Edexcel

IGCSE

Economics

CODE: (4EC1)

Section 1.2

Business economics

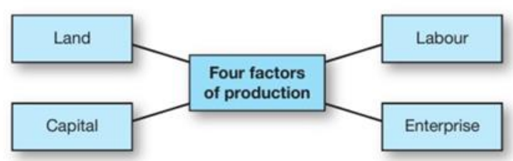
Chapter 14

The factors of production and sectors of the economy

What is production?

Production is a process that involves converting resources into goods or services. These goods and services are provided to satisfy the needs and wants of people.

Economists put these resources into different categories called the four factors of production. These are summarised in Figure 14.1.



▲ **Figure 14.1** Four factors of production

SUBJECT VOCABULARY

factors of production resources used to produce goods and services, which include land, labour, capital and enterprise

production process that involves converting resources into goods or services

LAND

Businesses often require a plot of land on which to locate or operate their premises. However, land also includes natural resources, such as coal, oil, iron ore, rainwater, forests, rivers, and fertile soil.

■Some of the land resources used by businesses are non-renewable. This means that once they have been used they cannot be replaced.

■Renewable land resources are those like fish, forests and water, which are replaced by nature. These resources should not run out but there is a risk that if some of them are not protected or over exploited they could disappear.

LABOUR

Labour is the workforce in the economy. Manual workers, skilled workers and managers are all members of a nation's workforce. The quality of individual workers will vary considerably. Each worker is unique, possessing a different set of abilities, characteristics, skills, knowledge, intelligence and emotions. The value of an individual worker to a business is their **human capital.**

CAPITAL

Capital is often said to be an artificial resource because it is made by labour. There are two types of capital.

■ **Working capital or circulating capital**, which refers to stocks of raw materials and components that will be used up in production. It also includes stocks of finished goods that are waiting to be sold. Retailers such as supermarkets and chain stores often hold large quantities of stocks.

■ **Fixed capital**, which refers to the factories, offices, shops, machines, tools, equipment and furniture used in production. It is fixed because it will not be converted into a final product. Fixed capital is used in production to convert working capital into goods and services.

ENTERPRISE

Entrepreneurs play a special role in the economy. They are responsible for setting up and running businesses. Without them production would not take place. But what exactly do entrepreneurs do?

■**They come up with a business idea**: This might involve the production of a completely new product. However, this is unusual. Most new businesses supply goods or services that are currently produced by others. That said, an entrepreneur might feel that there is a gap in the market for a slightly different product, or that it is possible to supply the same product more effectively.

■**They are business owners**: They usually provide some money to help set up a business and are responsible for its direction

■ **Entrepreneurs are risk-takers**: However, if the business is successful, they may make a lot of profit. But when they start up, they do not know what will happen - they are taking a risk.

■ **Entrepreneurs are responsible for organising the other three factors of production:** They have to buy and hire other resources such as raw materials, tools, equipment and labour. Entrepreneurs need to use a range of skills such as decision making, people management, time management and financial judgement to organise production factors effectively.

SUBJECT VOCABULARY

human capital value of the workforce or an individual worker
labour people used on production
working capital or circulating capital resources used up in production such as raw materials and components

SUBJECT VOCABULARY

fixed capital stock of 'man-made' resources, such as machines and tools, used to help make goods and services
entrepreneurs individuals who organise the other factors of production and risk their own money in a business venture

Labour - and capital – intensive production

Labour intensive production involves firms using more labour than capital, such as in China where labour is cheap. Services are also labour intensive. **Capital intensive** production, on the other hand, involves firms using more capital than labour, such as in Western economies, where labour management is more challenging.

SUBJECT VOCABULARY

capital intensive production that relies more heavily on machinery relative to labour
labour intensive production that relies more heavily on labour relative to machinery

Primary sector

The economy is divided into sectors, with developed countries like the USA and Germany primarily focusing on services like fitness centers, insurance brokers, and retailers, while China has many manufacturers and agricultural goods production.

■ Agriculture involves a range of farming activities. It is probably the most important primary sector activity for most countries. Most agriculture is concerned with food production.

■Fishing involves netting, trapping, angling and trawling fish. It also includes catching or gathering other types of seafood, such as mussels, prawns, lobsters, crabs, scallops and oysters. China is the world's largest fish producer.

■Forestry involves managing forests to provide timber for wood products. Modern forestry also involves protecting the natural environment, providing access and facilities to the public and managing areas for wildlife.

■Mining and quarrying involve the extraction of raw materials such as coal, iron ore, copper, tin, salt and limestone from the ground. This sector also includes the extraction of oil and gas.

Secondary sector

In the **secondary sector**, business activity involves converting raw materials into finished or semi-finished goods. All of manufacturing, processing and construction lie within this sector.

Examples of semi-finished goods might include the parts used in **assembly plants** to make motor cars such as steering wheels, car seats, brakes, light fittings, engines, electric cables, switching mechanisms and exhaust systems.

SUBJECT VOCABULARY

assembly plants factory where parts are put together to make a final product

secondary sector/industry production involving the processing of raw materials into finished and semi-finished goods

In many developed countries, the secondary sector has declined in recent years. This is discussed in more detail below.

Tertiary sector

SUBJECT VOCABULARY

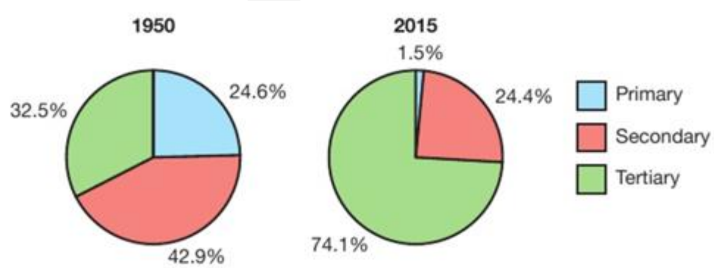
tertiary sector/industry production of services in the economy

The **tertiary sector** involves the provision of a wide variety of services. Some examples are given below:

■**Commercial services**: freight delivery, debt collection, printing and employment agencies
■**Financial services**: banking, insurance, investment advice and pensions
■**Household services**: plumbing, decorating, gardening and house maintenance
■**Leisure services**: television, tourism, hotels and libraries
■**Professional services**: accountancy, legal advice and medical care transport: train, taxi, bus and air services.

Changes in the importance of different sectors

The employment patterns in different sectors vary over time, with primary and secondary sectors growing and declining due to economic and social changes. In the UK, primary production was predominant before the Industrial Revolution, but **de-industrialisation** has led to tertiary sector expansion.



▲ Figure 14.2 Employment by sector in Germany, 1950 and 2015

SUBJECT VOCABULARY

de-industrialisation decline in manufacturing

Why has manufacturing declined in developed countries while services have grown?

■ People may prefer to spend more of their income on services than manufactured goods. There has also been a decline in demand for the goods produced by some of the traditional industries in manufacturing, such as shipbuilding and textiles.

■There is fierce competition in the production of manufactured goods from developing countries such as Brazil, China and India.

■As countries develop, their public sector grows. Since the public sector mainly provides services, this adds to the growth of the tertiary sector.

■ Advances in technology mean that employment in manufacturing falls because machines replace people.

Developed and developing countries

The structure of economies in developed and developing countries differs significantly. In developed countries, the primary sector is less important than the tertiary sector, with only a small percentage of the workforce employed in it. In developing countries, the secondary sector is growing alongside the tertiary sector, while in undeveloped countries, most people are employed in the primary sector.

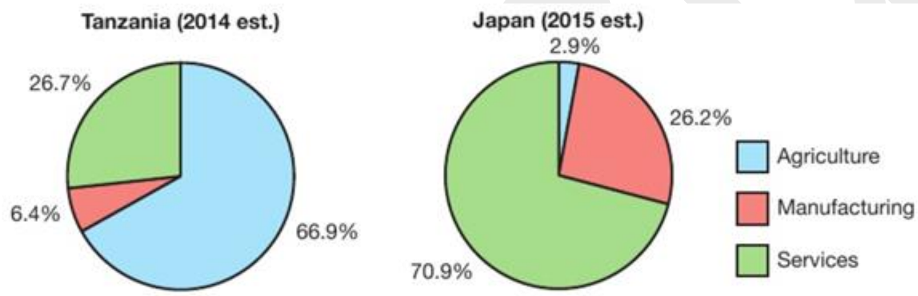


Figure 14.4 Employment by sector, Tanzania and Japan

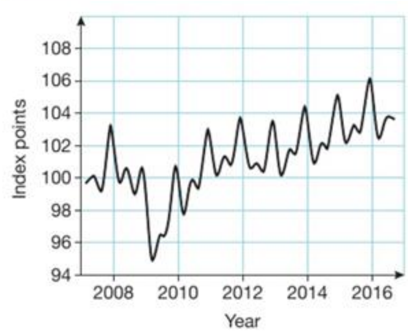
Chapter 15
Productivity and division of labour

SUBJECT VOCABULARY

productivity rate at which goods are produced, and the amount produced in relation to the work, time, and money needed to produce them

Productivity

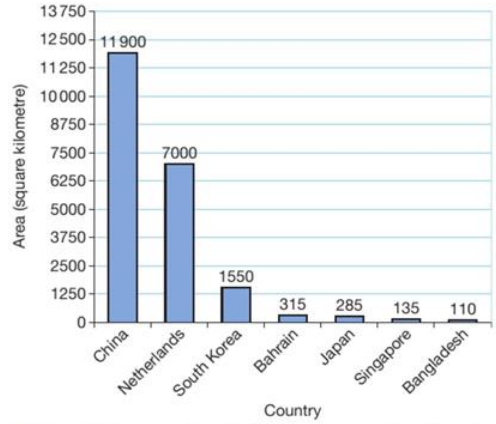
Productivity, the output per unit of input, is crucial for businesses to produce more output. It's calculated by dividing total output by the number of workers employed. Raising productivity allows for more goods and services to be produced with fewer resources. Countries monitor productivity levels, with the EU showing increased productivity between 2006 and 2016. Firms aim to lower costs and increase profits.



