barriers to entry and break the monopoly may encourage firms outside the industry to try and develop a better product.

LINK

Chapter 14.7 Abuse of monopoly power

Occurrence of monopoly

The number of firms that can be defined as monopolies depends, in part, on the way markets have been defined. The more narrow the definition, in terms of the product and geographical area, the more examples will be found. For example, a country may have only one firm supplying gas, but several firms in its energy industry. There may be a relatively high number of food retailers in a town, but only one food shop on an estate, making it a local monopoly.

INDIVIDUAL ACTIVITY 1

Copy and complete the table which shows a comparison of a competitive market and a monopoly.

	Competitive market	Monopoly
Level of competition		none
Number of producers	many	
Barriers to entry		high
Type of long term profit	normal	
Influence on price	limited or none	
Number of substitutes		none

Summary

You should know:

- The key characteristics of a competitive markets are the presence of many buyers and sellers, and entry to and exit from the market.
- Competitive firms usually earn relatively low profits in the long run.
- Competitive markets may promote efficiency, keep prices low and quality high. However, low-scale production may mean that prices are not as low as possible and also there may be a lack of choice of types of products.

- The key characteristics of a monopoly are dominance of the market by one firm and high barriers to entry and exit.
- A monopoly is a price maker which can earn supernormal profits in the long run due to barriers to entry and exit.
- A monopoly can arise because one firm captures the market, one firm is formed by mergers and takeovers or the law protects a firm's monopolistic power.
- Barriers to entry include legal barriers, scale of operation, high set-up costs, brand loyalty and monopolistic access to resources and retail outlets.
- A monopoly can determine price or the quantity it sells, but not both.
- A monopoly may raise price, reduce quality and fail to innovate. However, it is also possible that it may produce at a low cost and hence charge a low price. It may also innovate due to the availability of finance and sense of security.

Multiple choice questions

1 Which of the following is a feature of a competitive market?

A Easy entry and exit
B Firms with a high market share
C Small number of buyers
D Small number of sellers

2 Indian Railways is a monopoly firm. What does this mean?

A The firm is a price taker
B The firm has no competitors
C The firm has a small share of the market
D The firm is not protected by barriers to entry

3 In which type of market structure can supernormal profits be earned in the short run?

A Monopoly
B Competitive market
C Monopoly and competitive market
D Neither monopoly nor competitive market

4 Which of the following is a barrier to entry?

A Brand loyalty
B Lack of advertising
C Low set-up costs
D Perfect information

Four-part question

a Define a *barrier to entry*. **(2)**
b Explain **two** characteristics of a competitive market. **(4)**
c Analyse how a change in the number of firms in a market can affect the profits that are earned. **(6)**
d Discuss whether or not a monopoly benefits consumers. **(8)**

Exam-style questions

Multiple choice questions

1 'Money enables people to borrow and lend'. Which function of money does this describe?

A measure of value

B medium of exchange

C standard for deferred payment

D store of value

2 What is a function of a commercial bank?

A to control the money supply

B to decide on the amount spent by the government

C to lend to individuals and firms

D to manage the national debt

3 Which statement about different income groups is true?

A Low income groups save more, in percentage terms, than high income groups

B Low income groups find it easier to borrow than high income groups

C High income groups spend less, in percentage terms, than low income groups

D High income groups do not borrow money

4 More people throughout the world visit the cinema. What impact is this likely to have on the demand for actors and their wages?

	Demand for actors	Wages of actors
A	decreases	decrease
B	decreases	increase
C	increases	increase
D	increases	decrease

5 Which combination of events would increase a trade union's ability to negotiate a wage rise for its members?

	Labour productivity	Unemployment
A	decreases	decreases
B	decreases	increases
C	increases	increases
D	increases	decreases

6 The following information shows the cost and revenue of a firm producing coats.

Total output of coats	Total costs ($)	Total revenue ($)
100	2000	2400
200	3600	4200
300	4500	5000
400	5200	5600

At what output does the firm maximise profits?

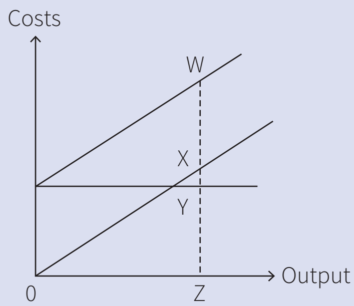
A 100

B 200

C 300

D 400

7 The diagram shows the fixed costs, variable costs and the total cost of a firm. Which distance represents the firm's variable costs at Z units of output?



A WX

B XY

C WY

D YZ

8 A firm sells 200 units at $9 each. Its average fixed cost is $2 and its average variable cost is $4. How much profit does the firm make?

A $400

B $600

C $800

D $1800

9 A firm's long run average cost curve shifts upwards. Which of the following could have caused this?

A internal economies of scale

B internal diseconomies of scale

C external economies of scale

D external diseconomies of scale

10 Which of the following will benefit a small firm?

- **A** bulk buying
- **B** easy access to finance
- **C** flexibility
- **D** specialist managers

Data response questions

Carefully study the source material for each question, then answer Questions 1 and 2.

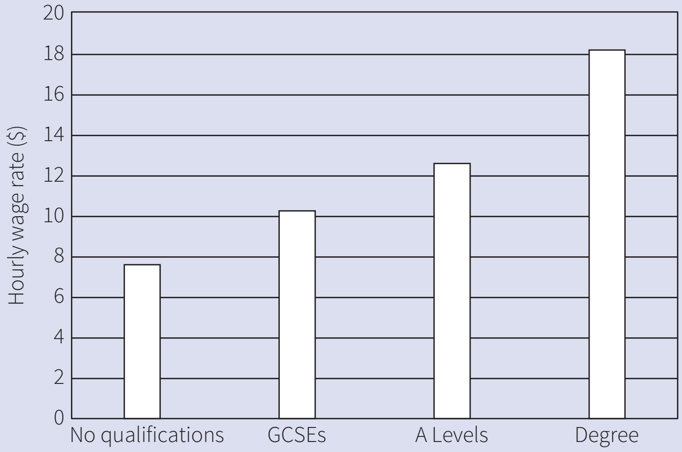
Source material: Corporate lawyers

Corporate lawyers specialise in advising firms on their legal rights and undertake legal work in drawing up contracts. They work in law firms and in large companies including commercial banks. In a commercial bank, a corporate lawyer may undertake legal work on, for example, the setting up of a new saving scheme, a merger with another bank or on the rights of the bank's shareholders.

Corporate lawyers' wages are high in comparison to the wages paid in most other countries. In 2016 the average wage received by a US corporate lawyer was $120 000 a year. This compared with an average of $30 000 a year in India, for example. Some experienced corporate lawyers working for top law firms and for multinational companies may earn in excess of $300 000. The average wage for US corporate lawyers has, however, not changed much in recent years. Indeed, it did not increase in 2016. The number of law school graduates has been increasing in the country for some time. In recent years, there has also been an increase in corporate legal work with more mergers taking place and more legal cases being brought against firms.

While the average wage paid to corporate lawyers in the USA did not rise in 2016, the average bonus paid to corporate lawyers did. Bonuses paid to US corporate lawyers can vary significantly from year to year. They rise when firms' profits are increasing and when it is considered that the productivity of the corporate lawyers is increasing.

The average wage of a corporate lawyer in the UK in 2016 was $80 000. In the UK, as in other countries, the average wage a worker receives is influenced by the qualifications she or he possesses. The chart shows the average hourly wage rate for workers with different qualifications in the UK in 2016.



Average hourly wage rate by qualification, UK, 2016

1 Referring to the source material in your responses, complete all parts of Question 1.

a Identify an example of a horizontal merger. **(1)**

b Calculate, in percentage terms, how much more on average corporate lawyers earned in the USA than in India in 2016. **(2)**

c Explain **one** function of a commercial bank. **(2)**

d Analyse, using a demand and supply diagram, **one** possible reason why the average wage of US corporate lawyers did not increase in 2016. **(5)**

e Explain why US firms prefer to pay bonuses rather than raise the wages of corporate lawyers. **(4)**

f Analyse the relationship between qualifications and the average hourly wage rate. **(4)**

g Discuss whether or not a firm will benefit from its workers specialising. **(6)**

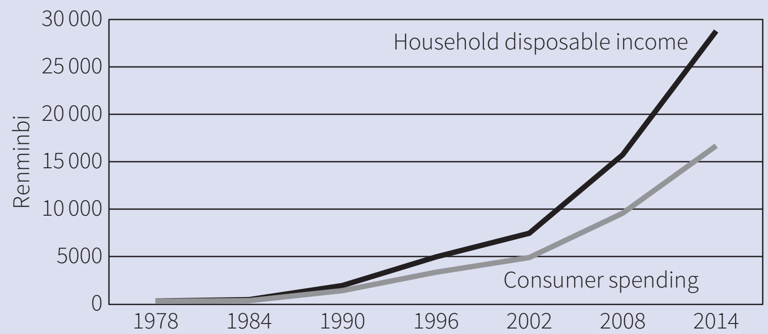
h Discuss whether or not higher wages in the USA will result in Indian corporate lawyers moving to the USA. **(6)**

Source material: E commerce in China

The e-commerce delivery business is expanding rapidly in China and throughout the world. More and more people are ordering products online and a number of firms are delivering these products to people's doors. These delivery firms are investing in advanced IT systems and new methods of delivery. Some firms are exploring drone deliveries to speed up their deliveries, which would reduce the number of workers and the amount of warehouse space needed, and also reduce the wages and rent.

One Chinese e-commerce delivery firm, Cainiao, is increasing its market share by buying out other e-commerce delivery firms. Its growth in size has enabled it to process orders and to use larger delivery vehicles more efficiently. It had got its average cost of delivery down to $1.50 in 2016 and is now delivering to more than 2800 districts in China. The firm might be able to reduce its average cost further by employing a greater proportion of capital. It currently makes good use of a supply of skilled workers and employs some temporary workers to deal with peaks in demand. The average delivery price it charged was 30% higher than its unit cost in 2016. This profit margin is below that of some of its competitors. To widen the gap between revenue and cost, the ecommerce delivery firms are seeking to be more responsive to changes in consumer demand and to be more productively efficient.

Globally there are three major firms in the market – DHL, FedEx and UPS. These firms are building up delivery networks in China, attracted by the rise in consumer spending in China. The diagram shows how household disposable income and consumer spending changed over the period 1978–2014.



Household disposable income and consumer spending in China, 1978–2014 (Rmb)

2 Referring to the source material in your responses, complete all parts of Question 2.

- **a** Identify an example of a fixed cost. **(1)**
- **b** Calculate how much Cainiao charged, on average, for a delivery in 2016. **(2)**
- **c** Explain **one** type of economy of scale that Cainiao is able to enjoy. **(2)**
- **d** Explain **two** advantages of labour-intensive production. **(4)**
- **e** Analyse how firms following the objective of profit maximisation may benefit consumers. **(5)**
- **f** Analyse what happened to China's savings ratio over the period shown. **(4)**
- **g** Discuss whether or not an increase in disposable income will always increase the savings ratio. **(6)**
- **h** Discuss whether or not small e-commerce delivery firms can compete against large e-commerce delivery firms. **(6)**

Four-part questions

1 In April 2016 teachers in Hungary took industrial action. In that year, a teacher with five years' experience was paid $800 a month, compared to the national average of $995. Of course, some Hungarian workers were paid less than teachers. For example, some farm workers were paid just the country's minimum wage of $382 a month. A number of other workers experienced a fall in pay which affected their spending.

- **a** What is meant by *industrial action*? **(2)**
- **b** Explain how the spending of the poor is likely to differ from that of the rich. **(4)**
- **c** Analyse the reasons why someone may continue to work in a job despite a fall in pay. **(6)**
- **d** Discuss whether or not teachers will always earn more than farm workers. **(8)**

2 Recent years have seen a number of mergers in food processing firms throughout the world.

In 2015 two large US food processing firms, Kraft Foods and H.J.Heinz, merged to form the Kraft Heinz Company. It was hoped that the merger would reduce average fixed cost. The food processing industry is growing at a rapid rate and becoming more capital-intensive. These changes are having an impact on the profits of the firms in the industry.

- **a** Define *average fixed cost*. **(2)**
- **b** Distinguish between a horizontal merger and a vertical merger and give an example of each. **(4)**
- **c** Analyse **three** causes of an increase in demand for capital goods. **(6)**
- **d** Discuss whether or not the growth of an industry will increase the profit earned by the firms in the industry. **(8)**

SECTION 4
Government and the macroeconomy

Chapter 24
The role of government

Learning objectives

By the end of this chapter you will be able to:

- describe the role of government, locally, nationally and internationally

Introducing the topic

We have seen how governments may seek to influence individual markets. We will now look at how governments may try to improve the performance of the economy on a local, national and international level.

24.1 Factors that influence the role of government

A government plays a larger role in an economy operating a mixed economic system than one operating a more market based economic system. How much the government intervenes in mixed economies differs according to both the perceived extent of market failure and how effective government policy measures are.

TIP

Find out what goods and services the government provides in the area where you live.

24.2 The government's influence on the local economy

Some local areas are very dependent on particular industries. Some of these industries may be state-owned industries. In this case, the government will be making decisions such as how much to produce and the wages to pay, which directly affect the local community. The industries which are in the private sector may be subsidised by the government to, for instance, prevent unemployment rising in a relatively poor area.

LINK

Chapter 15.3 Government measures to address market failure (Direct provision)

Some decisions on economic policies will be taken at the local level, rather than the national level. The extent to which decisions are made at the local level differ from country to country. **Local governments** may provide a range of goods and services including refuse collection, libraries, housing and local roads. To finance these, local governments may impose some taxes and charges and may receive grants from the national government.

24.3 The functions of government at local and national levels

The government carries out a range of functions. It is an owner of industries and assets such as schools and hospitals, a producer, a regulator, a collector of taxes and a director of the level of economic activity.

The government as a producer

A government may produce products which it believes are of key importance, the products that are produced by a **natural monopoly**, those which it thinks are essential and hence should be available to all and those which the private sector may under-produce or not produce.

Most countries seek to ensure that their key industries survive and do well. Key industries may be **strategic industries** or **national champions**. In China and France, for instance, such industries are often run by state-owned enterprises. In Italy, they receive favoured loans from banks. In a number of countries, the government also stops foreign companies from taking them over or merging with them, such as rail infrastructure which may be run or regulated by the government. This is, in part, to prevent consumers being exploited by a private sector firm charging a high price. In addition, to produce at a low average cost a high output may be required and at such an output, a loss may be incurred.

A government may also produce essential products, such as housing, on grounds of equity and merit and public goods.

KEY TERMS

Local government: a government organisation with the authority to administer a range of policies within an area of the country.

Natural monopoly: an industry where a single firm can produce at a lower average cost than two or more firms because of the existence of significant economies of scale.

Strategic industries: industries that are important for the economic development and safety of the country.

National champions: industries that are, or have the potential to be, world leaders.

Public sector contracts and partnerships between the public and private sectors

Private sector firms provide a range of products and services for the public sector. For example, private sector road building firms construct and maintain roads for the government in many countries, and private pharmaceutical firms supply state healthcare systems with medicines.

In recent years, in more and more countries, the government is forming partnerships with private sector firms. A common form of partnership is where the private sector initially provides the finance for a state project, such as the building of a hospital. The private sector firm then builds it and maintains it for a number of years. The government rents it and operates it, buying it back over time.

In other cases, the public and private sectors provide part of a service. For instance, private sector firms may run train operating companies, whilst the government builds and maintains the infrastructure.

GROUP ACTIVITY 1

Over the years, the Chinese government has identified a number of national champions. In recent years, these have included the biotechnology industry, the new energy cars industry and the rare earths industry.

a Identify two ways a government could promote the growth of a national champion.

b Identify a possible national champion from your country and explain your choice.

The government as an employer

The government employs workers and managers to operate its state-owned enterprises. Employing people helps a government to achieve some of its aims for the economy. To reduce unemployment, the government can employ more workers. To control rises in prices, the government can limit wage rises of its own workers and the prices charged by its enterprises. It can also set an example in terms of employment practice by, for instance, providing its workers with good quality training, preventing discrimination and ensuring good pensions to its workers.

INDIVIDUAL ACTIVITY 1

The number of letters and parcels being sent by post (mail) is declining throughout the world. In some countries, for example the Netherlands, the postal industry is in the private sector. In others, it is in the public sector, for example the Nigerian Postal Service is government owned and operated.

a Explain one argument for:

  i the state delivering mail

  ii private sector firms delivering mail.

b Explain two advantages of working for a state-owned enterprise.

24.4 The role of the government at an international level

LINK

Chapter 37.4 Methods of protection

Some governments promote free international trade, allowing firms to export and import what they want. Other governments place restrictions on what can be purchased from and sold to other countries.

Governments also vary in their policies towards foreign multinational companies (MNCs) wanting to set up in their countries. Some governments seek to attract them, believing they will generate jobs and increase the output that is produced in the country. Other governments stop foreign MNCs setting up in their countries as they think they will drive domestic firms out of business.

Some governments are also members of **trade blocs** such as the European Union (EU) and Mercosur (a Latin American trade bloc). Trade blocs promote trade between the member countries and may restrict trade with non-members. In addition, governments belong to international organisations. For instance, in 2016 there were 164 member countries of the World Trade Organisation (WTO). The WTO deals with global rules of trade between member countries. Its main aim is to promote **free international trade**.

KEY TERMS

Trade bloc: a regional group of countries that remove trade restrictions between themselves.

Free international trade: the exchange of goods and services between countries without any restrictions.

GROUP ACTIVITY 2

In August 2006, the government of Bahrain announced that government departments, schools, universities and other state institutions would have weekend holidays of Friday and Saturday instead of Thursday and Friday. The change was designed to bring Bahrain in line with other countries in the region, including Libya, Iraq and Syria which had also changed their weekends. It was also designed to make it easier for Bahrain's private sector firms, the majority of which work from Sunday to Thursday, to do business with the government. Six years later the government brought in new employment legislation. These included more anti-discrimination rules, for example, banning dismissal from employment being based on sex, colour, religion or membership of a trade union, and an increase in annual leave from 28 to 30 days. Bahrain is a member of the WTO and along with Kuwait, Oman, Qatar, Saudi Arabia and the UAE, a member of the Gulf Cooperation Council (GCC).

a Identify three products that may be supplied by private sector firms to government schools.

b Explain how increasing annual leave and reducing discrimination may increase a country's output.

c Find out whether your country is a member of a trade bloc.

Summary

You should know:

- Governments may raise some taxes and provide some goods and services at the local level.
- A government may seek to ensure the survival of key industries by running them as state-owned enterprises.
- A government may run a natural monopoly and may produce essential products.
- Governments produce, or at least finance, the output of public goods and may produce merit goods.
- Governments may work in partnership with the private sector to finance a government project or to provide a good or service.
- Employing workers can help a government achieve its aims for the economy including reducing unemployment, keeping inflation low and raising the standard of employment practices.
- Governments may promote free international trade or impose restrictions on international trade.

Multiple choice questions

1 What is the name of an industry in which the most efficient number of firms is one?

A A national champion
B A natural monopoly
C A primary sector industry
D A strategic industry

2 In what type of economy are most workers employed by the government?

A Free enterprise
B Market
C Mixed
D Planned

3 A government decides to limit the wage increase of state employees. What is it most likely trying to achieve?

A A reduction in employment
B A reduction in inflationary pressure
C An increase in the wages paid to private sector employees
D An increase in the attractiveness of public sector employment relative to private sector employment

4 A move from a planned economy to a market economy is most likely to reduce:

A Employment in the agricultural sector
B Employment in the public sector
C Flexible employment
D Self-employment

Four-part question

a Define a *private good*. **(2)**

b Explain **two** reasons why a government may run hospitals. **(4)**

c Analyse how the level of government intervention varies according to the type of economic system countries operate. **(6)**

d Discuss whether or not the government of a country with a large industry producing cigarettes should ban the production of cigarettes. **(8)**

Chapter 25
The macroeconomic aims of government

Learning objectives

By the end of this chapter you will be able to:

- describe the macroeconomic aims of government
- explain the reasons behind this choice of aims
- describe the criteria that governments set for each aim
- explain the possible conflicts between macroeconomic aims

Introducing the topic

Each government has aims for the economy of its country. In 2015 the Chinese government announced in its five-year plan for 2016 to 2020 that it was aiming for its economy to produce a minimum of 6.5% more output each year. A year later the Indian government said that it would try to ensure that the price level would not rise by more than 4% for the period 2016 to 2021. Do you know what your government is trying to achieve for the macroeconomy?

25.1 Governments' macroeconomic aims

The main government aims for the economy are economic growth, low unemployment, price stability, balance of payments stability, and redistribution of income. A government can operate a range of policy measures to achieve these aims and it is judged on their success or otherwise. Performance of the economy, however, is influenced not just by government policies. In a market that is becoming increasingly global, one economy's macroeconomic performance is being affected more and more by the dynamics of other economies.

KEY TERMS

Economic growth: an increase in the output of an economy and in the long run, an increase in the economy's productive potential.

Actual economic growth: an increase in the output of an economy.

Potential economic growth: an increase in an economy's productive capacity.

Aggregate demand: the total demand for a country's product at a given price level. It consists of consumer expenditure, investment, government spending and net exports (exports – imports).

Aggregate supply: the total amount of goods and services that domestic firms are willing to supply at a given price level.

Economic growth

When an economy experiences **economic growth**, there is an increase in its output in the short run. This is sometimes referred to as **actual economic growth**. In the long run, for an economy to sustain its growth, the productive potential of the economy has to be increased. Such an increase can be achieved as a result of a rise in the quantity and/or quality of factors of production.

The difference between actual and **potential economic growth** can be shown on a production possibility curve. In Figure 25.1, the movement from point A to point B represents actual economic growth – more capital and consumer goods are made. The shift outwards of the production possibility curve from YY to ZZ represents potential economic growth – the economy is capable of producing more.

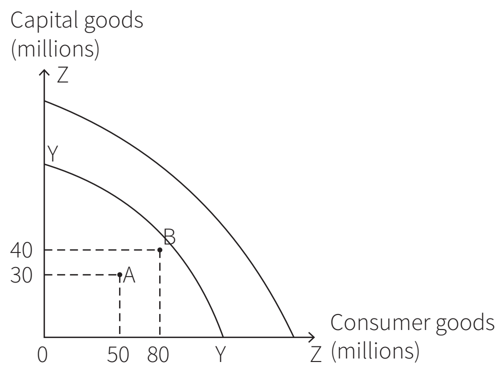


Fig. 25.1: Actual and potential economic growth

In analysing economic growth and other macroeconomic issues, economists also make use of aggregate demand and aggregate supply diagrams. **Aggregate demand (AD)** is the total demand for a country's products at a given price level. It is $C + I + G + (X - M)$. C is consumption. This is spending by households on goods and services. Investment (I) is spending by the private and public sectors on capital goods. G is government spending on state provided goods and services. $X - M$ is net exports which is the value of exports minus imports. A fall in the country's price level causes an extension in aggregate demand. This is because households and firms would have more purchasing power and because it increases the international competitiveness of the country's products. There are a number of causes of an increase in aggregate demand, and a shift to the right of the AD curve. These include an increase in population, a cut in the rate of interest, a lower exchange rate and greater confidence.

Aggregate supply (AS) is the amount of goods and services that domestic firms are willing and able to sell at a given price level. Aggregate supply is perfectly elastic if the economy has a significant number of unemployed resources, as then more can be produced without a contingent rise in costs of production and prices. The curve becomes more inelastic as the economy approaches full employment, since then the firms will be competing for resources and this will push up their costs and, as a result, the price level. At full employment of resources, aggregate supply becomes perfectly inelastic, since at this point a further increase in output is not possible. Aggregate supply will increase, and the AS curve shift to the right, if costs of production fall and if the quantity or quality of resources increases.

LINK
Chapter 29.3 Economic growth (Causes)

Changes in AD and AS affect the macroeconomy. Figure 25.2 shows actual economic growth. The rise in AD has resulted in a rise in the country's output and a small rise in the price level.

Figure 25.3 shows potential economic growth. The maximum amount that the economy can produce, has increased.

TIP
It is not a requirement to use the terms 'aggregate demand' and 'aggregate supply'.

In this case, the rise in the quantity and/or quality of resources has no impact on output. If, however, an increase in productive potential occurs when an economy is operating close to full employment, it can cause a rise in the country's output and a fall in the price level as shown in Figure 25.4.

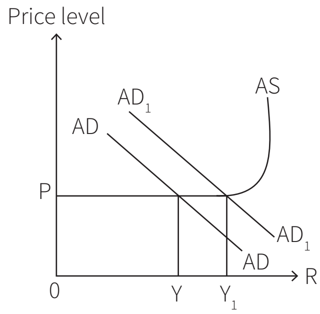


Fig. 25.2: Actual economic growth

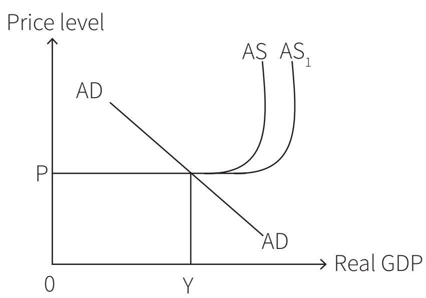


Fig. 25.3: Potential economic growth

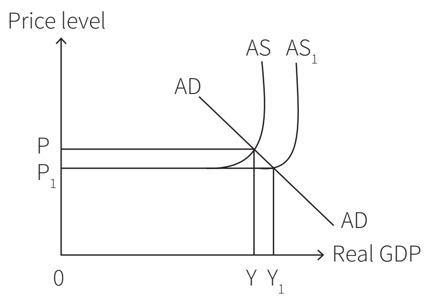


Fig. 25.4: Potential economic growth causing a rise in national output

The reasons why governments aim for economic growth

Governments want to achieve economic growth because producing more goods and services can raise people's living standards. Economic growth can indeed transform people's lives and enable them to live longer because of better nutrition, housing and healthcare.

Economic growth can also help a government achieve its other economic aims. As output increases, employment is likely to rise. If output increases to match higher demand, upward pressure on the price level can be avoided. A country's trade position may be improved if some of the extra output is exported. Some of the poor may gain jobs and some may be helped by the extra tax revenue generated.

Criteria that governments set for economic growth

The determinant of a country's possible economic growth rate is its level of output, in relation to its current maximum possible output and its growth in productive capacity. If, for instance, an economy is growing at 2% below its maximum possible output and its productive capacity is expected to increase by 3% this year, its possible economic growth rate is 5%. Most governments would like their economies to be working at full capacity. Some governments set a target for the economic growth rate of their economies based on their assessment of the possible economic growth rate.

Low unemployment

Most governments try to achieve as low a level and rate of unemployment as possible. This is sometimes expressed as **full employment**. Those people who are willing and able to work at the going wage rate can find employment. Of course, not everyone wants to work or is able to work. These people are not in the labour force. They are said to be economically inactive and are dependent on those in the labour force. They include children, the retired, those

KEY TERMS
Full employment: the lowest level of unemployment possible.

KEY TERMS

Economically active: being a member of the labour force.

Unemployment rate: the percentage of the labour force who are willing and able to work but are without jobs.

engaged in full-time education, home makers and those who are too sick or disabled to work. Those who are in work or are unemployed, but actively seeking work, form the labour force and are said to be **economically active**.

The **unemployment rate** is calculated as a percentage of the labour force:

$$\frac{\text{Unemployment}}{\text{Labour force}} \times 100$$

So, if 5 million people are unemployed out of a labour force of 40 million, the unemployment rate is:

$$\frac{5\text{ m}}{40\text{ m}} \times 100 = 12.5\%$$

LINK

Chapter 30.6 The consequences of unemployment

The reasons why governments aim for low unemployment

Unemployment is a waste of resources. Those unemployed can suffer a number of disadvantages including low income and government tax revenue may have to be spent supporting the unemployed.

Criteria that governments set for unemployment

Most governments and economists think that it is not possible to achieve 0% unemployment. This is because they think that even in a strong economy with demand for labour equalling the supply of labour, there will always be some workers changing jobs and being unemployed for short periods. As a result, governments aim for a low rate of unemployment. This rate can vary from country to country depending on their economic circumstances, with what is regarded as the full employment rate varying between countries and over time. In most countries, it is thought to be difficult to get unemployment below 3%.

GROUP ACTIVITY 1

In 2016, Mexico had an economic growth rate of 2.1%, an unemployment rate of 3.7% and an underemployment rate of 25%. The table shows Mexico's industrial structure by output and employment in 2016.

	% share of output	% share of employment
Agriculture	4	14
Manufacturing	33	24
Services	63	62

a What is meant by an 'economic growth rate of 2.1%'?

b What do you think is meant by underemployment?

c In which sector is underemployment likely to have been the highest in 2016? Explain your answer.

d From the information given, explain whether Mexico had the potential to grow at a faster rate than 2.1% in 2016.

KEY TERM

Price stability: the price level in the economy not changing significantly over time.

Price stability

Price stability means that the price level in the economy is not changing significantly over time. The price of some products may be falling while the price of others may be rising, but generally the amount households are paying for the products they are buying is relatively stable.

The reasons why governments aim for price stability

Governments aim for price stability because it ensures greater economic certainty and prevents the country's products from losing international competitiveness. If firms, households and workers have an idea about future level of prices, they can plan with greater confidence. It also means that they will not act in a way that will cause prices to rise in the future. Firms will not raise their prices because they expect their costs to be higher, households will not bring forward purchases for fear that items will be more expensive in the future and workers will not press for wage increases just to maintain their real disposable income.

Criteria that governments set for inflation

In seeking to achieve price stability, most governments are not aiming for a 0% change in price. Some governments, for instance, have set a target **inflation rate** of 2%. Others have a rather higher rate. They do not aim for unchanged prices, for two main reasons. One is that measures of inflation tend to overstate rises in prices. A price index, for instance, might indicate that the general price level has risen by 1%, but in practice, prices might not have changed and might have even fallen slightly. Some of the prices paid by people are lower than those appearing in the official price level indices, as people buy some products at reduced prices in sales and also make second-hand purchases. Price rises can also hide the improvements in products. A car may cost $100 more this year than last year, but it may incorporate a number of new features such as satellite navigation. So the question arises, is the car actually more expensive or is it a different car?

A second reason is that a slight rise in prices can provide some benefits. It can encourage producers to increase their output, as they may think that higher prices will lead to higher profits. It can also enable firms to cut their wage costs by not raising wages in line with inflation. The alternative to such a move might be a cut in employment.

Governments also try to avoid a fall in the price level if it is caused by a fall in aggregate demand. This is because it could result in a decline in output and a rise in unemployment.

KEY TERMS

Inflation rate: the percentage rise in the price level of goods and services over time.

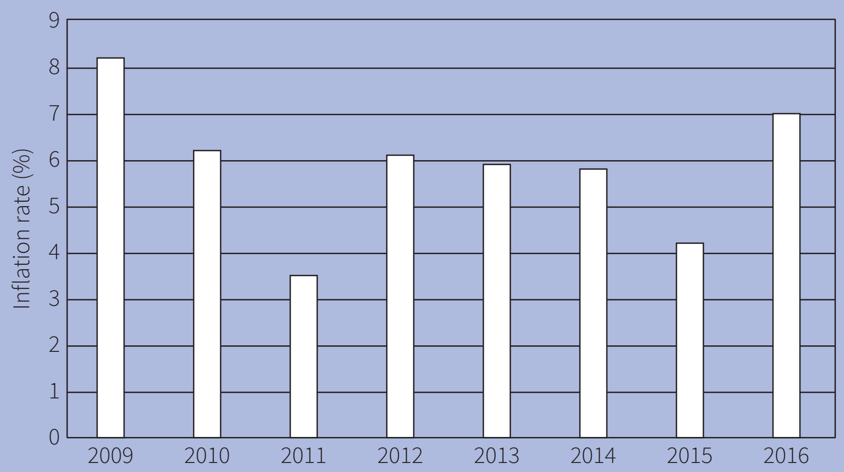
Balance of payments: the record of a country's economic transactions with other countries.

LINK

Chapter 31.2 Measurement of inflation and deflation (Constructing a price index)

INDIVIDUAL ACTIVITY 1

In 2009 the South African government set its central bank, the South African Reserve Bank, an inflation rate target of between 3 and 6%. This target range was still in force in 2016. The graph shows the country's inflation rate for the period from 2009 to 2016.



a Identify one function of a central bank other than controlling the inflation rate.

b Comment on how successful the South African Reserve Bank was in achieving the government's inflation rate target over the period shown.

Balance of payments stability

A key part of a country's **balance of payments** is its record of revenue received from selling exports and its expenditure on imports. Over the long run, most governments want the value of their exports to equal the value of their imports, so that what the country earns from exports equals what it spends on imports.

The reasons why governments aim for balance of payments stability

If expenditure on imports exceeds revenue from exports for a long period of time, the country will be living beyond its means and will get into debt. If export revenue is greater than import expenditure, the inhabitants of the country will not be enjoying as many products as possible.

Criteria that governments set for balance of payments stability

While governments usually aim for export revenue to equal import expenditure, they may not be concerned if there is a surplus of export revenue over import expenditure or a deficit of export revenue, provided this is of a small amount or if it lasts a short period of time. There may be a move to a deficit caused by an increase in the import of raw materials and capital goods. This is unlikely to be a cause for concern as the products purchased may increase the economy's ability to produce more goods and services to sell at home and abroad. Short-term deficits and surpluses may also arise from fluctuations in income at home and abroad.

GROUP ACTIVITY 2

The table shows selected economic indicators in 2016.

Economy	Economic growth rate %	Unemployment %	Inflation rate %
Greece	0.4	23.2	0.8
India	7.0	5.0	5.0
Japan	1.0	3.0	0.2
Pakistan	5.8	5.9	3.8
Venezuela	13.7	7.3	425.0

a Do you think any of the countries shown achieved all of their macroeconomic aims in 2016? Explain your answer.

b Which country is likely to have had the highest number of unemployed workers in 2016? Explain your answer.

Redistribution of income

A government may seek to redistribute income from the rich to the poor. The more money someone has, the less they tend to appreciate each unit. A rich person with an income of $10 000 a week is unlikely to miss $10, but that sum would make a huge difference to someone currently struggling on $20 a week.

Governments redistribute income by taxing and spending. The rich are taxed more than the poor. Some of the money raised is spent directly on the poor by means of benefits such as housing benefit and unemployment benefit. Other forms of government expenditure, such as that on education and health, particularly benefit the poor. Without the government providing these services free of cost or at subsidised prices, the poor may not find them accessible.

The reasons why governments may seek to redistribute income

Inequality of income and wealth may mean that some people are experiencing poverty. Governments try to reduce poverty because of the hardships it causes. Inequality can grow without government intervention. The rich tend to marry the rich and benefit from better education and have more opportunity to save. A significant gap between the rich and the poor can also cause social unrest as the poor may feel a sense of social injustice.

Criteria that governments set for income redistribution

Governments are unlikely to aim for a perfectly equal distribution of income. This is because people have different needs. It is also because taxing the rich too heavily and providing too generous benefits may act as a disincentive to effort and enterprise.

25.2 Possible conflicts between macroeconomic aims

There is the risk that full employment may conflict with stable prices. When there is a low level of unemployment, it will be difficult to increase output to match increases in aggregate demand. In this case, higher aggregate demand is likely to lead to higher prices. A low level of unemployment is likely to push up wages as firms compete for workers. The resulting higher costs of production are likely to result in inflation.

Full employment and economic growth may conflict with balance of payments stability. Producing a higher output may be partly the result of higher exports. The resulting rise in employment is likely to increase incomes, however, and spending on imports may increase by more than export revenue. To produce a higher output, firms may also import more imported raw materials and capital goods.

Priority

If the aims appear to conflict, a government may have to decide between, for instance, reducing inflation and reducing unemployment. Its choice will be influenced by the relative scale of the problem, the consequences of the problem and which problem the country's citizens are most concerned about.

TIP

Find out the unemployment rate, inflation rate, economic growth rate and current account position of your own country and compare them with the figures for three major economies. In answering questions about macroeconomic performance, it is useful to show an awareness of the events in your economy and other economies.

Summary

You should know:

- The main macroeconomic aims of the government are economic growth, full employment, price stability, balance of payments stability and redistribution of income.
- Economic growth can improve people's living standards by increasing the availability of goods and services.
- For economic growth to continue in the future, a country's productive capacity has to increase.
- Full employment is usually considered to be the lowest rate of unemployment possible.
- Price stability implies low and stable inflation.
- Low and stable inflation creates certainty and avoids a loss of international competitiveness.
- Measures of inflation tend to overstate rises in prices.
- Most governments aim for a match between export revenue and import expenditure in the long run.
- Governments redistribute income from the rich to the poor by means of taxation and government expenditure.
- There is the possibility that full employment may conflict with stable prices and economic growth and full employment may conflict with balance of payments stability.

Multiple choice questions

1 Which of the following is a macroeconomic aim of the government?

A A fall in national output

B High unemployment

C Imports exceeding exports

D Price stability

2 A country has a population of 120 million and a labour force of 50 million, of which 6 million of its labour force are unemployed. What is the unemployment rate?

A 3.53%

B 5%

C 10.71%

D 12%

3 Which of the following could increase a country's productive potential?

A An improvement in education

B A reduction in the retirement age

C Retention of worn out machinery by firms

D Migration of workers to other countries

4 What is meant by potential economic growth?

A An increase in the total demand in the economy

B An increase in productive capacity of an economy

C The economy's export revenue being greater than its import expenditure

D The economy operating at full employment

Four-part question

a Identify **two** macroeconomic aims apart from full employment. **(2)**

b Explain what is meant by full employment. **(4)**

c Analyse why governments want to achieve full employment. **(6)**

d Discuss whether or not all governments will have the same economic aims. **(8)**

Chapter 26
Fiscal policy

Learning objectives

By the end of this chapter you will be able to:

- define the budget
- analyse the reasons for government spending
- analyse the reasons for levying taxes
- describe the different types of taxes
- explain the principles of taxation (the qualities of a good tax)
- analyse the impact of taxation on consumers, producers, government and the economy as a whole
- define fiscal policy
- analyse the effect of fiscal policy measures on the budget position
- calculate the size of a budget deficit or surplus
- discuss the effect of fiscal policy on government macroeconomic aims

Introducing the topic

Do you know which of the products you buy have a tax on them? Do you know how much of the pay you may receive in your chosen career will be taxed? You might have heard people complaining about the taxes that they pay. Do you think they know why governments impose taxes and why they change tax rates?

