State-owned enterprises

Indian Railways is the state-owned railway company of India, which owns and operates most of the country’s rail transport. In July 2011, the government announced plans to privatise Indian Railways in order to make it more efficient. The railway service is an important means of transport for people living in rural areas where there may be no road service and to carry freight to areas that can’t be reached by road. In Tamil Nadu, for example, the government of Tamil Nadu plans to make a high-speed rail link to connect Madurai, the state capital. This will help to connect Madurai with the rest of the state and create economic opportunities for the people living in Tamil Nadu. Some state-owned enterprises also have public policy objectives, including running the central bank, delivering essential public services such as electricity, water and sanitation or the provision of merit goods such as national parks and museums. Some state-owned enterprises also have public policy objectives, including running the central bank, delivering essential public services such as electricity, water and sanitation or the provision of merit goods such as national parks and museums. Some state-owned enterprises also have public policy objectives, including running the central bank, delivering essential public services such as electricity, water and sanitation or the provision of merit goods such as national parks and museums. Some state-owned enterprises also have public policy objectives, including running the central bank, delivering essential public services such as electricity, water and sanitation or the provision of merit goods such as national parks and museums. Some state-owned enterprises also have public policy objectives, including running the central bank, delivering essential public services such as electricity, water and sanitation or the provision of merit goods such as national parks and museums. Some state-owned enterprises also have public policy objectives, including running the central bank, delivering essential public services such as electricity, water and sanitation or the provision of merit goods such as national parks and museums.

Unlike private sector firms owned and run by private individuals, the two organisations above are owned and controlled by their governments. They are state-owned enterprises and therefore part of the public sector in the economies of Hong Kong and India.

A state-owned enterprise (SOE) is a firm or trading organisation that is wholly or partially owned and operated by a government primarily to carry out commercial activities in order to raise revenue and, in many cases, to make profits, such as a state-owned railway, postal service, power company or airline. Any profits made by state-owned enterprises will be reinvested in improving the goods or services they provide or be used by the government to fund other public sector spending. However, any losses made by these enterprises will have to be funded from taxes and other government revenue. 4.3.2.2

Some state-owned enterprises also have public policy objectives, including running the central bank, delivering essential public services such as electricity, water and sanitation or the provision of merit goods such as national parks and affordable health care. Governments will often pay subsidies to their state-owned enterprises to reduce the cost of providing essential services and support people on low incomes who may not otherwise be able to afford these. 4.3.1.2

### Assessment exercises

#### Multiple choice

1. What is the main reason why people trust notes and coins issued by the government or central banks in their country?
   - A. They are generally acceptable for trade and exchange
   - B. They are easy to carry and in adequate supply
   - C. They are backed by gold at the central bank
   - D. They are convertible into the US dollar or franc

2. The use of a mobile phone app to make payments from a bank account is an example of which function of money?
   - A. A means of deferred payment
   - B. A store of value
   - C. A medium of exchange
   - D. A unit of account

3. An example of a public policy objective of a state-owned enterprise is to
   - A. Make profits; such as a state-owned railway, postal service, power company or airline
   - B. Make money efficiently and to improve the goods or services they provide or be used by government to fund other public sector spending. However, any losses made by these enterprises will have to be funded from taxes and other government revenue
   - C. To generate profit from the provision of health care
   - D. To achieve targets set for them by the government

4. Which of the following statements is most likely to be correct?

5. What may cause an individual to increase their savings as a proportion of their current income?
   - A. A fall in the rate of interest paid by banks
   - B. A desire to increase current consumption
   - C. A belief that the prices of goods will rise in the future
   - D. A desire to increase current consumption

6. What shows the correct examples of income and wealth?

<table>
<thead>
<tr>
<th>Income</th>
<th>Wealth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wages</td>
<td>Retirement fund</td>
</tr>
<tr>
<td>Overtime payments</td>
<td>Stocks and shares</td>
</tr>
<tr>
<td>Self-employment income</td>
<td>Bonds</td>
</tr>
<tr>
<td>Dividends</td>
<td>Bank savings</td>
</tr>
<tr>
<td>Social benefits</td>
<td>Retirement fund</td>
</tr>
<tr>
<td>Rent from letting</td>
<td>Shares</td>
</tr>
<tr>
<td>Profit from sales</td>
<td>Retirement fund</td>
</tr>
</tbody>
</table>