▲ Figure 15.1 EU productivity, 2006–16

Factors affecting productivity

Productivity can be improved if businesses make better use of their resources. There are a number of ways of raising the productivity of production factors, some of which are outlined below.



▲ **Figure 15.2** Land reclaimed by the top seven countries with reclaimed land

LAND

The quality of land varies. Some is fertile and can be used to grow crops or farm cattle. Other land is dry or mountainous and is almost useless. However, measures can be used to make agricultural land more productive.

■**Fertilisers and pesticides**: Fertilisers and pesticides are chemicals used to improve plant health and crop yields, but they can harm people, wildlife, and the environment, hence strict controls are in place.

■**Drainage**: Uzbekistan, with World Bank funding, initiated a major drainage project in the Aral Sea Basin to improve water flow and agricultural productivity, aiming to enhance the Amu Darya River's water quality.

■**Irrigation**: Irrigation systems redirect water from natural sources to land for increased productivity, particularly in dry areas and droughts, and protect plants against frost, used globally.

■**Reclamation**: Land reclamation, involving water drained from wetlands, can increase crop productivity. China leads the world in land reclamation, reclaiming 11900 square kilometers, including 65% of tidal flats, Yangzi lowlands, Shanghai, Wuhan, and Hong Kong International Airport.

■**Genetically modified crops**: GM crops have increased land productivity by transferring genes and DNA, potentially reducing disease risk and yields. However, opposition arises due to unpredictable genetic engineering, concerns about allergic reactions, and potential negative health effects from new proteins introduced into food chains.

CAPITAL

Improvements in productivity often arise because of the introduction of new technology. Advances in technology have helped improve productivity in all three sectors of the economy.

■Primary sector: In agriculture, Chemicals and pesticides have raised crop yields and biological research has developed plants that are less likely to suffer from diseases.

■Secondary sector: New technology has featured significantly in manufacturing. Many factories and production lines employ complex plant and equipment. This has led to huge increases in productivity.

■**The tertiary sector** is experiencing a shift towards technology, with retailing experiencing a surge in internet shopping and unstaffed checkout systems. Healthcare has seen significant technological advancements in medicine, surgical techniques, vaccines, drugs, and surgery, with surgeons using lasers and fiber optic cables.

The division of labour

Specialisation in businesses involves breaking down production processes into smaller parts, assigning workers specific tasks. **This division of labour**, like house construction, allows workers to focus on their best skills, increasing efficiency and economic growth.

SUBJECT VOCABULARY

division of labour breaking down of the production process into small parts with each worker allocated to a specific task

specialisation production of a limited range of goods by individuals, firms, regions or countries

Division labour and the worker

An individual worker will benefit from focusing on one specific work task but there will also be some disadvantages.

ADVANTAGES

Focusing on a task helps workers become more skilled, leading to easier employment and higher pay. Highly skilled workers can learn new skills or improve existing ones, such as IT, to stay updated with technological developments. Additionally, skilled workers may experience increased job satisfaction.

DISADVANTAGES

Specialization can lead to boredom due to repetitive tasks, especially for tasks with minimal skill. This can result in job dissatisfaction, decreased motivation, health issues like joint wear, and increased unemployment risk for workers with too much specialization.

Division of labour and business

Generally, if workers are more specialised, efficiency improves and businesses can make more profit. However, there are also some disadvantages regarding the division of labour for firms.

ADVANTAGES

■ Efficiency is improved because, through specialisation, workers can perform tasks more quickly and more accurately. There are fewer mistakes and productivity (output per worker) will rise. People who try to perform a wide range of tasks may find it difficult to develop the skills needed to be excellent at each one.

■A greater use of specialist tools, machinery and equipment is possible when workers specialise.

■Production time is reduced because workers do not have to waste time moving from one task to another. This often involves moving around the workplace collecting tools, changing workstations and resetting machinery.

■The organisation of production becomes easier. This is because specialist workers can fit more easily into a structured system of production, such as a production line.

DISADVANTAGES

■ The division of labour can lead to dissatisfaction, low motivation, late arrivals, increased absenteeism, high turnover, and detached employees, ultimately reducing productivity and profitability.

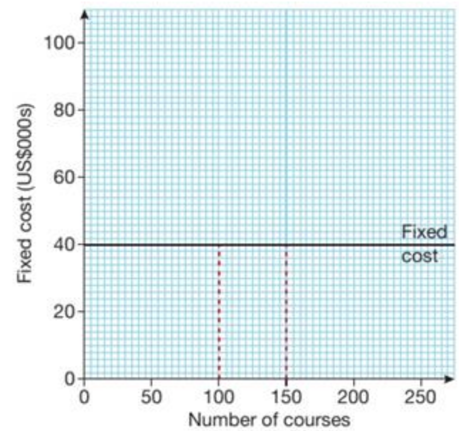
■ Problems can also occur if one stage of production depends on another stage. If one stage breaks down, all other stages may also have to be stopped.

■ Specialisation may result in a loss of flexibility in the workplace.

Chapter 16
Business costs, revenues and profit

Total fixed costs

Fixed costs, such as rent, business rates, advertising, insurance premiums, interest payments, and research and development **costs**, remain constant regardless of output levels. They are sometimes called overheads and will not increase if a firm produces nothing. A graph illustrating fixed costs for Frampton Training demonstrates that these costs remain constant at all output levels.



▲ **Figure 16.1** Fixed costs for Frampton Training

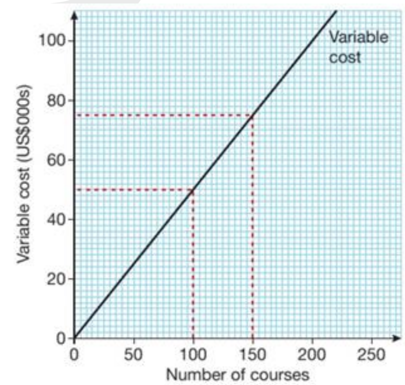
SUBJECT VOCABULARY

costs expenses that must be met when setting up and running a business
fixed costs (also known as overheads) costs that do not vary with the level of output

Total variable cost

Production costs that change when the level of output changes is called **variable costs.**

Figure 16.2 shows variable costs for Frampton Training. The business has variable costs of US$500 per course. If 100 courses are provided, the total variable costs will be US$50 000 (100 x US$500). If 50 extra courses are provided, total variable costs rise to US$75 000 (150 x US$500). The graph shows that variable costs change whenever output changes.



▲ **Figure 16.2** Variable costs for Frampton Training

SUBJECT VOCABULARY

variable costs costs that change when output levels change

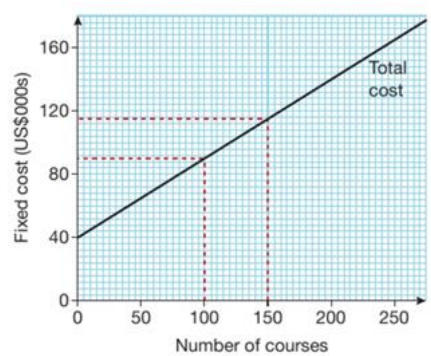
Total costs

The cost to a firm of producing all output over a period is called total cost. Total cost (TC) can be calculated by adding ftotal fixed costs (TFC) and total variable costs (TVC) together.

TC = TFC + TVC

If Frampton Training provides places for 100 training courses, total cost will be: TC
= US$40 000 + (100 x US$500)
= US$40 000 + US$50 000
= US$90 000

The total cost graph in Figure 16.3 shows that total cost increases from US$90 000 to US$115000 when the number of courses provided rises from 100 to 150.



▲ **Figure 16.3** Total cost for Frampton Training

SUBJECT VOCABULARY

total cost fixed costs and variable costs added together

Average Costs

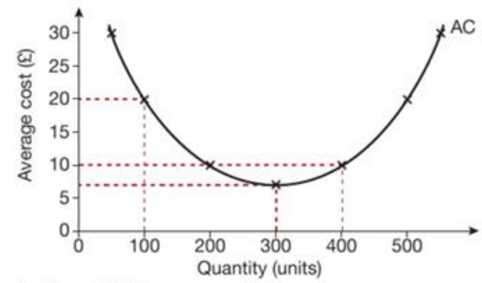
The average cost of production is the cost of producing a single unit of output. The formula for calculating average cost is:
Average cost =Total cost / Quantity produced

The average cost cave

The average costs for a business can be presented graphically. An example is shown in Figure 16.4. The average cost curve is U-shaped, which means that as output increases, average costs fall at first, reach a minimum and then start to rise. At an output level of 100 units, the average cost is £20.

■If output is increased to 300 units, the average cost falls to £7.50. This is the minimum average cost in this example.

■If output is increased further still to 400 units, average costs are now higher at £10.