26.1 The budget

A government sets out the amount it plans to spend and raise in revenue in a **budget** statement. It shows the relationship between government revenue and government spending. A **budget deficit** is when the government's spending, also sometimes called public expenditure, is higher than its revenue. In this case, the government will have to borrow to finance some of its spending. In contrast, a **budget surplus** occurs when government revenue is greater than government spending. A balanced budget, which occurs less frequently, is when government spending and revenue are equal.

KEY TERMS

Budget: the relationship between government revenue and government spending.

Budget deficit: government spending is higher than government revenue.

Budget surplus: government revenue is higher than government spending.

National debt: the total amount the government has borrowed over time.

India's finance minister on Budget day

26.2 The reasons for government spending

Governments spend for four essential reasons. These are

- **To influence economic activity.** A government may, for example, increase its spending in order to increase aggregate demand in the hope that the higher aggregate demand will stimulate higher output and so result in economic growth.
- **To reduce market failure.** Governments spend on public goods as this would not be financed by the private sector. They spend on merit goods as market forces would not allocate sufficient resources to their production. In addition, they spend money regulating markets where there is a difference between social and private costs and benefits and abuse of market power.
- **To promote equity.** Governments provide benefits and products to vulnerable groups and the unemployed. For example, some governments provide state pensions to the retired, subsidised housing for the poor and free education to children.
- **To pay interest on national debt.** If a government has borrowed in the past to finance a gap between its spending and its tax revenue, it will have to pay interest on the loans.

LINK

Chapter 15.3 Government measures to address market failure

Chapter 33.3 Possible government policy measures to reduce poverty

KEY TERM

Multiplier effect: the final impact on aggregate demand being greater than the initial change.

Government spending can be a powerful government measure. This is because of the **multiplier effect** whereby any initial increase in spending will eventually cause a greater increase in a aggregate demand. For example, if a government raised its expenditure by $20m, the final rise in the country's income, expenditure and output would be greater. This is because those who benefit from the $20m extra expenditure, may themselves spend $16m (saving $4m). In turn those who receive the $16m may spend $13m and so on. If expenditure continues to rise at this rate, total spending, income and output will rise by $100m. In this case, the final increase in expenditure is five times greater than the initial rise.

INDIVIDUAL ACTIVITY 1

The Maldives had a budget deficit of $100m in 2015. It was predicting that the budget deficit would double to $200m in 2016 with a forecast government revenue of $1.4bn. One-third of government spending was expected to go on public sector wages and a smaller proportion on promoting tourism. The Maldivian government gets revenue from a number of sources including taxation and leasing islands for agriculture, fisheries and resort development.

a Calculate how much the Maldivian government was expected to spend in 2016.

b Explain how a decline in tourism would be expected to affect the budget position of the Maldives.

26.3 The reasons for levying taxation

Most people think that taxes are used to raise revenue for government expenditure. This is, indeed, a key aim of taxation and in a number of countries, tax revenue is the main source of government revenue. There are, however, other aims as well, including:

- **To redistribute income from the rich to the poor.** Higher income groups usually pay more in tax than the poor and some of the revenue raised is used to pay benefits to the poor.
- **To discourage the consumption of demerit goods.** These are products that the government considers more harmful to consumers than they realise, for example, cigarettes and alcohol.
- **To raise the costs of firms that impose costs on others** by, for example, causing pollution.
- **To discourage the consumption of imports and hence protect domestic industries.** By placing tariffs on rival imported products, the country's inhabitants may buy less foreign and more domestic products.
- **To influence economic activity.** As with government spending, changes in taxation can be used to change aggregate demand. If an economy is experiencing rising unemployment, its government may cut taxes to stimulate an increase in consumption and investment.

LINK

Chapter 33.3 Possible government policy measures to reduce poverty

26.4 The main categories of taxes

Taxes are either direct or indirect and progressive, proportional or regressive. **Direct taxes** are taxes levied on a person's or a firm's income or wealth. They are called direct taxes because the people or firms responsible for paying the tax have to bear the burden of the tax. **Indirect taxes**, which can also be called expenditure or outlay taxes, differ from direct taxes in two key ways. One is that they are levied on spending. The other is that the firms that actually make the tax payment to the government may pass on at least some of the burden of the tax, to other people. For example, most of the tax that governments impose on petrol is passed on by petrol companies to the customers in the form of higher prices.

A **progressive tax** is one which takes a higher percentage of the income or wealth of the rich. As taxable income or wealth rises, so does the rate of taxation. In the case of a **proportional tax**, the percentage paid in tax stays the same as income or wealth change. With a **regressive tax**, the percentage paid in tax falls as income or wealth rises. So in this case, people with higher incomes pay a smaller percentage of their income in tax than the poor do.

KEY TERMS

Direct taxes: taxes on income and wealth.

Indirect taxes: taxes on expenditure.

Progressive tax: one which takes a larger percentage of the income or wealth of the rich.

Proportional tax: one which takes the same percentage of the income or wealth of all taxpayers.

Regressive tax: one which takes a larger percentage of the income or wealth of the poor.

In the case of all three types of tax, the total amount of tax paid usually rises with income or wealth but what differs is the percentage paid (this is shown in Table 26.1). For example, a rich and a poor person pay the same excise duty per litre of petrol bought. The rich person is likely to buy more petrol and so will pay more tax in total. The amount paid, however, is likely to form a smaller percentage of his or her income, making this a regressive tax.

Progressive tax		
Income ($)	**Tax paid ($)**	**Tax rate (%)**
100	10	10
500	100	20
1000	400	40
Proportional tax		
Income ($)	**Tax paid ($)**	**Tax rate (%)**
100	25	25
500	125	25
1000	250	25
Regressive tax		
Income ($)	**Tax paid ($)**	**Tax rate (%)**
100	40	40
500	150	30
1000	200	20

Table 26.1: Progressive, proportional and regressive taxes

INDIVIDUAL ACTIVITY 2

Some countries, including Bangladesh, Brazil and South Africa, have banned plastic carrier bags. Other countries, including Ireland, the UK and the USA, impose taxes on plastic bags. The main reason for this is to cut their use and so reduce litter.

a Is a tax on plastic carrier bags a direct or an indirect tax? Explain your answer.

b Identify a reason, other than reducing litter, for imposing a tax on plastic carrier bags.

c Using a demand and supply diagram, explain the effect of imposing a tax on plastic carrier bags, on their market.

The main types of taxes

The types of taxes imposed vary from country to country. There are some taxes, however, which are levied in most countries. Among the most common type of direct taxes are:

- **Income tax.** This is a tax on income that people receive from their employment and investment income. People are given a tax allowance, which is an amount of income they earn free of tax. Income above this level is referred to as taxable income.
- **Corporation tax.** This is also referred to as corporate tax and is a tax on the profits of firms.
- **Capital gains tax.** This is a tax on the profit made on assets when they are sold for a higher price than what they were bought for. A capital gain may be made, for example, by shareholders selling shares for more than what they paid for them. When a capital gains tax is imposed, exemptions are usually made. These normally include any money made on the sale of people's main residence.

- **Inheritance tax.** This is a tax on wealth above a certain amount which is passed on to other people, when a person dies.

Common types of indirect taxes are:

- A sales tax is a tax imposed when products are sold. The main examples of sales tax are GST (general sales tax) and VAT (value added tax).
- Excise duties are taxes charged on certain domestically produced goods, most commonly on alcoholic drinks, petrol and tobacco. They are charged in addition to VAT.
- Customs duties are taxes on imports and are also called tariffs.
- A licence may be needed to use a range of products including a television and a car.

Local taxes

Most taxes are levied on a national basis, but some are levied on a local basis. Local taxes are used to pay for local services such as education, fire services, libraries, roads and refuse collection. There are two main types of local taxes. One is based on the property of local firms and the other is based largely on the value of household property.

In a number of countries, business rates are levied on local firms. The government collects the revenue and then distributes it to local authorities on the basis of the number of people living in each area. Council tax is based on the value of people's housing and expenditure of each council. It is collected directly by the local authority. Some countries also use local sales tax.

TIP

Find out examples of direct and indirect taxes in your own country.

GROUP ACTIVITY 1

In Egypt, in 2016, the standard rate of corporation tax was 22.5%. Oil exploration and production firms, however, were charged a higher rate of 40.55%. After a tax free allowance, the rate of income tax increased from 10%, to 15%, to 20% and then 22.5% as income rose.

a Explain why a government may charge oil firms a higher corporation tax rate than other firms.

b Explain whether Egypt was operating a progressive or regressive income tax system in 2016.

26.5 The principles of taxation

Economists have identified a number of qualities that a good tax should possess. These include:

- **Equity.** This means fairness in the sense that the amount of tax people and firms have to pay, should be based on their ability to pay. A rich person has a greater ability to pay tax than a poor person.
- **Certainty.** A tax should be easy to understand, and households and firms should be able to calculate the amount of tax required to be paid by them.
- **Convenience.** A tax should be easy to pay.
- **Economy.** The cost of collecting a tax should be considerably less than the revenue it generates.
- **Flexibility.** It should be possible to change the tax if economic activity changes or government aims change. The revenue from some taxes changes automatically to offset economic booms and slumps. For example, tax revenue rises from income tax and sales tax, without any change in the rates, when there is an economic boom. This is because more people will be employed, incomes will rise and people will spend more. Such a rise in tax revenue may slow down the rise in aggregate demand and prevent inflationary pressure building up.
- **Efficiency.** A tax should improve the performance of markets or at least not significantly reduce the efficiency of markets. For example, an extra one-off tax, sometimes called a *windfall tax*, imposed on high supernormal profits of banks may encourage banks to

reduce the charges they impose on customers. A tax on pollution may result in a cleaner environment. Income tax rates should not be set so high that they discourage effort.

In practice, it is unlikely that a tax will have all of these qualities. For example, income tax can score high on equity and flexibility but not on certainty if a number of tax allowances are given.

TIP

Consider whether a particular tax in your country fulfils all the requirements of a 'good tax'.

GROUP ACTIVITY 2

In most countries, small firms are entitled to tax relief for the purchase of capital goods and expenditure on research and development.

a What type of tax is levied on firms?

b Why may governments give small firms a tax advantage?

26.6 Impact of tax

Tax base and tax burden

The tax base is the source of tax revenue, that is what is taxed. A wide tax base means that a large range of items and people are taxed. There can be a link between tax rates and the tax burden. A wide tax base may enable tax rates to be relatively low. High tax rates, particularly corporate tax rates, can reduce the tax base. This is because they may cause firms to move out of the country.

The tax burden relates to the amount of tax paid by people and firms. It is sometimes expressed as a percentage of the country's total income (Gross Domestic Product, or GDP). The higher the tax burden, the greater the percentage of people's and firms' income taken through tax.

Impact of taxation

The incidence of taxation refers to the distribution of the burden of an indirect tax, shared between consumers and producers. In the case of products with inelastic demand, consumers bear most of the tax. This is because the producers can pass on a high proportion of the tax in the form of a higher price as they know it will not reduce the demand significantly. In contrast, if products have elastic demand it is producers who bear most of the tax. This is because they know that they cannot pass on much of the tax to consumers as such a move would bring down the sales significantly. Figure 26.1 shows the contrasting impact of a tax on a product with inelastic demand and a product with elastic demand.

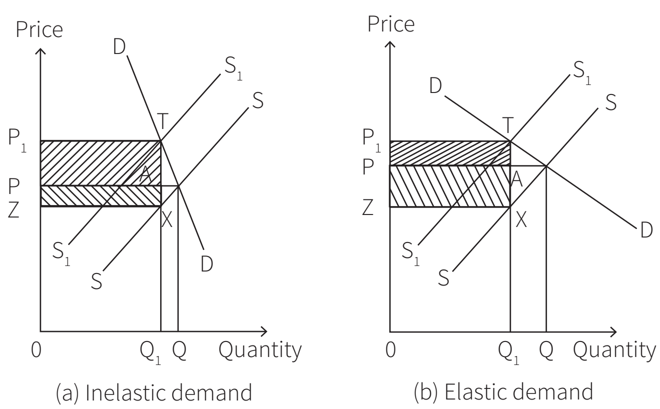


Fig. 26.1: The influence of the price elasticity of demand (PED) on the incidence of taxation

In both (a) and (b) in Figure 26.1 the tax shifts the supply curve to the left by the amount of the tax (TAX). The total revenue is P_1TXZ. The proportion of tax borne by consumers is represented by the change in price multiplied by the quantity sold, i.e. PP_1TA. The proportion borne by producers is the amount by which the price producers receive after tax is below the original market price, multiplied by the quantity sold, i.e. PAXZ. Elasticity of supply also influences the incidence of taxation. The more inelastic supply is, the more the tax will be borne by the suppliers. In contrast, if supply is elastic, more of the tax will be borne by consumers.

The impact of direct taxes

There is a risk that direct taxes, if set too high, may discourage effort, enterprise and saving. High rates of income tax may stop some people from working overtime and taking promotion and prevent some people from entering the labour force. High rates of corporation tax may discourage entrepreneurs from expanding their firms and investing in new markets. On the other hand, high tax rates may encourage some people to work harder. This is particularly likely to be the case with workers who have fixed financial commitments, such as mortgages. In addition, a number of workers cannot alter the hours they work for as they are contracted for a fixed number of hours per week.

The impact of high taxes on income earned from saving is also important. As they reduce the return from saving, they may cause some people to save less but they may encourage target savers to save more. Direct taxes have the benefits of being able to redistribute income and wealth, act as **automatic stabilisers** and as a good source of tax revenue in countries with organised labour markets, high literacy rates and high incomes.

The impact of indirect taxes

Whilst direct taxes tend to be progressive, indirect taxes are regressive and therefore proportionately fall more heavily on the poor. Increasing indirect taxes will also raise prices. This increase may stimulate workers to press for wage increases and set off a trend of rising prices, that is **inflation**. Indirect taxes do, however, have a number of benefits. They are relatively easy and cheap to collect as firms do some of the work. It is believed that they act as less of a disincentive to effort and enterprise than direct taxes. They can be used selectively to achieve particular aims such as reducing the consumption of alcohol. They tend to be harder to evade than direct taxes and easier to adjust. To a certain extent, people also have more choice with indirect taxes. The amount of tax paid by them depends on what they buy. They may decide not to buy products which are highly taxed.

Indirect taxes are also a useful source of income, especially in countries where it is difficult to raise much from income tax because a significant number of workers work in the **informal economy**. Also in countries with low literacy rates, people might face problems while filling in the tax forms.

KEY TERMS

Automatic stabilisers: forms of government expenditure and taxation that reduce fluctuations in economic activity, without any change in government policy.

Inflation: the rise in the price level of goods and services over time.

Informal economy: that part of the economy that is not regulated, protected or taxed by the government.

Flat taxes: taxes with a single rate.

INDIVIDUAL ACTIVITY 3

The French government has been reducing reliance on income tax and increasing reliance on indirect taxes. In 2016 less than 50% of French households paid any income tax. Income tax contributed less than 20% of government revenue compared to 51% received from VAT.

a Explain whether the change in the source of government tax revenue is making France's tax system more or less progressive.

b Explain one advantage and one disadvantage of using income tax as a source of tax revenue.

Changes in taxes

In recent decades, in a number of countries governments have become more reliant on indirect taxes and less on direct taxes. This move has been designed to reduce disincentive effects and tax evasion. Even more recently, some countries have been adopting what are called **flat taxes**. A pure flat rate tax system would involve income tax, corporation tax and VAT being set at the same rate with no exceptions. Several East European countries, for example, have replaced a number of income and corporate tax rates with one rate. In most of these countries, tax rates have been lowered as they have been flattened. For example, Ukraine has replaced a very progressive income tax system which had a top tax rate of 90% with one rate of 13%.

A number of advantages are claimed for flat taxes. They are simple to administer for governments and firms, there is less incentive to evade paying tax and more incentive for workers and entrepreneurs to earn and produce more. However, concerns have been expressed about the regressive nature of flat taxes although in practice, all existing flat taxes have set the uniform rate above a tax-free level of income.

KEY TERM

Fiscal policy: decisions on government spending and taxation designed to influence aggregate demand.

26.7 Fiscal policy and the budget

Fiscal policy refers to decisions on government spending and taxation taken to influence total (aggregate) demand in the economy. It has a direct effect on the budget balance. To calculate a government's budget balance, as indicated above government spending is deducted from its revenue. The size of any budget deficit or budget surplus can be expressed in absolute amounts, for example $10bn, or as a percentage of GDP.

If government spending equals government revenue, and then the government increases its spending or cuts taxes, it will cause a budget deficit in the short run. It is possible, however, that the effects of these changes may be different in the long run. For example, an increase in government spending on education may increase productivity and output which would be expected to raise tax revenue. Similarly, a cut in corporation tax may attract firms from overseas to set up in the country and for domestic firms to expand and so increase revenue from corporation tax.

INDIVIDUAL ACTIVITY 4

This table shows government spending and revenue in New Zealand in 2016.

Government spending (NZ$bn)		Government revenue (NZ$bn)	
Healthcare	16.2	Income tax	32.5
Education	13.5	GST	19.1
Pensions	12.9	Other indirect tax	6.5
Unemployment & other benefits	12.3	Corporate tax	11.6
Law and order	3.8	Other revenue	8.8
Other	18.8		

a Calculate New Zealand's budget position in 2016.

b Identify one form of government spending in the table which is spending on a public good.

c What proportion of New Zealand's government revenue was accounted for by income tax?

KEY TERMS

Expansionary fiscal policy: rises in government expenditure and/or cuts in taxation designed to increase aggregate demand.

Contractionary fiscal policy: cuts in government expenditure and/or rises in taxation designed to reduce aggregate demand.

26.8 The effects of fiscal policy on government macroeconomic aims

If a government wants to raise aggregate (total) demand in order to increase economic growth and employment, it will increase its expenditure and/or cut taxation by lowering tax rates, reducing the items taxed or raising tax thresholds. For example, a government may cut income tax rates. This will raise people's disposable income, which will enable them to spend more. Higher consumption is also likely to raise investment. Figure 26.2 shows the effect of an **expansionary fiscal policy**.

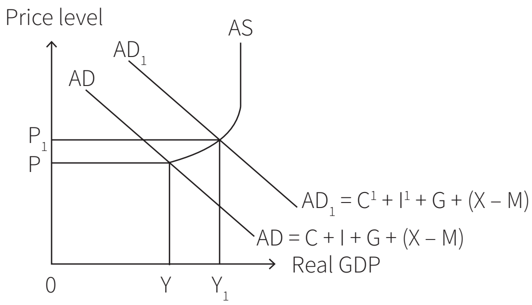


Fig. 26.2: The effect of an expansionary fiscal policy

The higher aggregate demand, in this case, causes economic growth. With more goods and services being produced, employment is likely to rise. A government may implement a **contractionary fiscal policy** to reduce inflationary pressure. A cut in government expenditure on, for example, education would reduce aggregate demand. Such a reduction may lower the rise in the general price level. It may also reduce an excess of import expenditure over export revenue. This is because spending is likely to fall, including spending on imports. Domestic firms, facing lower demand at home, may also put more effort into exporting.

LINK

Chapter 29.4 The policies to promote economic growth

Chapter 30.7 The policies to reduce unemployment

Chapter 31.5 Policies available to control inflation

Chapter 31.8 Policies available to control deflation

Chapter 33.3 Possible government measures to reduce poverty

Summary

You should know:

- The budget shows the relationship between government spending and government revenue.
- Governments spend money to influence economic activity, to reduce market failure, to promote equity and to pay interest on the national debt.
- The aims of taxation are to raise revenue, redistribute income, discourage the consumption of demerit goods, raise the costs of firms that impose these costs on others, discourage the consumption of imports and influence economic activity.
- Direct taxes are levied on income and wealth and include income tax, corporation tax, capital gains tax and inheritance tax.
- Indirect taxes are levied on expenditure and include sales tax, excise duties, customs duties and licences.
- Local taxes include business rates and council tax.
- Progressive taxes take a higher percentage as income or wealth rises, a proportional tax takes the same percentage and a regressive tax takes a smaller percentage.
- If demand is inelastic, most of an indirect tax will be borne by the consumer whereas if demand is elastic, it will be borne mainly by the producer.
- A good tax is one which is fair, easy to understand, easy to pay, cheap to collect, flexible and efficient.
- Direct taxes may discourage effort, enterprise and saving, but they can help to redistribute income and wealth, act as automatic stabilisers and raise a significant amount of revenue.
- Indirect taxes tend to be regressive and may raise prices but these are relatively easy and cheap to collect, do not tend to act as a disincentive to effort, enterprise and saving and are harder to evade.
- Recently a number of countries have moved towards greater reliance on indirect taxes and some have introduced flat taxes.
- Fiscal policy influences aggregate demand in the economy by changing taxes and government expenditure.

Multiple choice questions

1 What is meant by a regressive tax?

A A tax that falls in line with inflation

B A tax that reduces government revenue over time

C A tax that places a greater burden on the poor than the rich

D A tax that is replaced by one which generates more income

2 A government wants to redistribute income from the rich to the poor. Which changes in taxation would help it to achieve this objective?

A A cut in corporation tax and a rise in sales tax

B A cut in VAT and a rise in income tax

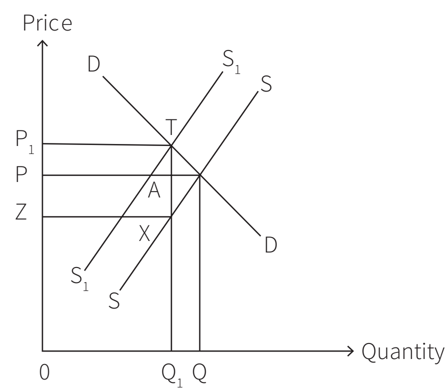
C A cut in capital gains tax and inheritance tax

D A rise in customs duties and excise duties

3 In which circumstance will the greatest amount of the tax be borne by the consumer?

	PED	**PES**
A	elastic	inelastic
B	inelastic	inelastic
C	inelastic	elastic
D	elastic	inelastic

4 The following diagram shows the effect of introducing a tax (TAX). What is now the producers' revenue?



A $OZXQ_1$ **C** OP_1TQ_1

B $OPAQ_1$ **D** OPYQ

Four-part question

a Define a *progressive tax*. **(2)**

b Explain the difference between a direct tax and an indirect tax, giving an example of each. **(4)**

c Analyse the reasons why governments impose taxes. **(6)**

d Discuss whether or not an increase in income tax rates will improve economic performance. **(8)**

Chapter 27
Monetary policy

Learning objectives

By the end of this chapter you will be able to:

- define the money supply
- define monetary policy
- analyse monetary policy measures
- discuss the effects of monetary policy on government macroeconomic aims

Introducing the topic

In 2008 the world experienced a global financial crisis. A number of banks collapsed because they had lent unwisely and bought securities which turned out to have little value. This made the remaining banks reluctant to lend as much. The difficulty of getting loans and the loss of confidence resulted in a downturn in economic activity. Central banks received some of the blame for not regulating the banks effectively. They tried to improve economic performance by increasing the money supply. These events have increased the attention that monetary policy receives.

27.1 The money supply

The money supply consists of all the money in an economy at any one time. There are a number of measures of the money supply. One counts notes, coins and current accounts held at commercial banks and concentrates on money that is primarily used as a medium of exchange. This measure is known as a narrow measure. The best known broad measure includes not only notes, coins, current accounts but also deposit accounts. This measure includes money used for a number of purposes, primarily medium of exchange and store of value.

GROUP ACTIVITY 1

In India in November in 2016 the government instructed people to hand in 500 and 1000 rupee bank notes in a bid to reduce forgeries. They were told these notes would be exchanged for smaller denomination notes of the same value and for new 500 and 2000 rupee notes. There was, however, a delay in getting the new notes printed. This caused chaos in parts of India with long queues to exchange the notes and prices falling as people ran out of cash to buy goods and services and sellers were unable to give change. A fifth of transactions are made in cash in India, a higher percentage than in many countries.

a Identify a function of money the information refers to.

b Explain a characteristic of money the information refers to.

c Explain a reason why some people may be reluctant to have a bank account.

27.2 Monetary policy

Monetary policy covers decisions on the money supply, the rate of interest and the exchange rate, although some economists treat changes in the exchange rate as a separate policy. Monetary policy influences the supply and/or price of money. The aim of monetary policy is to influence aggregate demand. In most countries monetary policy measures are carried out by central banks on behalf of governments.

KEY TERM

Monetary policy: decisions on the money supply, the rate of interest and the exchange rate taken to influence aggregate demand.

The People's Bank of China

Changes in the money supply

A central bank can increase the money supply by printing more money, buying back government bonds or encouraging commercial banks to lend more. Printing more money is a straightforward way of increasing the money supply. It is sometimes referred as ‘resorting to the printing press’. Buying government bonds gives commercial banks more money to lend to their customers. Encouraging commercial banks to lend or removing any restrictions on bank lending may also result in more borrowing to spend on consumer and capital goods. So, if the money supply is increased, there is likely to be an increase in consumer spending and investment. Such a rise in aggregate demand is likely to increase output.

A printing press

TIP

Follow the monetary policy changes of the central bank of your country plus those of another central bank. Consider why their monetary policy measures may be similar and why they may be different.

INDIVIDUAL ACTIVITY 1

In 2016 the money supply in China increased by 11.2%. This was a higher rate than in the two previous years. Some economists expressed concern that this would increase aggregate demand too much.

a What is meant by aggregate demand?

b Why may the money supply increase by more than a central bank wants?

Changes in the rate of interest

The main monetary policy measure, currently used in most countries, is changes in the rate of interest. When a central bank alters the rate of interest it charges to commercial banks, those banks are likely to raise the rate they charge to their customers. Such a rise in the rate of interest is likely to reduce aggregate demand by lowering consumer expenditure and investment. It will do this in three main ways.

- One way is that any households or firms who have borrowed in the past will have to pay more interest on their loans. This will reduce the amount of money they have to spend.
- A second way is that it will make it more expensive for households and firms to borrow to finance their spending. Borrowers will now have to pay more for any new loans they take out.
- The third way is that a higher interest rate will increase the incentive to save. Households and firms will earn more than before from saving. This means that for households the opportunity cost of spending will have increased and for firms the opportunity cost of investment will have increased. Firms may also have less incentive to invest as they will expect consumption to be lower.

Some households and firms that are savers, will now earn more interest and so they may spend more. Those people who save are, however, less likely to spend any extra money than borrowers are, and so the net effect will probably be a reduction in consumer expenditure. A higher interest rate may also reduce aggregate demand by encouraging a rise in the **foreign exchange rate**. Such a rise may lower net exports by causing a rise in the price of exports and a fall in the price of imports.

There may be times when a central bank decides to keep the rate of interest unchanged for a relatively long period of time. It may do this to promote certainty which can make planning easier. This, in turn, may encourage investment.

KEY TERMS

Foreign exchange rate: the price of one currency in terms of another currency or currencies.

Expansionary monetary policy: increases in the money supply and/or the rate of interest designed to increase aggregate demand.

INDIVIDUAL ACTIVITY 2

In February 2017, the People's Bank of China unexpectedly raised the rate of interest from 2.25% to 2.35%. The central bank was concerned that commercial banks were lending too much.

a Why might a rise in the rate of interest slow down economic growth?

b Why might a central bank think that commercial banks are lending too much?

LINK

Chapter 38.3 The causes of exchange rate fluctuations

Changes in the exchange rate

A government may instruct its central bank to change directly the country's foreign exchange rate or to try to influence it to move in a particular direction. A government may want the price of the exchange rate to fall to, for example, encourage a rise in exports.

LINK

Chapter 29.4 The policies to promote economic growth

Chapter 30.7 The policies to reduce unemployment

Chapter 31.5 Policies available to control inflation

27.3 The effects of monetary policy on government macroeconomic aims

Monetary policy is used to increase aggregate demand. If a government wants to increase the economic growth rate and reduce unemployment, it may use **expansionary monetary policy**, reducing the rate of interest or increasing the money supply.

Monetary policy is often used to control changes in the price level in the economy. If it is thought that the price level is rising too quickly, the central bank may increase the rate of interest or reduce the growth in the money supply. The intention behind this **contractionary monetary policy** would be to reduce aggregate demand and the upward pressure on prices.

KEY TERM

Contractionary monetary policy: cuts in the money supply or growth of the money supply and/or rises in the rate of interest designed to reduce aggregate demand.

GROUP ACTIVITY 2

In March 2017, the Monetary Policy Committee (MPC) of the State Bank of Pakistan (SBP) stated that it was going to keep the policy (interest) rate unchanged at 5.75%. This was despite expectations that aggregate (total) demand and inflation would increase and despite rising imports which were increasing the deficit on the current account of the balance of payments.

a What might have been the prime objective of the MPC of the SBP in March 2017?

b Why might the MPC of the SBP's decision have encouraged investment?

Summary

You should know:

- The money supply consists of notes, coins and bank accounts.
- Monetary policy seeks to influence aggregate demand.
- Monetary policy measures are decisions on the money supply, the rate of interest and the exchange rate.
- An increase in the money supply would be expected to increase aggregate demand.
- A reduction in the rate of interest may increase aggregate demand as it reduces the cost of borrowing and reduces the reward for saving.
- A fall in the exchange rate is likely to increase net exports.
- To increase economic growth and reduce the unemployment rate, a central bank may reduce the rate of interest.
- A central bank may increase the rate of interest to reduce upward pressure on the price level.

Multiple choice questions

1 Which one of the following is a monetary policy measure?

A A decrease in government regulations on labour markets

B A decrease in government spending on education

C An increase in the rate of interest

D An increase in sales tax

2 What would increase the money supply?

A A decrease in consumer expenditure

B A decrease in investment

C An increase in bank lending

D An increase in the rate of interest

3 Which type of institution is responsible for conducting monetary policy?

A A central bank

B A commercial bank

C A multinational company

D A trade union

4 Which of the following is most likely to increase demand in the economy?

A A reduction in government spending

B A reduction in the rate of interest

C A rise in a budget surplus

D A rise in income tax

Four-part question

a Define *monetary policy.* **(2)**

b Explain **one** similarity and one difference between monetary policy and fiscal policy. **(4)**

c Analyse why trade unions are likely to welcome an increase in the money supply. **(6)**

d Discuss whether or not an increase in the rate of interest will reduce consumer expenditure. **(8)**

Chapter 28
Supply-side policies

Learning objectives

By the end of this chapter you will be able to:

- define supply-side policy
- analyse supply-side policy measures (education and training, labour market reforms, lower direct taxes, deregulation, improving incentives to work and invest, and privatisation)
- discuss the effects of supply-side policy on government macroeconomic aims

Introducing the topic

How do governments encourage firms and workers to produce more? How do they increase firms' and workers' ability to produce more? Do you know what policy measures your government is using to increase the actual and potential output of your economy?

KEY TERM

Supply-side policy: measures designed to increase aggregate supply.

28.1 Supply-side policy

Supply-side policy measures are designed to increase aggregate supply and hence increase productive potential. Such policy measures seek to increase the quantity and quality of resources, and raise the efficiency of product and factor markets. These policy measures include improving education and training, cutting direct taxes and benefits, reforming trade unions and privatisation.

TIP

Remember: supply-side policy measures always seek to increase aggregate supply. They never try to reduce it.

Improved education can increase aggregate supply

Improving education and training

Improving education and training is designed to increase the skills of workers. If successful, this would make workers more productive. Higher labour productivity can reduce costs of production and raise the quality of the products produced. Both effects can result in the country's firms being able to sell more and so is likely to encourage them to expand. More skilful workers are also likely to be more occupationally mobile. This should mean that supply would adjust more quickly to changes in demand.

There is, however, the possibility that the education and training may not be in the right areas. For example, devoting resources to teaching children flower arranging may be less useful than devoting more resources to teaching them mathematics. Training people to work as taxi drivers will also serve little purpose if driverless cars are about to be widely used.

INDIVIDUAL ACTIVITY 1

In 2016 the government of Mauritius announced that it would pay 4000 people a total of 5000 Mauritian rupees a month to train in technical skills which were in high demand. It also said that it would be training 1200 people for jobs with cruise ships and other shipping firms.

a Why is it important that people are trained in skills that are in high demand?

b Explain how training can affect potential economic growth.

Lowering direct taxes and increasing incentives

The intention behind cutting direct taxes is to increase the incentive to work and invest. Reducing income tax rates will increase the reward from working, especially if combined with a cut in unemployment benefit. Such measures may make the unemployed search for work more actively and may increase the labour force by encouraging more people to seek employment.

Of course, some workers may respond to lower income tax by working fewer hours. This may be because they were happy with their pay and may prefer to have more leisure rather than more pay. In addition, increasing the incentive to work will not be effective if there are not jobs available for the unemployed and those currently inactive to do. Indeed, cutting unemployment benefit and other benefits could make unemployment worse. This is because the unemployed and, for example, the disabled will have less income to spend. This may result in a fall in aggregate demand and so output and employment.

Cutting corporation tax may increase the incentive to invest. This is because it is likely to make firms more willing and able to invest. The greater willingness will come from them being able to keep more of any profits they earn. The greater ability will come from the rise in funds they will have to invest.

If, however, firms lack confidence in the future, they may not invest even with lower corporation tax. If firms do not think they will be able to sell more goods and services in the future, they will not want to expand. A firm when deciding whether to invest takes into account not just the rate of corporation tax. As well as confidence, it also takes into account, for example, advances in technology.

GROUP ACTIVITY 1

In 2015 the Malaysian government cut income tax rates. A year later it increased the number of income tax bands from twelve to fourteen. This change in 2016 made the tax system more progressive and meant that the tax system had more bands than most countries.

a What is a possible disadvantage of cutting income tax rates?

b Why may introducing more tax bands discourage work and effort?

Deregulation

Deregulation is the reduction, or elimination, of rules and regulations that have been enforced by laws. The intentions behind deregulation are to remove barriers to entry to markets and to reduce the costs of complying with the rules and regulations. It will also reduce the cost to the government of regulating the industries and occupations affected.

KEY TERM

Deregulation: the removal of rules and regulations.

If deregulation does increase competition, it may increase efficiency and so lower costs of production and prices. Removing rules and regulations, however, does not guarantee that a monopoly will not develop. There are arguments for regulating monopolies, given their market power. Imposing restrictions on who can undertake particular occupations may also protect consumers. For example, most people would not want the government to remove the requirement that surgeons have to possess medical qualifications. There are, however, debates in some cases about what qualifications are needed to undertake particular occupations.

GROUP ACTIVITY 2

In 2016 the Indonesian government said it would continue with its policy of deregulation including reducing bureaucratic red tape. For example, the government was trying to reduce the time foreign multinational companies were having to spend on getting the permits and licences needed to produce in the country. The key aims of Indonesia's deregulation programme are to increase investment and promote economic growth.

a Explain why reducing bureaucratic red tape is likely to increase private sector investment.

b Explain one other way a government could increase private sector investment.

Privatisation

As with deregulation, privatisation seeks to increase competition and efficiency by increasing the role of market forces. Moving industries into the private sector may put more pressure on them and provide them with a greater incentive to respond to changes in consumer demand, and to provide them with high quality products at low prices. If they do not, they will go out of business, but, if they do, they could make high profits. Privatisation will increase productive capacity, if private sector firms invest more and work more efficiently than state-owned enterprises.

LINK

Chapter 15.3 Government measures to address market failure

Again, as with deregulation, privatisation will not necessarily ensure greater competition. Especially over time, a monopoly may develop. A private sector firm may be less inclined to take into account social costs and social benefits than a state-owned enterprise and may be more willing to make workers redundant.

Labour market reforms

Labour market reforms are designed to make labour markets work more efficiently. The intention is to increase the quality, quantity and flexibility of labour. There is some overlap between labour market reforms and the measures mentioned above. For example, the reforms can include better training and the removal of barriers to entry, such as excessive qualifications, and barriers to exit from labour markets, such as long contracts.

Making it easier for employers to hire and fire workers, is one way that some governments seek to increase the efficiency of labour markets. This is likely to make it easier for firms to adjust their supply to changing market conditions. It may also encourage firms to employ more workers as they will know that they will not have to continue to pay them, should demand for their products fall. There is a risk, however, that firms may not spend as much on training their workers if they think the workers may not be with them for very long.

Another labour market reform is reform of trade unions. This may make labour more productive. If the power of trade unions is reduced, they may be less inclined to engage in industrial action. There may be less disruption to production and trade union members may be more willing to be flexible in what tasks they do and the hours they work. If trade unions have been intimidating their members into taking industrial action, there may be a case for reducing their power. In some cases, though, reducing trade union power may reduce the benefits that trade unions may provide not only for their members, but also for employers and the economy as a whole. It is also possible that trade union reforms may give too much power to employers which could lower the pay of workers and increase their working hours. Being paid less and working more hours may reduce the motivation of workers and make them tired which would be likely to reduce their productivity.

LINK

Chapter 19 Trade unions

INDIVIDUAL ACTIVITY 2

Employment laws set out to protect the rights of workers. They may cover, for example, the right to maternity leave, the maximum number of hours a week a worker can be made to work and the procedures that have to be followed when a worker is made redundant. On average, there are more regulations imposed on employers in sub-Saharan Africa than in other parts of the world. For example, in Niger employers have to give any workers they want to fire, a relatively long period of notice, financial compensation and the offer of retraining. In practice, however, employment laws may only affect a relatively small percentage of the labour force in some countries.

a Explain one argument for and one argument against removing employment laws.

b Explain why employment laws may only affect a small percentage of the labour force in some countries.

Subsidies

A government may provide subsidies to the firms in particular industries for a number of reasons connected to increasing the performance of markets. For example, new small firms might be subsidised in order to increase competition in markets. Firms may also be subsidised to encourage them to buy new capital equipment. Of course, consideration would have to be given as to whether this is the best use of government spending and there is the risk that the firms may become dependent on the subsidies.

LINK

Chapter 15.3 Government measures to address market failure

28.2 Effects of supply-side policy on government macroeconomic aims

In the long run, all the government's macroeconomic aims have the potential to benefit from supply-side policy. Increasing aggregate supply enables an economy to continue to grow in a non-inflationary way. Figure 28.1 shows aggregate supply rising in line with aggregate demand. Such a combination enables output and employment to increase without inflation.