7. Why might a period of rapid inflation combined with low interest rates be of concern for a consumer?
   - A. Because the consumer lives on a pension linked to the consumer price index
   - B. Because the consumer needs to draw from savings to pay monthly fixed costs
   - C. Because the consumer pays a fixed rent for their accommodation
   - D. Because the consumer has a large bank loan to repay
In this unit

3.5.1 Classification of firms
- The advantages and disadvantages of small firms, the challenges facing them and reasons for their existence.

3.5.2 Small firms
- Internal growth in the size of firms, for example through increased market share, and external growth, for example through mergers.

3.5.3 Causes and forms of the growth of firms
- Examples, advantages and disadvantages of different types of mergers: horizontal, vertical and conglomerate.

3.5.4 Mergers
- How internal and external economies of scale and diseconomies of scale can affect a firm or an entire industry as the scale of production changes.

3.5.5 Economies and diseconomies of scale

AIMS
SECTION 3.5.1

What is a firm?

Human effort and natural and manmade resources are needed to produce goods and services. However, these resources alone will not produce goods and services that satisfy human needs and wants. For example, simply buying some wood and other materials and hiring a group of people to work together in a factory will not result in the production of tables and chairs. Production will only take place if resources are properly organized and financed and important decisions taken to manage and control what they produce from day to day. These decisions are taken within firms. ➤ 1.2.1

Resources are combined and organized into firms to carry out productive activities. Firms are therefore important decision makers within any economy. Decisions taken within firms by the entrepreneurs and managers who own, finance or run them will determine how scarce resources are allocated and used and therefore what goods and services are produced, how they are produced and who they are produced for. ➤ 2.2.1

Different types of firm

There are many different types of firms in a modern, mixed economy. Therefore, in order to identify and compare different types of firms and how they behave, economists classify or group them together according to common characteristics. For example, economists will distinguish between different firms according to

- the industrial sector in which they operate;
- whether they are privately owned, financed and controlled in the private sector, or state-owned enterprises in the public sector; and
- their size or scale of production.

Classifying firms into different industrial sectors

Decisions taken by firms in an economy about what and how to produce will result in scarce resources being allocated to different productive activities often located in different areas or regions of that economy. Economists therefore group or classify similar productive activities together into different economic sectors.

An economic sector may also be referred to as an industrial sector. An industry or industrial sector contains firms that use similar production processes and specialize in the production of a similar range of products. An industry will include small, local firms employing very few workers and large, national or even multinational firms employing many thousands of workers and selling products all over the world. ➤ 6.2.2

For example, the automotive manufacturing industry consists of all firms making and supplying vehicles and engines, tyres, body parts and components. Similarly, the air transport industry includes all firms providing air passenger and airfreight transport services and facilities, including airports and airlines.

Most national economies will have a variety of different industries or industrial sectors. In turn, each industry can be classified into one of three broad economic sectors: the primary sector, secondary sector or tertiary sector.

The primary sector

Firms in industries within the primary sector of an economy specialize in the production or extraction of natural resources by growing crops, managing forests, mining coal and other minerals, and extracting oils and gases. The production or extraction of natural resources is often the first stage of production for most goods and services. ➤ 3.4.5

Primary sector industries

- Crop and animal production
- Forestry and logging
- Fishing
- Mining
- Quarrying
- Oil and gas extraction

The secondary sector

Firms within industries in the secondary sector of an economy will use unprocessed natural resources and other unfinished products to make other goods. This process is called manufacturing. For example, oil is used to make plastics, glass is made from sand, and paper is made from pulped wood. Many electrical products are made from metals and plastics.

Construction firms using materials to build homes, offices, roads and other infrastructure, and firms processing oil, gas and other fuels to supply electricity, are also part of the secondary sector of an economy.