▲ Figure 16.4 Average cost curve

Total revenue

The amount of money a firm receives from selling its output is called total
revenue. Total revenue can be calculated by multiplying the price of each unit by the number of units sold:

Total revenue = Price x Quantity

If Frampton Training, in the earlier example, charged US$1500 for its HGV training courses, the total revenue from the sale of 100 courses is given by:

Total revenue = US$1500 x 100 = US$150 000
This means that Frampton Training generated US$150 000 of revenue from providing 100 places on its HGV driving course.

Calculating profit

One of the main reasons why firms calculate their costs and revenue is to work out profit or loss. Profit is the difference between total revenue and total costs. Profit = Total revenue - Total costs
The profit made by Frampton Training from providing 100 places is given by:

Profit = US$150 000 x 100-(US$40 000 + US$50000)
= US$150 000 - US$90 000
= US$60 000

It is possible to calculate the profit for a firm at any level of output using this method. If total costs exceed total revenue, then a loss is made.

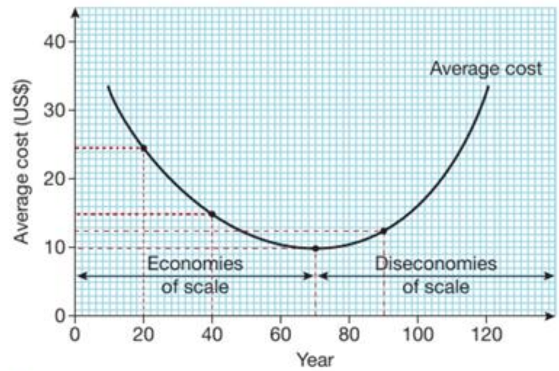
Chapter 17

Economics and diseconomies of sale

Economic of scale

As a firm increases its size, average costs start to fall. This is because of **economies of scale** and is shown in Figure 17.1. When the business is producing 20 000 units of output, the average cost is US$25. If it raises output to 40 000 units, average costs fall to US$15. The firm could carry on expanding and lower its average costs until it is large enough to produce 70 000 units.

For example, if the firm increases its size and produces 90 000 units, average costs will now rise to US$12.50 per unit. This is because of **diseconomies of scale**, which occur because of inefficiency.



▲ **Figure 17.1** Economies and diseconomies of scale

SUBJECT VOCABULARY

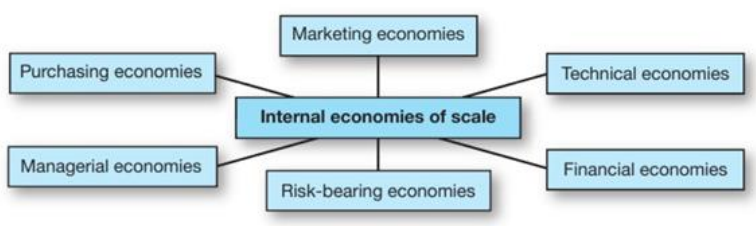
diseconomies of scale rising average costs when a firm becomes too big
economies of scale falling average costs due to expansion

SUBJECT VOCABULARY

scale size of a business

Internal economics for scale

Internal economies of scale are the cost benefits that an individual firm can enjoy when it grows. The reasons why costs fall are summarised in Figure 17.2.



▲ **Figure 17.2** Sources of internal economies of scale

SUBJECT VOCABULARY

internal economies of scale cost benefits that an individual firm can enjoy when it expands

PURCHASING ECONOMIES

Large firms that buy lots of resources get cheaper rates. Suppliers offer discounts to firms that buy raw materials and components in bulk. This is similar to consumers buying multi-packs in supermarkets - they are better value for money.

MARKETING ECONOMIES

Marketing economies occur when fixed costs, such as producing a television advert, are spread over more units of output, allowing a large firm to save on average costs, such as running its own delivery vehicles.

TECHNICAL ECONOMIES

Technical economies occur because larger factories are often more efficient than smaller ones. There can be more specialisation and more investment in machinery.

FINANCIAL ECONOMIES

Large firms can get access to money more cheaply. They also have a wider variety of sources to choose from

MANAGERIAL ECONOMIES

As firms expand, they can afford specialist managers. A small business may employ a general manager responsible for finance, human resources, marketing and production. The manager may find this role demanding and may be weak in some areas of the job. A large firm can employ specialists and, as a result, efficiency is likely to improve, and average costs fall.

RISK-BEARING ECONOMIES

Larger firms are more likely to have wider product ranges and sell into a wider variety of markets. This reduces the risk in business.

External economics of scale

Sometimes all firms in an industry can enjoy falling average costs as the whole industry grows. This is called **external economies of scale**. External economies of scale are more likely to occur if an industry is concentrated in a particular region.

SUBJECT VOCABULARY

external economies of scale cost benefits that all firms in an industry can enjoy when the industry expands

SKILLED LABOUR

If an industry is concentrated in one area, there may be a build-up of labour with the skills and work experience required by that industry. As a result, training costs will be lower when workers are recruited. It is also likely that local schools and colleges will provide vocational courses that are required by local industry.

INFRASTRUCTURE

If a particular industry dominates a region, the roads, railways, ports, buildings and other facilities will be shaped to suit that industry's needs.

ACCESS TO SUPPLIERS

An established industry in a region will encourage suppliers in that industry to set up close by. Specialist marketing, cleaning, banking, waste disposal, distribution, maintenance and components suppliers are likely to be attracted to the area.

SIMILAR BUSINESSES IN THE AREA

When firms in the same industry are located close to each other, they are likely to cooperate with each other so that they can all gain.

Diseconomies of scale

Figure 17.1 shows that if a firm continues to expand beyond a certain point average costs eventually rise. Average costs start to rise because aspects of production become inefficient. The possible reasons why this might happen are discussed below.

BUREAUCRACY

Bureaucracy in larger businesses increases costs due to wasted resources, slow decision-making, and long communication channels, leading to increased administration time and increased costs.

COMMUNICATION PROBLEMS

Large organizations with hundreds of thousands of workers worldwide face challenges in communication due to language, culture, and time differences among employees.

LACK OF CONTROL

Large businesses, with thousands of employees, billions of pounds, and numerous plants worldwide, can be challenging to manage and coordinate, potentially increasing costs.

DISTANCE BETWEEN SENIOR STAFF AND SHOP FLOOR WORKERS

A large firm can worsen worker-manager relations due to multiple management layers, leading to a lack of understanding and demotivation among workers, leading to conflicts and wasted resources in resolving issues.

Chapter 18

Competitive markets

SUBJECT VOCABULARY

competition rivalry that exists between firms when trying to sell goods to the same group of customers

What is a competitive markets?

Competition refers to the rivalry between firms in a specific market, with some markets having high competition, like Australia's milk market with 6000 farms, and others like Burkina Faso's internet supplier Onatel, with no competition. No other firm competes with Onatel. In a competitive market, there are likely to be some common features.

■There is many buyers and sellers.
■The products sold by each firm are close substitutes for each other.
■**Low barriers to entry**, which means that it is fairly easy to break into the market.
■Each firm has almost no control over the price charged
■There is a free flow of information about the nature of products, availability at different outlets, prices, methods of production and the cost and availability of production factors.

Competition and the firm

Firms typically prefer to dominate the market without competition, allowing them to charge higher prices and reduce efficiency and innovation. However, when faced with competition, they must offer value-for-money products. This involves:

■ operating efficiently by keeping costs as low as possible
■providing good quality products with high levels of customer service
■charging prices that are acceptable to customers
■innovating by constantly reviewing and improving the product.

Product differentiation is a key aspect of innovation, where firms aim to differentiate their products from rivals. For instance, in Italian towns, restaurants compete with authentic cuisine, but each offers unique service, menus, and locations. Over time, they strive to make their product stand out.

Competition and the consumer

Most consumers would argue that competition in business is desirable. This is because of the advantages that consumers enjoy from healthy competition.

■**Lower prices**: In a competitive market, firms cannot overcharge consumers. If one firm tries to raise its prices, it will lose a lot of its business. This is because the market is full of good substitutes and consumers can easily switch from one supplier to another.

■**More choice**: Competition means there are many alternative suppliers to choose from. Where possible, each supplier is likely to differentiate its product from those of rivals. This helps to widen choice even more. Competitive markets will also have a constant stream of new entrants offering fresh ideas and even more choice.

■**Better quality**: Firms that offer poor goods or services in a competitive market will lose business. Consumers are rational and will look for value for money. This means they consider both the price and the quality of products when deciding what to buy. Modern consumers are more aware and better informed than ever before.

There are also disadvantages to consumers of a highly competitive market.

■Market uncertainty: It could be argued that there may be some uncertainty or disruption in competitive markets. This is because unprofitable firms eventually leave the market. This means that some consumers might be inconvenienced.

■Lack of innovation: It could be argued that innovation in a competitive market might be lacking. This is because firms make less profit in competitive markets. As a result, they may not have enough profit to invest in product development.

Competition and the economy

Competitive markets offer advantages such as efficient resource allocation and increased innovation, as firms operate under pressure to keep costs low. Innovative firms develop new products, production techniques, technologies, and materials, benefiting the economy and improving living standards. However, resources may be wasted due to immobile production factors, leading to job losses and delayed reallocation of resources.

Chapter 19

Advantages and disadvantages of large and small firms

How is the size of a firm measured

Several methods can be used to measure the size of a firm. Here are three common methods.

	MICRO	SMALL	MEDIUM	LARGE
Turnover (revenue) (€ million)	< 2	< 10	< 50	> 50
Number of employees	< 10	< 50	< 250	> 250
Balance sheet total (€ million)	< 2	< 10	< 43	> 43

▲ Table 9.1 How the EU defines the size of firms

TURNOVER

Firms with high turnovers will tend to be larger than those with small turnovers.