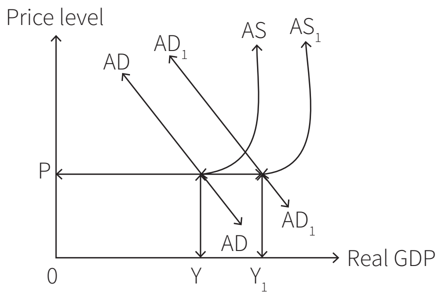


Fig. 28.1: Aggregate supply increasing with aggregate demand

Increasing productive potential and efficiency can improve an economy's balance of payments position. Producing better quality, and cheaper, products can increase exports and reduce imports.

In the case of some supply-side policy measures there is a time lag involved. For example, it can take some time before the effects of improved education and privatisation are experienced. In addition, some supply-side measures can be expensive.

Increasing the effectiveness of macroeconomic policies

Besides using supply-side policy measures in the long run to improve macroeconomic performance, there are a number of other ways through which a government can try to ensure that it achieves all its macroeconomic aims.

One is by using a number of policies. A Nobel Prize winning economist, Jan Tinbergen, suggested that a government needs to use one policy measure for each of its objectives. So, for example, if a government wants to stimulate economic growth and reduce imports, it may provide investment grants to firms and place a tax on imports.

Another way to try to ensure that all of its aims are achieved, is to have as much, and as accurate information, as possible. One vital piece of information is the size of the multiplier effect of any increase in aggregate demand. If aggregate demand is raised too much, for example, it will push up the price level.

TIP

You may find it useful to draw up a table comparing the effects of particular policy measures such as a cut in income tax on unemployment, inflation, economic growth and the balance of payments.

Governments also try to decide and implement their policies relatively quickly. If there is a delay in introducing policies, there is a danger that economic activity undergoes a change and the policy measures may actually harm the economy. For example, a period of high unemployment may lead the government to cut income tax, and to raise aggregate demand and employment. If, however, by the time the measure is introduced, aggregate demand is increasing anyway, it may increase inflationary pressure.

INDIVIDUAL ACTIVITY 3

The government of Pakistan is keen to encourage an increase in investment. Higher spending on capital goods may help the government to achieve its macroeconomic aims.

a Explain one supply-side policy measure that could be used to increase investment.

b Explain how investment could help a government achieve one of its macroeconomic aims.

Summary

You should know:

- Supply-side policy measures are designed to increase aggregate supply.
- Improved education and training can increase labour productivity and so the productive potential of the economy.
- Cutting income tax rates and unemployment benefits may be designed to make work more attractive to living off benefits.
- Lowering corporation tax may increase investment.
- Deregulation and privatisation may increase competition and efficiency.
- Labour market reforms may increase the efficiency of labour markets.
- Subsidies may allow small firms to grow and compete and may be used to encourage firms to invest.
- All government macroeconomic aims may be helped by supply-side policy measures in the long run.
- The effectiveness of macroeconomic policy measures can be increased by using a number of policies, accurate information and an absence of a time lag.

Multiple choice questions

1 Which of the following is a supply-side policy measure?

A A decrease in government spending on education

B A decrease in government spending on healthcare

C An increase in corporation tax

D An increase in the threshold at which people pay income tax

2 What is most likely to conflict with a government's aim of full employment?

A Lower income tax

B Lower spending on imports

C Higher government expenditure

D Higher interest rates

3 What combination of macroeconomic aims is most likely to benefit from a decrease in government spending?

A A fall in imports and price stability

B Economic growth and full employment

C Full employment and a fall in imports

D Price stability and economic growth

4 Which of the following may reduce the effectiveness of a government policy measure?

A Accurate information

B An absence of economic problems in other economies

C An absence of policy conflicts

D A time lag

Four-part question

a Define *deregulation.* **(2)**

b Explain whether a cut in income tax is a fiscal policy measure or supply-side policy measure. **(4)**

c Analyse, using a production possibility curve, the intended outcome of a supply-side policy measure. **(6)**

d Discuss whether or not supply-side policy measures always reduce unemployment. **(8)**

Chapter 29
Economic growth

Learning objectives

By the end of this chapter you will be able to:

- define economic growth
- analyse the causes of a recession
- discuss the consequences of a recession
- analyse the causes of economic growth
- discuss the consequences of economic growth
- discuss the effectiveness of the policies available to promote economic growth

Introducing the topic

Why do governments have economic growth as one of their macroeconomic aims? What benefits does it give to households, firms and the government? How is economic growth achieved and why, despite wanting to achieve economic growth, do some economies experience a fall in output?

29.1 Definition and measurement of economic growth

Gross domestic product (GDP)

Gross means total, domestic refers to the home country and product means output. So **gross domestic product (GDP)** means the total output produced in a country. There are three methods of measuring this output. These are – the output, income and expenditure methods. All three methods should give the same figure. This is because an output of $20bn will give rise to an income of $20bn which, in turn, will be spent on the output. This relationship is referred to as the **circular flow of income** and is illustrated in two diagrams in Figure 29.1.

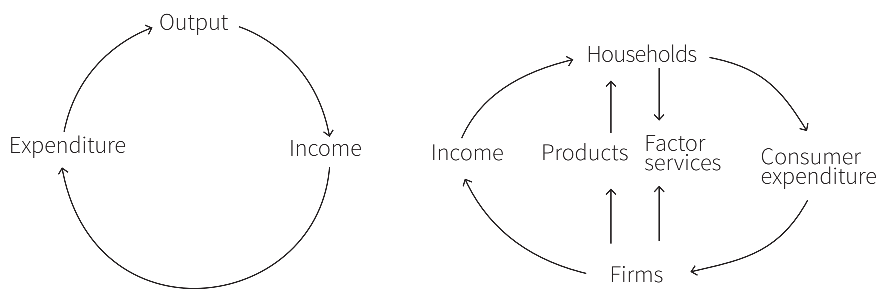


Fig. 29.1: The circular flow of income

The methods of calculating GDP

The output method measures GDP by adding up the output produced by all the industries in the country. Care has to be taken in using this method to ensure that output is not counted twice. For example, the value of the output of the car industry includes output produced by the steel and tyre industries also. To avoid this problem, economists include the '**value added**' by each firm at each stage of production.

The income method includes all the incomes which have been earned in producing the country's output. **Transfer payments**, such as pensions and unemployment benefit, are not included. This is because there is no corresponding output of goods and services.

The expenditure method calculates GDP by adding up all the expenditure on the country's finished output. Some of this comes from foreigners when they buy the country's *exports*. Some of the expenditure in the country goes on *imports* which are not produced in the country and which do not generate income for the country's citizens. So, in the expenditure method, it is necessary to add exports and deduct imports. Total expenditure on a country's output, and hence its GDP, includes consumption, investment, government expenditure and exports minus imports.

Nominal and real GDP

When governments calculate GDP, they usually first measure it in terms of **nominal GDP**, which is also referred to as money GDP or GDP at current prices. Nominal GDP is GDP valued in terms of the prices operative at that time. It has not been adjusted for inflation. For this reason, nominal GDP figures may give a misleading impression of what is happening to the output of a country, over time. For example, if prices rise by 20% in a year, there will be a 20% rise in nominal GDP even if output does not change.

To get the real picture of a country's output and assess its economic growth, economists adjust nominal GDP by taking out the effects of inflation. They do this by multiplying nominal

KEY TERMS

Gross domestic product (GDP): the total output of a country.

Circular flow of income: the movement of expenditure, income and output around the economy.

Value added: the difference between the sales revenue received and the cost of raw materials used.

Transfer payments: transfers of income from one group to another not in return for providing a good or service.

Nominal GDP: GDP at current prices and so not adjusted for inflation.

GDP with the price index in the base year, divided by the price index in the current year. This gives a figure for GDP at constant prices referred to as real GDP. A rise in real GDP of 5% would mean that the country's output has increased by 5%.

For example, in 2016, the nominal GDP of a country may be $800bn and its price index may be 100 (base year). In 2017, nominal GDP may increase to $900bn, giving the impression that output has risen by $100bn/$800bn × 100 = 12.5%.

If, however, the price index rises to 110, the real GDP in 2017 will be $900bn × 100/110 = $818.18bn.

So the increase in output is $18.18bn/$800bn × 100 = 2.27%, which is considerably below the 12.5% increase in nominal GDP.

Real GDP per head

A rise in **real GDP** means that more goods and services have been produced. Its impact on the goods and services available to people, will depend on the state of population. If real GDP increases by 5%, but the population increases by 8%, there will actually be fewer goods and services per head of the population and people's living standards may fall.

KEY TERM

Real GDP: GDP at constant prices and so adjusted for inflation.

To find out what is happening to people's living standards, economists calculate real GDP per head, which is also referred to as real GDP per capita. It is found by dividing real GDP by population.

LINK

Chapter 32.1 Indicators of living standards

If, for example, real GDP is $80bn and the population is 20m, real GDP per head is $80bn/20m = $4000. If real GDP rises to $90bn and population rises to 30m, real GDP per head will fall to $90bn/30m = $3000. In most countries, however, real GDP grows more rapidly than population, causing real GDP per head to rise.

Changes in population size can make a significant contribution to changes in real GDP. This has led some economists to suggest that a country's economic growth rate should be measured in terms of changes in real GDP per head. The international conventional measure, nevertheless, is currently changes in real GDP.

INDIVIDUAL ACTIVITY 1

a In 2017, a country's nominal GDP is $375bn. In 2018, it rises to $500bn. Between the two years, the price index rises from 100 to 125. What was the percentage increase in real GDP?

b The table shows shows a country's real GDP and population over a period of three years, 2016–18. Calculate the real GDP per head in each year.

Year	Real GDP ($bn)	Population (millions)
2016	100	20
2017	110	22
2018	90	15

The difficulty of measuring real GDP

GDP figures tend to understate the true level of output. This is because of the existence of unrecorded economic activity, both legal and illegal, and non-marketed goods and services.

There are a number of reasons why economic activity goes unrecorded.

One is that the activity is on a small scale and there are relatively high costs of registering a business. Another reason is that the activity is illegal, such as illegal drug dealing, and


Economic activity which may be formal or informal activity

work undertaken by immigrants who have not been given permission to work in the country. The activity may be legal, but the person undertaking it does not want to pay a tax on it. In the UK, it is thought that some workers in building, electrical installation, plumbing and car repairs do not declare all their earnings to the tax authorities. Some employers may want their businesses to be in the informal economy, so they can avoid government regulations such as having to pay the national minimum wage.

The size of undeclared economic activity is influenced by a number of factors. These include the number of activities that are declared to be illegal, tax rates, penalties for tax evasion and government regulations.

The existence of undeclared economic activity, besides understating the output produced through GDP figures, has a number of other effects on an economy. It means that tax revenue is below what could be collected. It can also mean that the official inflation rate overstates the rate at which the general price level is rising. This is because prices charged in undeclared economic activity tend to rise less quickly than in the formal economy.

There are also non-marketed goods and services. These are products which are not bought or sold. Family members who produce food for their own use including in **subsistence agriculture**, people who clean their own houses and repair their own cars, are all providing products, but these are not counted in GDP.

KEY TERM

Subsistence agriculture: the output of agricultural goods for farmers' personal use.

TIP

In economics, the word 'real' refers to something that has been adjusted for inflation. This includes real GDP, real wages and real disposable income.

GROUP ACTIVITY 1

Estimates of the size of Nigeria's informal economy vary from 35% to 70% of the country's GDP. Among the people who work in the country's informal economy are some taxi drivers, some street traders and some private educators. The informal economy can play a major role in employment creation, income, and production generation and innovation. Governments, however, try to encourage businesses to move into the formal sector as they believe that the businesses, their workers and themselves will gain benefits from such a move.

a Identify two reasons why someone may want to work as a taxi driver in the informal economy.

b Identify two benefits a business, a worker and the government may gain from the business moving from the informal economy into the formal economy.

29.2 Recession

A **recession** occurs when real GDP declines over a period of six months or more. This time period is also sometimes referred to as two successive quarters. It is a period of negative output with less being produced than in the previous period.

KEY TERM

Recession: a reduction in real GDP over a period of six months or more.

Causes of a recession

Just as economic growth can be caused by an increase in aggregate demand and/or an increase in aggregate supply, a recession is caused by a decrease in aggregate demand and/or a decrease in aggregate supply.

There are a number of reasons why aggregate demand may fall. These reasons are sometimes referred to as negative demand-side shocks. For example, consumer expenditure and investment could decline due to a fall in business and consumer confidence arising from a global financial crisis or falling house prices in the domestic economy. The government may cut back its spending too much and net exports could fall as a result of a rise in the exchange rate.

A decrease in aggregate supply, a negative supply-side shock, could result from a rise in fuel or raw material costs. Such effects would increase firms' costs of production which may cause them to produce less.

Figure 29.2 shows a recession caused by a decrease in aggregate demand and a recession caused by a decrease in aggregate supply.

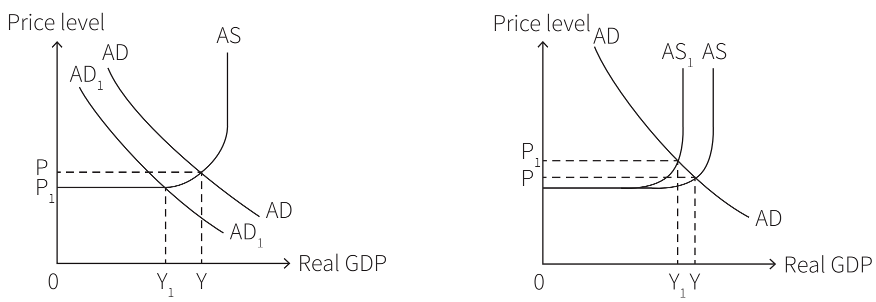


Fig. 29.2: (a) A recession caused by a decrease in aggregate demand

(b) A recession caused by a decrease in aggregate supply

TIP

The causes and consequences of a recession are essentially the opposite of the causes and consequences of economic growth.

The consequences of a recession

With lower output, unemployment is likely to rise. The reduction in output and incomes will be expected to lower living standards. Investment, including from foreign multinational companies, is likely to be discouraged which will endanger future economic growth.

Tax revenue will decline while government spending on benefits may be increased. This would increase any budget deficit or reduce any budget surplus.

The effect on the price level will depend on whether the recession has been caused by a decrease in aggregate demand or a decrease in aggregate supply. Figure 29.2 shows that if it is due to a decrease in aggregate demand, it would be expected that the price level would fall. If, on the other hand, it was caused by a decrease in aggregate supply, it would be anticipated that it would be accompanied by inflation.

LINK

Chapter 31.3 The causes of inflation

LINK

25.1 Government's macroeconomic aims (Economic growth)

29.3 Economic growth

Causes of economic growth

In the short run, an increase in aggregate demand may stimulate a rise in output if the economy has unused resources. For example, a rise in consumption resulting from increased consumer confidence, or a cut in income tax, may encourage firms to increase their output. This would cause a movement from inside toward the production possibility curve. In the long run, an economy can continue to experience economic growth only if the quantity or quality of resources increases. The quantity of resources may rise as a result of, for example, an increase in net investment or the size of the labour force. The quality of resources may increase due to an improvement in education and training and advances in technology. In this case, there would be a shift to the right of the PPC.

Consequences of economic growth

An increase in output can improve living standards of people. Access to more goods and services can improve their living conditions and increase their life expectancy. In richer economies, people are likely to consume luxury products, have better healthcare, go for better education than in poor economies. In very poor countries, economic growth is essential to ensure that people have access to basic necessities.

Higher output and incomes increase government tax revenue, making it easier for governments to finance measures to reduce poverty, increase healthcare provision and raise educational standards, without having to raise tax rates. Poverty can be reduced in a number of ways. Some of the extra tax revenue raised can be used to increase benefits for the poor, to improve schools in poor areas and provide training to the unemployed.

As an economy grows, its political and economic standing and influence usually increases. Voting power at the **International Monetary Fund** (IMF), for example, is influenced by the size of an economy's GDP. Economic growth, however, can involve costs. If the economy is working at full capacity, it may be necessary to shift resources from making consumer goods to capital goods, in order for it to grow. Such a shift will reduce living standards as fewer goods and services will be available for households. This is, however, only a short-term cost as in the longer term the extra capital goods will enable manufacture of more consumer goods. Figure 29.3 shows the output of consumer goods, initially falling due to the reallocation of resources but then increasing due to the resultant economic growth.

KEY TERM

International Monetary Fund (IMF): an international organisation which promotes international cooperation and helps countries with balance of payments problems.

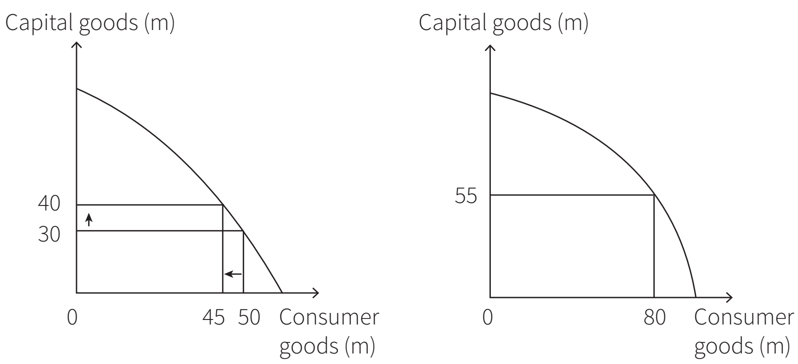


Fig. 29.3: The short-term and long-term effects of devoting more resources to capital goods

Higher output can increase pollution, lead to depletion of non-renewable resources and damage the natural environment. More factories and cars may increase carbon dioxide emissions. Rapid expansion of the furniture and fishing industries, for example, may result

KEY TERM

Sustainable economic growth: economic growth that does not endanger the country's ability to grow in the future.

in deforestation and depletion of fish stocks respectively. Construction of more factories, offices, roads and other infrastructure can also destroy wildlife habitats. Due to these risks, economists are increasingly emphasising the need for **sustainable economic growth**. Economic growth may also lead to greater stress on workers. An increase of output may require some people to work for longer hours, some to learn new skills and some to change their job.

The net impact of economic growth is influenced by its rate, means adopted to achieve it and distribution of its benefits. A very high rate of economic growth may not be sustainable. It may involve non-renewable resources being used up too quickly, before the development of alternative resources.

LINK

Chapter 32.2 Comparing living standards and income distribution

If productive capacity can be increased in line with increases in aggregate demand, more goods and services can be enjoyed without an increase in prices. Stable economic growth is better than a high economic growth rate, which fluctuates. This is because, it makes it easier for firms and households to plan for the future and hence encourages investment. Some of the extra resources which develop when productive potential increases, can also be used to reduce levels of pollution. Although there is indeed a risk, that economic growth can generate pollution and cause environmental damage, it can however lead to improved education and information, pressurise the government and society to care for the environment and provide the resources to do so. Economic growth has the potential to raise living standards, but the extent to which it does so is influenced by the type of products produced and the equality of distribution of extra income.

Economic growth rate

It is important to avoid the confusion between a fall in the economic growth rate and a fall in national output. If a country's economic growth rate falls from 5% to 3%, output will still be rising although it may be rising at a slower rate. If output reduces, the economic growth rate would be negative. For example, an economic growth rate of – 2% would mean that a country has produced 2% less this year than last year.

Table 29.1 shows the change in GDP of Pakistan over a five-year period.

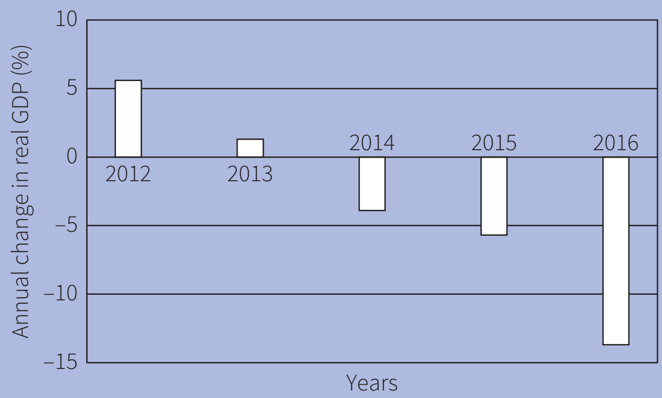
Year	Economic growth rate (percentage change in GDP on a year earlier)
2012	3.8
2013	3.7
2014	4.0
2015	4.2
2016	5.7

Table 29.1: Pakistan's economic growth rate, 2012–16

Between 2012 and 2016, Pakistan's output grew. Each year, it produced more than the previous year. Between 2012 and 2013, the rate at which its output was increasing slowed down, though it did produce more in 2013 than it did in 2012. Between 2014 and 2016 its economic growth rate accelerated.

INDIVIDUAL ACTIVITY 2

The diagram shows the economic growth rate of Venezuela between 2012 and 2016.



a Did Venezuela experience a period of stable economic growth between 2012 and 2016? Explain your answer.

b What happened to the output in 2013?

29.4 The policies to promote economic growth

If an economy is operating with spare capacity, a government may use expansionary fiscal and/or monetary policy to promote economic growth. A reduction in income tax rates or a cut in the rate of interest, for example, would be expected to increase consumer expenditure and investment. The resulting rise in aggregate demand is likely to encourage firms to increase their output. They will be able to do this as they will be able to take on unemployed workers and buy more capital equipment to expand their production.

The effectiveness of fiscal and monetary policy measures will be influenced by a number of factors. For example, households and firms may not spend more, despite a lower rate of interest and lower taxes, if they lack confidence. If the rate of interest is already very low, there may not be much room to cut it further and anyway a very small reduction may have little impact.

As aggregate demand tends to increase over time, it means that without any change in aggregate supply, the maximum level of output will be reached. So, in the long run, an economy can continue to increase the output it produces only if it gets more resources or higher quality resources. This means that to help achieve long run economic growth, a government needs to use both demand-side and supply-side policy measures. To increase productive potential, for example, a government may seek to improve education and training. If successful, this measure will raise labour productivity and so productive capacity. There is, of course, no guarantee that supply-side policy measures will work.

LINK

Chapter 26.8 The effects of fiscal policy on government macroeconomic aims

Chapter 27.3 The effects of monetary policy on government macroeconomic aims

Chapter 28.2 Effects of supply-side policy on government macroeconomic aims

GROUP ACTIVITY 2

Thailand's economic growth rate fell to 0.9% in 2014. In 2015 it rose to 2.4%, but the government was concerned that, without its intervention, it would decline again. As a result, in late 2015 the government and the Bank of Thailand both took measures to promote economic growth. The Bank of Thailand cut the rate of interest and encouraged the country's commercial banks to lend more to households, farmers and small firms. The government increased its spending by $8.3bn. Some of its spending went on infrastructure projects, including building light railways, in a bid to extend the benefits of its stimulus programme.

a Identify a monetary policy measure mentioned in the information.

b Why might an increase in lending cause economic growth?

c Explain why spending on infrastructure projects may promote economic growth in the long run.

Summary

You should know:

- GDP is the total output produced in an economy.
- GDP can be measured by adding up all output produced, all incomes earned from producing that output or the total amount spent on the output.
- Nominal GDP is total output measured in the prices of the year in question.
- Real GDP is adjusted for inflation.
- Changes in real GDP show changes in output.
- If real GDP per head increases, there will be more goods and services available for people.
- The existence of the informal economy makes it difficult to obtain an accurate figure for GDP.
- In the short run, increases in aggregate demand can lead to an increase in output, but in the long run, aggregate supply must also increase for output to continue to rise.
- Economic growth can improve living standards, reduce poverty, raise government expenditure on healthcare and education and increase the influence of an economy.
- Economic growth may involve a short-run opportunity cost, can cause pollution and damage to the environment and may put stress on people.
- Countries aim for stable and sustainable economic growth.
- A recession involves a fall in real GDP over two quarters of a year or more.
- A recession is caused by a decrease in aggregate demand or a decrease in aggregate supply.
- A recession will be likely to cause unemployment and a decline in living standards.

Multiple choice questions

1 What is meant by economic growth?

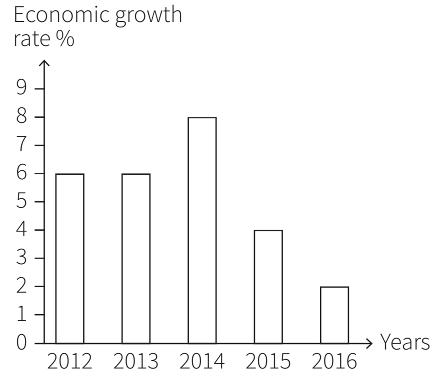
A An increase in exports

B An increase in population

C An increase in real GDP

D An increase in the price level

2 The diagram shows a country's economic growth over the period 2012 to 2016.



A Output was highest in 2012

B Output was highest in 2016

C Output fell from 2014 to 2016

D Output was unchanged between 2012 and 2013

3 If consumer expenditure is \$30bn, government expenditure is \$10bn, investment is \$20bn, exports are \$16bn and imports are \$20bn, what is GDP?

A \$56bn

B \$76bn

C \$80bn

D \$96bn

4 What is most likely to cause economic growth?

A An increase in capital depreciation

B An increase in education and training of workers

C An increase in taxation

D An increase in unemployment

Four-part question

a Define *real GDP*. **(2)**

b Explain **two** consequences of a recession. **(4)**

c Analyse the relationship between economic growth and the budget balance. **(6)**

d Discuss whether or not an increase in government spending will lead to economic growth. **(8)**

Chapter 30
Employment and unemployment

Learning objectives

By the end of this chapter you will be able to:

- define employment, unemployment and full employment
- analyse the nature and causes of changes in the pattern of employment
- describe how unemployment is measured
- analyse the causes and types of unemployment (frictional, structural and cyclical)
- discuss the consequences of unemployment
- discuss the effectiveness of policies available to reduce unemployment

Introducing the topic

Most people would like to have more goods and services. So, why are people who could produce some of those products unemployed? Why are some machines and some factories lying idle? Leaving capital goods unused can cause them to become outdated and, in some cases, to rust and fall apart. Not employing workers can have even more significant costs for not only the unemployed workers, but also their families, firms and the economy as a whole.

30.1 Employment, unemployment and full employment

People are in employment if they are paid employees or self-employed. In contrast, people are unemployed if they are willing and able to work, but cannot find a job. The labour force consists of both the employed and the unemployed – these two groups make up the country's available workers. Full **employment** occurs when **unemployment** is at its lowest possible rate.

LINK

Chapter 25 .1 Governments' macroeconomic aims

30.2 Changes in the patterns of employment

Over time, the pattern of employment in a country is likely to change. There can be alterations in the sectors in which people work, the hours they work for, who they work for and the type of work they do.

KEY TERMS

Employment: being involved in a productive activity for which a payment is received.

Unemployment: being without a job while willing and able to work.

Industrial structure

As economies develop, employment moves from the primary to the secondary and then to the tertiary sector. In the Netherlands in 2017, for instance, most workers (82%) were employed in the tertiary sector, whereas in Vietnam, the highest proportion of workers (48%) were employed in the primary sector.

Within any country at any particular time, some industries will be expanding and some will be contracting. For instance, in India, employment in textiles is declining, whilst it is increasing in ICT and software. This change requires workers to be occupationally and geographically mobile.

Proportion of women in employment

The number and proportion of women in employment and in the labour force is increasing in most countries. This trend is occurring because social attitudes to women working is changing. Gender discrimination is declining, opening up job opportunities for women and raising their wages.

Proportion of workers in the private and public sectors

The proportion of workers employed in the public sector in a number of countries is declining while the proportion employed in the private sector is increasing. This is because the countries are moving closer to market economies. In Australia in 2000, 21% of workers were employed in the public sector, while 79% were employed in the private sector. By 2016 the proportions had changed to 15% in the public sector and 85% in the public sector.

Full-time and part-time work

Most workers work full-time. Some, however, work part-time. Some opt to work part-time, as it may fit in with their children's school hours, enable them to look after elderly relatives or pursue other interests. Other people are forced to work part-time because they are not able to find full-time jobs.

Employed and self-employed

In some countries, including the UK, USA and most of Europe, most people work for someone else, that is they are employees. The number of self-employed workers is, however, rising. In other countries, including India and Pakistan, a high proportion of people are already self-employed and many of them work in the informal economy.

Informal and formal economies

People who work in the informal economy do not have the same access to the social security benefits, employment protection and rights as workers in the formal economy. For instance, whilst a country may operate a minimum wage, workers in the informal economy may be paid below it and they are very unlikely to receive a pension.

The informal economy does not include unions and so the workers cannot bargain collectively to improve their conditions. Some of those working in the informal economy are self-employed, some are migratory workers and some are casual workers. They tend to have lower productivity, lower levels of training and lower wages than workers in the formal economy. So a growth in the formal economy tends to raise the quality of employment and labour productivity.

High and low quality employment

High quality employment is skilled work which is interesting and which provides workers with the opportunity to progress, access to training, good working conditions and a relatively high degree of job security. In contrast, low quality employment is unskilled work, which often does not require or provide training, and does not provide good working conditions. As an economy develops the proportion of high quality jobs tends to increase.

Flexible employment

KEY TERM

Flexible labour force: a labour force is one which adjusts quickly and smoothly to changes in market conditions.

Global competition is putting pressure on firms to ensure that their labour force is flexible. A **flexible labour force** is one which adjusts quickly and smoothly to changes in market conditions. This flexibility can take a number of different forms.

One is in terms of the number of workers employed. The easier it is to hire and fire workers, the more able firms are in adjusting their output in line with consumer demand. Such flexibility, which can be called numerical flexibility, can increase workers' sense of job insecurity, but it can also raise employment. This is because firms may be more willing to take on more workers when demand for their products rises if they know they can let them go, should demand fall.

Other forms of flexibility are temporal flexibility (the ability to change the number of hours people work), locational flexibility (the ability to change the location where workers work), functional flexibility (the ability to change the tasks workers perform) and wage flexibility (the ability to raise or lower wages).

Locational flexibility: working from home

GROUP ACTIVITY 1

In 2016 average pay for full-time employers in the private sector in the UK was $26,884. It was $30,888 in the public sector. The pay in the private sector had increased by 3.4% since 2015. This compared with a rise of 0.7% in the public sector. The gender pay gap across both sectors was 17%. It was 11% in the public sector, with women, on average, earning $3,297 a year less than their male colleagues. The difference did, however, vary across public sector organisations. For instance, women working at the Bank of England, the UK's central bank, earned 26% less than men, while women at the Student Loans Company, a government organisation, earned 17% more than men.

a What evidence is there in the information that the pay gap between private sector and public sector workers was narrowing in the UK?

b Why may full-time female workers have earned less than male workers at the Bank of England in 2016?

c Explain two reasons why women in the UK may prefer to work in the public sector.

30.3 Changes in the levels of employment

A rise in employment may reduce unemployment if it is the unemployed who fill at least some of the extra jobs. It is, however, possible that both employment and unemployment increase. This will occur if the labour force grows faster than the number of jobs available. It is also possible for unemployment to fall without an increase in employment. This is because, finding a job is not the only reason why people stop being unemployed. Some unemployed people may reach retirement age, some may go into full-time education, some may emigrate, while some may just stop searching for work.

TIP

Take care to note whether information on unemployment and employment shows numbers of people unemployed and employed, or percentages.

The labour force participation rate

The labour force may grow as a result of an increase in the population of working age, a rise in the labour force participation rate or a combination of the two. The working age population may increase due to a rise in the birth rate, a fall in the death rate or net immigration.

The labour force participation rate is the proportion of people who are of working age and belong to the labour force. In other words, it is those who are **economically active** and form the labour force. Some of those of working age are not in the labour force, they are **economically inactive**. This group includes those who have retired early, those in higher education, homemakers and the long-term sick.

Among the factors that influence the **labour market participation rate** are:

- **The wages on offer.** High wages will encourage more people to seek work and will persuade some to stay in the labour force, past the usual retirement age.
- **Social attitudes to working women.** In countries where it is acceptable for women to work, there will be a larger labour force and a greater participation rate.

KEY TERMS

Economically active: those in the labour force, both the employed and the unemployed.

Economically inactive: those not in the labour force.

Labour market participation rate: the proportion of the working-age population who are in the labour force.

- **Provision for the care of children and the elderly.** The greater the availability of nursery places and retirement homes, the higher is the labour participation rate.
- **Social attitudes and provision for the disabled to work.** The greater the number of people willing to accept disabled people working and the easier it is made for the disabled to work, for instance having ramps installed for wheelchair access, the more potential workers there will be.
- **The proportion of school leavers who go into higher education.** The more people there are in full-time education, the lower the participation rate. Although it reduces the size of the labour force, a high proportion of people in full-time education raises the quality of the labour force.

INDIVIDUAL ACTIVITY 1

In 2016 the labour force participation rate was 71% in New Zealand, 62.6% in the USA and 52% in Pakistan. The labour force participation rate in the USA had fallen from 67.3% in 2000.

a What is meant by a labour force participation rate of 71%?

b Explain one reason for the labour force participation rate of New Zealand being higher than that of Pakistan.

LINK

Chapter 25.1 Governments' macroeconomic aims (Low unemployment – calculation of unemployment rate)

INDIVIDUAL ACTIVITY 2

In recent years, the Canadian government has cut income tax rates and tightened up the requirements people have to fulfil to receive unemployment benefit. The Canadian government is also keen to increase the quality of jobs and raise labour productivity. One way it is seeking to do this, is by increasing the number of school children progressing into higher education. Such a move reduces the labour force participation rate but raises the quality of labour.

a Explain how tax cuts and restrictions on claiming unemployment benefit could encourage the long-term unemployed to seek work more actively.

b How may more school children going for higher education raise labour productivity?

KEY TERM

Claimant count: a measure of unemployment which counts as unemployed those in receipt of unemployment benefits.

30.4 The measures of unemployment

Unemployment has costs both for the unemployed, for firms and for the economy. These costs are influenced by the extent of the unemployment, the duration of the unemployment and the cause of the unemployment.

The two major ways of measuring unemployment are to:

- count those in receipt of unemployment-related benefits and
- carry out labour force surveys.

The first method is known as the **claimant count**. This method has the advantage of being relatively cheap and quick, as the information is gathered anyway by the government to know the amount paid out in benefit and its recipients. Its disadvantage, however, is that it tends to understate unemployment. Whilst some people who are actually working fraudulently claim benefits, their number is less than those who are actively seeking employment, but not receiving unemployment benefits. People on government training schemes, those staying on at school and some who have been forced to retire early, may actually be searching for employment, but they won't be receiving unemployment benefits.

TIP

Remember that the unemployed are included in the labour force and that the unemployment rate is the unemployed as a percentage of the labour force and **not** of the total population.

The second method is the **Labour Force Survey Measure** which is also sometimes called the ILO measure as it makes use of the International Labour Organisation's definition of unemployment. This involves conducting regular surveys of a proportion of households which ask adults about their employment status. It counts people as unemployed if they are without a job and have been actively searching for employment in the past month. This method has the advantage that it can be used to make international comparisons. It also tends to identify the unemployed population more accurately.

The accuracy, though, depends on how the questions are asked and interpreted, and whether the sample selected is representative of the labour force as a whole. This method also takes longer to gather the information than a claimant count. In addition, the information has to be examined carefully. For instance, it counts people as employed if they do any work, even just an hour's work. This means that a country may have a relatively low unemployment rate but a relatively high underemployment rate. This means that a relatively high proportion of workers may be working fewer hours than they wish or may, in some cases, be in jobs that do not make full use of their skills.

KEY TERM

Labour Force Survey (ILO) Measure: a measure of unemployment which counts as unemployed people who identify as such in a survey.

30.5 The causes and types of unemployment

The causes of unemployment can be put into three broad categories. These are **frictional unemployment**, **structural unemployment** and **cyclical unemployment**.

Frictional unemployment

Workers who have been fired or voluntarily left one job, may have to wait for some time before finding another job. This type of unemployment, when workers are in between jobs, is called frictional unemployment. One form of frictional unemployment is what is called **search unemployment**. This arises when workers do not accept the first job offered, but spend time looking around for what they regard as an 'acceptable job'. Two other forms of frictional unemployment are **casual** and **seasonal**. Casual unemployment occurs when people are out of work between periods of employment. Actors and migrant farm workers are particularly prone to casual unemployment. Seasonal unemployment affects workers, including those working in the building and tourist industries, whose labour is not in demand at certain periods of the year and during periods of bad weather.

Casual unemployment often affects actors

KEY TERMS

Frictional unemployment: temporary unemployment arising from workers being in between jobs.

Structural unemployment: unemployment caused by long-term changes in the pattern of demand and methods of production.

Cyclical unemployment: unemployment caused by a lack of aggregate demand.

Search unemployment: unemployment arising from workers who have lost their jobs looking for a job they are willing to accept.

Casual unemployment: unemployment arising from workers regularly being between periods of employment.

Seasonal unemployment: unemployment caused by a fall in demand at particular times of the year.

Structural unemployment

Structural unemployment is caused by the decline of industries and particular occupations arising from long-term changes in demand and supply. Industries and occupations can become smaller or cease to exist, as a result of another country (or countries) becoming better at producing the product, a substitute being found for the product or capital being substituted for labour. Structural unemployment, which is concentrated in one area, can cause particular problems. Such unemployment can be referred to as **regional unemployment**.

KEY TERMS

Regional unemployment: unemployment caused by a decline in job opportunities in a particular area of the country.

Technological unemployment: unemployment caused by workers being replaced by capital equipment.

Another form of structural unemployment is **technological unemployment**. This occurs when workers are made redundant as a result of advances in ICT. For instance, airlines are currently reducing the number of backroom staff they employ, as more people are booking their flights on line.

Structural unemployment is more serious than frictional unemployment as it persists for longer periods and usually affects more workers. In both cases, however, labour immobility plays a key role. If workers are more geographically and occupationally immobile, frictional and structural unemployment will be greater and persist for a longer time. Measures to reduce frictional unemployment include those which seek to increase labour mobility (including education and training) and those which increase the incentive to work (including cutting income tax and benefits). Measures to reduce structural unemployment also include those which aim to increase labour mobility and encourage firms to move to areas of high unemployment.

Cyclical unemployment

Cyclical unemployment may be even more serious than structural unemployment as potentially it can affect more workers and it is spread throughout the country. It arises from a lack of aggregate demand. It can also be referred to as demand-deficient unemployment. If an economy goes through a recession, demand for labour is likely to fall and cyclical unemployment will occur. Figure 30.1 shows an economy operating below the full employment level of national output.