Some secondary sector industries

- Food processing
- Textiles
- Paper, pulp and paperboard
- Chemicals
- Oil and gas refining
- Pharmaceuticals
- Rubber and plastic products
- Fabricated metals
- Computer, electronic and optical products
- Water collection, treatment and supply
- Electric power generation, transmission and distribution
- Construction

The tertiary sector

Firms within industries that provide services are part of the tertiary sector or services sector in an economy. The distribution and sale of manufactured goods and the provision of services to consumers is the final stage in their production. Firms in the wholesale and retailing industries specialize in these activities.
Most firms are owned and financed by private individuals. Most aim to generate more revenue from their productive activities than their costs so that they earn a surplus or profit. ➤ 3.7.5

Privately owned firms are part of the private sector in an economy and can take many different legal or organizational forms according to how they are owned, controlled and financed. ➤ 2.11.1

For example, a sole trader or sole proprietorship is a business organization owned, controlled and financed by one person. The owner receives any profits but is also personally liable for any debts left by the business in the event it fails. Most sole traders are small firms, but they are also the most popular type of firm in the world because they are easy to set up.

In contrast, public limited companies are some of the biggest firms in the world. They can finance their operations from the sale of shares to investors through a stock exchange. A public limited company is therefore owned by its shareholders and any profits made by the company will belong to them. They will also appoint a board of directors to manage their company.

While it is useful to know some of the main differences between these and other types of firm in the private sector of an economy, you will not need to learn about them in any detail.

### Types of firm or business organizations in the private sector

<table>
<thead>
<tr>
<th>Legal form</th>
<th>Ownership</th>
<th>Control</th>
<th>Main sources of finance</th>
<th>Distribution of profits (or surplus)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sole trader</td>
<td>Owned by one person</td>
<td>The owner is the main decision maker</td>
<td>The owner’s personal savings</td>
<td>The owner receives any profits but is also personally liable for any business debts</td>
</tr>
<tr>
<td>Joint-stock or limited company</td>
<td>A company is owned by one or more shareholders</td>
<td>A company will be managed by one or more directors appointed by its shareholders</td>
<td>A company is financed by the sale of shares to shareholders</td>
<td>Any profit made by a company belongs to its shareholders</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>A private limited company can only sell shares to private individuals</td>
<td>Shareholders are not personally liable to repay any company debts</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>A public limited company can sell shares publicly through a stock exchange</td>
<td></td>
</tr>
<tr>
<td>Cooperative</td>
<td>A cooperative is owned by its members</td>
<td>A cooperative is managed by a board of directors appointed by its members</td>
<td>From membership fees and drawing on reserves</td>
<td>Members receive any surplus revenue that is not added to reserves</td>
</tr>
<tr>
<td>Charity</td>
<td>A charity can be set up and registered by a private individual or another organization to provide beneficial services for public benefit, but it cannot be owned</td>
<td>A charity is run by a board of trustees</td>
<td>Gifts and donations from people and organizations</td>
<td>Charities do not aim to make a profit. Any surplus income left over after costs have been deducted will be reinvested in the charity to fund the services it provides</td>
</tr>
</tbody>
</table>

### Some tertiary sector industries

- Wholesaling, retailing and repairs
- Transportation and storage
- Accommodation and food services
- Publishing and broadcasting
- Telecommunications
- Banking and insurance
- Real estate
- Public administration
- Defence services
- Education
- Arts and entertainment
- Health care
- Legal services

### ACTIVITY 3.15

Which stage of production?

1. Under three column headings sort the following list of industries into primary, secondary and tertiary industries.

<table>
<thead>
<tr>
<th>Television</th>
<th>Broadcasting</th>
<th>Health service</th>
<th>Advertising</th>
</tr>
</thead>
<tbody>
<tr>
<td>Film making</td>
<td>Farming</td>
<td>Universities</td>
<td>Motor cars</td>
</tr>
<tr>
<td>Shipping</td>
<td>Furniture</td>
<td>Mining</td>
<td>Engineering</td>
</tr>
<tr>
<td>Decorating</td>
<td>Hotels</td>
<td>Retailing</td>
<td>Restaurants</td>
</tr>
</tbody>
</table>

### However, there are many businesses providing services that are used at every stage of production, such as banking, insurance and transport. Some firms also provide personal services such as hairdressing, decorating, health care and personal training.