NUMBER OF EMPLOYEES

Large firms tend to employ larger numbers of employees than smaller firms.

BALANCE SHEET TOTAL

This measure is based on the amount of money invested in the business by the owners. Generally, more money will be invested in larger firms such as BP.

Small firms

Small firms and self-employment have grown in many countries over the last 30 years, with governments encouraging their development and the tertiary sector in developed countries benefiting from small-scale service provision. During high unemployment periods, people used redundant funds to start their own businesses.

ADVANTAGES

Small firms have some advantages over their larger rivals.

■ **Flexibility**: Small firms can adapt to change more quickly. This is because the owners, who tend to be the main decision makers, are actively involved in the business and can react to change.

■ **Personal service:** As firms get bigger, it often becomes difficult to offer customers an individual personal service. Some people prefer to deal with the owner of a firm directly and are prepared to pay a higher price for this benefit. Owners are far more accessible in small firms than larger ones.

■**Lower wage costs**: Many workers in small firms do not belong to trade unions. As a result, their negotiating power is weaker, and the owners are often able to restrict pay to the legal minimum wage.

■**Better communication**: Since small firms have fewer employees, communication tends to be informal and more rapid than in larger organisations. The owner will be in close contact with all staff and can exchange information quicker and more efficiently. As a result, decision making will be faster and workers may be better motivated.

■**Innovation**: Although small firms often lack resources for research and development, they may be surprisingly innovative. One reason for this is that small firms face competitive pressure to innovate

DISADVANTAGES

There are some disadvantages to being a small firm.
■**Higher costs**: Small firms cannot exploit economies of scale because their output is limited. Consequently, their average costs will be higher than their larger rivals. This means that small firms often lack a competitive edge.

■**Lack of finance**: Small firms often struggle to raise finance. Their choice of sources is limited.

■**Difficult attracting quality staff**: Small firms may find it difficult to attract highly qualified and experienced staff. One reason for this is because they lack resources.

■ **Vulnerability**: Small firms face challenges in challenging trading conditions due to limited resources and potential takeover risks, often forced to accept unattractive terms.

Large firms

The largest firms in the world are multinational companies. Multinationals have a great deal of power. They have huge resources and employ thousands of people. The largest firm in the world in 2016 was the US retailer Walmart.

ADVANTAGES

Large firms tend to be more powerful than smaller rivals. They enjoy several key advantages.

■ **Economies of scale**: The main advantage to large firms is that their average costs are likely to be lower than those of smaller rivals. They can operate in large-scale plants and exploit economies of scale.

■ **Market domination**: Large firms can often dominate a market. They have a higher profile in the public eye than small firms and benefit from such recognition. This may mean that they can charge higher prices that enable them to make higher profits.

■**Large-scale contracts**: The construction industry employs both small and large firms, but small firms struggle to compete for large-scale, profitable contracts like building a new motorway for the government.

DISADVANTAGES

Although big firms can generally produce goods more cheaply than small firms, they do have some disadvantages.

■**Too bureaucratic**: Large firms sometimes become overwhelmed by their administration systems.

■**Coordination and control**: Large businesses can be challenging to manage due to their vast workforce, extensive operations, and potential increased costs due to increased supervision.

■**Poor motivation**: Large organizations can lead to alienation, insignificant effort for individual employees, and lack of personal contact, resulting in poor worker motivation.

Factors influencing the growth of firms

FACTORS INFLUENCING THE GROWTH OF FIRMS

Many owners will hope to grow their businesses. However, in some cases growth may not be easy. What might influence the growth of firms?

GOVERNMENT REGULATION

Healthy competition between businesses benefits consumers and the economy by encouraging innovation and efficiency. Governments monitor business activity to prevent market dominance by investigating mergers and takeovers that threaten competition. In 2016, the EU prevented Three's takeover of O2, preventing market exploitation.

ACCESS TO FINANCE

Firms that can persuade money lenders and other investors to provide finance are in a better position to grow. Consequently, access to finance can have an important influence on growth.

ECONOMIES OF SCALE

Growth is driven by reducing average costs, which can be achieved by exploiting economies of scale in industries like car manufacturing, air transport, power generation, and water distribution. However, in markets like international taxi firms, giant window cleaning operations, and multinational hair salons, growth is limited.

THE DESIRE TO SPREAD RISK

Growth motives include spreading business risk by diversifying into new markets and developing new products. Increased uncertainty in certain sectors may prompt firms to diversify and grow, as seen in events like Brexit and commodity price drops.

THE DESIRE TO TAKE OVER COMPETITORS

To grow a business, take over rivals quickly and reduce competition. However, M&A activity varies over time. 2015 saw a record year of global M&A deals, totaling $4.7 trillion. However, in 2016, M&A fell to $2.2 trillion, potentially affecting firm growth if rivals' desire to take over decreases.

Reasons firms stay small

SIZE OF THE MARKET

Some markets are too small to sustain very large companies. Therefore, businesses in this market will struggle to grow into very large organisations.

NATURE OF THE MARKET

In some markets, such as groceries, painting and decorating, hairdressing and taxi driving, the set-up costs are relatively low. There is little to discourage new business joining the market.

Also, in some market’s businesses serve a particular **market niche.**

LACK OF FINANCE

Small businesses struggle to secure finance for growth due to a lack of confidence in lenders' potential for success and the perceived risk of risky ventures, requiring investment in new resources.

AIMS OF THE ENTREPRENEUR

Some small business owners prefer to stay small due to financial constraints, personal interests, or lifestyle reasons, which may prevent them from expanding their operations or taking on more workers.

DISECONOMIES OF SCALE

Once a firm reaches a certain size, any further growth results in diseconomies of scale. If a firm expands beyond the minimum efficient scale, average costs start to rise. A firm is not likely to grow any further if costs start to rise because it would have to charge more for its output.

SUBJECT VOCABULARY

market niche smaller market, usually within a large market or industry

Chapter 20
Monopoly

SUBJECT VOCABULARY
monopoly situation where there is one dominant seller in a market

What is monopoly?

A pure monopoly exists when just one producer supplies a market. However, there is also a legal monopoly. In some countries, if a firm has 25 per cent or more of a market it is said to be a monopolist. Pure monopolies are not common, but they do exist.

Features of monopoly

ONE BUSINESS DOMINATES THE MARKET

In markets dominated by one seller, a monopoly is said to exist. However, a monopoly can exist when one firm dominates the market even though there may others operating alongside

UNIQUE PRODUCT

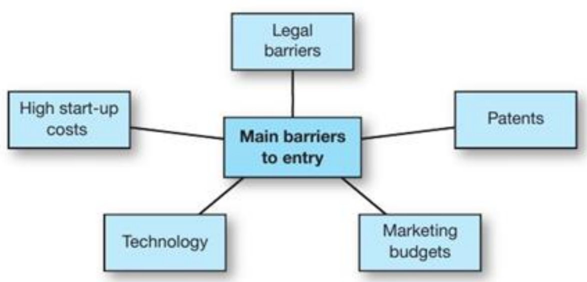
The product supplied by a monopolist will be highly differentiated. There will not be another exactly like it.the product supplied is the only one available; there is no choice whatsoever for the consumer.

PRICE-MAKER

Although monopolists face a downward sloping demand curve, they are able to control the prices they charge. Monopolists are sometimes called price makers. They can force prices up by restricting the quantity supplied in the market. However, they cannot fix both price and quantity. If they try to sell larger quantities, the price will be forced down.

BARRIERS TO ENTRY

Monopolies often exist because competition is discouraged. In some markets, there are obstacles that prevent a **new entrant** from trying to compete. Barriers to entry are a common feature in monopoly and the main ones are summarised in Figure 20.2.



▲ Figure 20.2 The main barriers to entry

SUBJECT VOCABULARY
new entrant company that starts to sell goods or services in a market where they have not sold them before, or one of these goods or services
price maker where a dominant business is able to set the price charged in the whole market

SUBJECT VOCABULARY
patent licence that grants permission to operate as a sole producer of a newly designed product

■ Legal barriers: Government contracts, such as those in rail travel and water supply, can legally exclude competition by awarding a single firm a specific service, preventing competition for a period of 10-30 years.

■ Patent: A patent is a license that prevents firms from copying a new product or technology, allowing the developer to be the sole supplier for up to 20 years, thereby encouraging research and development.

■Marketing budgets: Monopolists often have strong brand names. This makes it difficult for new entrants to compete because their products will be unfamiliar and may not be trusted by consumers. Dominant firms often spend large amounts of money on advertising to strengthen their brand names.

■Technology: If an established and dominant firm has access to complex or up-to-date technology, this can act as a barrier to entry.

■ High start-up costs: In some markets, the cost of setting up a firm to compete with the existing operators is too high.

The advantage of monopoly

Many would argue that monopoly is bad for the consumer because choice is limited, and prices are often higher. However, there may be some advantages.

EFFICIENCY

In some markets **natural monopolies** might exist. These are markets where it is more efficient if just one firm supplies all consumers. In these markets, it is often the case that the sole supplier is unable to exploit all economies of scale.

SUBJECT VOCABULARY

natural monopolies situation that occurs when one firm in an industry can serve the entire market at a lower cost than would be possible if the industry were composed of many smaller firms

INNOVATION

Since monopolies are often large and make high profits, they have the resources to invest in R&D. As a result, they can develop new products and new technologies from which consumers will benefit.