In such a situation, unemployment is likely to be high. To tackle such unemployment, a government will seek to raise aggregate demand by, for instance, reducing income tax or increasing its expenditure.

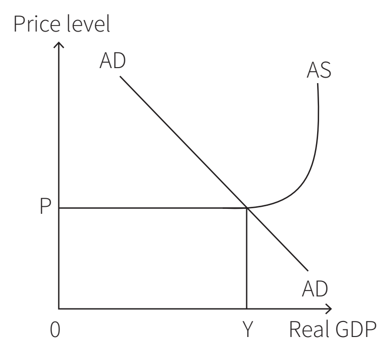


Fig. 30.1: An economy producing below full capacity

Stocks and flows of unemployment

The number of people unemployed at any one time is a *stock*. It is influenced by two factors – the rate of flow of people into unemployment and the time period for which they are unemployed. So the number of people unemployed may be higher than in a previous period in three circumstances:

- more workers have been dismissed from their jobs
- more people have entered the labour force without finding a job
- people have been unemployed for a longer period of time.

INDIVIDUAL ACTIVITY 3

In 2016, unemployment in Egypt was 12.5% and in Saudi Arabia, it was 5.7%.

a Explain one way unemployment may have been measured in the two countries.

b Why may the unemployment rate be higher in one country than another?

c Explain what should influence the measures that the Egyptian government should take to reduce unemployment in the country.

30.6 The consequences of unemployment

The existence of unemployed workers makes it easier for firms, wishing to expand, to recruit new workers. It can also keep down inflationary pressure by lowering wage rises. However, it is generally agreed that the costs of unemployment exceed any benefits.

The extent and seriousness of these costs are influenced by the numbers unemployed and the length of time for which they are unemployed. An unemployment rate of 9% with people being unemployed, on an average, for three months is less serious than an unemployment rate of 6% with the average length of unemployment being a year. Those who bear the main burden of unemployment are the unemployed themselves. But there are also costs for the wider economy.

The effects on the unemployed

Most people who are unemployed suffer a fall in income. In some countries the unemployed do not receive any financial assistance when they are out of work. In those where unemployment benefits are paid, these are usually noticeably lower than what most of the unemployed were previously earning. Having a job also provides a person with sense of worth. So losing a job can result in a loss of self-worth. Lower income and the stress of being unemployed can result in a decline in the mental and physical health of the unemployed and may also lead to marriage break-ups in some cases. Lower income may have an adverse effect on the education of the children of the unemployed and hence their employment chances. Those who are unemployed may not be able to afford the education of their children past the school leaving age.

Being unemployed can also reduce a person's chances of gaining another job. The longer people are unemployed, the more they lose out on training in new methods and technology. They may also lose the work habit and their confidence may dip.

The effects on firms

As mentioned above, firms may benefit from unemployment. They can employ unemployed workers in order to expand production. The existence of unemployment may put downward pressure on wage rises as workers may be more concerned that if they press for significant wage rises, they may be replaced by some of the unemployed. For the same reason, workers may be prepared to be more flexible in terms of the tasks they perform and the hours they work. Greater flexibility of workers would enable firms to adjust more quickly to changes in market conditions.

Unemployment, however, may bring a significant disadvantage for firms. A high rate of unemployment is likely to mean a low demand for most firms' products. In such a situation, firms will be reducing rather than expanding production.

The effects on the economy

Unemployment imposes an opportunity cost on an economy. Having unemployed workers means that the economy is not using all of its resources. The economy will not be making as many goods and services as possible. Figure 30.2 shows that unemployment causes an economy to produce at point A. Producing at this point involves the economy forgoing the opportunity to produce more capital and consumer goods. Producing at point B would mean that the economy would be making more products and living standards would be potentially higher.

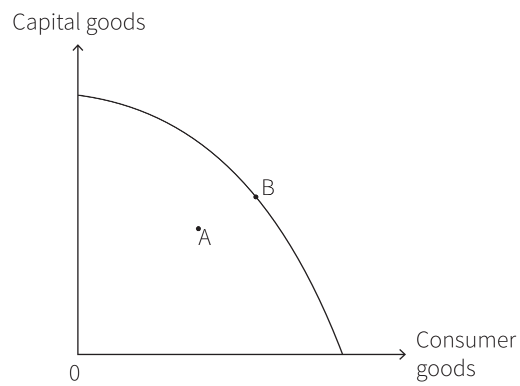


Fig. 30.2: The opportunity cost of unemployment

Unemployment also means that government tax revenue will be lower than possible. When people lose their jobs, their expenditure falls and as a result, indirect tax revenue declines. Income and firms' profits fall and, therefore, revenue from income tax and corporation tax decreases.

Besides lowering tax revenue, unemployment also puts pressure on government expenditure. Expenditure on unemployment benefits will automatically rise with unemployment. If the unemployed suffer from bad health, the government may have to spend more on healthcare. There is a risk that rising unemployment may lead to rising levels of crime, as some of the unemployed may resort to criminal activities to gain a higher income. If crime does rise, the government may have to spend more to tackle the problem and ensure the security of its citizens.

Higher government expenditure, resulting from unemployment, involves an 'opportunity cost'. The money spent on benefits, for instance, could have been spent on higher education. Spending on the treatment of unemployed people for depression might mean that the government has to spend less on treating people with cancer.

GROUP ACTIVITY 2

In 2005, the unemployment rate in South Africa was 27%. Eleven years later, the rate was still 27%. During this time, the South African government had tried a number of policy measures to try to boost aggregate demand in a bid to create jobs and reduce poverty. These measures included increased government spending on infrastructure.

a What type of unemployment did South Africa appear to be suffering from, in 2005 and 2016?

b Explain how expenditure on infrastructure may reduce unemployment.

c Explain how a decrease in unemployment may reduce poverty.

30.7 The policies to reduce unemployment

The policies a government will adopt to reduce unemployment will be determined by what it thinks are the cause or causes of unemployment. If it believes that most of the unemployment is frictional unemployment, it may seek to improve the working of the labour market by using supply-side policy measures. For instance, it may seek to increase the gap between pay and unemployment benefit by cutting income tax rates and reducing unemployment benefit. This may reduce the time that people spend searching for a new job. The government may also increase information on job vacancies so that people are made more aware of the jobs on offer.

To tackle structural unemployment a government would also use supply-side policy measures. In particular, it is likely to try to improve the quality of education and training. If workers are more skilled and qualified, they will be more occupationally mobile. A government may increase training in specific skills needed in particular industries. For example, if a country's coal industry is declining, while its tourism industry is increasing, it may offer special courses in, for example, hotel and catering. A government may also give subsidies to new industries in areas of high unemployment to speed up their expansion.

To reduce cyclical unemployment, a government will use expansionary fiscal and monetary policy. An increase in government spending, a reduction in tax rates and a cut in the rate of interest, for instance, may be used to raise aggregate demand. With higher aggregate demand, firms would expand and take on more workers.

How effective government policy measures are in tackling unemployment will be determined by a number of factors. One is whether the government has identified the cause of unemployment correctly. For example, increasing the skills of the unemployed will be no good if there is not the demand for goods and services they could produce. In the case of structural unemployment, a government would also have to be able to identify accurately which industries will expand in the future and what skills will be needed. A government may decide to use privatisation and deregulation in a bid to increase the efficiency and expansion of industries but there is no guarantee they will work. Indeed, privatisation may increase unemployment. Reducing cyclical unemployment requires a government to judge accurately the gap between the current level of real GDP and the full employment level. If it injects too much spending into the economy, it could cause inflation.

LINK

Chapter 26.8 The effects of fiscal policy on government macroeconomic aims

Chapter 27.3 The effects of monetary policy on government macroeconomic aims

Chapter 28.2 Effects of supply-side policy on government macroeconomic aims

Chapter 33.3 Possible government policy measures to reduce poverty

Summary

You should know:

- The pattern of employment can vary between sectors and industries over time.
- Some of those who work part-time do so because they want to work for fewer hours but some seek full-time employment.
- The rate of self-employment varies among countries.
- A growth in the formal economy usually increases the quality of employment and productivity.
- High quality employment provides better opportunities and conditions for workers than low quality employment.
- A flexible labour market is one which responds quickly and easily to changes in market conditions.
- A rise in employment may be accompanied by a rise or fall in unemployment.
- An increase in the population of working age or a rise in the labour force participation rate increases the size of the labour force.
- Factors affecting the labour force participation rate include the wages on offer, social attitudes to working women and the disabled, the provision for the care of children and the elderly and the proportion of school leavers going for higher education.
- Unemployment can be measured by counting those in receipt of unemployment benefits or undertaking a labour force survey.
- Frictional unemployment arises when workers are finding new jobs, after leaving the old one.
- Three examples of frictional unemployment are casual unemployment, seasonal unemployment and search unemployment.
- Structural unemployment is caused by long-term changes in demand and supply.
- Two types of structural unemployment are regional and technological unemployment.
- Cyclical unemployment results from a lack of aggregate demand.
- The unemployed suffer from lower income and possibly from lower self-esteem and bad health also.
- The longer people are out of work, the harder it can be for them to find employment.
- Unemployment is a waste of resources. It results in output and living standards being lower than possible, lower tax revenue and increased government expenditure on benefits and on other costs arising from unemployment.
- To reduce frictional and structural unemployment, a government will use supply-side policy measures. To reduce cyclical unemployment, a government will use demand-side policy measures.

Multiple choice questions

1 Which of the following are of working age, but do not form a part of the labour force?

A People past the age of retirement

B People who are in full-time education

C The self-employed

D The unemployed

2 A country's steel industry is closed down, as buyers switch their purchases of steel to another country. What type of unemployment will occur as a result of this?

A Cyclical

B Frictional

C Seasonal

D Structural

3 What is a cost of unemployment?

A Higher tax revenue

B Lost output

C Lower productivity

D Reduced inflationary pressure

4 Which policy is most likely to reduce cyclical unemployment?

A A reduction in government expenditure

B A reduction in interest rates

C An increase in direct taxes

D An increase in indirect taxes

Four-part question

a Define *cyclical unemployment.* **(2)**

b Explain how the unemployment rate may fall while the number of people employed declines. **(4)**

c Analyse how a cut in the rate of interest could reduce unemployment. **(6)**

d Discuss whether or not unemployment is harmful. **(8)**

Chapter 31
Inflation and deflation

Learning objectives

By the end of this chapter you will be able to:

- define inflation and deflation
- describe how inflation and deflation are measured
- analyse the causes of inflation
- discuss the consequences of inflation
- discuss the effectiveness of policies available to control inflation
- analyse the causes of deflation
- discuss the consequences of deflation
- discuss the effectiveness of policies available to counter deflation
- explain possible policy conflicts

Introducing the topic

Do you find that the money you are spending is buying you more goods and services or fewer goods and services? Do you know how the prices of the products you buy compare with the prices of those products ten, twenty, thirty years ago? For example, the price of a basket of foodstuffs in the UK was \$0.31 in 1914. The price of the same basket increased to \$1.12 in 1964, \$21.93 in 2017 and is forecast to rise to \$88.79 in 2064. What causes the prices of goods and services to change, what effect do changes have and can a government and/or a central bank control these changes?

31.1 The definition of inflation and deflation

While inflation is a rise in the prices of goods and services, deflation is a fall in the prices of goods and services. **Deflation** is, in effect, negative inflation. The rate at which the prices of goods and services rise or fall changes over time. An increase in the rate of inflation means that prices are increasing more rapidly. A fall in the inflation rate from, for example, 10% to 7%, can be described as **disinflation**.

KEY TERMS

Deflation: a sustained fall in the prices of goods and services.

Disinflation: a fall in the rate of inflation.

TIP

Remember that if inflation falls, for example from 8% to 6%, the general price level is still rising.

31.2 Measurement of inflation and deflation

To measure rises and falls in the price level, governments construct price indices (also referred to as price indexes). These show the change in general price level in percentage terms over time. One of the main price indices used is the **consumer prices index (CPI)**.

KEY TERM

Consumer prices index (CPI): a measure of the weighted average of the prices of a representative basket of goods and services.

Constructing a price index

There are a number of stages in constructing a price index. These include selecting a base year, finding out how households spend their money, attaching weights to items of expenditure, finding out price changes from a range of trade outlets and then constructing a weighted price index.

Selecting a base year

Government statisticians try to select a relatively standard year in which there were no dramatic changes, as a base year. The base year is then given a figure of 100 and the price levels in other years are compared to this figure. For example, if the base year is 2015, it would mean that if the price index in 2018 was 123, the general price level had risen by 23% between 2015 and 2018.

Finding out how households spend their money

In calculating the average rise in prices, it is important to know how people spend their money. This is because a price change in an item on which people spend a large proportion of their total expenditure will have more impact on the cost of living than an item on which they spend a relatively small proportion. If, for example, the price of water rose, it would hit the pockets of most of the population much more than a rise in the price of a trip in an air balloon, something most people will not buy and those who do, will buy infrequently.

To find out the spending patterns of people, government officials carry out surveys of household expenditure. In New Zealand, a sample of approximately 3000 households is used. These households are asked to keep a record of their expenditures. From the information collected, government officials work out the main commodities being bought by the households. This enables them to decide which items to include in the price index and what weights to attach to each of them. If people stop buying a product or their expenditure on it falls to a very small figure, it will be removed from the index. The weights reflect the proportion spent on the items. For example, if on an average, households spend \$120 of their total expenditure of \$600 on food – food will be given a weightage of 1/5 or 20%. Table 31.1 shows the categories of products in the UK's CPI and their respective weights with, for example, 10.3% of UK households' expenditure going on food and soft drinks.

	Category	Weight (%)
a	Food and non-alcoholic beverages	10.3
b	Alcohol and tobacco	4.2
c	Clothing and footwear	7.1
d	Housing and household services	12.0
e	Furniture and household goods	5.9
f	Health	2.8
g	Transport	15.3
h	Communication	3.2
i	Recreation and culture	14.8
j	Education	2.5
k	Restaurants and hotels	12.3
l	Miscellaneous goods and services	9.6

Table 31.1: The weights in the UK's CPI in 2016

Source: based on Office for National Statistics Consumer Price Inflation: 2016 Weights https://www.ons.gov.uk/file 3rd March)

Household spending patterns are reviewed each year with new family expenditure surveys. If these reveal, for example, that people are spending a greater percentage on recreation and culture, and a lower percentage on food and non-alcoholic beverages, the weights of these items in price index will be altered to reflect these changes.

Finding out price changes

Each month government officials find out information about prices. In the UK, about 130 000 price quotations are found for 650 different items. These are obtained from shops, post offices, power companies, train companies and a range of other outlets. From this information, the government estimates the change in prices.

GROUP ACTIVITY 1

India's CPI covers 260 items. It draws on about 160 000 price quotes from more than 16 500 outlets and selected markets. Most price quotes are collected every week. In the case of products which experience a change in price less frequently, the price quotes are collected every month or every six months.

a What does a CPI measure?

b How will the Indian government select the 260 items included in its CPI?

Constructing a weighted price index

Having assigned weights to different items included in the index and measured the change in their prices over time, the final stage is to multiply the weights by the new price index for each category of products and to calculate the change in general price level. For example, consumers may spend $40 on food, $10 on housing, $25 on transport and $25 on entertainment. This gives a total expenditure of $100. The price of food may have risen by 10%, the price of housing may have fallen by 5%, the price of transport may not have changed and entertainment may have risen in price by 8%. The information would then be used to perform the calculation shown in Table 31.2.

Category	Weight		Price index		Weighted price index
Food	4/10	×	110	=	44.0
Housing	1/10	×	95	=	9.5
Transport	1/4	×	100	=	25.0
Entertainment	1/4	×	108	=	27.0
					105.5

Table 31.2: Weighted price index

The price index has risen by 5.5%. The change in the price level could also have been calculated rather more directly, as shown in Table 31.3.

Category	Weight		Price change (%)		Weighted price change (%)
Food	4/10	×	10	=	4
Housing	1/10	×	–5	=	–0.5
Transport	1/4	×	0	=	0
Entertainment	1/4	×	8	=	2
					5.5

Table 31.3: Weighted price change

INDIVIDUAL ACTIVITY 1

In each case, calculate the inflation rate using the information given.

a Consumers spend \$20 on food, \$20 on clothing, \$10 on heating and \$50 on entertainment. The price of food rises by 5%, the price of clothing falls by 10%, the price of heating rises by 30% and the price of entertainment rises by 20%.

b Consumers spend \$50 on food, \$20 on clothing, \$60 on transport and \$70 on leisure goods and services. The price of food rises by 8%, the price of clothing rises by 10%, the price of transport falls by 10% and the price of leisure goods rises by 5%.

Different impact of price changes

A consumer prices index measures the price of goods and services consumed by the average household. Of course, the expenditure of particular households is likely to differ from the average, in some way. For example, families with young children will experience lower inflation than other households, due to lower bills for healthcare and no expenditure on university fees, if the price of healthcare and university fees increase at a greater rate than the inflation rate.

TIP

In explaining the idea of a consumer prices index, it is often useful to give a numerical example.

31.3 The causes of inflation

KEY TERMS

Cost-push inflation: rises in the price level caused by higher costs of production.

Demand-pull inflation: rises in the price level caused by excess demand.

Wage-price spiral: wage rises leading to higher prices which, in turn, lead to further wage claims and price rises.

Inflation is not a one-off increase in the general price level. While examining the causes of inflation, therefore, it is necessary to consider the reasons for a rise in the price level over a period of time. Economists divide the causes into two main categories. These are **cost-push inflation** and **demand-pull inflation**.

Cost-push inflation

Cost-push inflation occurs when the price level is pushed up by increases in the costs of production. If firms face higher costs, they will usually raise their prices to maintain their profit margins.

There are a number of reasons for an increase in costs. One is wages increasing more than labour productivity. This will increase labour costs. As labour costs form the highest proportion of total costs in many firms, such a rise can have a significant impact on the price level. It will also not be a one-off increase. The initial rise in the price level is likely to cause workers to press for even higher wages, leading to a **wage-price spiral**.

Another important reason is increase in the cost of raw materials. Some raw materials, most notably oil, can change in price by large amounts. Other causes of cost-push inflation are increases in indirect taxes, higher cost of capital goods and increase in profit margins by firms.

Cost-push inflation can be illustrated on an aggregate demand and aggregate supply diagram. Higher costs of production shift the AS curve to the left and this movement forces up the price level, as shown in Figure 31.1.

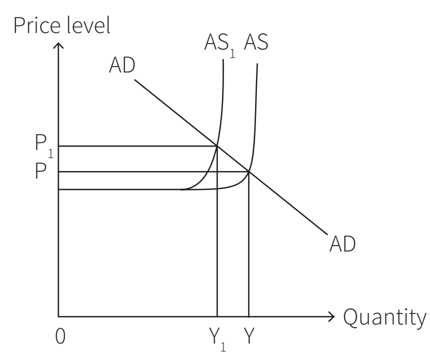


Fig. 31.1: Cost-push inflation

Demand-pull inflation

Demand-pull inflation occurs when the price level is pulled up by an excess demand. Aggregate demand can increase due to higher consumption, higher investment, higher government expenditure or higher net exports. Such an increase in aggregate demand will not necessarily cause inflation, if aggregate supply can extend to match it. When the economy has plenty of spare capacity, with unemployed workers and unused machines, higher aggregate demand will result in higher output but no increase in the price level. If, however, the economy is experiencing a shortage of some resources, for example skilled workers, then aggregate supply may not be able to rise in line with aggregate demand and inflation occurs. In a situation of full employment of resources it would not be possible to produce any more output. As a result, any rise in demand will be purely inflationary as shown in Figure 31.2.

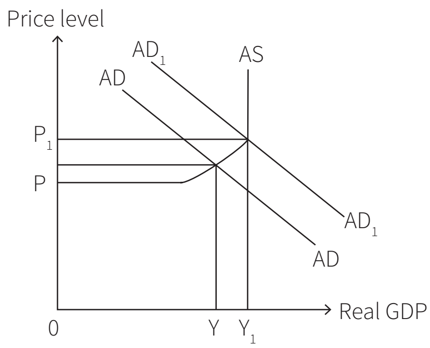


Fig. 31.2: Demand-pull inflation

Monetary inflation is a form of demand-pull inflation. In this case, excess demand is created by an excessive growth of the money supply. A group of economists, appropriately called **monetarists**, believe that the only cause of inflation is the money supply increasing faster than output. They argue that if the money supply increases, people will spend more and this will lead to an increase in prices.

KEY TERMS

Monetary inflation: rises in the price level caused by an excessive growth of the money supply.

Monetarists: a group of economists who think that inflation is caused by the money supply growing more rapidly than output.

INDIVIDUAL ACTIVITY 2

India's inflation rate fell in both 2015 and 2016. These falls were thought to have been caused by good harvests, smaller increases in the price of oil and appropriate monetary policy. Some economists were, however, predicting a more rapid rise in consumer expenditure in the next five years.

a What is meant by a fall in the rate of inflation?

b Explain how smaller increases in the price of oil rises may reduce inflation.

c Why may a rise in consumer expenditure cause inflation?

TIP

It is a common mistake to say that inflation is caused by a rise in prices. This shows confused thinking. Inflation *is* a rise in prices. So the reasons for the rise in the general price level need to be considered.

31.4 The consequences of inflation

Most of the consequences of inflation are thought to be harmful but some may actually prove to be beneficial. The impact that inflation has, depends on a number of factors. The key ones are the rate of inflation, stability of this rate, its rate relative to the inflation rates of other countries and the reaction of the government.

The harmful effects of inflation

- **Inflation causes a fall in the value of money.** If prices are rising, each unit of money (for example, each dollar) will buy fewer products. The higher the inflation rate, the greater will be the fall in the purchasing power of money. In a situation of **hyperinflation**, the value of money may be falling so rapidly that people may lose confidence in using the country's currency as money. 50% is usually taken to be the minimum rate to qualify as hyperinflation.
- **Inflation redistributes income in an unplanned way.** Some people gain from it, while others lose. Workers with strong bargaining power tend to gain, as their income usually rises more than the inflation rate. Normally borrowers also benefit. If the rate of interest is below the inflation rate, borrowers pay back less in real terms than what they borrowed. For example, a woman may borrow \$100. If the inflation rate is 12%, she would have to repay \$112 for the lender to just gain back the same amount of purchasing power. If the rate of interest is 8%, she will repay only \$108, which has less purchasing power than what she borrowed. Whilst borrowers are likely to benefit, savers are likely to lose, as they may be repaid less in real terms than what they lent. Workers with low bargaining power and those with fixed incomes also suffer during a period of inflation. The government can seek to protect some vulnerable groups from inflation by **index-linking** state benefit payments and interest rates on government securities.
- **The existence of inflation imposes extra costs on firms.** Some additional staff time will be taken up, estimating future costs of raw material. There will also be **menu** and **shoe-leather costs**. Menu costs are the costs involved in changing prices in catalogues, price lists and slot machines etc. Shoe-leather costs arise because money paid to firms will be losing its value as soon as it is received. Even if the firms plan to pay out the money relatively soon, for example on wages or raw materials, it would need to protect its value by placing it in a bank or other financial institution, which will pay a rate of interest above the inflation rate. Seeking out good financial returns will involve the time and effort of firms.
- **Inflation creates uncertainty.** It can make it hard for households and firms to judge the right price to be paid for products now. It can also make it difficult to plan ahead, as households and firms will be uncertain about future prices. This is a particularly grave problem with a high, fluctuating inflation rate. In such an unstable situation, firms may be discouraged from investing which will be harmful for the economy.
- **Inflation can harm the country's balance of payments position.** If a country's inflation rate is above that of its rivals, its products will become less price competitive. This may result in a fall in export revenue and a rise in import expenditure. Such an effect would cause a deterioration in the current account balance. The fall in demand for the country's products may also result in a rise in unemployment.

KEY TERMS

Hyperinflation: a very rapid and large rise in the price level.

Index-linking: changing payments in line with changes in the inflation rate.

Menu costs: costs involved in having to change prices as a result of inflation.

Shoe-leather costs: costs involved in moving money around to gain high interest rates.

- **Inflation can cause fiscal drag.** This occurs when governments do not adjust tax brackets in line with inflation. As a result, people's incomes are dragged into higher tax brackets and they are left with lower real disposable income.

GROUP ACTIVITY 2

Explain in each case, which type of inflation is likely to impose more costs on an economy.

a A high and fluctuating rate or a low and stable rate.

b A 5% rate with other countries averaging 3%, or a 5.2% rate with other countries averaging 6%.

The beneficial effects of inflation

You might be surprised to learn that inflation can have beneficial effects also. These effects are more likely to occur if the inflation is of a demand-pull, low and stable nature and is below that of rival countries.

- Inflation may encourage firms to expand. A low and stable level of demand-pull inflation may make entrepreneurs optimistic about future sales.
- Inflation reduces the real burden of any debt that households and firms have built up. This may mean that some households and firms will avoid going bankrupt.
- Inflation can prevent some workers being made redundant in a declining industry or region. This is because whilst workers are likely to resist any cut in their money wages, they may accept their money wages rising by less than inflation. In such a case, firms' real wage costs will fall without resorting to a retrenchment of workers.

INDIVIDUAL ACTIVITY 3

China's inflation rose to 2% in 2016 from 1.4% in 2015. The price level was driven up mainly by rising energy prices, transport prices and wages. Economists were forecasting that wages would rise 4.7% points above inflation in 2017 and that if inflation were to rise even higher, it could have a harmful effect on the country's exports and savings.

a Was China suffering mainly from cost-push or demand-pull inflation in 2016?

b What effect may inflation have on the country's exports and imports?

c Explain one other cost imposed by inflation on an economy.

INDIVIDUAL ACTIVITY 4

In 2008, Zimbabwe experienced an inflation rate of 23 million%. At the start of that year a loaf of bread was priced at Z$10 million and a bunch of bananas was sold for Z$100 million. A year later prices rose even higher. Supermarkets were changing the price of some products daily. With money having less worth each day, a bartering system was developing. For example, some farm workers were paid in food and people in cities swapped a range of goods for food. At this time, the Zimbabwean government was printing a huge number of extra bank notes to ensure that it could pay the soldiers, police and civil servants and meet other commitments of government spending. In 2014, the Zimbabwe central bank announced that a range of foreign currencies, including the US dollar, Pound Sterling and Indian rupee, would all be accepted as legal currency in the country.

a What is meant by barter?

b Explain one cost of inflation that has been touched on in the information.

c From the information given, decide the cause of inflation in Zimbabwe, in 2006.

31.5 Policies available to control inflation

A measure that is becoming increasingly used throughout the world is the setting by a government of an inflation rate target for its central bank to achieve. The intentions behind an inflation rate target are to make the central bank accountable and to influence the behaviour of households and firms. If a central bank does not achieve its target, it has to explain why and what measures it is going to take to get the inflation rate back on target. If a central bank can convince households and firms that there will be price stability, they may behave in a way that reduces the chance of significant movements in the price level. Households will not rush to buy products expecting them to be much more expensive in the future and firms will not raise their prices just to cover expected increases in costs of production.

If the country is experiencing demand-pull inflation, the appropriate policy approach would be to use contractionary fiscal and/or monetary policy. Aggregate demand could be reduced by increasing tax rates, lowering government spending, raising the rate of interest and/or reducing the money supply. The effectiveness of such measures will be influenced by how households and firms react. If they are very confident about future economic prospects, they may continue to spend increasing amounts despite these measures. They may also react in a way that turns demand-pull inflation into cost-push inflation. For example, workers may respond to higher income rates by demanding higher wages or they may opt out of the labour force. Contracting fiscal and monetary policy measures can have a number of adverse side effects, including reducing economic growth and possibly causing unemployment.

LINK

Chapter 26.8 The effects of fiscal policy on government macroeconomic aims

Chapter 27.3 The effects of monetary policy on government macroeconomic aims

Chapter 28.2 Effects of supply-side policy on government macroeconomic aims

To reduce cost-push inflation, a government will use supply-side policy measures such as improved education and training and privatisation. These measures may be effective but, as noted before, they make take some time. They may also be relatively costly and may, at least in the short run, add to aggregate demand. In addition, rises in firms' costs of production are not just influenced by what is happening in the domestic economy. Rises in the price of imported raw materials and fuel may put significant upward pressure on prices. In this case, a government may try to lower inflation by subsidising firms but this might need relatively large amounts of government revenue and so a high opportunity cost.

31.6 The causes of deflation

Deflation may result from the supply-side or the demand-side of the economy. The price level may be reduced as a result of advances in technology and increases in labour productivity. This is likely to be beneficial as it will mean that consumers can enjoy more goods and services and the economy may become more internationally competitive.

In contrast, deflation resulting from a decline in aggregate demand is likely to be harmful. This is because it can lead to a downward spiral in economic activity. Consumers expecting prices to be lower in the future, may postpone their purchase. With lower demand for their products, firms are likely to reduce their output and the number of workers they employ. The reduction in employment will push down aggregate demand further.

31.7 The consequences of deflation

The effect of deflation will be influenced by whether it is 'good' deflation (caused by an increase in aggregate supply) or 'bad' deflation (caused by a decrease in aggregate demand). Good deflation may reduce a current account deficit or increase a current account surplus if demand for exports and imports is elastic and if the fall in the price level is not offset by a rise the exchange rate. Good deflation can be associated with increases in output and employment.

Bad deflation, however, is likely to cause a rise in unemployment and lower output. It is also likely to discourage investment which will reduce productive capacity and endanger future economic growth. Both bad and good deflation increase the purchasing power of those whose income remains unchanged. It does, however, raise the burden of debt. Any household or firm which has taken out a loan will have to pay back more in real terms. In this situation, borrowers will lose and lenders will gain.

31.8 Policies available to control deflation

A government will not be concerned about good deflation, but it will be anxious to avoid bad deflation or to correct it should it occur. If there is a risk of bad deflation or if it is occurring, it is likely that the government will use expansionary fiscal policy and a central bank will use expansionary monetary policy. Bad deflation, however, can be difficult to reverse. If it has lasted some time, interest rates may be very low and there may be little room to cut them further. Confidence may be very low and the burden of debt high, so that cuts in income and corporation tax rates, for example, may not encourage households to spend and firms to invest.

GROUP ACTIVITY 3

Greece experienced deflation over most of the period 2013–16. During this time, wages and pensions were cut and the economy experienced a recession. Some economists warned that the cut in wages could result in a long run deflation.

a Does the information suggest Greece suffered from bad deflation or good deflation?

b How may a reduction in wages result in a deflationary spiral?

31.9 Policy conflicts

Some of the policy measures designed to reduce unemployment may increase inflation. For example, an increase in government spending on pensions would raise consumer expenditure. This rise would encourage firms to expand their output and take on more workers. The higher aggregate demand may, however, raise the price level.

Policy measures to reduce expenditure on imports may reduce economic growth. A rise in income tax, designed to reduce households' expenditure on imports, would also reduce spending on domestically produced products. This fall in demand will reduce the country's output or at least slow down the economic growth.

Unemployment and economic growth both tend to benefit from expansionary fiscal and monetary policies. In contrast, contractionary fiscal and monetary policies are more likely to be used to reduce inflation and expenditure on imports.

Summary

You should know:

- The consumer prices index (CPI) is a weighted measure of consumer prices.
- A rise in a consumer prices index indicates inflation.
- Surveys are done of the products bought by households. On the basis of this information, weights are attached to products. The greater the percentage of an average household's total expenditure devoted to a product, the higher its weightage.
- Information on price changes is found from a range of outlets.
- A weighted price index is constructed by multiplying weights by a price index for each category.
- A weighted price change can be found by multiplying weights with price changes.
- Inflation may be caused by increases in the costs of production (cost-push), excess demand (demand-pull) or the faster growth of money supply relative to output (monetary).
- Among the causes of cost-push inflation are rises in wages and raw material costs.
- Demand-pull inflation is more likely to occur when the economy is at or approaching full employment.
- The effects of inflation will depend on its rate, stability of price rises, its rate relative to other countries and response of the government.
- Inflation will cause a fall in the purchasing power of money. Among the other possible harmful effects are an unplanned redistribution of income, menu costs, shoe leather costs, uncertainty and a worsened position of the balance of payments.
- The possible beneficial effects of inflation include a stimulus to production, a reduction in debt and reduction of unemployment.
- The effects of deflation are influenced by whether it is 'good' deflation or 'bad' deflation.
- Economic growth and employment are likely to benefit from measures designed to increase aggregate demand but these measures may result in higher inflation and a rise in imports.

Multiple choice questions

1 The price of a product rises by 8% in 2016 and its weighted price change is 2%. In 2017, its rise in price falls to 5%, but its weighted price change increases to 2½%. What was the weight of the product in 2016 and 2017?

	2016	2017
A	¼	½
B	½	¼
C	4	2
D	2	4

2 Who, among the following, is most likely to benefit during a period of rapid inflation?

A Borrowers

B Pensioners

C Savers

D Workers in strong unions

3 Which of the following is a possible cause of demand-pull inflation?

A An increase in government expenditure, not matched by a rise in taxation

B An increase in the price of oil, not matched by a fall in the price of other raw materials

C A rise in wages, not matched by an increase in productivity

D A rise in imports, not matched by a rise in exports

4 Which of the following must happen as a result of inflation?

A A decline in uncertainty

B A fall in the value of money

C An improvement in the balance of payments

D An increase in savings

Four-part question

a Define *inflation*. **(2)**

b Explain how a consumer boom could cause inflation. **(4)**

c Analyse how inflation is measured. **(6)**

d Discuss whether or not workers suffer as a result of inflation. **(8)**

Exam-style questions

Multiple choice questions

1 In 2016, output in Indonesia rose by 5%. Which of the government objectives does this meet?

A balance of payments stability

B economic growth

C full employment

D price stability

2 Which government policy measure would be most likely to reduce unemployment?

A an increase in income tax

B an increase in interest rates

C a decrease in government expenditure

D a decrease in VAT

3 A government wants to redistribute income from the rich to the poor. Which combination of policy measures would achieve this?

	Progressive taxes	Welfare payments
A	increase	increase
B	increase	reduce
C	reduce	reduce
D	reduce	increase

4 Which government policy measure is most likely to benefit people on a high income?

A increasing housing benefit

B increasing unemployment benefit

C reducing government expenditure on higher education

D reducing income tax

5 'A tax levied on the profit made on selling assets such as second homes and shares' – what type of tax is this?

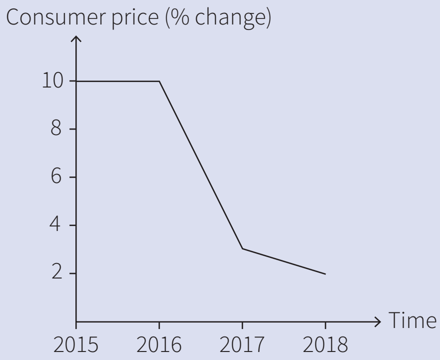
A capital gains

B corporation

C income

D sales

6 The graph shows a change in consumer prices for a country.



What can be concluded from this information?

A Consumer prices remained unchanged between 2015 and 2016

B Consumer prices fell from 2016 to 2017

C Consumer prices were higher in 2017 than 2016

D Consumer prices were lower in 2016 than in 2015

7 India's economy grew by approximately 7% in 2016. What must have increased in India in 2016?

A gross domestic product

B labour productivity

C the government's budget deficit

D the rate of inflation

8 Which of the following is a cause of cost-push inflation?

A an increase in the money supply

B an increase in government expenditure on pensions

C a rise in the price of housing

D a rise in the cost of transporting goods

9 What is a possible disadvantage of economic growth?

A a depletion of non-renewable resources

B an increase in unemployment

C a reduction in the government's ability to reduce poverty

D a reduction in the productive capacity of the economy

10 The occupational mobility of labour increases. Which types of unemployment is this likely to reduce?

A cyclical and frictional

B frictional and structural

C structural and cyclical

D cyclical, frictional and structural

Data response questions

Carefully study the source material for each question and then answer Questions 1 and 2.

Source material: The Brazilian government seeks to reform the economy

Brazil, the world's seventh largest economy, experienced its second successive year of recession in 2016. Its GDP fell to $1755 billion in 2015 and then fell by a further 3.5% in 2016. In 2015, with a budget deficit equivalent to 10% of GDP, the government had introduced spending cuts and tax increases amounting to $16.9bn. There were, for example, cuts in government spending on healthcare, housing, infrastructure projects and the pay of public sector workers. In 2016, the government introduced another round of spending cuts and tax increases, this time amounting to $15bn.

The country's central bank lowered the interest rate from 14.25% in 2015 to 14% in 2016. This was a relatively small change in an interest rate which remained high relative to other major economies. Although in historical terms (Brazil experienced hyperinflation in the 1990s), inflation was relatively low at 8.5% in 2016, this was high again compared to other major economies. Prices were being driven up due to higher electricity and raw material costs, largely resulting from a fall in the country's foreign exchange rate.

In 2016 the government increased the pay of high-ranking government officials, but in recent years the pay and employment of public sector workers has declined relative to those in the private sector. There have also been a number of other changes in the country's labour market. The proportion of informal workers has declined, while the proportion of workers employed in jobs requiring university degrees has changed. Proposed government reforms are likely to make further changes.

The reasons behind these reforms are to reduce unemployment, restore economic growth and to increase Brazil's exports compared to its imports. One of the influences on the value of goods and services that a country imports, is the size of the economy. The table shows the GDP and import expenditure of the seven largest economies in terms of output in 2015.

Country	GDP ($bn)	Import expenditure ($bn)
USA	18 560	2200
China	12 000	1440
Japan	4730	630
Germany	3500	990
UK	2650	582
France	2500	525
Brazil	1775	144

GDP and import expenditure of the seven largest economies 2015

1 Referring to the source material in your responses, complete all parts of Question 1.

- **a** Calculate Brazil's budget deficit in US$s in 2015. **(1)**
- **b** Explain what type of fiscal policy was operating in Brazil in 2015 and 2016. **(2)**
- **c** Explain the type of inflation experienced in Brazil in 2016. **(2)**
- **d** Explain **two** ways in which the pattern of employment has changed in Brazil. **(4)**
- **e** Analyse the likely effect of the supply-side policy measures taken by the Brazilian government on the country's output. **(5)**

f Analyse the relationship between a country's GDP and import expenditure. **(4)**

g Discuss whether or not an increase in the rate of income tax will reduce a budget deficit. **(6)**

h Discuss whether or not all households suffer from inflation. **(6)**

Source material: The government of Bangladesh tackles inflation

Bangladesh's inflation rate fell from 6.4% in 2015 to 5.9% in 2016. The government of the country of 156m people had set an inflation rate target of 6.2%, an economic growth rate target of 7.2% and a money supply growth rate of 15.5%. Although there were pay rises for public sector workers, food prices rose more slowly largely due to good harvests. The weight given to food and non-alcoholic drinks varies from country to country as shown in the table.