Every economy can be divided up into a primary, secondary and tertiary sector. However, in some economies more firms and more resources are engaged in primary sector activities than other productive activities. In contrast, other, usually more advanced or developed economies allocate far more resources to secondary and tertiary sector activities than to primary sector activities.

The relative size of the primary, secondary and tertiary sectors in an economy, measured by the number and size of firms in each sector, the amount of resources they employ and the amount they produce, therefore provides a useful indicator of how developed an economy is. ➤ 5.4.1
State-owned enterprises

Indian Railways is the state-owned railway company of India, which owns and operates most of the country’s rail transport. Each year the government allocates Indian Railways a budget to operate rail services and to invest in the new and replacement tracks and rolling stock it needs. Pradeep Verma, a regional manager, explained that all the railway managers are accountable to the Indian Parliament. ‘We are entrusted with managing money efficiently’ he said, ‘and to meet performance targets for punctuality, safety, passenger and freight traffic and more.’

‘Ticket prices are kept low to enable people on low incomes to use the rail service and to carry freight to rural areas where there may be no other way of getting goods to people who need them. However, the company is still expected to generate an operating surplus or profit each year for the government.’

Unlike private sector firms owned and run by private individuals, the two organizations above are owned and controlled by their governments. They are state-owned enterprises and therefore part of the public sector in the economies of Hong Kong and India.

A state-owned enterprise (SOE) is a firm or trading organization that is wholly or partially owned and operated by a government primarily to carry out commercial activities in order to earn revenues and, in many cases, to make profits; such as a state-owned railway, postal service, power company or airline. Any profits made by state-owned enterprises will be reinvested in improving the goods or services they provide or be used by government to fund other public sector spending. However, any losses made by these enterprises will have to be funded from taxes and other government revenues. ➤ 4.3.2

Some state-owned enterprises also have public policy objectives, including running the central bank, delivering essential public services such electricity and sanitation or the provision of merit goods such as national parks and affordable health care. Governments will often pay subsidies to their state-owned enterprises to reduce the cost of providing essential services and merit goods to people on low incomes who may not otherwise be able to afford them. ➤ 2.11.2

Why are some industries nationalized?

- Nationalization is carried out to control large powerful firms, especially those providing essential services for consumers such as electricity, gas and water supplies.
- Some industries are nationalized to protect employment in large firms which may be forced to close down by private sector owners if they fail to make a profit.
- Nationalization can be carried out for national security. For example, some industries such as nuclear energy are thought to be too dangerous to be controlled by private entrepreneurs.
- Some industries are nationalized because they are considered too important to the economy in terms of national output and income to be under private sector control.
- Some industries are nationalized to protect public services. Nationalized industries can continue to provide essential services even if they make a loss, such as many postal and rail services in rural areas.
- Nationalization may be carried out for political reasons. The governments of some countries believe they should control the vast majority of resources and industries rather than the private sector.

Many state-owned enterprises have been created through a process called nationalization. This occurs when a government takes over the ownership of private sector organizations, for example through the compulsory purchase of all the shares in a private or public limited company.

Nationalization therefore allows a government to take control of large firms or even entire industries for political, social or economic reasons. Nationalized industries are industries owned and controlled by government.
There are many examples of nationalized industries around the world. For example, the US government owns Amtrak, the national passenger train operator, and the United States Postal Service.

The oil and gas industries in many countries including Libya, Kuwait, Mexico, Nigeria, Saudi Arabia and Venezuela are also nationalized.

Many banks across many different countries were also taken into public ownership during the banking crisis and global economic recession in 2008 to stop them failing.

There are a number of ways to measure and compare the size of firms: while others remain small. Other clues about the reasons why some firms grow into very large organizations can come from their size. Firms can be measured in a number of ways and these also provide useful clues about the reasons why some firms grow into very large organizations. The size of enterprises or small and medium-sized enterprises (SMEs). The size of firms can be measured in a number of ways and these also provide useful clues about the reasons why some firms grow into very large organizations while others remain small.

There are a number of ways to measure and compare the size of firms:

- how many workers they employ
- how they are organized
- how much capital they employ
- their market share.

Wal-Mart Stores is one of the world’s largest business organizations employing some 2.3 million people worldwide and with over $200 billion invested in buildings, computers, vehicles, forklift trucks and other capital assets.