ECONOMIES OF SCALE

Monopolies exploit economies of scale, resulting in lower average costs and lower product prices. This benefits consumers and allows firms to build strength and compete effectively with overseas competition, increasing employment and national income in the domestic economy.

The disadvantage of monopoly

Most people would consider monopolies to be undesirable. This is because of the disadvantages associated with markets that are dominated by a single firm.

SUBJECT VOCABULARY

market segments groups of customers that share similar characteristics, such as age, income, interests, and social class

HIGHER PRICES

A firm that dominates a market is able to charge more for its products. Monopolists will tend to restrict output in order to force up the price.

RESTRICTED CHOICE

If there is just one supplier in a market, consumer choice is obviously restricted.

LACK OF INNOVATION

Monopolists may not invest in product innovation due to market dominance and consumer pressure, potentially wasting resources on R&D if they can prevent entry and maintain higher profits.

INEFFICIENCY

Monopolies may be inefficient due to lack of competition, resulting in unnecessary costs. Oversize can lead to diseconomies of scale, increasing average costs. Some monopolists may also provide poor customer service, operating call centers with insufficient staff.

Chapter 21
Oligopoly

SUBJECT VOCABULARY

oligopoly market dominated by a few large firms

What is oligopoly?

An **oligopoly** is a market dominated by a few large producers, such as Toyota, Volkswagen, GM, Renault-Nissan, Hyundai, and Ford, which supply 70% of the global motor industry. However, smaller firms can also survive alongside these dominant firms by serving niche markets.

Features of Oligopoly

Oligopoly is a common market structure. However, the features in each oligopolistic market may differ slightly depending on the circumstances. The main features of oligopolistic markets are outlined briefly below.

FEW FIRMS

One of the main features of oligopoly is that the market often contains just a few firms. Oligopoly is a common market structure and there are many examples in most countries across the world.

LARGE FIRMS DOMINATE

When an oligopoly exists in a market, a few large firms will dominate it. They will have a large proportion of the market to themselves. Large firms will be highly influential in the market.

DIFFERENT PRODUCTS

In most oligopolistic markets, the products sold by each of the large firms will be very close substitutes for each other. However, there are likely to be some differences. Also, each manufacturer produces a wide product range where each product is different and aimed at a slightly different market segment. Firms in an oligopolistic market usually make a deliberate effort to differentiate its products from those of rivals.

BARRIERS TO ENTRY

The firms that dominate the market are likely to benefit from barriers to entry. The dominant firms are also likely to discourage entry by investing heavily in their brands. Without barriers to entry, the high profits enjoyed by the dominant firms would attract new entrants. As a result, their dominance would be reduced.

COLLUSION

In some oligopolistic markets collusion might take place. This is where the dominant firms in the industry set up agreements to restrict competition. Finally, firms may agree to restrict output. By restricting output, supply is decreased and prices rise. In many countries, collusion is illegal because it exploits consumers.

NON-PRICE COMPETITION

Since firms are keen to avoid price wars, they compete using advertising and promotions such as coupons, loyalty cards, competitions and free offers. This helps consumers identify them more easily. Firms then try to create brand loyalty through advertising, so that customers carry on buying the brand. Product differentiation is also common. This is where the firm tries to persuade customers that their brands are different from those of competitors. The differences may be real or imaginary.

PRICE COMPETITION

Oligopolistic markets often maintain consistent prices due to fear of **price wars**, where firms must cut prices to avoid losing sales. However, price wars do occur, and firms in oligopolies exhibit **interdependence**.

SUBJECT VOCABULARY

interdependence where the actions of one country or large firm will have a direct effect on others
price war where one firm in the industry reduces price causing others to do the same

Advantages of oligopoly

Since there is some competition in oligopolistic markets, it is reasonable to assume that consumers will benefit in some way.

CHOICE

Competition in oligopolistic markets ensures that consumers are provided with some choice. One of the ways in which oligopolists compete is by launching new brands. These new brands provide consumers with new products, and often, an ever-growing choice in the market. Small producers also provide choice by supplying a **niche market.** However, in other markets there may be little real choice.

QUALITY

Since non-price competition is common in oligopolistic markets, one method firms can use to differentiate their product is to make it better. Consequently, the quality of products in some markets might be superior.

ECONOMIES OF SCALE

If the dominant firms are able to exploit economies of scale, their average costs will be lower. Therefore, it is possible that some of the cost savings will be passed on to consumers in the form of lower prices. The smaller rivals in the market cannot exploit economies of scale. They often survive because they do not compete directly with the dominant firms.

INNOVATION

The level of innovation in oligopolistic markets might vary. On the one hand, since large and powerful firms dominate the market, it could be argued that they will have the resources to invest in R&D. It is true to say that competition can be resisted if an individual firm can develop a new model that is superior to those of rivals.

PRICE WARS

A price war is a market phenomenon where one firm aggressively cuts prices, forcing others to follow or risk losing market share. This can lead to lower prices for consumers. However, price wars don't last long and can lead to a squeezed market, making it less competitive. In 2017, Morrisons initiated a price war in the UK supermarket industry to help families on tight budgets.

Disadvantages of oligopoly

Oligopoly can harm consumers by limiting competition and leading to price fixing. In 2016, Colgate-Palmolive was fined AUD 18 million for colluding with rivals to control detergent prices in Australian supermarkets. In some cases, oligopolistic markets may have cartels, where firms or countries agree on pricing or output levels, acting as monopolies. In the USA and EU, cartels and collusion are illegal, with OPEC being an example.

SUBJECT VOCABULARY

cartel where a group of firms or countries join together and agree on pricing or output levels in the market

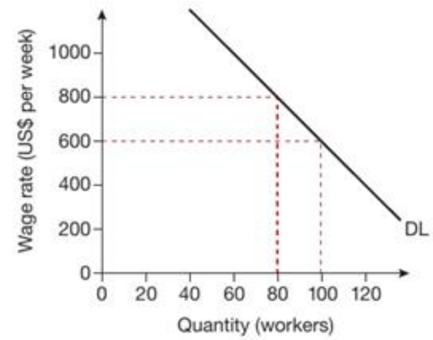
Chapter 22
The labour market

SUBJECT VOCABULARY
value-added products or services have an increased value because work has been done on them, they have been combined with other products and so on; this increase in value to the buyer is what the buyer pays for

SUBJECT VOCABULARY
wage rate the amount of money paid to workers for their services over a period of time (that is, the price of labour)

The demand curve for labour

The **wage rate** is the cost of labor, affecting demand and supply. The demand curve for labour slopes downwards, with higher wages reducing demand and lower wages increasing demand. For example, a high wage rate leads to a shortage of workers.



▲ Figure 22.1 Demand curve for labour

Factors affecting the demand for labour

DEMAND FOR THE PRODUCT

The demand for labour is said to be a derived demand. This means that the demand for labour is derived from the demand for the goods and services supplied by firms and public sector organizations.

AVAILABILITY OF SUBSTITUTES

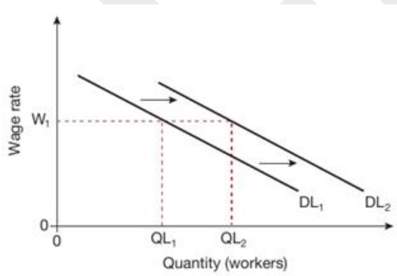
The demand for labour may be affected by the cost and availability of substitutes for labour.

PRODUCTIVITY OF LABOUR

The productivity of labour may also affect demand. If every worker is able to produce more output, demand for workers is likely to increase. This is because production becomes more profitable, provided the extra output can be sold.

OTHER EMPLOYMENT COSTS

The demand for labour may be influenced by other costs such as national insurance contributions, recruitment, pensions, perks, training, sick pay, maternity pay, holiday pay, and childcare facilities.

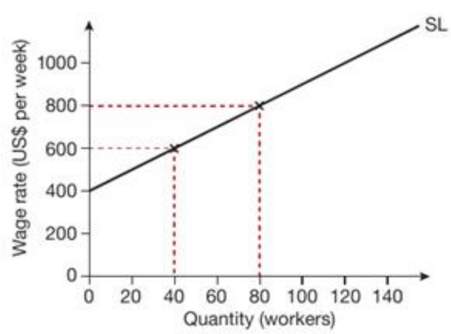


▲ Figure 22.2 Shift in the demand curve for cabin crew workers

SUBJECT VOCABULARY
derived demand demand that arises because there is demand for another good

The supply curve for labour

The supply curve for labour slopes upwards due to the proportionate relationship between wages and labor supply. An example is a wage curve showing that a higher wage increases the number of workers available for a job.



▲ Figure 22.3 Supply curve for labour

Factors affecting the supply of labour

POPULATION SIZE

In most countries in the world, the size of the population is growing. The global population was 7400 million in 2016. However, this was predicted to rise to 9700 million by 2050. As the population grows, there will be more people available for work. Therefore, the supply of labour will tend to increase over time.

MIGRATION

Many countries welcome immigrants to help increase the working population. For example, many countries in the Middle East have a history of welcoming foreign workers.

AGE DISTRIBUTION OF THE POPULATION

The aging population in developed countries increases the dependency ratio, causing a financial burden on the rest of the population. This is due to the increasing number of people over 65 years old.

RETIREMENT AGE

In many countries, once people reach a certain age they are entitled to a state pension. This is called the retirement ag. This means that people will have to work for longer before they are entitled to any state benefit. Therefore, the supply of labour will increase in Canada.