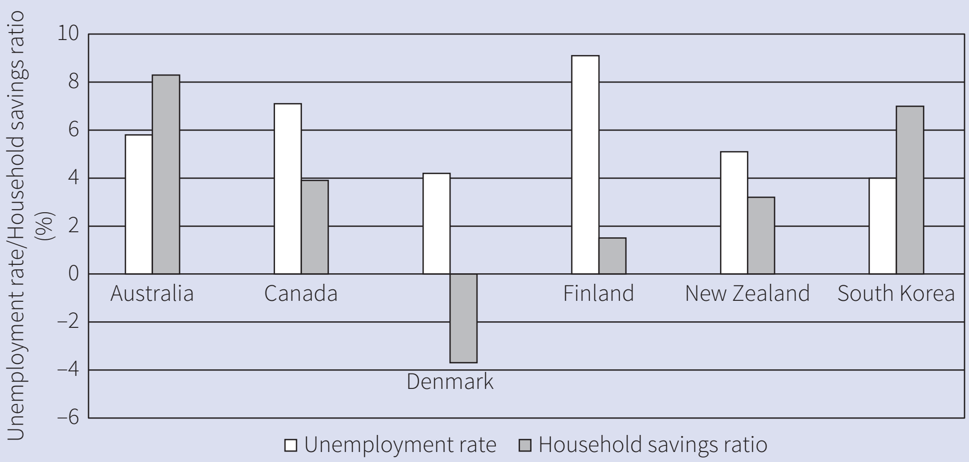
Country	Weight given to food and non-alcoholic drinks (%)	GDP per head ($)
Bangladesh	56.0	3700
India	46.0	6300
South Africa	18.2	13400
Turkey	23.7	20700
UK	10.3	42000
USA	8.4	56800

The weight given to food and non-alcoholic drinks and GDP per head in selected countries in 2015

As well as falling inflation, Bangladesh experienced a falling unemployment rate in 2016. Youth unemployment nevertheless remained high and there was considerable underemployment. This was despite a high rate of job vacancies. Employers said they could not fill these because the job applicants lacked the appropriate skills.

To stimulate investment, the government cut the rate of corporation tax. The central bank of Bangladesh decided that it would keep the rate of interest stable, but some economists suggested that it too needed to be cut to stimulate investment.

Changes in the rate of interest also influence a country's household savings ratio. Another influence on saving is a country's unemployment rate. The chart shows the unemployment rate and household savings ratio for six countries.



Unemployment rate and household savings ratio for selected countries, 2016

2 Referring to the source material in your responses, answer all parts of Question 2.

- **a** Identify **one** fiscal policy measure. **(1)**
- **b** Calculate Bangladesh's GDP in 2016. **(2)**
- **c** Explain what happened to the price level in Bangladesh in 2016. **(2)**
- **d** Explain what type of unemployment Bangladesh was experiencing in 2016. **(4)**
- **e** Analyse the relationship between the weight given to food and non-alcoholic drinks, and GDP per head. **(5)**
- **f** Analyse the relationship shown between the unemployment rate and the household savings ratio. **(4)**
- **g** Discuss whether or not setting an inflation rate target will reduce the inflation rate. **(6)**
- **h** Discuss whether or not a cut in the rate of interest will increase investment. **(6)**

Four-part questions

1 In 2016 the Greek economy returned to economic growth after experiencing a period of recession. It was hoped that the economic growth would reduce the country's high rate of unemployment, restore confidence in the country's economic prospects, and revenue from direct and indirect taxation.

- **a** Define a *direct tax*. **(2)**
- **b** Explain how changes in resources affect economic growth. **(4)**
- **c** Analyse how a fall in confidence in the economic prospects of a country could cause that country to experience a recession. **(6)**
- **d** Discuss whether or not economic growth will always result in lower unemployment. **(8)**

2 The unemployment rate in Sri Lanka fell between 2015 and 2016 while its inflation rate rose. Government spending increased over the period and it introduced a number of policy measures designed to increase the incentive to work.

- **a** Identify **two** measures of unemployment. **(2)**
- **b** Explain how a government could increase the incentive to work. **(4)**
- **c** Analyse why a fall in unemployment may be accompanied by a rise in inflation. **(6)**
- **d** Discuss whether or not an increase in government spending will cause inflation. **(8)**

SECTION 5
Economic development

Chapter 32
Living standards

Learning objectives

By the end of this chapter you will be able to:

- describe indicators of living standards
- discuss the advantages and disadvantages of real GDP per head and HDI as indicators of living standards
- explain how income and wealth inequality are measured
- analyse the reasons for differences in living standards and income distribution within and between countries

Introducing the topic

One of the key roles of an economist can be seen to be to raise people's living standards. By helping to improve the performance of firms and advising governments on increasing macroeconomic performance, economists can make a significant difference to the quality of people's lives. Do you think you enjoy a higher living standard than people living in your country fifty years ago? What would you look at in making this comparison?

KEY TERMS

Human Development Index (HDI): a measure of living standards which takes into account income, education and life expectancy.

Genuine Progress Indicator (GPI): a measure of living standards which takes into account a variety of indicators including income, leisure time, distribution of income and environmental standards.

32.1 Indicators of living standards

There are a variety of indicators that can be used to assess the living standards in a country. These include the number of people or households that own a given consumer good, such as cars, laptops, mobile (cell) phones and TVs (see Table 32.1). The number of patients per doctor, enrolment in tertiary education, the adult literacy rate, the average food intake per person and conduct of free elections in the country can also be examined. A main measure of living standards, however, is still probably real GDP per head. There are also composite indicators such as the **Human Development Index (HDI)** and the **Genuine Progress Indicator (GPI)**.

Cars per 1000 population		Internet users per 100 population		Mobile phone subscriptions per 100 people	
Puerto Rico	805	Iceland	98.2	Macau	322.6
Luxembourg	746	Bermuda	96.8	Hong Kong	233.6
Iceland	720	Norway	96.3	Kuwait	218.4
Malta	665	Denmark	96.0	Saudi Arabia	179.6
Bahrain	662	Andorra	95.9	UAE	178.1
New Zealand	648	Liechtenstein	95.2	Bahrain	173.3
Lithuania	623	Luxembourg	94.7	Kazakhstan	172.2
Canada	612	Netherlands	93.2	Gabon	171.4
Italy	607	Sweden	92.5	Suriname	170.6
Finland	592	Finland	92.4	Botswana	167.3
		Monaco	92.4		

Table 32.1: The top ten countries in terms of highest car ownership, internet users and mobile phone subscriptions 2014

Source: Pocket World in Figures, 2017 edition, pages 76, 98 and 99, The Economist

Ownership of electronic goods is one indicator of living standards

Real GDP per head as an indicator of living standards

An increase in real GDP per head would suggest that living standards have risen, but it may not necessarily indicate the real situation for a number of reasons. One is that real GDP is an average. Not everyone may benefit from a rise in the average income level. The extra income may be unevenly spread with a few receiving much higher income and some not receiving any extra income.

Higher output will obviously mean that more goods and services are being produced, but not all of these may add to people's living standards. For example, an increase in the output and consumption of tobacco may actually reduce the quality of people's lives by affecting their health and life expectancy adversely. A rise in police services, due to a higher crime rate, is also unlikely to improve most people's living standards.

Increases in real GDP per head figures may understate the products available to people due to undeclared economic activity and non-marketed output. It may, however, overstate it if the quality of output is falling. Living standards are also influenced by other factors besides the material goods and services produced. If output rises but working conditions deteriorate, the number of working hours increases, or pollution increases, people may not feel better off.

Comparing living standards between countries

Again, one of the main measures is real GDP per head. This measure has the advantage that it takes into account differences in population size and also incorporates adjustments for inflation.

There are still a number of reasons why it cannot serve as a definite way of ascertaining the quality of living standards of people in a country. (In fact, some of the citizens of some countries enjoy a better quality of life than some of those in richer countries.) This is because there can be differences in the distribution of income, the size of the informal economy, working hours and conditions, the composition and quality of output and environmental conditions between countries.

KEY TERM

Purchasing power parity: an exchange rate based on the ratio of the price of a basket of products in different countries.

There is also a potential problem in comparing different countries' real GDP per head because countries measure their output in terms of their own currency initially. The comparison, on the other hand, requires to be done in a common unit. There is a risk that if an unadjusted currency is used, the comparison may be distorted. This is because the value of a currency can change on an hour to hour basis. For example, US dollars may be used. If the real GDP of Kenya was KSh1200bn and the exchange rate was initially $1 = 100 Kenyan Shillings (KSh), the GDP of Kenya would be valued at $12bn. If the exchange rate changed to $1 = KSh80 the next day, the value of its output in dollars would change to $15bn, despite the fact that in that period Kenya would not have increased its output by 25%.

It is for this reason that economists make use of **purchasing power parity** (PPP) exchange rates when comparing countries' GDP. These use an exchange rate based on the buying power of currencies in their own countries. They compare the amount of a country's currency needed to buy the same basket of goods and services with that of another country or countries' currencies. If in the USA a given basket of products sells for $5000 and in Kenya, it sells for KSh45 000, the exchange rate used would be $1 = KSh9. This figure would not be affected by market changes in the price of currencies on the foreign exchange market.

INDIVIDUAL ACTIVITY 1

One of the richest self-made women in the world is Cheung Yan in China. She runs one of Asia's largest packaging and paper production firms and has a personal fortune of $1.46bn. She is one of a new breed of super-rich entrepreneurs in a country which, in 2016, had a real GDP per head of $15 400 (PPP) in comparison with $42 500 in the UK. In that year in China, the disposable income of the top 10% of richest households was more than nine times higher than that for the poorest 10%.

a What is PPP?

b Are people in China poorer than people in the UK?

c Is income evenly distributed in China? Explain your answer.

The Human Development Index

The Human Development Index (HDI) was developed by a team of economists led by Dr Mahbub ul Haq, while he was working for the United Nations Development Programme (UNDP). It has been published every year since 1990.

The HDI is a wider measure than real GDP per head. Besides including GDP per head (see Note, right), the HDI considers two other indicators of living standards. One is the length of time for which people can enjoy life, measured as life expectancy at birth. The second is education. This is measured by mean years of schooling and expected years of schooling.

On the basis of their HDI values, countries are categorised into very high human development, high human development, medium human development and low human development. The HDI shows that economic growth and human progress may not always match. Some countries such as Namibia and South Africa have recently enjoyed a higher ranking in terms of GDP per head than HDI, whilst others including Costa Rica and Cuba usually score more highly in terms of HDI than GDP per head.

Although the HDI does take into account other factors that influence people's living standards, it has been criticised for what it leaves out. In fact, it has been stated that the index would be high for someone living for a long time in a prison who has been well educated. Among the factors it does not take into account are political freedom and the environment. It also does not consider differences in life expectancy, education and differences in income between males and females and between those living in rural and urban areas, among other groups. Table 32.2 shows the countries with the highest and lowest HDI rankings in 2014.

NOTE

The HDI now actually uses Gross National Income per head rather than GDP per head. This is very similar to GDP per head although it includes workers' remittances. For consistency, GDP per head is used here.

Ranking	Top ten countries	Ranking	Bottom ten countries
1	Norway	178	Mali
2	Australia	179	Mozambique
3	Switzerland	180	Sierra Leone
4	Denmark	181	Guinea
5	Netherlands	182	Burkina Faso
6	Germany	183	Burundi
6	Ireland	184	Chad
8	USA	185	Eritrea
9	Canada	186	Central African Republic
10	New Zealand	187	Niger

Table 32.2: HDI rankings in 2014

Table 1 page 208 Human Development Report 2015 UNDP

> **TIP**
> For understanding the measures of living standards, it might be useful to discuss (as a group) the change in living standards in your own country in the last five years. You might also want to carry out a survey, asking your friends and relatives whether they think that the living standards have risen and what leads them to think this (or vice versa).

The Genuine Progress Indicator (GPI)

The Genuine Progress Indicator (GPI) is another composite measure containing a number of indicators. It was developed in 1995. It starts with GDP. It then adjusts for income distribution. As the poor receive more benefit from a rise in income than the rich, the GPI rises when the poor receive a higher proportion of income and it falls when income becomes more unevenly distributed. Then, it makes a number of deductions and additions. The items deducted are those which reduce living standards now or in the future. Examples of such items include the costs of crime, traffic accidents, carbon dioxide emissions, depletion of non-renewable resources and the loss of wetlands and forests. Items which are thought to make a positive contribution to current or future living standards are added. These include the value of housework and volunteer work and increases in leisure time.

Other measures

There is a wide range of other measures of living standards. Whilst the HDI is the UNDP's best known measure, it also produces several other measures. Another of the UNDP's measures is the **Gender Inequality Index (GII)** which considers gender-based disadvantage in terms of reproductive health, empowerment and the labour market. The health dimension is measured in terms of maternal mortality rate and adolescent fertility rate. There are two measures to the empowerment dimension which are the percentage of seats in the national parliament held by women and the relative percentage of men and women with at least a secondary education. Involvement in the labour market is assessed by comparing the labour force participation rates of men and women.

Economists also calculate the **Happy Life Expectancy Index (HLEI)**. This seeks to measure the degree to which people live long and happy lives. It is found by multiplying life expectancy at birth by a happiness index. Bhutan also measures **Gross National Happiness**. This is based on a survey which assesses people's happiness using thirty-three indicators in nine categories. One category is named living standard and this has the three indicators of income per head, assets and housing. The other eight categories are psychological wellbeing, health, time use, education, cultural diversity and resilience, good governance and community vitality, ecological diversity, and resilience.

> **KEY TERMS**
>
> **Gender Inequality Index (GII):** a measure of gender inequalities in terms of reproductive health, empowerment and labour market participating.
>
> **Happy Life Expectancy Index (HLEI):** an index which multiplies life expectancy by a happiness index.
>
> **Gross National Happiness:** a measure of living standards which includes a wide number of indicators including income, psychological wellbeing, education and ecological diversity.

GROUP ACTIVITY 1

In 2016, the Pakistani economy grew by 5.7% and the population, by 2.0%. Property prices rose in the country and sales of televisions, mobile phones and cars, including Porsches, increased. Nevertheless, most of the country's population of 202 million remained on a low income, barely able to aff o rd a motorcycle. The rich/poor divide widened. The government increased its expenditure on education by 14% and on defence by 12%.

a Identify two diff e rent indicators which would indicate that living standards rose in Pakistan in 2016.

b Would all Pakistanis have enjoyed a 5.7% rise in living standards in 2016?

c Would all the extra government expenditure have increased living standards?

32.2 Comparing living standards and income distribution

Income is unevenly distributed between households in every country, but to different extents. Wealth is even more unevenly distributed. Wealth is a stock of assets which have a financial value. Some of these assets, such as shares and government bonds, give rise to income. Some people have a considerable amount of wealth, whilst others have none.

Measures of income and wealth inequality

To assess the distribution of income and wealth in a country, economists calculate the percentages of income earned and wealth owned by given proportions of the population. Two common proportions used are deciles (tenths) and quintiles (fifths).

The causes of differences in living standards and income and wealth inequality

Living standards vary between countries and between regions within a country for a large number of reasons. These include, for example, differences in income, wealth, education and healthcare systems, levels of pollution and working hours.

Income may be unevenly distributed between households within and between countries due to uneven holdings of wealth, differences in the composition of households and differences in the opportunity and ability to earn an income. Some wealthy households can live off the income their wealth generates. In more cases, the income from wealth adds to earned income.

Households with a number of workers are likely to have a higher income than those with one or no workers and a high number of dependants.

The wages received by workers are influenced by their skills, qualifications and the number of hours for which they work. High skilled workers with better qualifications are likely to be in high demand and hence are likely to receive high wages. Full-time workers usually earn more than part-time workers. Some people may be dependent on state benefits or help from relatives and their income is likely to be relatively low.

Wealth is unevenly distributed because there are differences in the assets inherited by people, their savings and entrepreneurial skills. In fact, inheritance is a major reason for some people being wealthy. The more a person can save, the wealthier they will become. Of course, in this sense wealth creates wealth. Wealthy people can afford to save more and this makes them wealthier. People with an entrepreneurial flair may be able to build up a business from scratch and become wealthy.

LINK

Chapter 29.3 Economic growth (Consequences)

INDIVIDUAL ACTIVITY 2

More than half of the world's wealth is owned by 2% of adults, whilst the least wealthy 50% of the world's adults own only 1% of global wealth. Wealth is heavily concentrated in North America, Europe and affluent Asia-Pacific countries. People living in these countries, together hold almost 90% of total world wealth. Wealth is also unevenly distributed within countries. The USA has one of the highest levels of inequality and Japan one of the lowest.

a How much of the world's wealth is owned by the wealthiest 50% of adults?

b Explain what is meant by Japan having one of the lowest levels of wealth inequality.

Summary

You should know:

- There are a number of possible indicators of living standards, including consumer goods per head, real GDP per head, HDI, and the Genuine Progress Indicator.
- Real GDP per head gives an indication of material living standards, but a rise in average income does not translate into a benefit for everyone. The extra output may not add to the quality of people's lives. Official figures may not capture the total income and may fail to include other factors – like working conditions, working hours and environmental conditions, which affect living standards.
- One country can have a higher real GDP per head than another, but its citizens may still have lower living standards, if they have less leisure time, worse working conditions, lower quality products, worse environmental conditions and a smaller informal economy.
- International comparisons in real GDP per head are usually made in terms of purchasing power parity.
- The Human Development Index is based on life expectancy and education, as well as GDP per head.
- Some households are rich because they earn high incomes and own assets which generate income.
- The main reasons accounting for why some people are wealthy are inheritance of wealth, accumulated savings or money earned in business.

Multiple choice questions

1 What is the most popular measure of the difference in living standards between countries?

A Average price level
B Real gross domestic product per head
C The size of the population
D The value of the currency

2 What is most likely to cause an increase in a country's standard of living?

A A fall in the school leaving age
B A fall in the size of the labour force
C A rise in the level of pollution
D A rise in the number of doctors per head of the population

3 Under which circumstance would the standard of living of a country be most likely to fall?

A A fall of 3% in real GDP and a fall of 6% in population
B No change in real GDP and a fall of 3% in population
C A rise of 2% in real GDP and no change in population
D A rise of 5% in real GDP and a rise of 8% in population

4 In what circumstance would a fall in working hours be most likely to increase the standard of living?

A The average income falls

B The level of output remains unchanged

C The rate of unemployment rises

D The standard of working conditions falls

Four-part question

a Identify **two** influences on living standards. **(2)**

b Explain why real GDP per head is a better measure of the standard of living in a country than nominal GDP. **(4)**

c Analyse how a rise in labour productivity can increase living standards. **(6)**

d Discuss whether or not HDI is a good measure of living standards. **(8)**

Chapter 33
Poverty

Learning objectives

By the end of this chapter you will be able to:

- distinguish between absolute poverty and relative poverty
- analyse the causes of poverty
- discuss the policies to alleviate poverty and redistribute income
- measuring poverty

Introducing the topic

No one wants to be poor. We all want to have sufficient income to enable us to enjoy a good standard of living. So why are some people poor? Why do some people have so little, while other people have so much? Is there anything governments can do, to help the poor and redistribute from the rich to the poor?

KEY TERMS

Absolute poverty: a condition where people's income is too low to enable them to meet their basic needs.

Relative poverty: a condition where people are poor in comparison to others in the country. Their income is too low to enable them to enjoy the average standard of living in their country.

Vicious circle of poverty: a situation where people become trapped in poverty.

33.1 Absolute and relative poverty

Absolute poverty occurs when people do not have enough income to pay for their basic needs. They may lack access to, for example, adequate food, clothing, shelter, sanitation and healthcare. People experience **relative poverty**, when they are poor relative to other people in the country. People who are relatively poor are unable to participate fully in the normal activities of the society they live in. People who are regarded as relatively poor in a rich country may not be seen as such if they had the same income in a poor country.

33.2 The causes of poverty

There are a number of reasons why people are poor. These include being unemployed, being in low-paid work, falling ill and growing old. In all of these cases, people may lack the income to ensure that they do not experience poverty. Once in poverty, it can become difficult to get out of it. People can become trapped in a **vicious circle of poverty**. Those who are poor are likely to have worse than average education and healthcare. This will reduce their productivity, employment opportunities and income, and will also affect the prospects of their children.

Relatively poor housing

GROUP ACTIVITY 1

The following are circumstances people may experience. Identify which ones would indicate that they are living in absolute poverty.

a high car ownership
b high internet use
c homelessness
d longevity
e low access to electricity
f malnutrition

KEY TERM

Multidimensional Poverty Index (MPI): a measure of poverty based on deprivations in education, health and standard of living.

LINK

Chapter 18 National minimum wage

The Multidimensional Poverty Index (MPI)

One measure of poverty is the **Multidimensional Poverty Index (MPI)**. This index is based on deprivations in education, health and standard of living. Household surveys are undertaken to find, for example, how many households have no member who has completed five years of schooling, someone who is malnourished, and who has no access to clean water and no electricity.

There are two indicators in the health category – child mortality and nutrition, each with a weighting of 1/6th. There are again two indicators in the education category with a weighting of 1/6th each. These are years of schooling and child school attendance. The total weighting given to standard of living is one-third, as it is with education and health. This time, however, the category is subdivided into six rather than two indicators. These are electricity, improved sanitation, safe drinking water, flooring, cooking fuel and assets. Each part has a weighting of 1/18th. A household is regarded as poor if it suffers deprivations on a third, or more, of the ten indicators (see Figure 33.1).

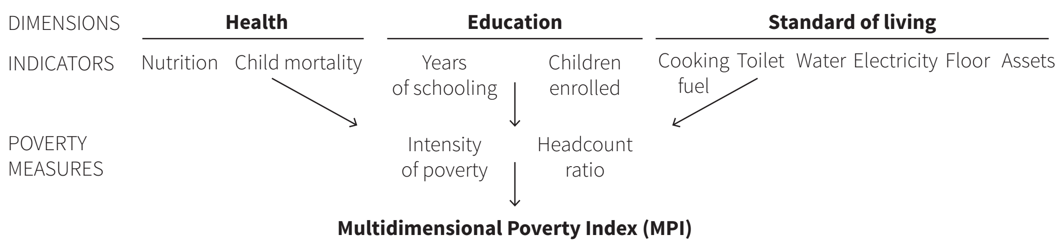


Fig. 33.1: The Multidimensional Poverty Index

Source: United Nations Development Programme, Human Development Reports, Multidimensional Poverty Index (MPI), 2016, hdr.undp.org/en/content/multidimensional-poverty-index-mpi

33.3 Possible government policy measures to reduce poverty

There are a number of measures a government may take in a bid to reduce poverty. Its choice of measures, however, can be restricted by the tax revenue it has raised to fund them. Among the possible measures are:

- **Improving the quantity and quality of education.** In the long term this can be a very ef ective policy, as it can increase the job prospects and earning potential of the poor and their children.
- **Promoting economic growth.** For example, increasing government expenditure or reducing the rate of interest, will increase aggregate demand. This can increase output and create jobs. Unemployment is a major cause of poverty. Having unemployed and underemployed workers not only lowers their living standards, but also the living standards of others since output will be below potential.
- **Introducing or raising a national minimum wage.** This is designed to tackle the problem of people experiencing low living standards due to low wages.
- **Encouraging more multinational companies to set up in the country.** The opening up of new firms in the country should create more employment opportunities.
- **Providing benefits or more generous state benefits.** The elderly, and some of the sick and disabled, may not be able to work and may not have any savings to support them. Giving them benefits, or raising the benefits they receive, may enable them to avoid absolute poverty. What is more debatable is the eect that raising unemployment benefit will have on poverty. If there is a lack of jobs, it may help in the short run, as it will not only raise the living

standards of the unemployed, but may also reduce unemployment by increasing aggregate demand. If, however, jobs are available, and the unemployed are not filling them because they receive a higher income on benefits, raising benefits will reduce the incentive to work.

- **Land reform.** In a number of countries, many agricultural workers work on land owned by a few rich land owners. Those who rent or lease land may be reluctant to improve the fertility of the land. In such circumstances, making ownership of land more equal may increase output and living standards.

GROUP ACTIVITY 2

A report published at the start of 2017 found that a third of people in the UK live in a household which is experiencing poverty. The measure used was a minimum income standard, defined as the income required to buy a basket of goods and services that allows households to be adequately fed, clothed and housed, as well as being able to participate in society by, for example, eating out occasionally in a restaurant and going on a low-cost holiday. A high proportion of lone parents and their children did not achieve this minimum income standard. In contrast, only a relatively low proportion of old age pensioners had an income below the minimum standard.

a Was this study focusing on absolute or relative poverty?

b What does the passage suggest about the level of income UK pensioners received in the period covered?

c Do you think it is easy to get agreement on what is 'the minimum income standard'?

Measures to raise living standards

Measures to reduce poverty should also raise general living standards. Improving education and training will enhance the knowledge and earning potential of the people, and their ability to participate in the political system of the country. Reducing unemployment, as already mentioned, also raises living standards by increasing the quantity of available goods and services.

Other ways of improving living standards include improving healthcare, increasing and improving the housing stock, improving the working conditions and reducing pollution.

Economists debate about the extent to which government intervention is needed to achieve these objectives. Some economists argue that government policies will be needed, such as legislation, to give workers holiday entitlement and government provision of housing. Other economists argue that the private sector is better at providing improved living standards. If this is the case, living standards might be increased by reducing government regulation and taxation. For example, if corporation tax is reduced, firms may be encouraged to expand taking on more workers and providing more training.

LINK

Chapter 26.2 The reasons for government spending

Chapter 26.3 The reasons for levying taxation

Chapter 28.1 Supply-side policy (Improved education and training)

Chapter 29.3: Economic growth (Consequences)

GROUP ACTIVITY 3

The 2016 the Global Hunger Index found that a third of India's children are malnourished. This problem was occurring despite the country's economic growth. The Indian government uses a number of policy measures to reduce poverty in the country. For example, it runs the Integrated Child Development Services scheme. The scheme offers nutritious food, pre-school education with links to primary healthcare services such as immunisation. Poverty can bring significant disadvantages to those experiencing it and can hinder economic growth.

a How may provision of nutritious food to the children of the poor increase their chance of escaping poverty?

b Identify two reasons why some households may not benefit from a country's economic growth.

c Explain how poverty may hinder economic growth.

Government policies on the distribution of income and wealth

Governments may decide to influence the distribution of income and wealth because of concerns that a very uneven distribution may be socially divisive. It may also want to ensure that everyone has access to a certain standard of living. In influencing the distribution, however, governments may be concerned that it does not reduce incentives to entrepreneurs and workers.

Governments can influence the distribution in a number of ways including:

- taxation
- the provision of cash benefits
- the provision of free state education and healthcare, and
- using labour and macroeconomic policies.

Progressive taxes make the distribution of income and wealth more even. The provision of unemployment and other cash benefits can help maintain a reasonable standard of living. Provision of free state education and healthcare can ensure that everyone has access to these essential services, and it may also offer the people an opportunity to improve their living standards. Other government policies that can affect distribution of income include minimum wage legislation, regional policy and measures to reduce unemployment.

TIP

Remember the difference between equity and equality. An equal distribution of income or wealth might be seen as unfair, if people have different needs.

Summary

You should know:

- Poverty is measured both in absolute and relative terms.
- The main reasons that account for poverty of people are unemployment and low-paid jobs.
- Among the measures a government may take to reduce poverty and raise living standards include improving education and training, raising aggregate demand, attracting multinational companies and improving healthcare.
- Governments influence the distribution of income and wealth through taxation, the provision of benefits and adoption of macroeconomic policies.

Multiple choice questions

1 What may cause a more uneven distribution of income?

A An increase in the national minimum wage
B An increase in state benefits
C A reduction in the top rates of tax
D A reduction in unemployment

2 Why does income inequality tend to be associated with wealth inequality?

A It is a disincentive for entrepreneurs and workers
B Those with high incomes have higher ability to save than the poor
C Those with high incomes spend a higher proportion of their income than the poor
D Those with low incomes often inherit wealth

3 What could cause a decrease in absolute poverty but a rise in relative poverty?

A The income of the rich rising by less than the income of the poor
B The income of the rich rising by more than the income of the poor
C The income of the rich falling by less than the income of the poor
D The income of the rich falling by more than the income of the poor

4 Which government measure may reduce absolute poverty?

A A cut in government expenditure on state education
B An increase in the rate of interest
C Granting subsidies to builders of low-cost housing
D The imposition of a tax on food

Four-part question

a Define *absolute poverty*. **(2)**
b Explain **two** reasons why the children of the poor are likely to be poor as adults. **(4)**
c Analyse how fiscal policy could reduce income inequality. **(6)**
d Discuss whether or not the introduction of a national minimum wage will reduce poverty. **(8)**

Chapter 34
Population

Learning objectives

By the end of this chapter you will be able to:

- describe the factors that affect population growth
- analyse the reasons for different rates of population growth in different countries
- discuss the effects of changes in the size and structure of population on different countries

Introducing the topic

In 2017 the world population was 7.5 billion. It is predicted that it will increase to 9.7 billion by 2050 and to 11.2 billion by 2100. The number of people aged 60, or above, is expected to double by 2050 and more than triple by 2100.

Individual countries are facing a number of challenges connected with changes in the size and structure of their populations. For example, Japan is experiencing a decline in population, while Uganda is experiencing a rapid increase in population. The average age of population varies considerably between countries. For example, it is 52 years in Monaco, while it is only 15 years in Niger.

34.1 Factors that affect population growth

The size of a country's population can grow as a result of a natural increase or net **immigration**. A natural increase occurs when the birth rate exceeds the death rate. For example, the **birth rate** in Iran in 2016 was 15.6 per 1000 and the **death rate** was 4.6 per 1000, giving a natural rate of increase of 11 per 1000 or 1.1%.

The birth rate is influenced by the average age of the population, the number of women in the population and women's fertility rate (that is, the average number of children per woman).

The death rate is influenced by nutrition, housing conditions, medical care, lifestyles, working conditions, involvement or non-involvement in military action.

Net immigration occurs when more people come into the country to live (*immigrants*) than people who leave it to live elsewhere (*emigrants*).

34.2 The reasons for different rates of population growth

The birth rate is likely to be high when there is a young average aged population in which women marry young, **infant mortality rate** is high, women are not well-educated, most women do not work and it is cheap to bring up children. Other factors leading to a high birth rate are the lack or disapproval of family planning, government cash incentives to have children, but a lack of government help to care for the sick and elderly.

In contrast, in a country where it is expensive to have children (because there is a legal requirement to send children to school for a number of years and an expectation that some of them will go on to higher education), and well-paid jobs are open to women, the birth rate is likely to be low. If the government does provide state pensions, sickness and disability benefits, families may not feel that they have to have a large family in order to support them.

A country in which people have healthy diets, enjoy good housing facilities and access to high quality medical care, do not smoke or consume excess alcohol, exercise regularly, enjoy good working conditions and the country is at peace with other countries, is likely to have a relatively low death rate.

The rate and pattern of **net migration** is influenced by relative living standards at home and abroad, persecution of particular groups and extent of control on the movement of people. If living standards abroad are better (or perceived as better), there is persecution at home and no restriction to immigration by other countries, some people are likely to emigrate. Most migrants tend to be single people, of working age.

In deciding what is happening to a country's population size, the relationship between the birth rate, death rate and net migration have to be considered. A fall in the death rate, for example, will not necessarily lead to an increase in population if it is offset by a fall in the birth rate and/or net emigration. Latvia's population, for example, is declining because its birth rate has fallen at a greater rate than its death rate and it is currently experiencing net emigration.

KEY TERMS

Emigration: the act of leaving the country to live in another country.

Birth rate: the number of births in a year per 1000 population in a year.

Death rate: the number of deaths in a year per 1000 population in a year.

Net immigration: more people coming to live in the country than people leaving the country to live elsewhere.

Infant mortality rate: the number of deaths per 1000 live births in a year.

Net migration: the difference between immigration and emigration.

More children may increase the size of a country's population

TIP

Be careful not to confuse population growth with economic growth.

INDIVIDUAL ACTIVITY 1

Namibia is a high fertility country. It has been found that there is a strong correlation between education and fertility in the country. The more educated a woman is, the fewer children she will have.

a What is meant by a 'high fertility country'?

b Why would it be expected that more educated women would have fewer children?

TIP

It is often thought that countries with low development have large populations. This is not always the case. What they tend to have is a high population growth rate.

KEY TERM

Population pyramid: a diagram showing the age and gender structure of a country's population.

34.3 The effects of changes in the size and structure of populations

Population structures

The gender distribution of a population indicates the number of males, compared to the number of females. In most countries, more boys are born than girls. However, in a number of countries females outnumber males. This is largely due to women, on an average, living longer than males and higher male infant mortality rates. In some countries, such as the United Arab Emirates (UAE) and China, there are more males in the population than females. This is because some families in China may favour males, while in the UAE more males than females from other countries come to work and live in the country.

The age distribution is the division of the population into different age groups. In broad terms, the categories are people under 16, those between 16–64 and those over 65.

Diagrams in the form of bar charts, referred to as **population pyramids**, show a more detailed breakdown of the different age groups. The traditional view of the population pyramid of a country with relatively low development is a pyramid shape such as that shown in Figure 34.1.

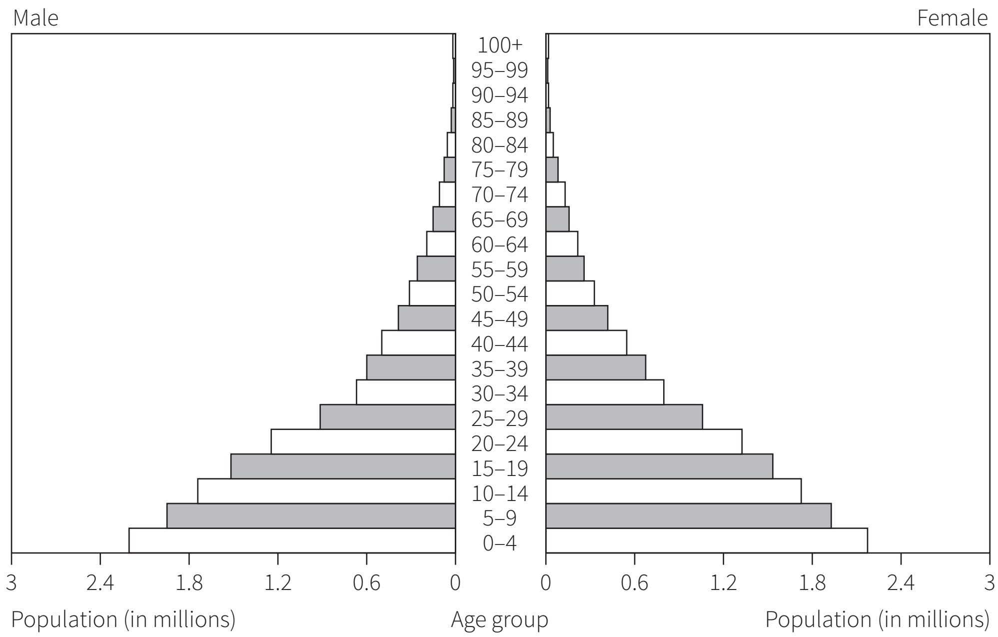


Fig. 34.1: Population pyramid, Mozambique, 2016

Source: CIA World Factbook

Such a pyramid reflects a high birth rate and a high death rate. It has a large proportion of young people in its population with only a small percentage of people reaching older age groups. Of course, not all countries with relatively low development fit this pattern of population structure.

The traditional view of the population pyramid of a country with high development is reflected in Figure 34.2. This is based on a lower birth rate and death rate with more people surviving till they enter old age.

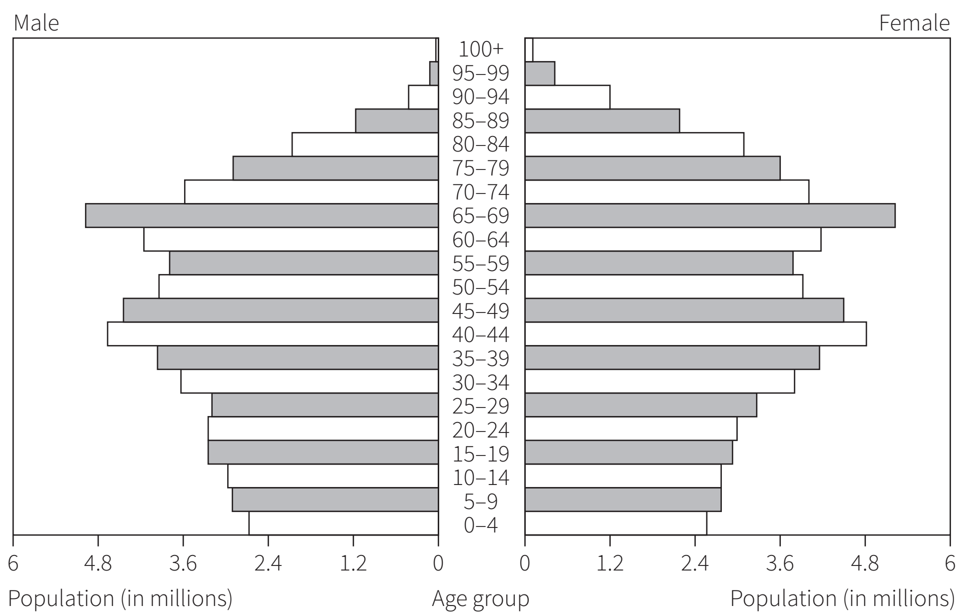


Fig. 34.2: Population pyramid, Japan, 2016

Source: CIA World Factbook

KEY TERMS

Dependency ratio: the proportion of the population that has to be supported by the labour force.

Optimum population: the size of population which maximises the country's output per head.

The age structure of a population influences its **dependency ratio**. This is the:

$$\frac{\text{Number in dependent age groups}}{\text{Number in the labour force}} \times 100$$

The dependant age groups are those below school leaving age and those above retirement age.

The optimum population

The term **optimum population** refers to the number of people which, when combined with the other resources of land, capital and existing technical knowledge, gives the maximum output of goods and services per head of the population.