The Toyota Motor Group also ranks as one of the world’s largest firms. It employs 348,877 people worldwide but has assets worth over $400 billion. So does this make Toyota a smaller or larger firm than Wal-Mart?

Of course both these giant organizations are huge compared to the many millions of other firms worldwide that serve small local markets, employ very few workers and have few capital assets.

It is useful to group firms together according to whether they are large enterprises or small and medium-sized enterprises (SMEs). The size of firms can be measured in a number of ways and these also provide useful clues about the reasons why some firms grow into very large organizations while others remain small.

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Local government authorities may also own and control trading enterprises.

In addition to the national or central government in a country, local government authorities may also operate public sector enterprises selling services to direct consumers. These may include local theatres, libraries, children’s nurseries and swimming pools. Many of these services may be run at a loss or will at least be expected to cover their costs with their revenues. However, some may be able to set their prices or charges at a level that will earn a profit.

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- how many workers they employ
- how they are organized
- how much capital they employ
- their market share.

Measure 1: number of employees

This is a straightforward measure. Firms with less than 50 employees are often classed as small, while a micro-enterprise is generally defined as a small firm employing nine or fewer people.

However, just counting the number of employees a firm employs can be misleading. This is because some large firms are capital intensive and employ relatively few workers. Instead they use a lot of machinery and computer-controlled equipment to automate their production processes in order to mass-produce large quantities of output. > 3.6.3

Measure 2: organization

Larger firms are often divided up into different departments specializing in particular functions, such as purchasing, sales and marketing, finance and production. In smaller firms the owners and employees tend to carry out all the various functions between them. Larger firms may also have many different layers of management and different offices, factories and/or retail outlets spread across different locations, and in different countries if the firm is a multinational. The size of an organization can therefore be judged by how it is organized internally.

Measure 3: capital employed

Capital employed is money invested in those productive assets in a firm that help it generate revenue. They are assets used to produce and sell goods and services. > 3.7.3

Assets used in production include machinery, factory and office buildings, stocks of materials and components and money held by a firm to pay wages and other costs.

The more capital employed in a firm, the more it can produce and therefore the greater its size or scale of production. However, some large firms may be labour intensive. This means their production process requires the employment of a lot of workers but relatively little capital.

Measure 4: market share

The market for any good or service consists of all those consumers willing and able to buy it no matter where they might be located. > 2.2.1

The size of the market for a good or service is measured by the total amount spent by consumers on that product per week, month or year. The bigger the market demand for a particular good or service, the more scope there is for firms supplying that market to increase their scale of production. The share of the total market sales any one firm is able to capture is its market share.

The market share of a firm measures the proportion of total sales revenue or turnover that is attributable to that firm. For example, the global market for carbonated soft drinks was worth an estimated $342 billion in 2015. The market is dominated by the Coca-Cola Company. Its share of the global market was 48.6%. In comparison, its major rival, PepsiCo, captured only 20.5% of the total market.

But not all markets are so large. For example, a local hairdressing salon may be a very small business in terms of the number of people and amount of capital equipment it employs, but it may have a very large share of the local market it serves because it is the only salon in a town where most local people can have their hair cut and styled.
**Labour diseconomies**

It is harder for senior managers to stay in day-to-day contact with employees in large firms that employ many hundreds or thousands of workers. Production is also automated in many large firms using computer-controlled equipment and machines. As a result, workers in large firms may feel their ideas and skills are not valued by their managers. This can reduce their motivation with damaging consequences for output and quality. Labour disputes, including strikes, may occur if workers feel they are not being consulted or treated fairly.

**Supply constraints**

Some very large firms may need vast quantities of materials, components or power for production. They may have to pay much more to obtain the supplies they need and they may also experience shortages that can hold up production.

**Skill shortages**

Some large firms may be unable to attract enough workers with the right skills. They may have to spend more money on training their workers and increasing their wages to ensure that they do not leave to take jobs in other firms.

**Regulatory risks**

Some firms grow so large that smaller firms are unable to compete with them. As a result they can dominate the market supply of a product and control its market price. Large firms with dominant market positions in an economy may attract the attention of the government. It may introduce laws and regulations that control the prices charged by large firms and the quality of the services they provide. The need to understand and comply with regulations will increase running costs in the affected firms. 