SCHOOL LEAVING AGE

In most countries, children must attend school until they reach a certain age. This is called the school leaving age. Once this age is reached, children are allowed to work. Consequently, any changes to the school leaving age can affect the supply of labour.

FEMALE PARTICIPATION

In the last 50 years, in many countries, there has been a change in the role of women. An increasing number of women have elected to work due to changes in society and more favourable equality legislation to work and pursue careers. This has increased the size of the working population.

SKILLS AND QUALIFICATION

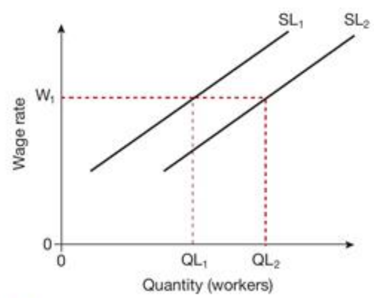
The supply of labour will tend to increase if people become more employable. This can happen if people have good skills and are well qualified. The quality of labour is discussed in more detail below.

Labour mobility

Labour mobility affects the supply of labour in a market. Geographical and occupational mobility allows workers to easily move between regions and switch jobs. Improved transport networks have improved this mobility. Changes in these factors affect the supply curve for labour. Increased immigration leads to an increase in labour supply, shifting the supply curve to the right.

SUBJECT VOCABULARY

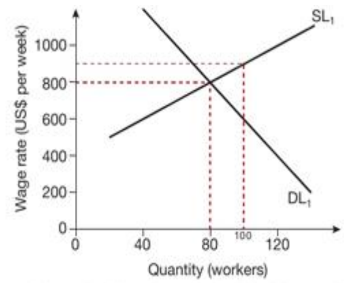
labour mobility ease with which workers can move geographically and occupationally between different jobs



▲ **Figure 22.4** Effect of an increase in immigration on the supply curve for labour

Wage of determination

The wage rate in a labour market is determined by the interaction of supply and demand for labor, with equilibrium wage being reached when both supply and demand are equal, affecting the wage rate.



▲ Figure 22.6 Wage determination in a labour market

The importance of the quantity and quality of labour to businesses

When choosing a location for business operations, it's crucial to consider the quantity and quality of human capital, not just the cost of labour. Businesses must ensure the labor meets quality standards and not invest in unskilled workers. Additionally, businesses must ensure there are enough workers near the chosen site and in the future for expansion. Recruitment challenges in China, such as the one-child policy, and the preference for domestic goods, can hinder businesses' ability to minimize costs, operate efficiently, and increase profits.

SUBJECT VOCABULARY

boom time when business activity increases rapidly, so that the demand for goods increases, prices and wages go up, and unemployment falls

boom and bust when an economy regularly becomes more active and successful and then suddenly fails

Impact of education and training on the quality of human capital

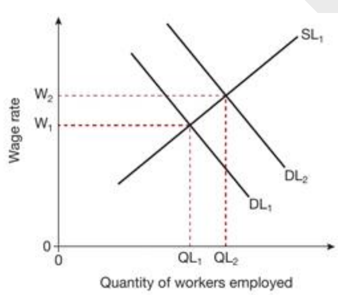
Education and training are crucial for improving human capital and labor quality. Employers prioritize skilled workers with reading, writing, communication, and specialist skills. The responsibility for education and training is divided between the state and firms. Over time, countries aim to improve labor quality, requiring investment from both. Training provides workers with necessary skills and knowledge for their jobs, increasing productivity. It also helps businesses adapt to changes in health and safety procedures, technology, and working practices. Multi-skilled workers feel secure and motivated, reducing anxiety and frustration.

Chapter 23

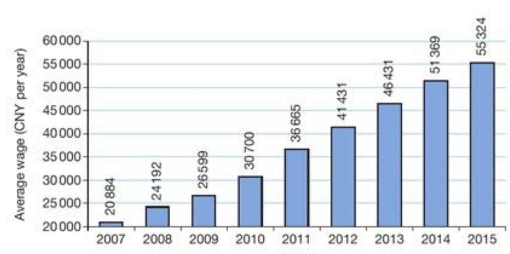
The impact of changes in the supply and demand for labour and trade union activity in labour markets

Changes in the demand for labour

The demand for labor in an industry is not constant over time, as a fall in demand for a product will result in a decrease in workers involved in its production and sale. In some countries, such as China, the demand for factory workers has increased due to rising manufacturing output and demand for manufactured exports.



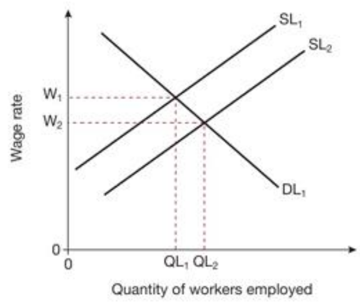
▲ Figure 23.2 Effect on wages and employment of an increase in the demand for labour in Chinese manufacturing



▲ Figure 23.3 Rising wages in Chinese manufacturing

Changes in the supply of labour

The global population growth has driven the supply of labour, with the world's population expected to reach 9700 million by 2050. Governments have raised retirement age, such as in Greece, to increase the labor supply. This shift in the supply curve shifts wage rates from W to W_2, and the number of people employed rises from QL_1 to QL_2.



▲ Figure 23.4 Effect on wages and employment of an increase in the supply of labour caused by an increase in the retirement age

Trade unions

Trade unions are organisations that exist to protect the interests of workers. In most countries, there are numerous different trade unions that represent different types of workers. The main aims of trade unions are to:

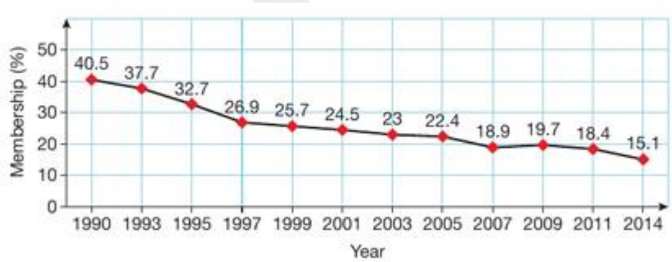
■Negotiate pay and working conditions with employers
■Provide legal protection for members, such as representation in court if an employee is fighting a case against an employer
■Put pressure on the government to pass legislation that improves the rights of workers
■Provide financial benefits, such as strike pay whenever necessary.

The power of trade unions

In the 1960s and 1970s, UK trade unions faced disputes with employers, disrupting production and causing disruption. In the 1980s, the government limited union power. For example, new laws:

■Required trade unions to have a secret ballot before a strike; a strike could only go ahead if the majority of members voted in favour
■Allowed businesses to sue for compensation if trade unions did not obey the law banned secondary picketing
■Made closed shops illegal.

Partly as a result of this anti-trade union legislation, trade unions became weaker in the UK. They also became less popular and as a result their membership fell. This weakened their position further.



▲ Figure 23.6 Australian trade union membership, 1990–2014

SUBJECT VOCABULARY

closed shop company or factory where all the workers must belong to a particular trade union

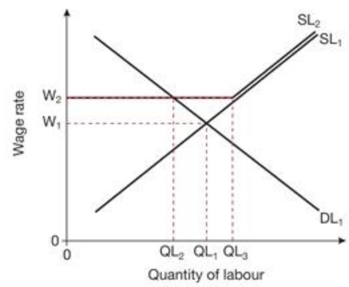
secondary picketing workers in one workplace or company strike in a group at a particular location in order to support the striking workers in a different workplace or company

Effects of trade unions on wages and employment

A strong trade union can force wages up in labour markets by putting pressure on employers during wage negotiations. If unions are involved, they can affect wages and employment levels. In this case, trade unions insist on W_2 wages, creating a new supply curve for labor with an elastic horizontal section.

Trade union interference has led to a decrease in employment due to increased wages, as demand for labor decreases with wage increases, potentially affecting some members' jobs. However, job losses might be avoided:

■If labour productivity rises at the same time
■If employers are able to pass on wage increases to customers in the form of price rises
■If profit margins are reduced (which means that employers meet the cost of the wage increase).



▲ Figure 23.7 Effect on wages and employment of trade union interference in the labour market

SUBJECT VOCABULARY

inflation rate at which prices rise, a general and continuing rise in prices

Chapter 24
Government intervention

The need for government intervention

Government intervention is crucial to protect stakeholders' interests and ensure businesses operate legally and with incentives. However, too much intervention can discourage enterprise, reduce foreign investment, and reduce national income, while too little can neglect some stakeholders' best interests. A balanced approach is essential.

Government intervention to deal with externalities

Chapter 13 discusses the impact of economic activity on third parties, such as individuals, organizations, and resources. Negative externalities, such as the destruction of rainforests by businesses, can result in external costs. On the other hand, positive externalities, like waste recycling, can generate benefits for the environment and economy. Governments often use measures like taxes, subsidies, fines, regulation, and pollution permits to reduce external costs and provide external benefits.

Government regulation of competition
PROMOTING COMPETITION

One of the roles of the government in the economy is to promote competition and prevent anti-competitive practices. Some examples of the action a government might take are outlined below.

Encourage the growth of small firms: Encouraging small firms to enter markets boosts competition. Governments in some countries support growth through business start-up schemes, business services, and lower taxes for small firms, promoting their growth and success.

Lower barriers to entry: If barriers are lowered or removed, then more firms will join a market making it more competitive. In recent years, many countries have removed some of these legal barriers.