The concept is not based just on the number of people in a country or per square kilometre. The balance between population and resources is of crucial importance. A country with a large geographical area and a small population may still be considered as overpopulated if there is a shortage of land, capital and technical knowledge, relative to the number of workers. In such a case, a government may seek to move towards its optimum population either by introducing measures to reduce its population size or by seeking to increase investment. A country is said to be under-populated if it does not have enough of human resources to make the best use of its resources. In such a case, its government may encourage immigration. Figure 34.3 illustrates the concept of optimum population.

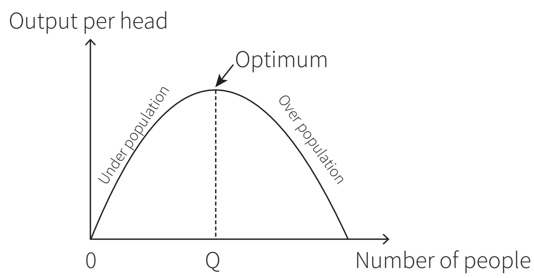


Fig. 34.3: The concept of optimum population

In practice, it is difficult to determine a country's optimum population and size of actual population relative to it. This is, in part, because the quantity and quality of resources are changing all the time.

INDIVIDUAL ACTIVITY 2

The Population Reference Bureau (PRB) forecast in 2016 that India's population will become the world's most populous nation in 2050. It projected that China's population will fall from 1.37 billion to 1.34 billion, whilst India's will increase from 1.27 billion to 1.71 billion. The projections were based on infant mortality rates, life expectancy, fertility rates, age structure, contraception and AIDS rates.

a Identify a factor influencing the population size, not mentioned in the passage.

b Explain why India's population may grow by less than the predicted figure.

Technological advances can increase the size of a country's optimum population

The effects of an increase in population

The consequences of a growth in a country's population depend on its cause, size of population relative to optimum population and the rate of population growth. Possible benefits of an increasing population are listed below:

- If the population is below the optimum size, the country will be able to make **better use of its resources**.
- The **size of markets will increase**. This should enable firms to take greater advantage of economies of scale.
- There may be an **increase in factor mobility** if the rise has resulted from an increase in the birth rate or immigration. Expanding industries can recruit new workers to the labour force. These people are likely to be familiar with new ideas and methods. If this is the case, firms' training costs will be reduced.
- Extra demand will be generated. This is likely to stimulate investment and this may lead. To the introduction of new technology.
- A **rise in the labour force** now due to net immigration and in the future, caused by a rise in the birth rate. Net immigration will bring in more workers. More children being born will increase the dependency ratio in the short term but in the long term, will result in more workers.

Despite the possible advantages of an increasing population, there are a number of reasons for a government to be concerned about population growth. These include:

- **Concerns about famine.** If a country is currently overpopulated and agricultural productivity is low, there is a risk that the country may not be able to feed more dependants.

> **TIP**
> Remember that both a high rate of population growth and a low rate of population growth can cause problems for an economy, depending on their causes and the state of the economy in relation to its optimum population size.

- **Restrictions on improvements in living standards.** Resources which could have been used to improve living standards may have to be devoted to the provision of goods and services for the extra number of dependants in the population. There may be, for example, provision of more healthcare facilities but healthcare services per head may fall.
- **Overcrowding.** Increases in population may put pressure on housing and social capital and cause traffic congestion.
- **Environmental pressure.** More people in a country may result in damage to wildlife habitats, water shortages and the depletion of non-renewable resources.
- **Pressure on employment opportunities.** If there is an increase in the number of people of working age who lack appropriate skills, the government may have to devote more resources to education and training. It must be remembered, however, that immigration in itself does not cause unemployment. The number of jobs in existence is not fixed. Although immigration will increase the supply of labour, it will also result in an increase in aggregate demand.
- **Balance of payment pressures.** More dependants in the population may result in a rise in imports and some products may need to be diverted from the export to the home market.

Ways of reducing the birth rate

A country concerned that its population is growing too rapidly would not want to raise its death rate! It may however, seek to reduce immigration and try to reduce the country's birth rate. There are a number of ways it could do the latter. An effective way is thought to be improvement of the educational and employment opportunities for women. Educated women tend to be more aware of contraceptive methods, marry later and are likely to restrict their family size, in order to be able to combine raising children with work and also because they have higher hopes for their children's future. Better information and increased availability of family planning services will make it more likely that households will be able to limit their family sizes.

Improvement of healthcare and nutrition reduces infant mortality and, in turn, the birth rate. One reason which may explain a higher number of children in families is the apprehension and concern over their survival. Another reason for having a large family is the need for support in old age. Setting up pension and sickness insurance schemes will reduce the need for family support. A government can raise the cost of having children by raising the school leaving age. It can also reduce or stop any financial support it gives to families for each child they have and instead provide incentives for families who restrict the number of children. The most extreme measure is to make it illegal to have children above a specified number.

INDIVIDUAL ACTIVITY 3

In 2016 the Chinese government announced it was abolishing its one-child policy, which had been introduced in 1979. All married couples are now to be allowed to have two children. This change was made because of concerns about the country's ageing population and expectation that there would soon be a labour shortage. It is predicted that 35% of the country's population will be over the age of 65 by 2050. The country has nearly full employment and employers are experiencing difficulty recruiting workers in, for example, accountancy, engineering and IT. For many families in China, however, one child has become the norm. A number of Chinese workers are working long hours to progress their careers and to earn more to cope with rising prices, including education and childcare costs.

a Identify two possible advantages of the two-child policy referred to in the passage.

b Explain three reasons why, despite the two-child policy, some economists predict that the population of China is likely to fall by 2050.

The consequences of an ageing population

A number of countries, including Japan, the USA and many of those in the EU, are experiencing an ageing population. An ageing population is one in which, as its name suggests, the average age is rising. In Japan, for example, the average age of the population in 2016 was 43 and 26.3% of the population was aged over 60.

An ageing population can be caused by a fall in the birth rate, a fall in the death rate, net emigration or a combination of the three. There are a number of consequences of an ageing population including:

- **A rise in the dependency ratio.** If people are living longer and there are fewer workers because of net emigration, there will be a greater proportion of consumers to workers.
- **A change in the labour force.** Older workers may be geographically and occupationally less mobile. They may, however, be more experienced, reliable and patient.
- **Higher demand for healthcare.** The elderly place the greatest burden on a country's health service.
- **Greater need for welfare services,** such as caring for the elderly at home and in retirement homes.
- **Rise in cost of state and private pensions.**
- **Change in the pattern of demand.** For example, demand for housing for retired people will rise.

Ways of coping with an ageing population

Having a higher proportion of elderly workers will put pressure on governments to spend more. If they do so, it will involve an opportunity cost. The money used, for example, may have been spent on education instead. An ageing population may also raise the tax burden on workers. There are a number of ways a government may seek to reduce these effects. One is to raise the retirement age. This will reduce the cost of pensions and increase tax revenue without increasing tax rates. In a country in which life expectancy is rising, there is some justification for raising the retirement age. Working for a longer period can also increase a worker's lifetime income and, depending on the nature of their work, may keep them physically and mentally healthy for a longer period.

People in Japan are living longer

A government may also try to cope with the financial burden of an ageing population by encouraging or making it compulsory for workers to save for their retirement. It may try to raise the productivity of workers by means of education and training. This may involve an increase in government expenditure but, if successful, may generate more tax revenue. In addition, it may encourage the immigration of younger skilled workers by issuing more work permits. This will reduce the dependency ratio at least in the short term.

GROUP ACTIVITY 1

It has been estimated that, in India, the retirement age would have to be raised to 75 and to 85 in China, the UK and USA to maintain the ratio of working people to the retired citizens.

a Explain two reasons for an increase in life expectancy.

b Explain two benefits to workers due to a rise in the retirement age.

Internal migration

Workers tend to migrate from rural to urban areas in search of better jobs and higher incomes. Such migrants may supply growing industries and result in a better allocation of resources. Their movement may also raise living standards in rural areas if initially there had been underemployment and if they send back money to their relatives. There may, however, be some harmful effects also. If it is the most productive agricultural workers that leave, agricultural productivity may fall. There is also no guarantee that enough jobs will be available in urban areas and a number of external costs, including overcrowding, increased pressure on social capital and congestion may occur as a result of the rapid expansion of cities.

The effects of net emigration

There are a number of possible economic effects of net emigration. These are influenced by the size and the nature of the emigration. Some of these include:

- The size of the working population is likely to be reduced. Most emigrants tend to be of working age.
- The remaining labour force will have a greater burden of dependency.
- The average age of the labour force will increase. This may make it less mobile.
- The gender distribution of the population may be affected. In the case of some countries, more men emigrate than women.
- There may be a shortage of skilled workers. For example, doctors may emigrate in search of higher pay and better working conditions. The country they leave will experience a 'brain drain', while the country they go to will experience a 'brain gain'.
- There may be under-utilisation of resources. The country may become under-populated.
- Those who emigrate may send money home to help their relatives. This money is called workers' remittances.

Summary

You should know:

- A country's population can grow as a result of its birth rate exceeding its death rate and/or as a result of net immigration.
- The birth rate is influenced by the average age of the population, the number of women in the population and the number of children they have.
- The age distribution of a population can be illustrated in a population pyramid. The higher the birth rate and death rate, the more pyramid-shaped it will be.
- The death rate is influenced by social conditions, lifestyles, medical conditions and the existence or absence of military conflicts.
- People emigrate in search of better living standards and to escape persecution.
- A country is said to be over-populated, if there is an excess of labour relative to land, capital and technical knowledge.
- The effect of an increasing population will depend on its cause, size of the population in relation to the optimum population and the rate of population growth.
- An increase in the size of the population may increase the efficiency of firms, raise factor mobility, increase the demand and make better use of resources.
- A government may be concerned that an increasing population may result in famine, reduced living standards, overcrowding, depletion of resources, environmental problems and an unfavourable balance of payments position.
- Ways of controlling the population include raising the educational and employment opportunities for women, increasing availability of family planning services, increasing the cost of having children, providing support for the elderly and providing incentives for limiting the family size.
- An ageing population will raise the dependency ratio, change the labour force, burden the health and welfare services, raise the cost of pensions and alter the pattern of demand.
- Among the possible policies that can be used to cope with an ageing population are raising the retirement age, promoting workers to save for their pensions, raising productivity and encouraging immigration of skilled workers.
- Internal migration from rural to urban areas may make it easier for firms to recruit labour but may lead to farms losing their most productive workers. Some of those who move to urban areas may not find jobs and this leads to overcrowding in cities.
- Net emigration is likely to reduce the size of the labour force, increase the dependency ratio, alter sex distribution, reduce the size of the population and increase money sent home.

Multiple choice questions

1 In a country, more boys are born than girls and yet there are more women than men in the population. How can this be explained?

A A higher death rate for women than for men

B More women emigrating than men

C The infant mortality rate of females being higher than males

D Women living longer than men

2 Which of the following is most likely to cause a rise in the average age of a country's population?

A A fall in the death rate and birth rate

B A fall in the death rate and a rise in the birth rate

C A rise in the death rate and a fall in the birth rate

D A rise in the death rate and birth rate

3 What is meant by the gender distribution of a population?

A The proportion of females and males in the population

B The proportion of people over retirement age in the population

C Where females and males in the population live

D Where people over retirement age live

4 Why may a government want to reduce the growth of its population?

A Capital is not being fully utilised

B The population is below the optimum level

C There are worries about the risk of famine

D There is low population density

Four-part question

a Identify **two** causes of a natural increase in population. **(2)**

b Explain why a government may try to reduce the growth of the population of its country. **(4)**

c Analyse how the rate of population growth in a low income country may differ from that of a high income country. **(6)**

d Discuss whether or not an economy will benefit from net immigration. **(8)**

Chapter 35
Differences in economic development between countries

Learning objectives

By the end of this chapter you will be able to:

- describe the nature of economic development
- discuss the causes of differences in economic development between countries
- discuss the impacts of differences in economic development between countries

Introducing the topic

Over time most economies develop, allowing poverty to fall, living standards to rise and people to have more choices. For example, between 1980 and 2015 the average life expectancy in Thailand rose from 65 to 75, the infant mortality fell from 47 per 1000 births to 9 per 1000, and the percentage of households with a TV rose from 21% to 93%. What causes countries to develop? Why do countries have different rates and levels of economic development?

35.1 Economic development

KEY TERM

Economic development: an improvement in economic welfare.

Economic development is wider than economic growth. Besides improved living standards, it also involves reducing poverty, expanding the range of economic and social choices, and increasing freedom and self-esteem. As an economy develops, the economic welfare of its population increases. At first, the availability of basic life-sustaining products increases. Then consumption levels rise beyond those needed for survival, and people have more choice of what to consume, where to live and where to work.

The different stages of economic development

Most economies are developing, but their rate and level of development varies. Countries with high income per head also usually have relatively high economic development. They tend to have high living standards, a high proportion of workers employed in the tertiary sector, high levels of productivity and high levels of investment. Countries with lower income per head usually have lower economic development with lower living standards and a number of other characteristics, as explained below.

International organisations classify countries in a variety of ways. The United Nations, for instance, divides countries into four levels of development – very high human development, high human development, medium human development and low human development. The World Bank divides countries into high income, upper middle income, lower middle income and low income.

Measures of economic development

It is not easy to measure development, but a number of ways are used. A common one is real GDP per head. This does measure an important aspect of development, material living standards, but it does not measure all aspects of development.

A wider measure is the Human Development Index (HDI). As explained in Chapter 32, this measures the extent to which people in a country achieve a long and healthy life, knowledge and a good standard of living. A figure of 0–1 is calculated for each country. An index of:

- less than 0.550 indicates low development
- 0.550–0.699 medium development
- 0.700–0.799 high development
- above 0.800 very high development.

Some countries are ranked higher in terms of HDI than real GDP per head, for example, Costa Rica, Vietnam and Zaire. Others have a higher real GDP per head ranking than HDI ranking, such as Kuwait, Pakistan and Saudi Arabia.

INDIVIDUAL ACTIVITY 1

In 2016 10% of the world's population were living on less than $1.90 a day. Half of the extreme poor were living in sub-Saharan Africa. Real GDP per head was, however, higher in some sub-Saharan African countries than some Asian countries. For instance, it was higher in South Africa, Botswana, Namibia and Gabon than in Bangladesh, India and Pakistan. Life expectancy, however, was on average 70 in Bangladesh, India and Pakistan, whereas it was only 63 on average in the four African countries.

a Identify an indicator of economic development, not referred to in the passage.

b Explain two possible reasons why, despite higher real GDP per head, life expectancy is lower in the African countries than the Asian countries.

35.2 Causes of differences in economic development between countries

There are a number of reasons why countries have different levels of economic development including:

- **Differences in incomes per head.** Economic development tends to be lower in countries with low real GDP per head. In such countries, some people may struggle to afford a good standard of living. However, this does not mean that all the people in such countries are poor. In fact, some can be very rich.
- **Differences in saving due to differences in income per head.** Poor people cannot afford to save and so the savings ratio (saving as a percentage of disposable income) of a country where the average income is low, is likely to be low. If savings are low, there will be a lack of finance for investment.
- **Differences in investment.** Countries with a low value of capital goods per worker will be likely to have low income per head.
- **Differences in population growth.** In countries with high population growth there is usually a high dependency ratio, with a high proportion of children being dependent on a small proportion of workers. This means that some of the resources which could have been used to improve the quality of life of the current population, have to be used to support the extra members of the population
- **Differences in education and healthcare.** A lack of access to, or poor quality of, education and healthcare will reduce the quality of people's lives and will result in low levels of productivity.
- **Differences in the size of the primary, secondary and tertiary sectors.** Economic growth and the quality of people's working conditions tend to be lower the greater the proportion of workers employed in the primary sector: Underemployment can be high in agriculture. For instance, ten persons may be doing the work of six. This, again, lowers productivity.

Good quality healthcare promotes economic development

- **Differences in the concentration on a narrow range of exports (most of which are primary products).** Countries that export a narrow range of products can be adversely affected by large decreases in demand or decreases in supply. The demand for manufactured goods and services tends to increase more than the demand for primary products as income increases.
- **Differences in productivity.** Countries with a low output per worker hour will tend to have low income per head and so may have, for instance, lower education and healthcare.

As suggested above, the causes of differences in economic development are inter-related. Indeed, countries can be subject to what is known as the under-development trap or the vicious circle of poverty. This is the problem, that a country with low incomes has a low saving rate. This means that most of their resources are used to produce consumer goods. The lack of capital goods keeps productivity and income low, as shown in Figure 35.1.

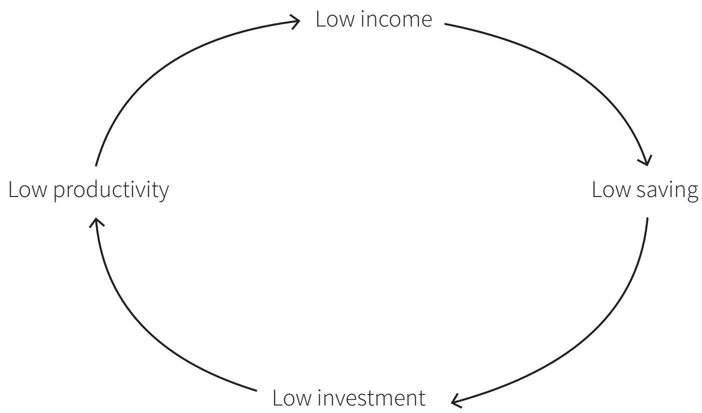


Fig. 35.1: The vicious circle of poverty

GROUP ACTIVITY 1

Discuss the extent to which the figures in the table suggest that Singapore had achieved a higher level of development than Egypt, in 2016.

A comparison of Egypt and Singapore in 2016

	Egypt	Singapore
Real GDP per head	$1200	$87 100
Population under the age of 15	33%	13%
Life expectancy	73	85
Workers employed in agriculture	29%	1%
Doctors per 1000 of the population	2.8	2.0
Adult literacy rate	74%	97%

Why governments seek to achieve economic development

Governments pursue economic development because they want higher real GDP, higher living standards for their citizens and expansion of the range of economic and social choices.

Economic growth has the potential to raise material living standards. If higher real GDP consists of both more consumer and capital goods the country's population should be able to enjoy more goods and services, both now and in the future. Life expectancy may be increased and infant mortality rate may be reduced.

For economic development to be achieved, it is important that all people should have access to higher living standards. For this to occur, it is important that the distribution of income does not become too uneven and poverty is reduced.

A reduction in poverty brings benefits both to the poor and to the wider society. Lifting people out of poverty gives them access to (at least) basic necessities, improves their mental and physical health, and raises their expectations. People who enjoy better living standards are likely to be more productive, which in turn should lower the country's average costs and make the country more internationally competitive. A reduction in poverty may also reduce pollution. As people become better off, they are more likely to have access to sanitation and environmentally friendly forms of heating.

Expanding the range of economic and social choices, increasing freedom and self-esteem includes increasing access to education, healthcare and participation in the political process. This should improve the quality of people's lives and enhance future economic performance. Economic development can create a virtuous circle. As income, education and healthcare increase, saving and investment increase and workers become more productive. This raises international competitiveness, which can lead to even higher output and income.

TIP

It would be useful to consider the development of the economy of your country and the factors influencing its rate of development.

The conditions for economic development

Most economists agree that for economic development to occur, there needs to be an improvement in the quantity and quality of resources. More investment, improved education, training and healthcare can raise not only real GDP but also the quality of people's lives, their life expectancy and their choices.

Better education and healthcare improves the prospects of a country's children

35.3 The impacts of differences in economic development between countries

Countries develop at different rates at different times. These differences have implications for both them and for other countries.

The problems facing economies with relatively low economic development

Economies with relatively low economic development may face a number of difficulties in seeking to improve their economic performance and living standards. These include:

- **High growth of population.** A high birth rate can result in resources being used, for instance, to feed and educate children. These could instead have been used to increase the country's productive potential and living standards.
- **High levels of international debt.** Many poor countries have borrowed heavily in the past. In some cases, a large proportion of the country's income is taken up in repaying (and paying interest on) foreign loans. This means it cannot be used to spend on education, healthcare and investment. So the opportunity cost of repaying debt may be economic development.
- **Reliance on the export of primary products.** Over a period of time, the price of primary products tends to fall, relative to the price of manufactured goods and services. This means that some poor countries receive relatively less for their exports, whilst having to pay more for their imports. Over the last fifty years, a range of prices of primary products, including copper, coffee, cocoa and coal, have been falling. A number of primary markets are dominated by the consuming countries and these rich countries use their buying power to keep down the prices of primary products. There have also been significant fluctuations in the price of some primary products due to climate changes and other factors affecting natural resources.
- **Lack of investment in human capital and capital goods.** Lack of expenditure on education, training and capital goods holds back increases in productivity, introduction of new technology and international competitiveness.
- **Emigration of key workers.** Doctors, nurses, teachers, managers and other key workers may seek better-paid employment abroad. Since 1999, for instance, more medical staff have emigrated from Ghana than the country has been able to train. Most of these have emigrated to Canada, the UK and USA.
- **Trade restrictions on their products.** Tariffs, other restrictions and foreign government subsidies on their own products, make it difficult for developing countries to sell their products at home and abroad, on equal terms. The steepest tariffs tend to be imposed by rich economies on those products, which poorer economies concentrate on, including agricultural produce and labour-intensive manufactured goods. These tariffs also build up as the goods are processed into higher-value-added goods, so that poorer economies are discouraged from building up their industries.
- **Unbalanced economies.** Certain markets may be under-developed such as the financial sector. A lack of a developed financial sector is likely to discourage saving and investment.

INDIVIDUAL ACTIVITY 2

Guinea is a poor African country. In 2016 it had a GDP of $7.2 billion and a population of 12 million. The country has large reserves of bauxite, gold and diamonds and very fertile land. It does, however, have poor transport, a lack of access to clean water, only 30% of the population are literate and the average household size is 8.9.

a Calculate average income in Guinea.

b Explain two changes which would increase economic development in Guinea.

c Would a fall in the average household size in Guinea increase living standards in the country?

Measures to promote economic development

There is some disagreement about the best ways to promote economic development, for instance, whether it is better to rely on government intervention or market forces operating in the private sector, whether countries should rely on domestic or foreign sources of investment funds. One strategy, which involves government intervention, is what is called import substitution. This involves the protection of new domestic industries against foreign competition by the government.

This help is designed to allow the industries to grow and as they do so, imports can be replaced by domestic products. If successful, the strategy can increase domestic output, raise employment and improve the country's trade in goods and services balance. There are risks, however, with this strategy. In the short term, at least, it may raise prices and reduce choice and hence lower economic welfare. Other countries may also retaliate and the domestic industries may become reliant on protection without seeking to increase their efficiency and competitiveness.

An alternative strategy is to try to promote exports by exposing domestic firms to market forces. The idea is that, without government support, firms will be forced to become efficient. The success of this policy, however, depends on the firms being able to compete with foreign firms, some of which may have been established for some time (and as a result may have built up consumer loyalty) and may be taking advantage of economies of scale.

Another strategy is to improve the country's infrastructure, capital stock, education, training and healthcare systems. As the country may lack the tax revenue to do this, it may seek to attract multinational companies (MNCs), loans from abroad or foreign aid.

MNCs may promote development in their host countries. They can increase employment and wages, train and educate workers, bring in new technology and improve infrastructure, for example, by building roads and improving dock facilities. MNCs may pay workers in poor countries less than that in their home countries and may provide them with poorer working conditions. Nevertheless, as long as the wages are higher and the conditions are better than those generally operating in the host countries, the MNCs will be making a positive contribution to development. There are circumstances, however, when MNCs may harm development. MNCs may deplete non-renewable resources, cause pollution and put pressure on host governments to pursue policies which have a detrimental effect on development such as reducing health and safety regulations.

LINK

Chapter 37.2
Role of multinational companies (MNCs)

Borrowing from abroad can work, if the funds are used in a way which raises productivity and generates enough income to repay the loans, and make a contribution to higher living standards. Interest charged on loans, however, can be high which makes some projects unviable. Also, there is the risk that projects may not be as successful as expected. If this is the case, the countries will accrue debt. Some of the money raised may be used for unprofitable prestigious projects, or on the military or may be lost due to corruption.

Foreign aid

Foreign aid, by its very nature, is on more generous terms than borrowing on commercial terms. It has the potential to increase development, but it can create economic and political dependency, postpone necessary reforms and bring in inappropriate technology. For example, a gift of complex capital equipment may not be that useful for a country with a high level of unemployed workers who lack education and training. Also, there is a risk that any financial foreign aid may be used for non-profitable projects and there may be corruption in its use.

Foreign aid may be given out of a desire to help people, win political support and gain commercial advantage. In the last case, the aid is likely to be in the form of tied aid. This means that conditions are placed on what the recipients can spend the aid on. Often the requirement is that it has to be spent on products produced by the donor countries. Foreign aid can be bilateral or multilateral. Bilateral aid is aid is from one government to another, whereas multilateral aid is channelled through international organisations to developing countries. Such organisations include the United Nations, **the World Bank**, the International Monetary Fund (IMF), the EU and non-government organisations including charities such as Oxfam.

Foreign aid can come in a variety of forms including grants, which do not require repayment, loans charged on favourable terms and the supply of goods, services, technical assistance and guidance. **The IMF** and World Bank have been criticised for attaching conditions to some of the loans they make. They often require governments to follow what are known as structural adjustment programmes. These are designed to increase the quality and quantity of resources but they may, at least in the short term, reduce economic growth and development. For instance, a government may be required to cut its expenditure and this may reduce the provision of education and healthcare.

It is thought that foreign aid is more likely to promote development if it is more generous, multilateral, untied and is geared towards the needs of the recipients.

KEY TERMS

The World Bank: an international organisation which provides long term loans on favourable terms, to promote development.

The IMF: an international organisation that promotes international trade and global financial stability.

GROUP ACTIVITY 2

Nigeria faces a number of economic problems including poor infrastructure, emigration of key workers, a relatively high level of corruption and foreign debt. Power and water are not provided for most firms. Firms have to invest in generators. Many professionals, especially doctors, emigrate, taking their skills with them. The country was ranked 136th out of 178 countries in the Corruption Perception Index (with the ranked 1st being the least corrupt) in 2016. In that year, the country's GDP per head was $6000. It had foreign debt of $11 billion and a budget deficit of an equal amount.

a Explain how one of the problems facing Nigeria could hinder its economic development.

b Discuss how the problem you have identified could be overcome.

How the economic development in one country can promote economic development in another country

In an increasingly global market, the events in one economy have a greater impact on other economies. For instance, a buoyant UK economy would be likely to benefit Tanzania, while an improvement in the Tanzanian economy should bring some advantages to the UK. If the UK economy grows, the UK government will receive more tax revenue and this will enable it to increase its foreign aid, some of which may go to Tanzania. Incomes will be higher in the UK and its people and firms may buy more imports from Tanzania, including more UK people going on holiday to Tanzania. UK firms are likely to earn higher profits and this may encourage some of them to set up units abroad, especially if the UK economy is reaching full capacity.

The UK economy may also develop as a result of an improvement in education. A more educated UK population may be more concerned and interested in the dynamics of other economies. This may result in pressure on the UK government to give more foreign aid to Tanzania and more UK citizens visiting Tanzania as tourists.

The development of the Tanzanian economy can also benefit the UK. A more developed Tanzanian economy will need less aid, be able to buy more products from the UK and invest more in the UK.

Summary

You should know:

- Economic development is concerned with improvements in economic welfare. It involves higher real GDP per head, higher living standards, a wider range of choices, more freedom and more self-esteem.
- Economic development can be measured in terms of real GDP per head, although HDI gives a wider measure of development.
- Among the usual characteristics of countries with relatively low economic development are low real GDP per head, low savings ratio, low life expectancy, high rate of population growth, low levels of education, healthcare and investment, a relatively high number of workers employed in the primary sector and concentration on a narrow range of exports.
- Countries with relatively low economic development may experience a vicious circle of poverty that is difficult to break out of.
- Economic development can introduce a range of benefits to people and enhance a country's ability to develop in the future.
- Countries with low economic development may face a number of problems including population pressures, international debt, reliance on primary products, lack of investment in human capital and capital goods, emigration of key workers, trade restrictions on their products and unbalanced economies.
- Measures to promote development include import substitution, export promotion, attracting MNCs and applying for foreign aid.
- Foreign aid is more likely to promote economic development if it is multilateral, untied and takes into account the needs and economic conditions of the recipient.
- An improvement in the development of one economy can benefit another, through increased demand for its products, increased investment and, wherever appropriate, increased aid.

Multiple choice questions

1 The table provides information on four countries. Which country is likely to be the most developed?

	Population (m)	Real GDP ($bn)	Life expectancy
A	100	600	58
B	200	2000	70
C	300	2100	58
D	400	3600	70

2 What is often found in a country with low real GDP per head?

A A high proportion of the population in higher education
B A high savings ratio
C A low infant mortality rate
D A low investment rate

3 Why is a country's savings ratio likely to increase as it experiences economic development?

A Average income per head will rise
B Interest rates tend will rise
C Investment will decline
D The range of saving institutions to choose from will decline

4 Which of the following would boost an economy's development?

A A rise in expenditure on the police to tackle a higher rate of crime
B A rise in provision of healthcare per head of population
C A fall in the average number of years of schooling received by children
D A rise of 2% in nominal GDP and a rise of 8% in inflation

Four-part question

a Identify **two** indicators of economic development. **(2)**
b Explain a virtuous circle of economic development. **(4)**
c Analyse how economic growth could reduce economic development. **(6)**
d Discuss whether or not a government can successfully promote economic development. **(8)**

Exam-style questions

Multiple choice questions

1 What measure of living standards is included in HDI, but not in real GDP?

A education
B gender equality
C income
D leisure time

2 Why might real GDP per head rise and yet living standards fall?

A Income may be more evenly distributed
B Levels of pollution may have risen
C The size of the informal economy may have risen
D Working conditions may have improved

3 What is most likely to cause an immediate increase in the size of the working age population?

A a decrease in immigration
B a decrease in unemployment
C a rise in the retirement age
D a rise in the school leaving age

4 What effect is a rise in the birth rate most likely to have?

A an increase in the average age of the population
B an increase in the dependent population
C an increase in labour productivity
D an increase in the proportion of females in the population

5 What would reduce the size of the dependent population?

A a fall in the death rate
B a fall in the retirement age
C a fall in the average size of families
D net emigration

6 A country's population is expected to rise and its average age to fall in the future. Which of the following is likely to cause this?

	Birth rate	Migration
A	decreases	net emigration
B	decreases	net immigration
C	increases	net emigration
D	increases	net immigration

7 Which policy measure would increase wealth inequality?

A a cut in inheritance tax

B a reduction in the price of shares

C an increase in the tax on savings

D a rise in the top rates of income tax

8 For what reasons may a government of a country not welcome the presence of a multinational company in its country?

A It will speed up the exploitation of non-renewable resources

B It will increase employment in the country

C It will improve the country's infrastructure

D It will bring in new ideas and technology

9 A country registers a rise in its living standards. What is likely to fall as a result?

A adult literacy rate

B employment

C GDP per head

D infant mortality rate

10 Under what circumstance will a country register a fall in its population?

A When the birth rate is lower than the death rate and there is net emigration

B When the birth rate is lower than the death rate and there is net immigration

C When the birth rate is greater than the death rate and there is net emigration

D When the birth rate is greater than the death rate and there is net immigration

Data response questions

Carefully study the source material provided and then answer Questions 1 and 2.

Source material: The dramatic reduction in poverty in China

Between 1980 and 2016, China moved 750 million people out of extreme poverty. The country accounted for three-quarters of the world's poverty reduction in this period. Real GDP per head was twenty-eight times greater in 2016 than in 1980. In comparison, the UK's real GDP was four times greater over the same period.

Although incomes have risen significantly and extreme poverty has fallen, income inequality has become an issue. For much of the period, income inequality increased. The Gini coefficient rose from 0.24 in 1980 to 0.49 in 2008. It did fall to 0.46 in 2016, but China still had one of the world's highest levels of income inequality.

The country's Human Development Index (HDI) value rose to 0.727 in 2014. The mean and expected years of education and life expectancy increased. The higher incomes gave people the opportunity to consume more goods and services. Car ownership, for instance, rose to 83 per 1000 in 2016 and is expected to rise much further in the future.

The rapid growth in the economy has been driven by the expansion of a number of industries including the aircraft industry, the machine production industry, the healthcare industry and the education industry. At the same time, there has been a decline in the relative importance of agriculture as a source of employment despite the rise in agricultural output. The table shows the percentage of the labour force employed in agriculture and net migration in a number of countries.

Country	Percentage of labour force employed in agriculture	Net migration per 1000 population
Bangladesh	47	–3.1
China	30	–0.4
Japan	3	0
Laos	73	–1.1
Malaysia	32	–0.3
Singapore	1	13.6
Sri Lanka	28	–1.3

The percentage of the labour force employed in agriculture and net migration in selected countries 2016

The Chinese government has used a number of policy measures to accelerate the reduction in poverty. These include giving a subsidy to people in urban areas to bring their income levels up to a minimum standard, the introduction of a rural pension, better health and education services and improved access to safe drinking water in rural areas. These schemes have been funded by the country's progressive taxation system.

1 Referring to the source material in your responses, answer all parts of Question 1.

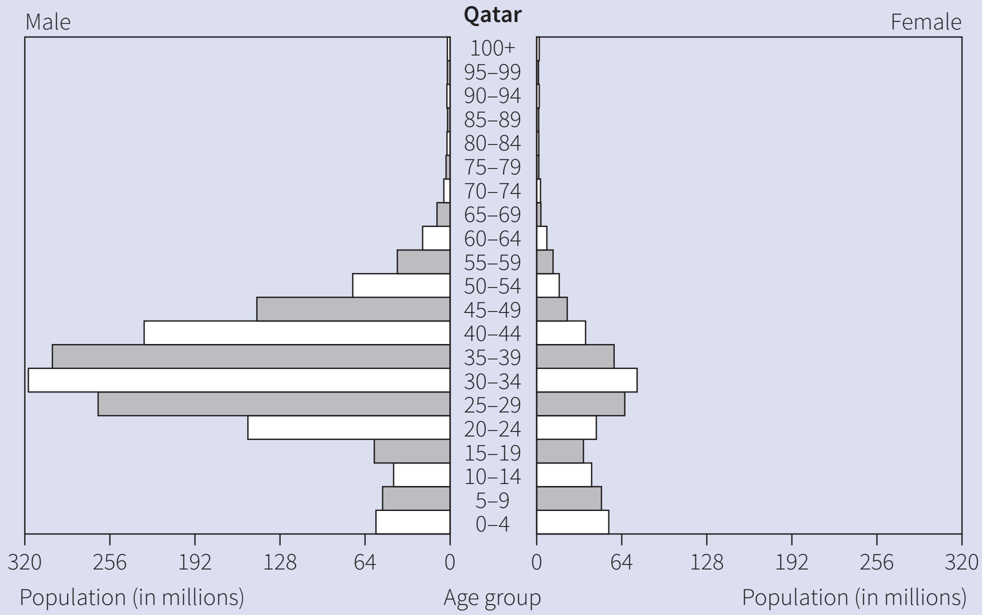
- **a** What level of development does China's HDI figure suggest it had achieved in 2014? **(2)**
- **b** Identify **two** industries operating in the secondary sector in China. **(2)**
- **c** Explain what type of poverty has been reduced in China. **(2)**
- **d** Explain **two** reasons why the percentage of workers employed in agriculture may fall while agricultural output increases. **(4)**
- **e** Analyse the relationship between the percentage of people employed in agriculture and net migration. **(4)**
- **f** Analyse how improved access to safe drinking water can increase economic development. **(4)**
- **g** Discuss whether or not taxation will reduce income inequality. **(6)**
- **h** Discuss whether or not an increase in car ownership will improve living standards in China. **(6)**

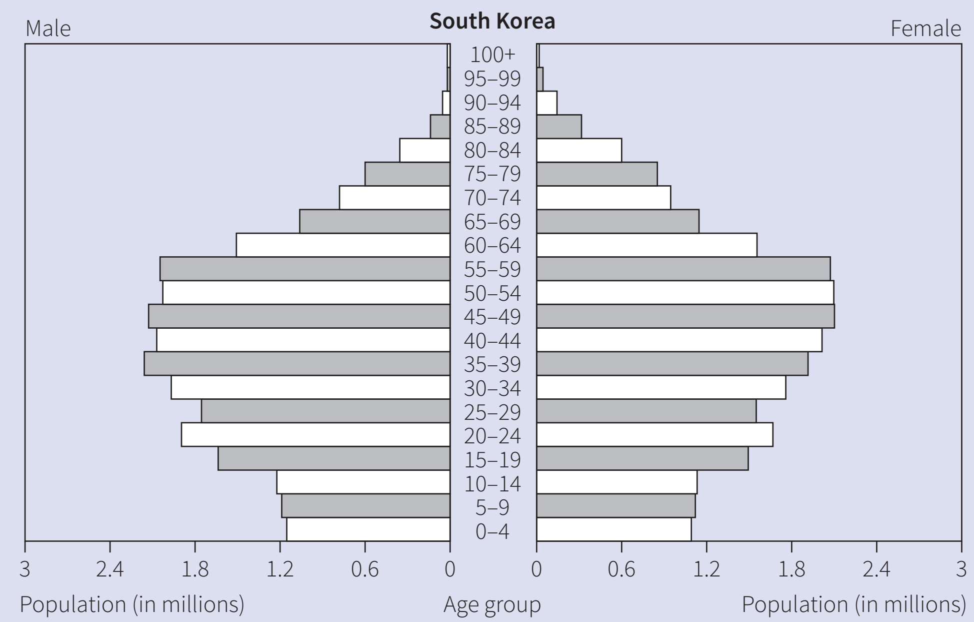
Source material: We are living longer

A study published in 2017 predicted that life expectancy will be highest for women in South Korea. It forecast that women born in South Korea in 2030 would, on average, live for 90.8 years. This compares with an average of 85.2 years for women born in 2016. The two countries it predicted would have the next longest life expectancy were France (88.6 years) and Japan (88.4 years). For men, it was predicted that South Korea would also have the longest life expectancy (84.1 years), followed by Australia and Switzerland (both 84 years).