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**What evidence is there in these articles that large firms enjoy lower average costs than smaller firms producing the same or similar products?**

The answer to this question is yes. This is exactly what happened when Mozambique’s Mozal aluminium smelter wanted to expand its operations and increase output but was unable to do so because of a shortage of electricity in the country.

Similarly, the global US coffee shop chain Starbucks had to sell off 600 stores in the USA in 2008 because coffee sales and the value of the properties the business owned were falling. The business had expanded significantly in the 1990s and invested a lot of money in business properties. The fall in property prices and consumer spending during the economic downturn in 2008 had a big impact on the business. Starbucks also closed 61 of its 85 shops in Australia due to weak sales. The business had failed to attract consumers away from established cafés and coffee bars in Australia’s main cities.

Many firms can experience costly problems if they grow too large. **Diseconomies of scale** occur when a business grows so large that its average costs rise. They include the following:

1. **Management diseconomies**

   Controlling and coordinating production in a large firm can be difficult, especially if it produces and sells a wide variety of products in many different locations. A large firm can have thousands of employees and many different layers of management. This can cause communication problems and disagreements between managers at different levels in different parts of a firm.

2. **Labour diseconomies**

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18. Firms are unable to grow their scale of production  (4,3)
17. The merger of many smaller firms into much larger ones  (7,4)
16. The time period in economics in which all factors of production can be varied within firms in order to change their scale of production  (4,3)
15. The merger of many smaller firms into much larger ones. It reduces the number of firms competing within an industry  (13)
14. Firms unable to grow their scale of production in this time period economics because capital is a fixed factor of production and cannot be varied  (5,3)
13. The percentage of the total market sales of a product that is earned by a particular firm in the same industry combine to form a larger, more diversified enterprise  (12,6)
12. The smallest type of firm with nine or fewer employees  (5,10)
11. Firms in this sector of an economy produce natural resources  (7,6)
10. The central bank loans money to small firms. The need to understand and comply with regulations will attract the attention of the government. It may introduce laws and regulations that alter the market price. Large firms with dominant market positions in an economy may be consulted or treated fairly. Some large firms may be unable to attract enough workers with the right skills. They may have to spend more money on training their workers and ideas and skills are not valued by their managers. This can reduce their motivation with damaging consequences for output and quality. Labour diseconomies  (3,8.2)
9. Why might a period of rapid inflation combined with low interest rates be of concern for a consumer? A desire to increase current consumption. Why might a period of rapid inflation combined with low interest rates be of concern for a consumer? A desire to increase current consumption. Karimah will find it easier than Akram to increase running costs in the affected firms. Because the consumer has a large bank loan to repay. Some firms grow so large that smaller firms are unable to compete with them. Some large firms may be unable to attract enough workers with the right skills. They may have to spend more money on training their workers and ideas and skills are not valued by their managers. This can reduce their motivation with damaging consequences for output and quality. Labour diseconomies  (3,8.2)
8. A strategy that involves a firm expanding its range of products and the markets it supplies to expand its customer base, reduce market risks and increase sales. This type of long run growth in firm size occurs without merger as a firm expands its own scale of production through investments in new capital and technology  (12,6)
7. What shows the correct examples of income and wealth? Karimah works part-time in a local supermarket. She lives with her parents in a small house. She earns a lower disposable income than Akram. Which of the following statements is least likely to be correct? Karimah will find it easier than Akram to increase running costs in the affected firms. Because the consumer has a large bank loan to repay. Some firms grow so large that smaller firms are unable to compete with them. Some large firms may be unable to attract enough workers with the right skills. They may have to spend more money on training their workers and ideas and skills are not valued by their managers. This can reduce their motivation with damaging consequences for output and quality. Labour diseconomies  (3,8.2)
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5. Firms in this sector of an economy process natural and manmade materials and components to manufacture or construct other goods  (9,8)
4. The type of long run growth in the size of firms that occurs as they combine or merge their operations  (8)
3. This occurs when two or more firms producing the same or similar products in the same industry combine to form a larger enterprise with an increased market share  (10,5)
2. These occur when a firm grows too large and as a result its average costs rise  (12,2,5)
1. Cost advantages gained from increasing the scale of production within a firm. They reduce the average cost of producing or selling each item  (9,3,2,5)