SUBJECT VOCABULARY

anti-competitive practices (or restrictive trade practices) attempts by firms to prevent or restrict competition

Introduce anti-competitive legislation: In many countries, legislation exists to prevent practices that result in reduced competition. For example, in India, the Competition Commission of India (CCI) acts as a regulator to:

■Eliminate practices that reduce competition

■Promote and sustain competition in markets

■Protect the interests of consumers

■Ensure freedom of trade.

SUBJECT VOCABULARY

fit for purpose usable (by a consumer) for the purpose for which it was intended

LIMIT MONOPOLY POWER

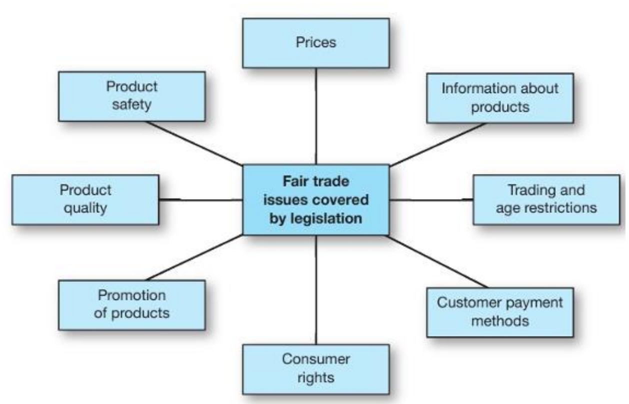
Monopolies in markets require careful monitoring to prevent exploitation. In many countries, appointed bodies oversee monopolies, such as the State Administration for Industry and Commerce (SAIC) in China. In 2016, SAIC found Swiss packaging firm Tetra Pak breaking anti-monopoly regulations, leading to a $97 million fine. In some countries, a special industry watchdog, like the UK's Office of Water Services, regulates monopolies, controlling prices and issuing fines if quality standards are not met.

PROTECT CONSUMER INTERESTS

Consumers desire high-quality, fair-priced, accurate product information, and clear, accurate product claims. Government intervention prevents firms from exploiting consumers through anti-competitive or restrictive practices. These might include:

■Increasing prices to higher levels than they would be in a competitive market
price fixing, where several firms agree to fix the price of a product to avoid price competition
■Restricting consumer choice by market sharing
■Raising barriers to entry by spending huge amounts of money on advertising, which smaller companies could not match, for example.

Legislation exists to prevent businesses from activities such as making false claims about the performance of their products, selling goods that are not fit for human consumption and selling goods that are not fit for purpose.



▲ Figure 24.1 Fair trade issues covered by legislation

CONTROL MERGERS AND TAKEOVERS

Governments monitor mergers and takeovers to maintain market competitiveness. Large deals, such as Telefonica's sale of O2 to Three, are investigated by the European Commission to prevent weakening competition. Microsoft's acquisition of LinkedIn, worth $26,200 million, was approved under conditions to preserve competition, including PC manufacturers and distributors not installing LinkedIn on Windows and users removing it from new machines. The EU's goal is to prevent tie-ups from weakening competition.

Government intervention in the labour market

SUBJECT VOCABULARY

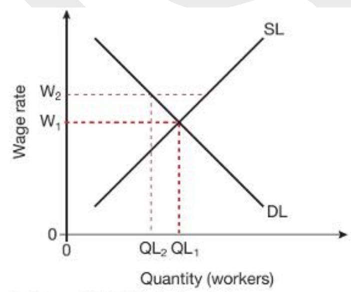
minimum wage minimum amount per hour which most workers are legally entitled to be paid

Governments set a minimum wage, prohibiting employers from paying workers below the set rate. Employers face penalties and workers are entitled to repayment at current rates, with some countries appointing bodies for annual reviews.

REASONS FOR A MINIMUM WAGE

Minimum wages are introduced to raise the incomes of low-paid workers, benefiting disadvantaged groups like women, ethnic minorities, and low-income families. They reduce inequality and increase fairness, helping to close the gap between the rich and the poor. Increased minimum wages can also save the government money by reducing welfare benefits for low-income workers, and motivate them to work harder, boosting productivity. Employers may respond by investing in training and replacing inefficient labor with more efficient machinery.

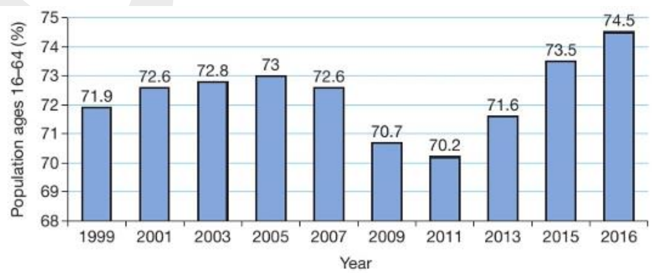
The study examines the impact of a minimum wage on wages and employment in labor markets. It shows that a wage above the equilibrium wage, W_2, leads to job losses, as the number of workers employed decreases from QL_1 to QL_2, indicating a negative effect.



▲ **Figure 24.2** Effect of a minimum wage on wages and employment in a labour market

DO MINIMUM WAGES CAUSE JOB LOSSES?

Some have argued that minimum wages do not reduce the level of employment in the economy, as shown in Figure 24.2. There is some evidence to support this view. For example, since the introduction of the minimum wage in the UK in 1999, the number of people employed has risen. Figure 24.3 shows that in 1999 employment was 71.9 per cent. However, this rose to 74.5 per cent in 2016. There was a dip for a few years, but this was almost certainly due to the global financial crisis when employment fell in many countries during a global recession.



▲ **Figure 24.3** UK employment rates since the introduction of the minimum wage in 1999, 1999–2016

Revision questions

2024 May / June

1) Describe one feature of an oligopoly.

2) More than one million drinks are bottled each day at the Coca-Cola factory in Mwanza, Tanzania. Over 1,000 workers are involved in the process at its 65,000m^2 site, which includes filling bottles, sealing them with caps and adding labels. This enables consumers across East Africa to enjoy brands such as Coca-Cola, Fanta and Sprite.

(a) With reference to the data above and your knowledge of economics, analyse the possible advantages for Coca-Cola of using division of labour at the factory.

3) Figure 3 shows the daily costs of hiring a vehicle to transport goods to a customer.

Vehicle hire cost ($ per day)	Fuel cost ($ per km)	Distance travelled (km)	Cost of insurance ($ per day)
90	0.25	65	20

Figure 3

(a) Calculate the daily total costs of transporting the goods to the customer. You are advised to show your working.

MAS Supermarkets is the largest supermarket chain in Cyprus. It owns many shops across the country, selling a wide range of groceries. The firm states that its focus is on selling quality products, offering good service and low prices.

(b) With reference to the data above and your knowledge of economics, analyse how internal economies of scale may lead to benefits for MAS Supermarkets.

2023 October/ November

(1) What is meant by the term economies of scale?

(a) State one main feature of an oligopoly.

(2) Figure 3 shows some of the production costs in March for a firm manufacturing clothing in Bangladesh.

Production costs	Bangladeshi Taka (Tk)
Rent	20 250
Raw materials	10 050
Advertising	5 125
Labour (paid in direct proportion to output)	105 000

Figure 3

(a) Describe one reason why an entrepreneur is a factor of production.

In 2028, the lowest age at which workers can receive a private pension in the UK will rise from 55 to 57. This means that the age of retirement will increase for many people.
(c) Explain one advantage for firms of an increase in the retirement age.

(3) Figure 5 shows profit for a firm between 2020 and 2022.

(a) Calculate, to two decimal places, the percentage change in profit for the firm between 2020 and 2022. You are advised to show your working.

Year	Profit ($)
2020	20 250
2021	21 000
2022	22 950

Figure 5

Churros are a popular Spanish snack made from fried pastry and covered in sugar and/or chocolate. Raphael operates a factory making the churros pastry, which is supplied to busy restaurants and street vendors all over Madrid, Spain. The factory has been owned by his family since 1980 and currently has 23 employees.

The pastry-making process involves mixing all the ingredients together and then heating them. Once the mixture has cooled, eggs are added, and the dough is then shaped into lengths of about 15 cm. Raphael is considering introducing division of labour into the production process in order to increase productivity.

(b) With reference to the data above and your knowledge of economics, evaluate whether introducing division of labour is the best way for Raphael to increase productivity in his pastry-making factory.

2023 May / June

(4) Define the term congestion.

(5) Figure 2 shows some of the monthly production costs for a firm which makes furniture.

Production costs	€
Rent	30 000
Raw materials	16 500
Insurance	7 000
Labour (payment depends on output)	95 000

Figure 2

(a) Calculate the total variable costs for the firm each month. You are advised to show your working.

6) Figure 3 shows the market for apples.

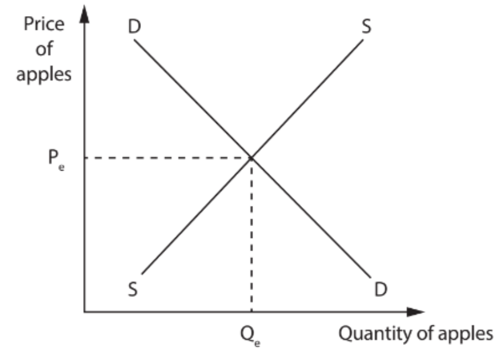


Figure 3

(a) Using the diagram below, draw the likely effects on the market for apples following an increase in the advertising of apples. Label the new curve, the new equilibrium price and the new equilibrium quantity.

A firm produces tennis balls. There are a number of stages in the process of producing tennis balls. The firm uses division of labour in its factory.