There are thought to be a number of linked reasons why people in South Korea have, and will continue to have, a long life expectancy. These include good education, good nutrition and widespread access to a good healthcare system. The country has a low level of obesity, a diet rich in vegetables and a relatively small proportion of the population who smoke. The country's economic growth rate averaged 1.7% between 1980 and 2016. The government is seeking to raise the rate in a range of ways including deregulation, increases in the money supply and making it easier for households to take out a mortgage to buy a house.

In 2016, South Korea had a birth rate of 8.4, a death rate of 5.8 and a net migration rate of 2.6. Its obesity rate was very low at 6.3%. This contrasts with Qatar which in 2016 had a very high, and increasing, obesity rate of 41%. The figure shows the population pyramids of Qatar and South Korea.





Population pyramids of Qatar and South Korea, 2016
Source: CIA World Factbook

One of the countries with a small predicted increase in life expectancy is the USA. The country has a high obesity rate (35% in 2016), a relatively high degree of income inequality and differences in access to good healthcare. In contrast, Switzerland has a lower obesity rate and a more even distribution of income. A larger proportion of people of working age in Switzerland are in the labour force than in the USA. Switzerland, like the USA, is a high-income country. The Swiss, however, seem to have a better work–life balance. Real GDP per head is higher in Switzerland than the USA but the average Swiss worker works 155 hours less each year. The Swiss are among the happiest people in the world according to the Organisation for Economic Co-operation and Development (OECD).

2 Referring to the source material in your responses, answer all parts of Question 2.

- **a** Identify **one** supply-side policy measure. **(1)**
- **b** Calculate the natural increase in South Korea's population in 2016. **(2)**
- **c** Explain why healthcare costs may rise in Qatar. **(2)**
- **d** Explain what evidence there is that labour productivity is high in Switzerland. **(4)**
- **e** Analyse how large inequalities in income can result in a relatively low life expectancy. **(4)**
- **f** Analyse the differences in South Korea's and Qatar's population pyramids. **(5)**
- **g** Discuss whether or not a decrease in the average hours worked is likely to have an impact on a country's HDI. **(6)**
- **h** Discuss whether or not an ageing population is a problem for an economy. **(6)**

Four-part questions

1 France's HDI has been increasing and its value is above the world's average. Its unemployment rate fell slightly from 10.4% in 2015 to 9.9% in 2016. There is a debate in the country about whether the government should cut or raise its unemployment benefit and other state benefits, including pensions. There is also a discussion about why, despite legislation, there is gender and racial discrimination in the country's labour market.

- **a** Identify **two** components of the HDI. **(2)**
- **b** Explain how discrimination can result in income inequality. **(4)**
- **c** Analyse how a fall in unemployment in one country can reduce poverty in another country. **(6)**
- **d** Discuss whether or not an increase in state benefits will reduce poverty. **(8)**

2 Between 1960 and 2016 Sri Lanka's death rate nearly halved, falling from 12.3 to 6.2. Its birth rate also declined from 37.0 in 1960 to 15.5 in 2016. There were some years, however, when it rose. For example, it increased from 15.9 to 17.0 between 2010 and 2011. There were also changes in the relative importance of the stages of production in the country over this period. The country has a lack of university places but a high secondary school enrolment.

- **a** Identify **two** causes of a decrease in a country's death rate. **(2)**
- **b** Explain how the relative importance of different stages of production may change as an economy develops. **(4)**
- **c** Analyse how an increase in the provision of university education could promote development. **(6)**
- **d** Discuss whether or not an economy will benefit from a rise in the country's birth rate. **(8)**

SECTION 6
International trade and globalisation

Chapter 36
International specialisation

Learning objectives

By the end of this chapter you will be able to:

- analyse the basis for specialisation at a national level
- discuss the advantages and disadvantages of specialisation at a national level

Introducing the topic

Households in the UK drink more than 60 billion cups of tea a year. The country, however, produces very little tea. It imports most of the tea from Kenya and Uganda. Kenya imports the oil and most of the machinery it uses. Why do countries not just produce all the products they consume? Why do they buy goods and services from other countries and why do they sell some of what they produce to other countries?

36.1 Specialisation of countries at a national level

Countries usually concentrate on producing those products they are best at making and which are in high global demand. What countries are best at producing is influenced by the quantity and quality of their resources. For example, a country with an abundance of fertile land, good irrigation, moist climate and a large number of workers may decide to concentrate on producing rice. Its average cost of producing the rice is likely to be low. A country with a good climate, good beaches and a good supply of labour may decide to concentrate on tourism. In contrast, Hong Kong, which has a very limited supply of land and a highly skilled labour force, concentrates on financial services.

Hong Kong

INDIVIDUAL ACTIVITY 1

Textiles is a major industry in Bangladesh and, in 2016, it accounted for 70% of its exports. Nearly 15% of its exports go to the USA. Clothing is also an important industry in Turkey, but accounts for only 12% of its exports.

a On the basis of information provided, decide which country is more specialised.

b Identify the other piece of information that could help you decide the answer to (a).

36.2 Advantages and disadvantages of specialisation at a national level

The advantages and disadvantages for consumers

If countries specialise in what they are best at producing, the output should be higher. The higher output should enable consumers to enjoy more goods and services and hence have higher living standards. Specialisation can enable the firms in the country concentrating on producing the product to develop skills and techniques in its production. This would raise the quality of the product. Specialisation may also result in lower costs of production and the benefit of this may be passed on to consumers in the form of lower price.

There is a risk, however, that one country or a small number of countries may gain control of most of the global market for a product and may use its or their power to restrict supply and push up price. The Organisation of Petroleum Exporting Countries (OPEC), a group of the major oil producing countries, has pushed up the price of oil in the past.

If consumers are buying products from foreign specialists, those firms may not follow the same health and safety standards as in the home country. Any problems that may occur in the countries that are producing the product, including natural disasters, may mean that the products are unavailable, at least for some time.

The advantages and disadvantages for firms

If firms specialise, they can produce the product on a large scale and this may enable them to take advantage of economies of scale, such as buying and technical economies. Firms can also buy their raw materials from specialist firms, which are producing high quality raw materials at low costs.

Specialisation means that countries have to trade (see advantages and disadvantages for the economy below). Engaging in international trade can help firms in the exchange of new management ideas, information about new products and new technology.

There are, however, a number of potential disadvantages for firms. One is that if firms become more dependent on other countries for the markets of the products they produce and for the source of their raw materials, they can be adversely affected by events in those countries. For example, foreign governments could put a tax on imports and may restrict the export of raw materials.

Firms could experience a fall in demand. Tastes may change, firms in other countries may become more efficient at producing the product or a substitute product may be developed.

The advantages and disadvantages for the economy

Generally, it is thought that international specialisation and trade increases efficiency and economic welfare. By allowing an economy to concentrate on what it is most efficient at producing, its real GDP should be relatively high. Its output would also be higher than if it used its resources to produce products, the resources are not best suited to making. For example, the USA is a world leader in the development of aircraft technology, and has some of the most advanced capital equipment and skilled labour. This makes it one of the main manufacturers of aircraft. The USA is a major consumer of coffee, but it only produces a small amount of coffee, in Hawaii and California. This is because it does not have the right climate and its labour is more skilled in producing other products.

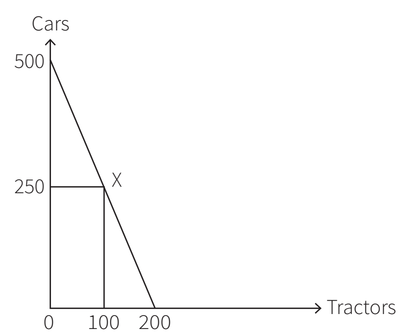


Fig. 36.1: Production possibility curve for tractors and cars before international trade

Combined with international trade, specialisation can allow an economy to consume outside its production possibility curve. For example, an economy may be able to produce either 500 cars or 200 tractors. It may initially not specialise and may produce 100 tractors and 250 cars as shown in Figure 36.1.

The opportunity cost of one tractor is two and a half cars. The economy's resources may be more suited to producing tractors. It may be possible for the economy to export tractors and import cars at a ratio of one tractor for four cars. In this case, the economy could specialise in tractors. It could produce 200 tractors and export 70 tractors. This would enable it to import 280 cars. Figure 36.2 adds a trading possibility curve, which joins 200 tractors and 800 cars. It shows that the economy's consumption of tractors rises by 30 to 130 and its consumption of cars also by 30 to 280.

Being able to consume more goods and services can raise living standards and may reduce absolute poverty.

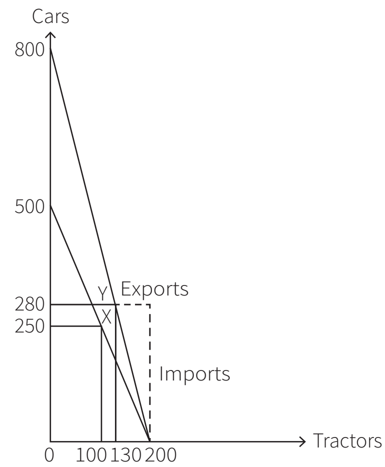


Fig. 36.2: Trading possibility curve for tractors and cars

If an economy specialises on the basis of the quality and quantity of its resources, this should mean its resources will not be lying idle. For example, an economy with a large supply of unskilled labour may specialise in industries that are labour-intensive and do not require high skills. This can mean that there is little unemployment of labour.

As specialisation is based on efficiency, it may also keep the inflation rate relatively low. The economy will be producing products at a relatively low cost and may have the opportunity to import from countries that are efficient at what they are producing.

Specialisation may also enable an economy to build up a reputation in producing a particular product. This could attract both more sales and ancillary industries to set up in the country. It would also boost its sales of exports. In practice, however, it can be difficult to determine what an economy is best at producing and what will be in demand in the future. Indeed, concentrating on a few products is fine if demand for these products remains high and costs of production do not rise. If, however, demand suddenly falls or costs rise, the country can run into difficulties. Structural unemployment may increase if labour is occupationally or geographically immobile. Producing a wider range of products would spread risks.

High transport costs may also offset any cost advantage a country has in producing a product. If the goods are heavy and have to be transported long distances, it may be more efficient for the importing economies to produce them themselves.

GROUP ACTIVITY 1

Match the following countries with, in each case, a product they specialise in:

Country	Product
Brazil	cocoa
Chile	coffee
China	copper
Ivory Coast	formula 1 cars
New Zealand	milk
Thailand	oil
UK	rare earths
Venezuela	rubber

Absolute advantage

It used to be thought that most international trade was based on what is called absolute advantage. This is not actually the case, although it does account for some of international trade.

A country has an absolute advantage in producing a product, if it can produce it using fewer resources than other countries. Table 36.1 shows that Kenya has an absolute advantage in producing horticultural products, while Hungary has an absolute advantage in producing machinery.

	Horticultural products (number of plants)	Machines
Kenya	200	1
Hungary	100	5

Table 36.1: Output per worker per day

If Kenya specialises in horticultural products and Hungary specialises in machinery, total output will increase, for example 400 horticultural products could be made instead of 300 and the output of machines could rise from 6 to 10. Kenya could then export horticultural products and import machinery, while Hungary could export machinery and import horticultural products. By specialising and trading, the countries improve the international allocation of resources.

Comparative advantage

It is on comparative advantage, rather than absolute advantage, that most of international trade is based. A country is said to have a comparative advantage in producing a product, if it can produce it at a lower opportunity cost.

Comparative advantage explains how two countries can mutually benefit from international trade, even if one is better at producing all products than the other country. Table 36.2 shows that Germany is better at producing both cars and chemicals than Italy.

	Cars	Chemicals (units)
Germany	4	400
Italy	1	200

Table 36.2: Output per worker per day

Germany can make four times as many cars as Italy, but only twice as many chemicals. The opportunity cost of producing one car is lower in Germany than in Italy. It is 100 chemicals in Germany, whereas in Italy it is 200 chemicals. So Germany's comparative advantage lies in cars. Whilst Italy has an absolute disadvantage in producing both products, it has a comparative advantage in making chemicals. Its opportunity cost of making one unit of chemicals is 1/200th of a car, whereas it is 1/100th of a car in Germany. So Germany should specialise in making cars and Italy should concentrate on producing chemicals. Germany should export cars and import chemicals and Italy should export chemicals and import cars.

INDIVIDUAL ACTIVITY 2

Using the information in the table, answer the following questions.

	Clothing (units)	Fish
Bangladesh	50	200
Vietnam	100	600

a Explain which country has the absolute advantage in producing clothing.

b Explain which country has the comparative advantage in producing clothing.

c What will Vietnam export to Bangladesh?

TIP

In explaining comparative advantage, it is useful to give a numerical example. Keep this simple and make sure that it does show comparative (rather than absolute) advantage.

Changes in comparative advantage

Comparative advantage changes over time. In the past, the USA and the UK had a comparative advantage in producing steel. Now the comparative advantage lies with Brazil, China and Malaysia.

Comparative advantages changes, as relative costs change. A country may gain a comparative advantage in a product because it discovers new sources of minerals, makes its land more fertile, adopts new technology or increases the productivity of its workers by improving education and training. India, with a labour force having good ICT skills and good command over English, has the comparative advantage in operating call centres. China is currently improving its performance in producing computers and may soon gain a comparative advantage.

INDIVIDUAL ACTIVITY 3

Mongolia specialises in mining. It mines coal, copper, gold and other minerals. It is the most China-dependent exporter in the world. It sells nearly 90% of its exports to China. The country grew rapidly between 2008 and 2014. Its economic growth then fell as a result of a drop in commodity prices and it had to borrow from the International Monetary Fund (IMF).

a Explain why Mongolia specialises in mining.

b How would the Mongolian economy be affected by a recession in China?

The link between countries specialising and international trade

Producing a relatively narrow range of products will mean that countries will have to export some of their output. This is necessary for them to gain revenue for spending on imports of products that their citizens want to buy, but their countries are not producing.

The difference between international and internal trade

Trade involves the exchange of goods and services. International trade, which can also be referred to as external trade, is the exchange of goods and services between countries. In contrast, internal trade is trade within a country. Any trade involves risk and effort. A firm based in one part of the country, selling goods to individuals or firms in another part of the country, has to arrange and pay for transport and may have to wait for the payment of goods. International trade enables firms to reach a wider market, take greater advantage of economies of scale, source their products from a wider area and earn higher profits. It may, however, provide additional challenges to those posed by internal trade.

Buying and selling products across national boundaries may involve the products travelling greater distances. Firms may have to deal with buyers and sellers speaking different languages. If, for example, a Japanese firm is selling cars to South Africa it will have to produce advertisements, manuals and insurance plans in English and Afrikaans. There may be differences in culture in different countries and these will have to be taken into account in the type of products firms seek to sell and the method of marketing adopted. For example, it is not appropriate to try to sell alcohol to Saudi Arabia where the drinking of alcohol is prohibited. Trade restrictions may also make it difficult for firms to sell their product abroad. If foreign governments place **tariffs** on imports, it will raise the price of the products sold by the firms and prevent consumers from buying them. Selling and buying in foreign markets exposes firms to more competition. Some may respond by becoming more efficient, but others may struggle to survive. Firms engaged in international trade also have to deal with foreign currencies. For example, an Indian firm which sells textiles to a US store may be paid in dollars. It is likely to sell these for rupees. If the value of the dollar falls by the time the Indian firm agrees to a price in dollars and receives the payment, it will earn fewer rupees.

KEY TERM

Tariff: a tax on imports.

Summary

You should know:

- Specialisation of countries can increase output, reduce costs and spread new ideas and technology.
- The risks of specialisation of countries include: rival countries' firms may start producing the product, substitute products might be developed, supply problems may be encountered, consumers may become reliant on firms in other countries and trade restrictions may be imposed on their products.
- International trade is the exchange of products across national boundaries.
- International trade may involve relatively long distances, may be with countries with different cultures and languages, may be in a different currency, may face trade restrictions and may involve more competition.

Multiple choice questions

1 Which of the following conditions promote international trade?

A Difficulties in communication between countries

B Differences in the quantity and quality of resources in countries

C High trade restrictions

D High transport costs

2 The table shows the output per worker for two products, in two countries. What can be concluded from this information?

	Tractors	Wheat (tonnes)
Country Y	50	500
Country Z	10	250

A Country Z has the comparative advantage in producing tractors

B Country Z has the absolute advantage in producing both products

C Country Y will export tractors and import wheat

D It will not be beneficial for the two countries to trade

3 A firm which previously had traded internally, decides to trade externally. What additional risk will it face?

A Its costs of production may rise

B The government may impose a sales tax on its products

C There may be a change in demand for its products

D Trade restrictions may be placed on its products

4 The table shows the main source of export earnings with respective products, for four countries. What can be concluded from this information?

Country	Product	Percentage of export earnings
W	cars	58
X	copper	63
Y	financial services	70
Z	oil	80

A Countries X and Z specialise in the production of primary products

B Country W and Y specialise in the production of tertiary products

C Country Z earns most of its export revenue from the sale of secondary product

D Country Z earns maximum export revenue

Four-part question

a Define *international trade.* **(2)**

b Explain **two** differences between international trade and internal trade. **(4)**

c Analyse what determines which products countries specialise in. **(6)**

d Discuss whether a country should specialise in tourism. **(8)**

Chapter 37
Free trade and protection

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Learning objectives

By the end of this chapter you will be able to:

- define globalisation
- discuss the role of multinational companies
- discuss the benefits of free trade
- describe methods of protection
- discuss the reasons for and consequences of protection

Introducing the topic

We buy products from all over the world. We have more choice of goods and services than ever before. More products are being bought and sold between countries, and more firms are producing in other countries. Despite the advantages of international trade, governments put restrictions on what products firms and households can buy from other countries. Some governments also restrict which firms can set up in their countries. Why do they impose these restrictions and why might they want to stop foreign multinational companies setting up in their country?

37.1 Globalisation

Globalisation is the process by which the world is becoming one market. Barriers are being broken down in terms of where people buy products from and where firms produce. There are an increasing number of global brands and multinational companies. Among the reasons for the greater interconnection between countries are:

- **Reduced transport costs.** Containerisation and larger and more efficient ships, airplanes and trains have lowered the cost of moving goods.
- **Advances in communications.** Consumers can now purchase products online from anywhere in the world and are more in touch with trends in other countries. Executives of multinational companies (MNCs) can also keep in close contact with managers of foreign branches.
- **Removal of some trade restrictions.** The general trend has been for tariffs and quotas to be reduced.

> **KEY TERM**
>
> **Globalisation:** the process by which the world is becoming increasingly interconnected through trade and other links.

Modern container ships move vast quantities of goods around the world

The consequences of globalisation

Globalisation has both advantages and disadvantages. It is increasing competition, with consumers being able to buy a greater range of products at relatively low prices. It is also encouraging firms to locate some of their production in the most efficient locations.

It is, however, making economies more susceptible to external shocks. The greater the integration of economies means that a recession in one economy can have a significant impact on other economies. Government policy is also, to some extent, constrained by globalisation. For example, a government may be reluctant to increase the rate of corporation tax for fear that some MNCs will relocate to other countries. The ability of MNCs to shift production from branches in one country to other countries can cause structural unemployment. Some workers may also lose their jobs because of the increased competition that is arising from the breaking down of barriers between national markets. This is increasing the importance of occupational mobility.

GROUP ACTIVITY 1

Decide which changes would increase globalisation and which would reduce globalisation:

a A decision by the US government to impose trade restrictions on Chinese products.

b More governments recognising qualifications awarded in other countries.

c The development of social media.

d An increase in foreign travel.

e A reduction in the number of different currencies.

37.2 Role of multinational companies (MNCs)

A multinational company (MNC) is a business organisation that produces in more than one country. For example, the US based McDonalds has outlets in many countries, the UK based Lloyds Bank has branches in a range of countries, the Japanese based Toyota has factories in a number of countries and the Indian based Tata Group produces in a high number of countries.

Most MNCs are public limited companies, but an increasing number of state-owned enterprises (SOEs) are now producing internationally. For example, the Chinese state-owned oil giant, the China National Offshore Oil Company (CNOOC) operates in a number of countries. There are a number of benefits MNCs hope to gain by spreading their operations to more than one country. Producing in countries where products are sold rather than exporting to those countries will reduce the MNCs' transport costs and enable them to keep in close contact with the market. It may also enable them to get around any restrictions on imports, to gain access to cheaper labour and raw materials. They may also receive grants from the governments of the countries in which they set up their franchises.

MNCs can have a number of effects on the countries in which they are located, that is their host countries, some beneficial and others harmful. They can increase employment, output and tax revenue, bring in new technology and management ideas and help in development of infrastructure. They may, however, be more prone to pollute and willing to close down plants in foreign countries. Their size and their ability to shift production may mean that they can put pressure on the governments of the host countries in which they have plants, to give them tax concessions and not to penalise them for poor safety standards. In addition, although MNCs may increase employment, there is a risk that they may drive domestic firms out of business. The profits they earn may be paid to shareholders in their home countries rather than being reinvested in the host country.

Recent years have seen the growing importance of MNCs. These companies are increasingly seeing countries, throughout the world, as their markets and possible locations for production. Besides setting up the operating plants abroad which produce the complete finished good, they are also spreading different parts of the production process to different countries. For example, an MNC producing cars may base its design in a country with a strong tradition in design, its assembly in a country with a skilled but low-cost labour force and its administration and marketing in other countries. In fact, the production process of some products is spread over more than fourteen countries.

GROUP ACTIVITY 2

Decide which of the following would attract an MNC to set up in a country.

a Low corporate taxes
b Government grants
c Strict employment laws
d A good educational system
e Cheap land

37.3 The benefits of free trade

Free international trade occurs when there are no restrictions on the products bought by firms and consumers from abroad or products sold by firms to other countries and no imposition of special taxes.

Such unrestricted trade should allow countries to concentrate on what they are best at producing and hence allow for an efficient allocation of resources. If countries are able to exploit their comparative advantage fully, then world output, employment and living standards should be higher than if resources were less efficiently allocated. Selling freely to a global market should enable firms to take greater advantage of economies of scale, raise competitive forces and give them access to more sources of raw materials and components. These effects should lower prices for consumers, raise the quality of products they buy and also gain from a greater choice of products.

37.4 Methods of protection

Despite the potential advantages of free trade, every country in the world engages in protection, also called protectionism, albeit to differing extents. Protection is the shielding of the country's industries from the competition posed by other countries' industries and hence involves restriction of free trade.

There are a number of methods that a government of a country or the governments of a group of countries may employ, to protect their industries. These include:

- **A tariff.** A tax can be imposed on imported products. Such a tax is also referred to as a customs duty or import duty. Sometimes tariffs are used to raise government revenue but most commonly, they are used to discourage the purchase of imports. Placing a tariff on an imported product raises its price. The tariff is likely to be set at a level which will mean that the imported products will sell at a higher price than domestically produced goods.
- **A quota.** A limit may be placed on the quantity of a good that can be imported. For instance, a country may limit the number of cars that can be imported into the country at 40 000.
- **Embargo.** The import of a product or trade with another country may be banned. A government may want to ban the import of demerit goods. A ban on a trade with a particular country is usually introduced for political reasons.
- **Exchange control.** A government may try to stop households and firms from buying imports, by restricting the availability of foreign currency. Those wanting to buy foreign products, travel or invest abroad will have to apply to buy foreign currency.
- **Quality standards.** A country may require imports to reach artificially high standards. This measure will either dissuade other countries from selling to the country or push up their costs and prices if they do try to sell to the country.

KEY TERMS

Quota: a limit placed on imports or exports.

Embargo: a ban on imports or exports.

Exchange control: a limit on the amount of foreign currency that can be obtained.

KEY TERM

Voluntary export restraints (VERs): agreements with other governments to restrict their exports to the country.

- **Expensive paperwork.** Requiring foreign firms who wish to sell to the country to fill out a considerable amount of time-consuming paperwork may persuade them to switch over to other markets.
- **Voluntary export restraints** (VERs). A government may persuade the government of the exporting country to agree to restrict the number of units of a product sold by it. It may do this by agreeing to do the same or by threatening to impose tariffs or quotas, if they do not agree.
- **Subsidies.** A government may protect its domestic industries from cheaper imports by giving them subsidies. Such help may enable domestic firms to sell at lower prices, which may undercut the price of imports.

Besides placing restrictions on imports, a government may also impose restrictions on exports if it is concerned that selling the product abroad will lead to shortages at home. Between 2012 and 2016, for instance, the government of Tanzania imposed a ban on the export of maize. The export ban was introduced to stabilise domestic prices, and to ensure that there was enough maize to be sold on the home market.

TIP

Remember that whilst increasing a tariff increases protection, increasing a quota reduces protection.

International travellers may have to pay customs duty on certain goods

INDIVIDUAL ACTIVITY 1

The USA has been accused of hypocrisy by talking in favour of free trade whilst itself imposing trade restrictions and putting up barriers to foreign takeovers of US firms.

a What is meant by free trade?

b Identify two trade restrictions.

37.5 The reasons for and consequences of protection

A number of reasons are presented for protecting domestic industries. Some favour protection of particular domestic industries while some advocate protection of all domestic industries. The strength of the arguments varies.

- **Protection of infant industries.** These industries are also called sunrise industries. The argument is that such new industries, which have the potential to grow, may be eliminated by foreign competition before they have really started. Giving them some protection may enable them to grow, take advantage of economies of scale and become internationally competitive. It can, however, be difficult to identify the new industries which indeed have such a potential. There is also the risk that the industries will not respond to the opportunity by becoming more efficient but may become dependent on the protection.
- **Protection of declining industries.** These industries are also known as sunset industries. In a dynamic economy, some industries are likely to be declining. If other industries are expanding and labour is mobile, this may not be a problem. However, if labour is immobile and there is a shortage of job vacancies, the decline of a major industry may lead to a significant rise in unemployment. A government may decide to protect the industry to allow it to decline gradually, in order to avoid this. As workers retire and leave of their own accord, the protection can be removed. Owners of the industry, however, may resist the removal of the protection.
- **Protection of strategic industries.** These are industries essential for the survival or development of the country. Most governments provide some protection to their agricultural and defence related industries, to ensure consistency of supplies. A country that is dependent on imports of food and weapons, runs the risk of its supplies being cut off due to wars or natural disasters. A government might also consider that protecting the growth of clean energy industries and next generation IT industries may promote the economic development of the country.
- **Raising employment and improving the trade position.** Reducing imports can enable domestic firms to expand and take on more workers. This would raise employment and income. There is a high risk, however, of retaliation. If other countries do respond by imposing trade restrictions, the country will buy fewer imports but will also sell fewer exports. So employment, income and the trade position may not improve. Restricting imports of raw materials may be particularly harmful as it will raise domestic firms' costs of production.
- **Protection of industries from low wage competition.** This is not a strong argument in favour of protection. Low wages do not necessarily mean low costs of production. A foreign industry may pay low wages but if the productivity of its workers is low, its average cost of production may be high. If both wages and costs are low, it may mean that a foreign industry has a comparative advantage. If this is the case, then under conditions of free trade, demand for the industry's products is likely to rise and this higher demand will probably push up wages.
- **Protection of industries from dumping.** It is generally agreed that trade restrictions can be imposed to prevent dumping as this is seen as unfair competition. This occurs when foreign firms sell products at a price below the cost of production. Foreign firms may be engaging in what is sometimes called sporadic dumping. This is selling excess supplies in other countries, in order to keep the price high in the domestic market. A more damaging motive behind dumping is to drive domestic firms out of the market, gain a large market share and then raise prices. This form of

KEY TERMS

Infant industries: new industries with relatively low output and high cost.

Declining industries: old industries which are going out of business.

Strategic industries: industries that are considered important for the survival or development of the country.

Dumping: selling products in a foreign market at a price below the cost of production.

dumping, sometimes called predatory dumping, may benefit consumers in the short run. In the long run, however, it may result in a less efficient allocation of resources and the foreign firms gaining more market power, reducing choice and raising price. This is because it makes it very difficult for domestic firms to compete, even if their costs are lower.

- **Protecting industries from other forms of unfair foreign competition.** Another reason why foreign firms may be gaining an unfair competitive advantage is that they may be enjoying subsidies by their governments. This would again mean that there is not a level playing field.

The strongest arguments for protecting domestic industries are probably the infant industry, strategic industry, protection from dumping and protection from firms that are subsidised by foreign governments.

The key arguments against protection are that it can result in lower choice, higher prices, inefficiency and retaliation. These arguments are stronger against protecting declining industries, raising employment and improving the trade position and protecting industries from low wage competition.

INDIVIDUAL ACTIVITY 2

In 2016, the Indian government imposed anti-dumping taxes on some steel products from Brazil, China, Indonesia, Russia and South Korea. The motive behind this was not to raise revenue but to ensure that imports of steel products would compete on equal terms with Indian steel products.

a Explain what is meant by dumping.

b What impact may the imposition of anti-dumping duties on imported steel products have on their sales to India?

c What might happen to the Indian steel industry without protection?

Summary

You should know:

- Globalisation is occurring due to reduced transport costs, advances in communications and trade liberalisation.
- Globalisation is increasing competition and choice but also economies' susceptibility to external shocks and structural unemployment.
- MNCs are growing in importance. MNCs operate in other countries for a variety of reasons including reduced transport costs, getting round import restrictions, obtaining government grants and access to cheaper labour and raw materials.
- MNCs can have a number of effects on the countries in which they are based. They may raise output, employment and tax revenue and bring in new technology and management ideas but may generate pollution, drive out domestic producers, may shift production to other countries and unduly influence the government.
- Free international trade can raise output, reduce prices and increase choice.
- The most common method of protecting domestic industries is to place a tariff on imports.
- Other methods of protecting domestic industries include imposing a quota, imposing an embargo, and granting subsidies to domestic industries.

- The arguments for protecting domestic industries include protecting infant industries, protecting declining industries, protecting strategic industries and protecting industries from dumping.
- The strongest arguments for protectionism are probably the infant industry, strategic industry and protecting industries from dumping.

Multiple choice questions

1 Which of the following is an advantage to a country, of having a multinational company producing in that country?

A The company employs local people

B The company depletes non-renewable resources rapidly

C The company sends its profits back to the country in which its headquarters is based

D The company reduces its costs by lowering its health and safety standards

2 Which of the following would reduce trade restrictions in a country?

A An increase in tariffs

B An increase in quota limits

C The imposition of exchange control

D Tighter health and safety standards

3 A government has been allowing manufactured goods to enter its country, without any trade restrictions. It then decides to impose a 10% tariff on all imported manufactured goods. What effect will this change have on the cost of living and government revenue?

	Cost of living	Government revenue
A	increases	increases
B	increases	reduces
C	Reduces	reduces
D	Reduces	increases

4 Under what circumstances would the protection of infant industries be justified?

A If their long-term costs are higher than the revenue earned by them

B If they generate substantial external costs

C If they have the potential to grow and gain a comparative advantage

D If the number of workers they employ will decline over time

Four-part question

a Define an *infant industry*. **(2)**

b Explain **two** benefits of free trade for producers. **(4)**

c Analyse how the imposition of a tariff could prevent dumping. **(6)**

d Discuss whether or not the presence of a foreign multinational company will benefit a country. **(8)**

Chapter 38
Foreign exchange rates

Learning objectives

By the end of this chapter you will be able to:

- define a foreign exchange rate
- distinguish between a fixed and a floating exchange rate
- explain how a foreign exchange rate is determined in a foreign exchange market
- analyse the causes of foreign exchange fluctuations
- analyse the effects of foreign exchange rate fluctuations
- discuss the advantages and disadvantages of floating and fixed foreign exchange rates

Introducing the topic

Currencies are bought and sold like other goods and services. But why might someone choose to buy euros rather than Chinese renminbi (yuan) or Pakistani rupees? Why do the prices of currencies change over time and what are the consequences of these changes?

38.1 A foreign exchange rate

A **foreign exchange rate** is the price of one currency in terms of another currency (or currencies). It is also the value of the currency – that is, how much the currency is worth in terms of another currency (or currencies). For example, a foreign exchange rate of $1 = 65 Indian rupees means that the price of $1 is 65 Indian rupees and that one dollar is worth (would buy) 65 Indian rupees. A foreign exchange rate index is the price of one currency in terms of a basket of other currencies, weighted according to their importance in the country's international transactions. For example, the Japanese effective exchange rate measures the value of the Japanese yen against fifteen major currencies, including the US dollar, the Chinese renminbi, the Korean won and the Thai baht.

Foreign exchange rates

KEY TERM

Foreign exchange rate: the price of one currency in terms of another currency or currencies.

GROUP ACTIVITY 1

Match the following currencies with their countries:

Country	Currency
Cedi	Argentina
Dirham	Brazil
Dong	France
Euro	Ghana
Kip	Indonesia
Kwacha	Iran
Ougulya	Laos
Peso	Mauritania
Rand	Russia
Real	Saudi Arabia
Rial	South Africa
Riyal	South Korea
Rouble	Uganda
Rupiah	United Arab Emirates
Shilling	Vietnam
Won	Zambia

KEY TERMS

Fixed exchange rate: an exchange rate whose value is set at a particular level in terms of another currency or currencies.

Devaluation: a fall in the value of a fixed exchange rate.

Revaluation: a rise in the value of a fixed exchange rate.

Floating exchange rate: an exchange rate which can change frequently as it is determined by market forces.

Appreciation: a rise in the value of a floating exchange rate.

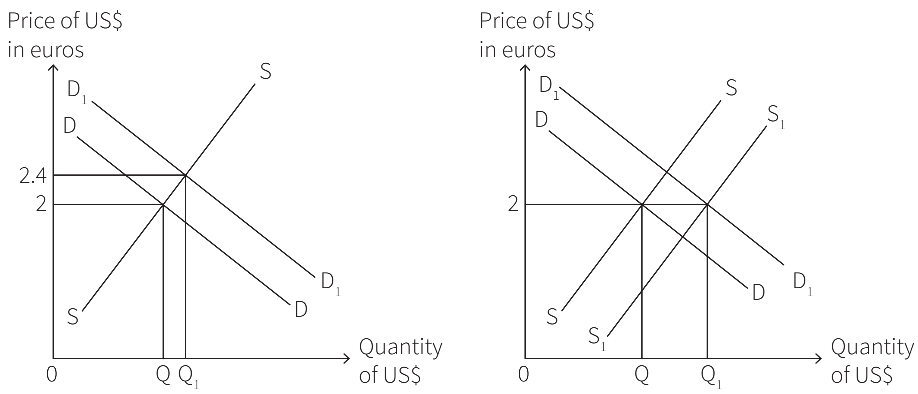
Depreciation: a fall in the value of a floating exchange rate.

LINK

Chapter 15.2 Maximum and minimum prices

A fixed exchange rate

A **fixed exchange rate** is one whose value is fixed against the value of another currency (or currencies) and is maintained by the government. The value may be set at a precise price or within a given margin. If market forces are pushing down the value of the currency, the central bank will step in and seek to increase its value, either by buying the currency or raising the rate of interest. In Figure 38.1, the price of one US dollar is initially two euros. Demand for the dollar rises and, if left to market forces, its price would rise to 2.3 euros. If, however, the central bank wants to keep the price of the dollar at two euros, it may ask its central bank to sell dollars. If it does so, the supply of dollars traded on the foreign exchange market will increase and price may stay at two euros.



(a) The effect on the price of the $ without government intervention

(b) The effect on the price of the $ with government intervention

Fig. 38.1: Maintaining a fixed exchange rate

A change in the value of the currency from one exchange rate to a lower one is referred to as **devaluation**. A rise in a fixed exchange rate is called **a revaluation**.

A floating exchange rate

A **floating exchange rate** is one which is determined by market forces. If demand for the currency rises or the supply decreases, the price of the currency will rise. Such a rise is referred to as an **appreciation**. In contrast, a **depreciation** is a fall in the value of a floating exchange rate. It can be caused by a fall in demand for the currency or a rise in its supply. Figure 38.2 shows a decrease in demand for Bangladeshi taka, causing the price of the taka to fall.

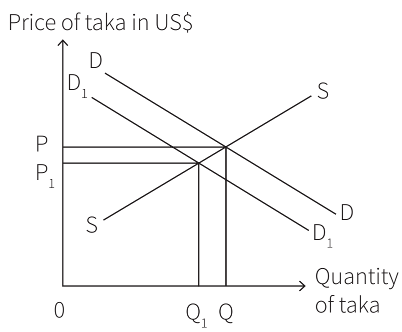


Fig. 38.2: A depreciation in the value of the taka

TIP

In explaining how a floating exchange rate is determined, it is useful to draw a diagram. Remember that on the vertical axis of an exchange rate diagram, you should express the price of the currency in terms of another currency.

38.2 The determination of a foreign exchange rate in a foreign exchange market

Currencies are bought and sold on foreign exchange markets. Individuals, firms and central banks may buy and sell foreign currencies. The main traders are, however, commercial banks. These buy currencies for their customers and to speculate on movements in the price of currencies.

The key reasons why currencies are bought and sold are linked to speculation, demand for exports and imports, the purchase and sale of financial assets and **foreign direct investment (FDI)** often carried out by multinational companies. These and other reasons are examined in more depth below.

KEY TERM

Foreign direct investment (FDI): setting up production units or buying existing production units in another country.

Foreign exchange traders

TIP

Follow what is happening to the price of the currency of your country.

The reasons for the demand and supply of currency in a foreign exchange market

As mentioned above, there are a number of reasons for individuals, banks, firms and governments to buy and sell a currency. These reasons can be examined in more depth by considering the specific example of demand and supply of Indian rupees, as shown in Table 38.1.

Demand for rupees will come from:	The supply of rupees will come from:
• Foreigners wishing to buy Indian goods and services. • Foreign-based branches of Indian multinational companies sending back profits to India. • Foreign banks buying currencies on behalf of their customers and paying interest on money held by Indian residents. • Foreign firms paying dividends on shares held by Indian residents. • Indians working abroad, wishing to send money back home to relatives. • Foreign firms wishing to buy Indian firms and setting up units in India. • Foreign firms and individuals wanting to buy shares in Indian companies, to save in Indian banks and lend to Indian firms or individuals. • Foreign governments wanting to hold rupees as reserves. • Speculators buying rupees in the expectation that the rupee will rise in value in the future. Significant sums of currency can be traded by speculators.	• Indians wishing to buy foreign goods and services. • Foreign multinational companies based in India, sending profits home. • Indian banks selling currencies on behalf of their customers and paying interest on money held by foreign people living abroad. • Indian firms paying dividends on shares held by foreigners. • Foreigners working in India, sending money home to their relatives. • Indian firms wishing to buy foreign firms and setting up production units in other countries. • Indian firms and individuals wanting to buy shares in foreign companies, save in foreign banks and lend to foreign firms and individuals. • The Indian government wishing to hold foreign currencies in its reserves. • Speculators selling rupees because they expect the price of the rupee to fall.