**Assessment exercises**

**Multiple choice**

1. What is the usual reason why people trust notes and coins issued by the government or central bank in their country? A They are generally acceptable for trade and exchange. B They are easy to carry and in infinite supply. C They are backed by gold at the central bank. D They are convertible into the US dollar or Euro.
2. The use of a mobile phone app to make payments from a bank account is an example of which function of money? A A store of value or wealth. B A unit of account. C A means of deferred payment. D A medium of exchange.
3. A key function of money is to be a measure of value. What does this mean? A It is used to compare the worth of different goods. B It is used to enable monthly payments for expensive goods. C It is used to pay the price of a good. D It is used for future savings.
4. Which of the following statements about different banks in an economy is correct? A The central bank determines the tax and spending policies of the government. B The central bank loans money to small businesses and members of the public. C Commercial banks hold the gold and foreign currency reserves of the government. D Commercial banks settle debts by clearing customers’ cheques and debit card payments.
5. Which one of the following types of household is most likely to spend the highest proportion of its disposable income? A High income, middle-aged with no children. B Low income, young single parent with young children. C Middle income, young single person with no children. D High income, middle-aged couple with two grown-up children.

**Income/Wealth**

<table>
<thead>
<tr>
<th>Income</th>
<th>Wealth</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Annual salary</td>
<td>Dividends from shares</td>
</tr>
<tr>
<td>B Wages</td>
<td>Overtime payments</td>
</tr>
<tr>
<td>C Dividends from shares</td>
<td>Rent from letting a house</td>
</tr>
<tr>
<td>D Rent from letting a house</td>
<td>Shares</td>
</tr>
</tbody>
</table>
10 In the diagram, D1D1 and S1S1 represent the demand for, and the supply of, labour to the hotels and restaurants sector. W indicates the legal minimum wage.

An increase in migrant labour causes the labour supply curve to shift from $S1S1$ to $S2S2$.

11 In which occupations do wages tend to be lowest?
A. In those where there is an excess supply of labour.
B. In those where the work is dangerous.
C. In those where employees are paid an annual salary.
D. In those where employees need advanced educational qualifications.

12 Why might manufacturing workers have higher wage rates than agricultural workers?
A. Manufacturing workers are in greater supply.
B. Manufacturing workers face fewer health and safety risks.
C. Manufacturing workers have better working conditions.
D. Manufacturing workers use more productive equipment.

13 Which of the following is most likely to limit increases in wages in an industry?
A. An increase in profits in the industry.
B. An increase in consumer demand for the industry's products.
C. An increase in the wages of workers with similar jobs.
D. An increase in the substitution of labour in production processes by robots.

14 The table shows how the average weekly earnings of four workers (A to D) changed between ages 16 and 64.

<table>
<thead>
<tr>
<th>Age</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td>$600</td>
<td>$900</td>
<td>$600</td>
<td>$600</td>
</tr>
<tr>
<td>35</td>
<td>$600</td>
<td>$800</td>
<td>$700</td>
<td>$600</td>
</tr>
<tr>
<td>49</td>
<td>$600</td>
<td>$700</td>
<td>$800</td>
<td>$700</td>
</tr>
<tr>
<td>64</td>
<td>$600</td>
<td>$700</td>
<td>$800</td>
<td>$900</td>
</tr>
</tbody>
</table>

Which row is most likely to represent the change in the weekly earnings of an unskilled, manual labourer over time?
A. A
B. B
C. C
D. D

15 What might be a disadvantage to a trade union in discussions with the owners of a firm to increase the pay of its members?
A. An increase in imports of a cheaper, similar product.
B. The closure of a training centre resulting in fewer skilled workers.
C. Increasing consumer demand for the firm's products.
D. The development of new techniques that increase productivity.

16 A manufacturer of sports equipment expands by merging with a sports retail chain. What type of merger does this describe?
A. forward vertical
B. conglomerate
C. backward vertical
D. horizontal.