(7) Drinking water in the Canary Islands has to be filtered by machines to remove the salt from sea water. Samples are taken by production workers to ensure salt and impurities have been removed.

(i) With reference to the data above and your knowledge of economics, analyse how all four factors of production might be used to produce drinking water in the Canary Islands.

(8) Rail travel in Poland is a monopoly. Polskie Koleje Państwowe (PKP) is the main firm that operates the trains and the rail network in Poland. Both passenger and freight trains run on PKP's network. It has over 18,510km of track.

Its main aims are to meet the transport needs of the state and the interests of its consumers.

(a) With reference to the data above and your knowledge of economics, assess whether a monopoly such as PKP is likely to benefit consumers.

(9) Studies have shown that there are several negative impacts from spending too much time using a mobile phone. These include pain in the thumbs, loss of sleep and anxiety. Despite this, it is not unusual for people to spend a lot of time using their phone, even in the presence of others.

(a) With reference to the data above and your knowledge of economics, analyse why some people may ignore the negative impacts of spending a lot of time using a mobile phone.

2022 May /June

(10) Explain one disadvantage of the division of labour for the warehouse employees.

A firm has total fixed costs of $75000 per month and variable costs of $525 per unit. It produces 1350 units per month.

(a) Calculate the total costs per month for the firm. You are advised to show your working.

(b) Define the term takeover.

(c) Describe one reason why consumers do not always maximise their benefit from the consumption of a product.

(11) It is estimated that 23 billion bricks are made each year in Bangladesh. The industry employs over one million people. Demand for bricks is rising due to growth in the construction industry. The production of bricks contributes to the severe air pollution in the country by emitting smoke and dust clouds. Children, the elderly, pregnant women and those with a respiratory or heart condition may be especially affected by the poor air quality.

(12) The English city of Kingston upon Hull has an independent telecoms network known as Kingston Communications (KCOM). It is the only provider serving the city and its surrounding towns and villages. People living there do not have many broadband options. The network remained independent when most others joined together to become British Telecom (BT) and it has remained as a separate company to this day.

As well as broadband, KCOM also offers home phone and mobile deals which are available at a discounted price when purchased together. It will soon offer high-quality television packages. Its broadband is fast, with fibre optic packages which can reach impressive speeds of up to 250Mb. However, these are not available everywhere in the region and KCOM's packages are more expensive than those in the rest of the country. This is especially true as they have low download limits.

(c) With reference to the data above and your knowledge of economics, evaluate whether a monopoly such as KCOM is always bad for the consumer.

2021 May / June

13) Define the term monopoly.

(2) Bupa is an international firm that provides healthcare products to 32 million customers in 190 countries. The initial purpose of the firm was to provide health insurance. It has grown by offering a wider range of services. These include retirement homes for the elderly, eye care, hospital treatment, dental work and travel insurance.

(i) With reference to the data above and your knowledge of economics, analyse why Bupa may have decided to operate in a wider range of markets.

3) State one reason why governments intervene in the economy.
(14) Figure 2 shows selected financial data of a firm selling shoes.

	Cost/Revenue per pair of shoes ($)
Selling price	89
Raw materials	17
Labour	35

Figure 2

(a) Calculate the profit or loss for the firm for each pair of shoes. You are advised to show your working.

Governments can use fines to deal with externalities.
(b) Define the term fine.

Microsoft has a patent on a number of its technological designs.
(c) Explain one reason why Microsoft might have patents on its designs.

Fast food restaurants around the world use division of labour during the production of food and drinks. Employees are given different tasks. Burgers are fried before being placed in a bread 'bun'. Chopped lettuce and tomatoes are then added. Potatoes are also peeled and sliced in order to make fries.

(d) With reference to the data above and your knowledge of economics, assess whether a firm, such as a fast food restaurant, always benefits from using division of labour.

15) Figure 5 shows the population in Austria in the years 2000, 2008 and 2018.

Year	Population
2000	8,069,276
2008	8,341,532
2018	8,891,388

(Source adapted from: https://worldpopulationreview.com/countries/austria-population/)

Figure 5

(a) Calculate, to two decimal places, the percentage change in the population in Austria between 2000 and 2018. You are advised to show your working.

(b) In 2019, the monthly minimum wage in Spain increased by the largest percentage in over 40 years. It rose by around 22% compared to only a 4% rise the previous year. It was part of an annual review with a focus on 'making Spain great again'. The Spanish Prime Minister said that, 'A rich country should not have poor workers'.

Figure 7

With reference to the data above and your knowledge of economics, evaluate whether an increase in the minimum wage would benefit an economy such as Spain.

2019 May / June

(16) Introduced in 1935, Inca Kola is a yellow-gold coloured, fizzy, soft drink that is popular all over Peru. By 1995, Inca Kola had grown to become a strong competitor of Coca-Cola. Inca Kola had a 32.9% market share compared to Coca-Cola's 32.0% in Peru.

By 2014, Coca-Cola owned 48.5% of Inca Kola shares.

(i) With reference to the data above and your knowledge of economics, analyse the possible reasons for Coca-Cola purchasing shares in Inca Kola.

(17) **Beating the congestion in Dhaka**

Nearly 17 million people live in Dhaka, the capital of Bangladesh. The majority of people live in the city centre and traffic congestion is a problem. However, there are many auto rickshaws (a small, three-wheeled vehicle, driven by a motorcycle engine) competing in the city centre to take passengers to their destinations. Fares tend to be cheaper in the city centre than they are outside the city centre and are usually agreed between passengers and drivers.

Dhaka has a large number of auto rickshaws competing for fares.

(a) Apart from price, describe one advantage for passengers of this competition.

(b) With reference to the information given in 'Beating the congestion in Dhaka', explain one reason why prices for journeys using an auto rickshaw might be higher outside the city centre.

(c) A lack of space in many busy cities means parking is an increasing problem. Japan has developed the first Automated Parking Systems (APS). These are car parks where the cars are automatically stacked. The driver takes the car to the entrance, then technology takes over, placing each car on racks, one above the other. This allows many cars to be parked in a very small area. Not only do they offer a more practical use of space than traditional multi-storey car parks, but they cost less to build. The drivers benefit from cheaper parking fees and they save time.

(d) With reference to the data above and your knowledge of economics, assess the extent to which changes in technology may reduce the shortage of car parking spaces in city centres.

(18) Firms in Canada, the world's second largest country, have been struggling to find the labour needed for specialist positions such as computer engineers and web designers. The 'Global Talent Stream' is a government programme that provides firms with a quick way to hire highly skilled foreign workers. High costs and long time commitments often stop Canadians from training. Although a processing fee is payable for each new employee, firms have welcomed the programme.

(a) With reference to the data above and your knowledge of economics, analyse why Canadian firms may have been struggling to hire the labour they need.

Productivity is a measure of how efficiently goods and services are produced and is the single most important determinant of a country's per capita income. Canada's labour productivity growth has been lower than that of other leading economies for many decades, reducing its international competitiveness. Since 2011 however, Canada's labour productivity has greatly improved and it is now the 3rd most productive of the 16 leading economies.

(b) With reference to the data above and your knowledge of economics, assess the extent to which an increase in education and training is the best way to increase productivity.

19) Competition and Markets Authority warns online sellers about collusion

The Competition and Markets Authority (CMA) is a UK government department that aims to increase competition. It has reminded online sellers of electrical equipment that collusion is illegal and can result in serious penalties. The CMA stated that buying electrical equipment online, such as laptops and games consoles, means consumers can search a wide range of deals from many different sellers. However, it also stated that collusion is a threat.

(a) With reference to the data above and your knowledge of economics, analyse why collusion may be a disadvantage for online consumers buying electrical equipment.

(20) Figure 7 shows the market share of supermarkets in the Netherlands in 2017.

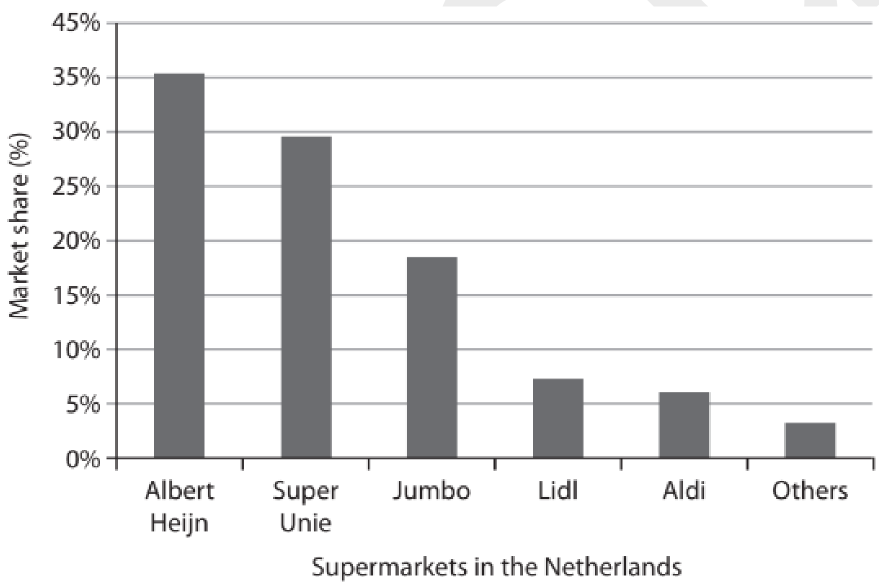


Figure 7

(a) With reference to the data above and your knowledge of economics, evaluate how firms might be influenced by competing in an oligopoly, such as supermarkets in the Netherlands.