Table 38.1: Demand and supply of Indian rupees

TIP

Think carefully about which curve or curves will shift when there is a transaction involving foreign exchange. Remember, for example, that when we buy imports we sell our own currency and this purchase causes the supply curve to shift to the right.

Figure 38.3 shows the effect of a rise in the Indian rate of interest on the market for Indian rupees. This will encourage foreigners to place money in Indian banks and hence, increase the demand for Indian rupees and raise its price.

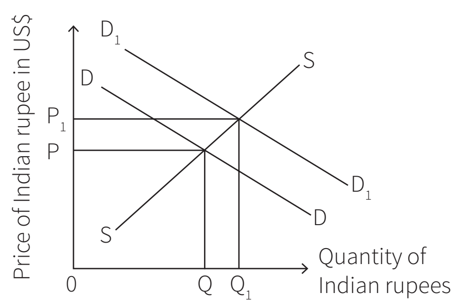


Fig. 38.3: The effect of a rise in the Indian rate of interest

INDIVIDUAL ACTIVITY 1

In each case draw a diagram to show the effect on the market for baht (the currency of Thailand) of:

a a Japanese multinational company opening up a branch in Thailand

b more tourists from Thailand going to India on holiday

c Thai banks lending to Ghanaian firms

d a reduction in demand for Thai exports.

38.3 The causes of exchange rate fluctuations

An exchange rate may change as a result of a change in export revenue and import expenditure, direct foreign investment, the sale and purchase of financial assets between the country and other countries, speculation and central bank action. An increase in a current account surplus would tend to cause the value of the currency to rise. For example, if export revenue rises relative to import expenditure, demand for the currency will rise. An increase in investment in the country arising from a foreign multinational company setting up a production plant can also cause the price of the currency to rise. If it is generally believed that the currency will rise in price, speculators will act in a way which will help in bringing about their expectation. They will buy the currency which, in the case of a floating exchange rate, will push up its price.

A government and its central bank can seek to influence the price of its currency in three main ways. One is by buying and selling the currency. If it wants to raise the exchange rate, it will instruct its central bank to buy the currency, using foreign currency to do so. Of course, there is a limit to which it can do this, as it will have a limited supply of foreign currency in its reserves. A central bank may also raise the rate of interest, in a bid to raise the value of the currency. A higher interest rate may attract what are called **hot money flows**. These are funds, which are moved around the financial markets of the world, to take advantage of differences in interest rates and exchange rates. If more people want to place money into the country's financial institutions, it will increase the demand for the currency. In addition, a government may try to raise the value of the currency by introducing measures to increase exports and reduce imports.

KEY TERM

Hot money flows: the movement of money around the world to take advantage of differences in interest rates and exchange rates.

38.4 The consequences of a change in the exchange rate

The effect of a change in the exchange rate on export and import prices

A rise in a country's exchange rate would raise the price of its exports and lower the price of its imports. More precisely, the price of exports rises in terms of foreign currency and the price of imports falls in terms of the domestic currency.

For example, initially 80 Indian rupees may equal £1. In this case, an Indian export valued at 800 rupees will sell in the UK at £10. A UK import valued at £20 will sell in India for 1600 rupees. If India experiences a rise in its exchange rate against the pound sterling, it means that rupees will buy more pounds now. The value of the rupee may rise so that 80 rupees equal £2. This significant rise would mean that the Indian export would now sell for £20 in the UK and the £20 import from the UK would sell for 800 rupees in India. If export prices rise, fewer exports will be sold. The effect on export revenue will depend on price elasticity of demand. If demand is elastic, the rise in price will cause a fall in revenue whereas if demand

LINK

Chapter 11.5 Determinants of price elasticity of demand (PED and total spending on a product and revenue gained)

is inelastic, revenue will rise. In practice, in many export markets there is considerable competition from firms throughout the world and hence the demand is elastic.

The effect of a change in the exchange rate on the macroeconomy

A change in the exchange rate, besides affecting exports and imports, may influence economic growth, employment and inflation. A fall in the exchange rate, by lowering export prices and raising import prices, is likely to increase demand for domestic products. This rise in aggregate demand can increase output and employment of the economy, if it is not operating at full capacity initially. Figure 38.4 shows real GDP rising from Y to Y_1 as a result of a rise in net exports.

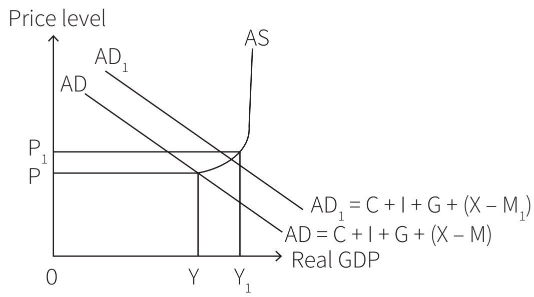


Fig. 38.4: The effect of a rise in net exports

A fall in the exchange rate can, however, increase inflationary pressure for a number of reasons. Imported raw materials will be more expensive, which will raise the costs of production. Finished imported products will also be more expensive. These appear in the country's consumer prices index and hence a rise in their price will directly boost inflation. It will also increase inflation indirectly, by reducing the pressure on domestic firms to keep price-rise to a minimum, in order to remain competitive.

38.5 The advantages and disadvantages of floating and fixed foreign exchange rates

The advantages and disadvantages of floating exchange rates

An advantage of a floating exchange rate is that it may help to eliminate a gap between export revenue and import expenditure. If demand for imports rises whilst demand for exports falls, supply of the currency will rise (as individuals and firms sell it to buy foreign currency) and demand for the currency will fall. This will lower the value of the currency and hence reduce export prices and raise import prices. These changes may make export revenue and import expenditure balance.

Even with a deficit between what the country has earned from exports and what it has spent on imports, however, demand for the currency may rise. Firms and individuals may still buy more of the currency to invest in the country, if they think that economic prospects are good. So, in practice, there is no guarantee that a floating exchange will eliminate a current account deficit. A floating exchange rate, nevertheless, does allow a government to concentrate on other objectives. It also means that a government does not have to keep reserves of foreign currency to influence the price of its currency.

The main disadvantage with a floating exchange rate is that it can fluctuate, making it difficult for firms to plan ahead. Speculation may cause significant changes in the price of a currency. A large depreciation may result in a rise in the country's inflation rate. This is why, on occasions, a central bank may still intervene despite usually leaving the exchange rate to be determined by market forces.

The advantages and disadvantages of fixed exchange rates

The main advantage of a fixed exchange rate is that it creates *certainty*. Firms that buy and sell products abroad will know the exact amount they will pay and receive in terms of their own currency, if the exchange rate does not change.

A fixed exchange rate, however, has a number of disadvantages. It can mean that a central bank has to use up a considerable amount of foreign currency to maintain its value. If the exchange rate is under downward or upward pressure, it may also have to implement policy measures which may conflict with its other government objectives. For example, a central bank may raise the rate of interest to reverse downward pressure on the value of the currency. A higher interest rate may cause unemployment and slow down economic growth as it may reduce aggregate demand. Finally, if a government cannot maintain an exchange rate at a given value, it may have to change its price and this may cause a loss of confidence in the economy.

GROUP ACTIVITY 2

The UK operates a floating exchange rate. Between 2010 and the first half of 2016, the value of the pound sterling was relatively stable. It was also relatively high, as foreigners wanted to invest in an economy perceived to be performing well. It fell dramatically, however, in June 2016 when people in the country voted in a referendum to leave the European Union.

a What is meant by a floating exchange rate?

b Identify one benefit of a stable exchange rate.

c Explain one advantage and one disadvantage of a high exchange rate.

d What did the change in the value of the pound indicate about the global view of the outcome of the referendum decision?

International competitiveness

A country might be called internationally competitive, if it provides the goods and services desired by consumers at a price acceptable to them. There are a number of indicators of a country's international competitiveness. These include its economic growth rate, its share of world trade, levels of expenditure on research and development, the quantity and quality of education and training and the state of the country's infrastructure. A competitive economy is likely to have a stable economic growth rate, a reasonable share of world trade, high levels of investment and expenditure on research and development, good quality education and training and developed infrastructure.

In the short term, changes in a country's exchange rate and inflation rate can influence its international competitiveness. A fall in both would be likely to make the country's products more attractive to buyers at home and abroad. Changes in productivity, however, will have long-lasting effects. Productivity can be raised by, for example, investment, education and training and improved working conditions.

INDIVIDUAL ACTIVITY 2

In 2013 and 2014 the Chinese government was criticised for maintaining a low price of its currency, in order to keep its products internationally competitive. It did this by selling its currency.

a Does it appear that China was operating a fixed or a floating exchange rate in 2013 and 2014? Explain your answer.

b How does a low value of its currency help to keep a country's products 'internationally competitive'?

c Explain how selling a currency can keep its value down.

Summary

You should know:

- An exchange rate is the price of one currency in terms of another currency (or currencies).
- The price of a currency is influenced by demand for exports and imports, direct and financial investment, speculation and government action.
- Domestic currency may be bought by foreigners wanting to buy the country's products, to invest in the country and due to the expectation of a rise in the value of currency.
- Domestic currency is sold to buy foreign products, to invest in other currencies and for the fear of a decline in its value.
- A rise in the exchange rate will increase the price of exports in terms of foreign currency and lower the price of imports in the domestic currency.
- A fall in the exchange rate would be likely to increase export revenue, reduce import expenditure, boost economic growth and employment but may also tend to increase inflationary pressure.
- A floating exchange rate may automatically eliminate a gap between export revenue and import expenditure.
- A fixed exchange rate is maintained at a certain rate. Its main advantage is that it reduces uncertainty.
- A floating exchange rate is determined by market forces. If there is a current account deficit, the exchange rate may adjust automatically to make domestic products more competitive.

Multiple choice questions

1 What is meant by 'an appreciation of the currency'?

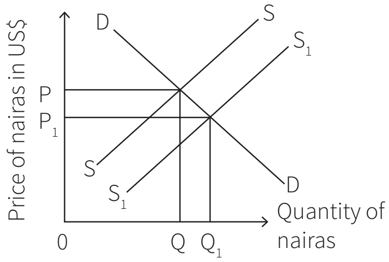
A A fall in value caused by government intervention

B A fall in value caused by market forces

C A rise in value caused by government intervention

D A rise in value caused by market forces

2 What might have caused the change in the value of the Nigerian currency shown in the diagram below?



A Foreign firms investing in Nigeria

B Foreigners placing more money in Nigerian banks

C Nigerians buying more imports

D Nigerians speculating that the value of the naira will rise

3 What combination of factors is most likely to cause a fall in the value of a floating currency?

	Demand for the currency	Supply of the currency
A	increase	increase
B	increase	decrease
C	decrease	decrease
D	decrease	increase

4 If the value of the pound sterling against the US dollar changes from £1 = $2 to £1 = $1.5, what effect will this have?

A UK exports to the USA will rise in price

B The USA will import more UK products

C UK tourists will be able to buy more, for less money, in the USA

D The value of the pound sterling has risen in price

Four-part question

a Define *devaluation*. **(2)**

b Explain **two** ways a central bank can prevent a rise in a fixed exchange rate. **(4)**

c Analyse how a recession in Country X could affect Country Y's floating exchange rate. **(6)**

d Discuss whether or not a country would benefit from switching from a fixed to a floating exchange rate. **(8)**

Chapter 39
Current account of balance of payments

Learning objectives

By the end of this chapter you will be able to:

- describe the components of the current account of the balance of payments
- calculate deficits and surpluses on the current account of the balance of payments
- analyse the causes of current account deficits and surpluses
- analyse the consequences of current account deficits and surpluses
- discuss the effectiveness of policy measures to achieve balance of payments stability

Introducing the topic

In 2016 the USA had the largest deficit on the current account of the balance of payments of any country while China had the largest surplus. What is a current account deficit and a current account surplus? What causes deficits and surpluses and is it better to have a surplus than a deficit?

39.1 Structure of the current account

The meaning of the balance of payments

The balance of payments is a record of all economic transactions between the residents of a country and the rest of the world in a particular period (over a quarter of a year or more commonly over a year). These transactions are made by individuals, firms and the government. Money coming into the country is recorded as credit items and money leaving the country as debit items. The first section of the balance of payments, and the best known, is the current account.

The components of the current account

The current account shows the income received by the country and the expenditure made by it in its dealings with other countries. It is usually divided into four components.

- **Trade in goods.** This covers exports and imports of goods including cars, food and machinery. Such goods are sometimes referred to as merchandise exports and imports and visible exports and imports. If revenue from the export of goods exceeds the expenditure from import of goods, the country is said to have a **trade in goods deficit**. This can also be referred to as a visible trade deficit. In contrast, a **trade in goods surplus** occurs when export revenue exceeds import expenditure.
- **Trade in services.** As its name suggests, this part records payments for services sold abroad and expenditure on services bought from foreign countries. Services are also sometimes called invisibles with sales of services abroad called invisible exports and the purchase of sales from abroad known as invisible imports. Among the items included are banking, construction services, financial services, travel and transportation of goods and passengers between countries. A **trade in service surplus** would mean that service receipts exceed payments for services.

Together the first two components give the balance on trade in goods and services.

- **Primary Income** (previously called income). This covers income earned by individuals and firms. It records two categories of income flow, which are compensation of employees and investment income. Compensation of employees includes wages, salaries and other benefits earned by residents working abroad minus that earned by foreigners working in the home economy. Investment income covers profit, dividends and interest receipts from abroad minus profit, dividends and interest paid abroad. Investment income is earned on foreign direct investment and financial investment including shares, government bonds and loans. If, for example, a multinational company sends profits out of the country back to its home country, it will appear as a debit item in this section. The receipt of dividends on shares in foreign companies and interest on loans made to foreign firms will be credit items.
- **Secondary Income** (previously called current transfers). This is transfers of money, goods or services which are sent out of the country or come into the country, not in return for anything else. It essentially covers gifts. Items include charitable donations, workers' remittances (money sent by migrant workers to relatives abroad and money received by relatives from migrant workers in other countries) and aid from one government to other governments. Workers' remittances are a large item in some countries' secondary income.

KEY TERMS

Trade in goods: the value of exported goods and the value of imported goods.

Trade in goods deficit: expenditure on imported goods exceeding revenue from exported goods.

Trade in goods surplus: revenue from exported goods exceeding expenditure on imports.

Trade in services: the value of exported services and the value of imported services.

Trade in service surplus: revenue from exported services exceeding expenditure on imported services.

Primary income: income earned by people working in different countries and investment income which comes into and goes out of the country.

Secondary income: transfers between residents and non-residents of money, goods or services, not in return for anything else.

KEY TERM

Current account balance: a record of the income received and expenditure made by a country in its dealings with other countries.

Calculation of deficits and surpluses on the current account of the balance of payments

The balances of the four components are summed up to give the **current account balance** (also sometimes just called the current balance). A current account surplus arises when the value of credit items exceeds the value of debit items. If the value of debit items is greater than the value of credit items, there is a current account deficit.

INDIVIDUAL ACTIVITY 1

a In the period July–December 2016, Bangladesh imported \$24 900m worth of goods and exported \$19 618m worth of goods. The value of its credit items on services was \$2121m and the value of its debit items was \$4074m. What was its balance of trade in goods and services?

b From the following information, calculate South Africa's current account balance in 2015.

	Rand millions
Exports of goods	1 041 438
Imports of goods	1 075 850
Exports of services	191 656
Imports of services	197 643
Primary income (net)	–100 366
Secondary income	–33 533

GROUP ACTIVITY 1

The Philippines had a current account surplus of \$8.3bn in 2015. It usually has a current account surplus mainly because of a large surplus on secondary income. There are many Filipino people who work abroad and who send money home to their relatives. There is also usually a trade in services surplus but a trade in goods deficit.

a What is meant by a current account surplus?

b Which section of the current account is not referred to in the passage?

c Do you think a reduction in the number of Filipino people working abroad would reduce the country's current account surplus?

Changes in exports and imports

There are a number of factors that influence the value of a country's exports and imports. These include:

- **The country's inflation rate.** If the country has a relatively high rate of inflation, domestic households and firms are likely to buy a significant number of imports. The country's firms are also likely to experience some difficulty in exporting. A fall in inflation, however, would increase the country's international competitiveness and would be likely to increase exports and reduce imports.
- **The country's exchange rate.** A fall in a country's exchange rate will lower export prices and raise import prices. This will be likely to increase the value of its exports and lower the amount spent on imports.

- **Productivity.** The more productive a country's workers are, the lower the labour costs per unit and the cheaper its products. A rise in productivity is likely to lead to a greater number of households and firms buying more of the country's products – so exports should rise and imports fall.
- **Quality.** A fall in the quality of a country's products, relative to other countries' products, would have an adverse effect on the country's balance of trade in goods and services.
- **Marketing.** The amount of exports sold is influenced not only by their quality and price but also by the effectiveness of domestic firms in marketing their products. Similarly, the quantity of imports purchased is affected by the effectiveness of the marketing undertaken by foreign firms.
- **Domestic GDP.** If incomes rise at home, more imports may be bought. Firms are likely to buy more raw materials and capital goods, and some of these will come from abroad. Households will buy more products, and some of these will be imported. The rise in domestic demand may also encourage some domestic firms to switch from the foreign to the domestic market. If this does occur, exports will fall.
- **Foreign GDP.** If incomes abroad rise, foreigners will buy more products. This may enable the country to export more.
- **Trade restrictions.** A relaxation in trade restrictions abroad will make it easier for domestic firms to sell their products to other countries.

LINK

Chapter 37.4 Methods of protection

INDIVIDUAL ACTIVITY 2

One-quarter of the UK's exports to China are services. The country sells a range of services including private medical insurance, financial services and banking, construction services and private medical insurance. It does particularly well in business and financial services.

a What is meant by an export of services?

b Is demand for construction services in China likely to increase or decrease in the future? Explain your answer.

c Why may the UK be particularly good in producing financial services?

39.2 The causes of a current account deficit

The factors influencing changes in exports and imports give an indication as to what can cause a current account deficit. One is incomes at home and abroad. A deficit arising from low incomes abroad and/or high incomes at home can be referred to as a cyclical deficit.

A high exchange rate can also cause a current account deficit. This is because it will mean high export prices and low import prices. There may also be, what can be called, structural problems. These can include a problem with the products manufactured by firms in the country, costs incurred to produce them, prices at which they are sold and strategies adopted for marketing them. These can give rise to what is called a structural deficit. A current account deficit may also be the result of a deficit on primary income and/or secondary income.

INDIVIDUAL ACTIVITY 3

The UK's current account deficit widened between 2012 and 2016. This was largely due to changes in its primary income balance. This went from a surplus in 2012 to a deficit in 2013 and the deficit increased to 2016. The change in the primary income balance was due to a fall in investment income which makes up the vast majority of primary income. Investment income declined because the stock of assets held by the UK abroad fell relative to the stock of assets held by foreigners in the UK and because the rate of return the UK received on its assets abroad declined.

a Identify:

  i the three forms of investment income

  ii three examples of assets the UK may hold abroad.

b Explain what may have happened to the loans UK banks made to foreign firms and individuals and the rate of interest received between 2012 and 2016.

39.3 The consequences of a current account deficit

A current account deficit may mean that a country is consuming more goods and services than what it is producing. This is sometimes referred to as a 'country living beyond its means'. A current account deficit can also mean a reduction in inflationary pressure, as there will be a fall in aggregate demand.

A current account deficit does, however, mean that output and employment is lower than possible. If more goods and services were to be produced at home, more workers would be employed.

The significance of a current account deficit depends on its size, duration and cause. A small deficit that lasts for only a short time is unlikely to cause any problem. A deficit that has been caused by the import of raw materials and capital goods, changes in income (domestic and foreign) or a high exchange rate, is likely to be self-correcting over time (irrespective of its size). Imported raw materials and capital goods will be used to produce goods and services, some of which will be exported. Recessions abroad will not last and with a rise in incomes, the country can export more to foreign countries. A deficit on the current account will put downward pressure on the exchange rate. If it does fall, exports will become cheaper and imports will become more expensive – as a result a deficit may be eliminated.

A deficit may also be the result of more primary and secondary income leaving the country than entering it. This may reflect a booming economy, with foreign MNCs making high profits in the country and sending the profits back to their economies and migrant workers earning high wages and sending some of them home to their relatives.

A deficit arising due to a lack of international competitiveness is more serious. This is because it will not be self-correcting. If firms' costs of production are higher due to lower productivity or the quality of the products produced are poor or the products made are not in high world demand, the deficit may persist. In this case, government may have to introduce policies, particularly supply-side policies, to improve the country's trade performance.

Bringing in goods from abroad

INDIVIDUAL ACTIVITY 4

The USA has had a large and growing current account deficit since the 1990s, despite having a surplus on its trade in services balance.

a Identify:

i two possible causes of a current account deficit

ii a part of the current account other than trade in services.

b Explain one reason for the growing concern for the USA about its current account deficit.

39.4 The causes of a current account surplus

A current account surplus may arise for a number of reasons including:

- **A low exchange rate.** This will make export prices cheap and import prices expensive.
- **High quality of domestically produced products.** This will encourage foreign and domestic citizens to purchase the country's output.
- **High incomes abroad.** This will enable foreigners to buy a high volume of the country's exports.
- **Low costs of production.** This may make an economy's products internationally competitive.
- **High investment income earned abroad.** The economy's banks, firms and individuals may be earning more profits, interest and dividends in other economies than is earned by foreigners' assets in this economy.
- **The receipt of high workers' remittances.** The economy's workers working abroad may be sending more money home to relatives than foreign migrant workers are sending to their relatives.

39.5 The consequences of a current account surplus

An increase in a current account surplus will increase an economy's aggregate demand and so may lead to a rise in real GDP and higher employment. More money will enter the economy than will leave it and the higher aggregate demand may cause demand-pull inflation if the economy is operating close to full capacity. It also means that the country is consuming fewer products than it is producing.

If an economy is operating a floating exchange rate, an increase in a current account surplus may result in an appreciation in the exchange rate. This is because demand for the economy's currency will exceed its supply.

TIP

Find out the major trading partners of your country and the reasons for their importance.

GROUP ACTIVITY 2

India exports a range of products including fruit, meat, minerals, spices, IT services and wheat. It imports, among other items, capital goods, edible oils, gold, and silver. The table shows India's main trading partners in 2015.

Main export destinations	Main source of imports
a USA	**a** China
b UAE	**b** Saudi Arabia
c Hong Kong	**c** UAE
d China	**d** USA

a What proportion of the main countries that India exports to, also forms its main sources of imports?

b Explain two reasons for countries to buy spices from India.

39.6 Policies to achieve balance of payments stability

Over time, a government is likely to want to achieve balance of payments stability. It will not want to see large and persistent current account deficits or large and persistent current account surpluses. As mentioned above, a current account deficit reduces total demand. A current account surplus means that the people of the country are not consuming as many products as they could afford. To avoid large and persistent current account deficits or surpluses there are a number of policy measures a government can use.

Measures to correct a current account deficit

A government will seek to reduce a current account deficit by using policy measures designed to reduce imports and/or increase exports. It may try to do this directly by imposing import restrictions, subsidising exports and reducing the country's foreign exchange rate. It may also try to reduce imports and increase exports by introducing measures that will lower spending by the country's consumers. Such measures may include increasing income tax, raising the rate of interest and pushing up rates of indirect taxes. These measures may reduce imports and may give domestic firms a greater incentive to export as they may find it harder to sell at home.

To reduce the chances of a long run current account deficit, however, a government may decide to use supply-side policy measures. For instance, education and training may result in lower average costs of production and a rise in the quality of products produced. The government may find that supply-side policy is the most effective approach. This is because this policy has the potential to raise international competitiveness over a longer period of time. It may also avoid some of the disadvantages of the other measures including retaliation (import restrictions), inflation (a lower foreign exchange rate) and higher unemployment (an increase in income tax).

Measures to correct a current account surplus

If a government wants to reduce a current account surplus, there are a number of measures it could use. These are, essentially, the reverse of measures to reduce a current account deficit. It could revalue a fixed exchange rate or encourage an appreciation of a floating exchange rate. It could also enable households and firms to purchase more imports by making use of expansionary fiscal policy and monetary policy. For example, a cut in income tax would raise the disposable income of households. This would enable them to buy more goods and services, including imported goods and services.

Summary

You should know:

- The balance of payments is a record of a country's trade and investment with other countries.
- The current account covers trade in goods, trade in services, primary income and secondary income.
- A current account deficit means that expenditure on imports of goods and services, income and transfers received from abroad are greater than earnings from exports of goods and services, income and transfers received from abroad.
- International trade is the exchange of products across national boundaries.
- International trade may involve relatively long distances, may be with countries with different cultures and languages, may be in a different currency, may face trade restrictions and may involve more competition.
- Exports and imports are influenced by changes in the inflation rate, exchange rate, productivity, quality, marketing, income and trade restrictions.
- An increase in a current account deficit may be caused by a change in income at home or abroad, a change in the exchange rate or a change in international competitiveness.
- The significance of a current account deficit depends on its size, duration and cause. A deficit arising from a lack of international competitiveness is the most serious.
- A current account surplus may be caused by a low exchange rate, high quality of domestically produced products, high income abroad and low costs of production.
- An increase in a current account surplus will increase aggregate demand and may raise the exchange rate.
- A government can seek to improve the current account position by encouraging people to buy more domestic and fewer foreign products or by discouraging people from buying products in general. In the long run, supply-side policies are likely to be most effective.

Multiple choice questions

1 Which of the following is an import of a service into Indonesia?

A French firms selling insurance to Indonesian firms
B Indonesian citizens buying cars from the USA
C Indonesian firms buying land in Germany
D Tourists visiting Indonesia

2 Mexican firms sell more oil to the USA and buy more banking services from the UK. How do these changes affect the Mexican balance of payments?

	Trade in goods	Trade in services
A	improves	improves
B	improves	worsens
C	worsens	worsens
D	worsens	improves

3 Which of the following items is included in the current account of the balance of payments?

A The payment of interest on foreign loans

B The purchase of shares in foreign companies

C The sale of government bonds to foreign residents

D The setting up of a branch of a bank in a foreign country

4 Which of the following is most likely to reduce a deficit on the current account of the balance of payments?

A A fall in government expenditure on benefits

B A fall in income tax

C A rise in consumer confidence

D A rise in the value of the currency

Four-part question

a Define *primary income*. **(2)**

b Explain how a country could have a deficit on its primary income but a current account surplus. **(4)**

c Analyse how a rise in a country's inflation rate could move a current account surplus into a current account deficit. **(6)**

d Discuss whether or not an increase in a current account surplus will benefit an economy. **(8)**

Exam-style questions

Multiple choice questions

1 When does free trade occur?

A When exports are directly exchanged for imports without the use of money
B When exports are subsidised by governments
C When goods are transported free of any direct charge
D When there are no barriers placed on importing and exporting products

2 What is an advantage of international specialisation?

A Countries become more susceptible to external shocks
B Countries can spread their risks over a range of products
C There can be a more efficient use of resources
D Those countries with an absolute advantage can gain at the expense of those with an absolute disadvantage

3 What would increase a surplus on Namibia's balance of trade?

A European firms buying more food from Namibia
B European governments providing more foreign aid to Namibia
C Namibian firms selling more building materials in Namibia
D Namibian firms selling more insurance to other African countries

4 Which of the following is a credit item on Mexico's trade in services?

A earnings from the sale of Mexican food in Peru
B investment by Argentinean firms in Mexico
C revenue received from Mexican insurance policies sold in Chile
D the money Mexican tourists spend in the USA

5 What effect is the current account balance of a country, changing from a surplus to a deficit, likely to have on its exchange rate and its unemployment rate?

	Exchange rate	**Unemployment rate**
A	decreases	decreases
B	decreases	increases
C	increases	increases
D	increases	decreases

6 Why might a fall in the exchange rate increase the rate of inflation?

A it will reduce employment
B it will reduce a current account surplus
C it will increase the cost of imported raw materials
D it will increase the price of exports

7 The table shows four economic indicators for four economies.

Wvhich country appears to exhibit the best economic performance?

	Economic growth rate %	Inflation rate %	Unemployment rate %	Current account balance ($m)
Country W	8	6	10	+5000
Country X	5	4	8	–50 000
Country Y	3	2	3	–100
Country Z	1	–2	1	+100

A Country W

B Country X

C Country Y

D Country Z

8 A government increases tariffs on imports from its main trading partner. What is the likely consequence of this move?

A a fall in inflation

B a fall in trade barriers

C a rise in government revenue

D a rise in competitive pressures on domestic firms

9 Which of the following combinations of government measures would provide the maximum protection to the domestic car industry?

	Government subsidies to domestic producers	Tariffs on car imports
A	decrease	Increase
B	decrease	decrease
C	increase	decrease
D	increase	Increase

10 The table shows how a number of countries have altered tariffs and quotas on imports of TVs between 2009 and 2017. Which country had the greatest reduction in protection from TV imports in this period?

	Tariffs		Quotas	
	2009	2017	2009	2017
A	20%	15%	200 000	180 000
B	20%	25%	200 000	220 000
C	20%	25%	200 000	160 000
D	20%	15%	200 000	210 000

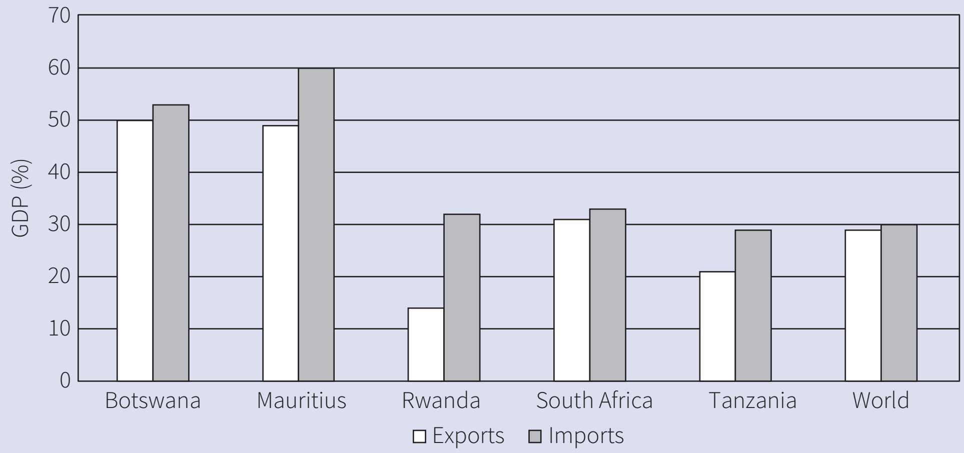
Data response questions

Carefully study the source material for each question, then answer Questions 1 and 2.

Source material: African countries become more open

African countries are becoming more open to international trade. Integration is increasing not only between the 54 countries of Africa, but with the wider world. Transport costs are decreasing, although they are still twice the global average. Tariffs and non-tariff barriers are also declining, but again, are higher than the global average.

The extent to which African countries are open to international trade and the extent to which their governments engage in protectionism varies. The chart shows five African countries' exports and imports as a percentage of GDP compared to the global average.



Exports and imports as a percentage of GDP of selected African countries and the world in 2015

The export of diamonds has been the main driver of Botswana's economic growth which has changed the country from one of the poorest countries in Africa to an upper-middle income country. Its heavy reliance on the export of diamonds makes it vulnerable to changes in the international market. In 2014 the economy grew by 3.2%, but in 2015 it contracted by 0.3%.

Mauritius and South Africa are also upper-middle income countries. Mauritius has a more diversified economy than Botswana. It produces a range of agricultural products, on a commercial basis, including sugar cane and potatoes and has growing financial and tourist industries. The government has reduced tariffs significantly, particularly those protecting inefficient industries, and now the country has one of the lowest average tariff rates in the world. South Africa is a relatively large economy which had a GDP of $330 billion in 2015. It uses a range of measures to restrict imports into the economy. For example, it makes widespread use of anti-dumping tariffs as well as quotas, product standards and delays at customs. It is debatable how these measures have influenced the country's international trade.

In 2015, as shown in the chart above, the country's exports were equivalent to 31% of its GDP while its imports were equivalent to 33% of GDP.

Rwanda and Tanzania are low income countries which produce mainly agricultural products. In Tanzania agriculture accounts for 25% of its output, 85% of the country's exports and 80% of its employment. Tanzania's economic growth has increased in recent years. Lower costs of production have increased the exports of a number of the country's products, including coffee. In Rwanda, a densely-populated country with poor infrastructure, 90% of the population are engaged in subsistence farming. They produce a number of agricultural products including potatoes and bananas.

1 Referring to the source material in your responses, answer all parts of Question 1.

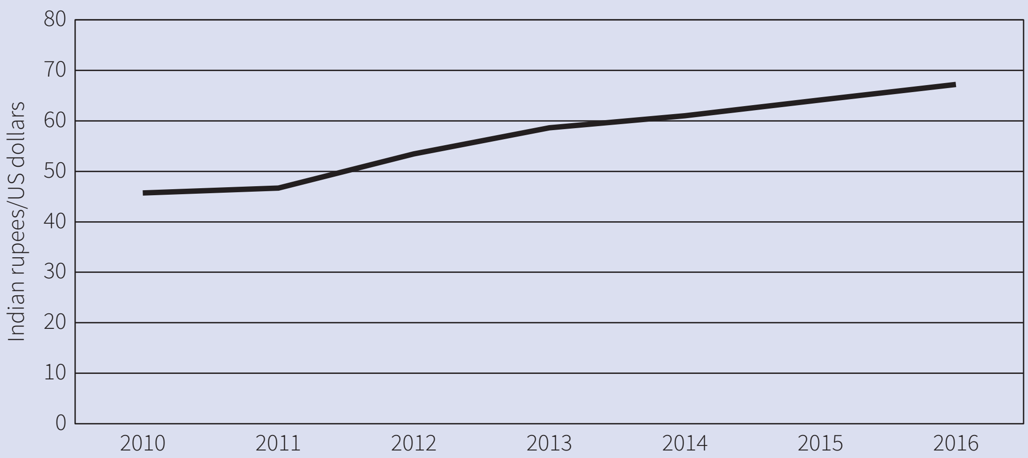
- **a** Identify a non-tariff. **(1)**
- **b** Calculate the value of South Africa's imports in 2015. **(2)**
- **c** Explain **one** piece of evidence of globalisation. **(2)**
- **d** Explain **one** possible disadvantage of specialisation. **(4)**
- **e** Analyse which African countries are the most open. **(4)**
- **f** Analyse whether Mauritius or Rwanda is likely to have exported more potatoes. **(5)**
- **g** Discuss whether or not a reduction in its cost of producing coffee, will always result in Tanzania exporting more coffee. **(6)**
- **h** Discuss whether or not the removal of a tariff protecting an inefficient industry would affect unemployment. **(6)**

Source material: Trade Links

Nigeria imports a vast range of products including food, freight transport, insurance and machinery. Its exports are dominated by oil. The product accounts for 10% of the country's output but 70% of government revenue and 75% of its export revenue. In 2015 the price of oil fell. This reduced government revenue. It also lowered the country's export revenue from N16 304bn in 2014 to N9729bn in 2015 and caused the current account to go into deficit. The country's imports of goods also fell but not by as much. They fell from N7374bn to N6698bn.

The change in the current account position had little impact on the country's exchange rate. This was because its central bank was preventing it changing from 315 naira to 1 dollar, a rate thought to be higher than the market price.

The fall in the price of Nigeria's oil had a beneficial impact on the Indian economy. India is the main destination of Nigeria's exports. While Nigeria's exchange rate was almost constant, India's exchange rate altered. The chart shows the exchange rate between the Indian rupee and the US dollar between 2010 and 2016.



Indian rupee/US dollar exchange rate, 2010–16

Although Nigeria normally has a current account surplus, India has had a current account deficit for some time. To reduce the current account deficit, the Indian government has been encouraging foreign MNCs to set up branches in the country. In 2014 the Indian prime minister urged foreign firms to 'come and make in India'.

The Indian government also tried to increase economic activity by cutting the rate of interest in 2015 and 2016. A reduction in the rate of interest can reduce a country's exchange rate and increase spending by consumers. These two changes can influence the current account balance in opposite directions.

2 Referring to the source material in your responses, answer all parts of Question 2.

- **a** Identify an item that would have appeared in Nigeria's trade in services. **(1)**
- **b** Calculate Nigeria's merchandise trade balance in 2015. **(2)**
- **c** Explain whether demand for Nigerian oil was elastic or inelastic in 2015. **(2)**
- **d** Explain what type of foreign exchange rate Nigeria was operating in 2015. **(2)**
- **e** Analyse what effect the change in India's foreign exchange rate would have had on the price of its exports to the USA and its imports from the USA. **(4)**
- **f** Analyse how a rise in consumer spending can cause a current account deficit. **(5)**
- **g** Discuss whether or not a fall in a country's rate of interest will reduce its foreign exchange rate. **(6)**
- **h** Discuss whether or not more MNCs setting up branches in India would be likely to reduce India's current account deficit. **(6)**

Four-part questions

1 Vietnam is becoming a more open economy. Its government is reducing the protection it gives to domestic industries and is signing more free trade deals. The economy is increasing the resources it devotes to making electrical and electronic products and these have become the country's top export earner.

- **a** Define *free trade*. **(2)**
- **b** Explain **two** methods of protection. **(4)**
- **c** Analyse how specialisation at national level can benefit the country's firms. **(6)**
- **d** Discuss whether or not a government should protect its industries from foreign competition. **(8)**

2 The Mexican peso depreciated by 13% against the US dollar in November 2016. Changes in the country's exchange rate can influence a country's balance on the current account of its balance of payments. The Mexican government was planning to cut its spending on education and training. Some economists suggested that this would increase the country's current account deficit.

- **a** Define a *foreign exchange rate*. **(2)**
- **b** Explain **two** causes of a depreciation in a foreign exchange rate. **(4)**
- **c** Analyse how a cut in spending on training and education could increase a deficit on the current account of the balance of payments. **(6)**
- **d** Discuss whether or not a depreciation in its foreign exchange rate will reduce a country's deficit on the current account of the balance of payments. **(8)**

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