17 Which type of economy of scale will benefit a firm producing a range of different products?
A. buying
B. financial
C. risk-bearing
D. technical.

18 India is experiencing rapid growth in air travel. The number and size of airlines is increasing every year. Which effect arising from this growth is an external economy of scale?
A. Banks offer low-cost credit facilities to large airlines.
B. Fuel suppliers charge lower prices to airlines that buy in bulk.
C. Colleges are established to train flight crew.
D. Larger airlines operate aircraft which can carry more passengers.

19 Which change must occur when a firm starts to experience diseconomies of scale?
A. Average costs begin to rise.
B. Average revenue falls.
C. Total fixed costs increase.
D. Total variable costs rise.

20 How can a firm guarantee that it earns a maximum profit?
A. By maximizing its prices.
B. By minimizing the difference between average revenue and average cost.
C. By maximizing the number of items it sells.
D. By minimizing the difference between its total revenue and total cost.

21 A firm produced 4,000 cars each month and employed 100 workers. A fall in demand caused the firm to cut output to 3,200 cars a week and its workforce to 64. What was the percentage change in the firm's labour productivity?
A. It fell by 20%.
B. It fell by 25%.
C. It increased by 20%.
D. It increased by 25%.

22 Some worker cooperatives in the agricultural sector have changed from using labour-intensive methods of production to capital-intensive methods. What might be the cause of this change?
A. Some agricultural land has been sold for housing.
B. Farming equipment has become more efficient.
C. People are eating less food for health reasons.
D. Average productivity of agricultural workers has increased.

23 A firm's total variable cost is $3,000 when it produces 1,000 units each week and its total fixed cost is $27,000. What is the average cost of producing each unit of output?
A. $3
B. $27
C. $30
D. $300

24 The table shows a firm's average revenue and average cost. What level of output, A, B, C or D, will maximize its profit?

<table>
<thead>
<tr>
<th>Output (units)</th>
<th>Average revenue ($)</th>
<th>Average cost ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>10</td>
<td>40</td>
</tr>
<tr>
<td>B</td>
<td>25</td>
<td>52</td>
</tr>
<tr>
<td>C</td>
<td>30</td>
<td>55</td>
</tr>
<tr>
<td>D</td>
<td>35</td>
<td>62</td>
</tr>
</tbody>
</table>

25 The diagram shows the costs of a firm.

The firm is currently producing 20 units per day. What are the firm's total fixed costs at this level of output?
A. $1,000
B. $2,000
C. $10,000
D. $12,000

26 A firm intends to expand its scale of production by investing in additional factory space and machinery. What immediate impact will this decision have on its costs?
A. Total variable costs will rise.
B. Total fixed costs will rise.
C. Total cost will be unchanged.
D. Average costs will rise.

27 Why are firms in perfect competition price takers?
A. They have no information about market price.
B. They are unable to influence market equilibrium.
C. There are no barriers to entry.
D. There are only a few firms in the industry.

28 What exists in perfect competition but not in monopoly?
A. barriers to entry
B. economies of scale
Microeconomic decision makers

Structured questions

1 During 2017 and 2018, Irish airline Ryanair had to cancel thousands of flights to and from many European destinations. Ryanair blamed the cancellations on a combination of air traffic control delays and strikes, bad weather and shortages of pilots and cabin crew due to increased annual leave allocations.

(a) What is the principle of profit maximization? [2]

(b) Explain the difference between a fixed cost and a variable cost. [4]

(c) Analyse what might have happened to the level of profits for Ryanair as a result of the problems stated. [6]

(d) Discuss whether the cancellation of a flight would have affected the fixed and variable costs of Ryanair. [8]

29 Prices tend to be lower in a competitive industry than in a monopoly. Why is this?

A Profits are lower in a monopoly.
B A monopoly is a price taker.
C Competitive industry has more economies of scale.
D New firms are free to enter the competitive industry.

30 What is a possible advantage to the consumer of a monopoly supplier in a market?

A Its average production costs will be lower than if there were many suppliers.
B Its profits will be higher than if there were many suppliers.
C It is able to restrict competition.
D It can determine the market price.

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<td>Workbook Late 2018</td>
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