The objectives of firms

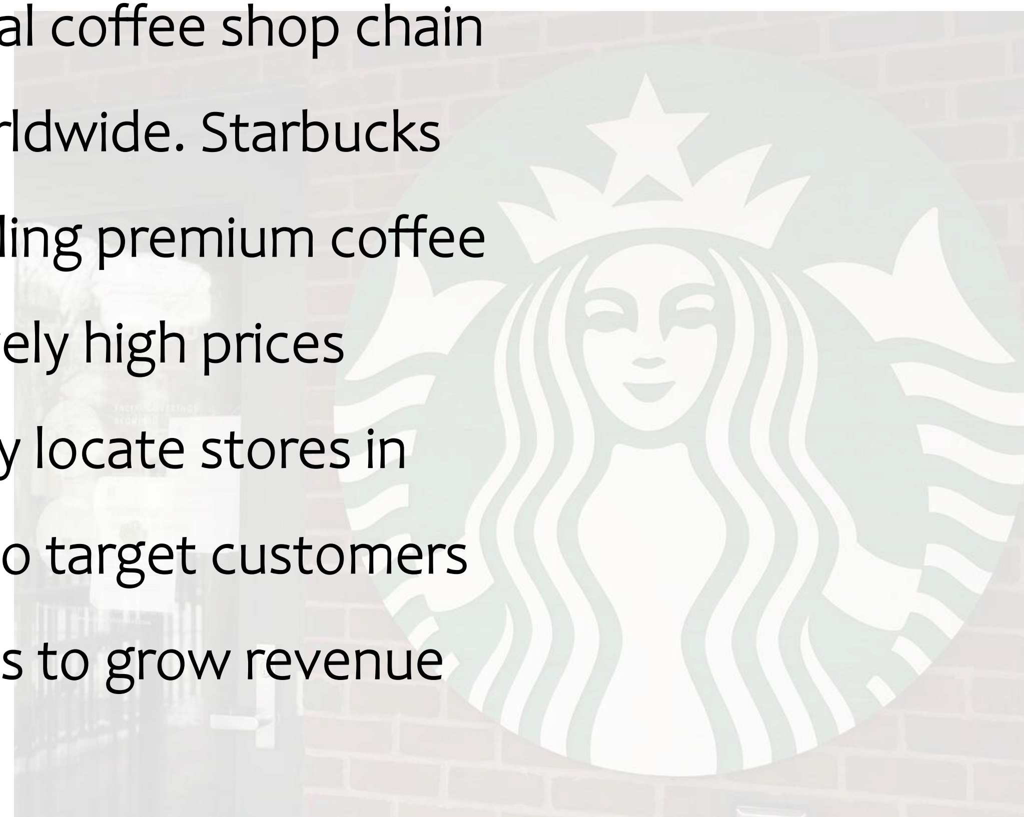
The objectives of firms

- Why should we know the objectives of firms?
  - *The objectives of a firm will affect its behaviour.*
  - *The objectives will affect the decisions a firm can make (i.e price, output, R&D ...)*

- **Case Study** - Discuss and identify the main objectives of two coffee shops - Starbucks and Brew HaHa.

Case No. 1

Starbucks is a large international coffee shop chain with over 30,000 locations worldwide. Starbucks aims to maximize profits by selling premium coffee drinks and food items at relatively high prices compared to competitors. They locate stores in high-traffic and affluent areas to target customers willing to pay more. Their goal is to grow revenue and profits for shareholders.



Case No. 2

Brew HaHa is a small local coffee shop with just 3 locations in town. The owner's main goal is not big profits but providing a comfortable community gathering space and fairly-paid jobs for staff. Brew HaHa pays above minimum wage and provides benefits. They source high-quality fair trade coffee beans to support farmers. Prices are moderate to cover costs but they don't aim to maximize profits.

The objectives of firms

- For most of the firms, what is the basic objective for them?
  - *Profit maximisation*

Profit: sales revenue minus the cost of production (or running of the business)

Profit maximisation

- In a free market economy, profit has many functions
  - *reward for risk-taking*
    - *reward for the uncertainty of getting successful*
  - *incentive*
    - *Profit provides an incentive to set up and continue in business.*
  - *source of funds*
    - *Profit is often used to finance investment.*

Other objectives of a firm

- **Sales growth**

  Some firms may wish to maximise the number of units of their products or services that they sell. Some business owners and managers will gain *personal satisfaction* from having as large an operation as they can (without making a loss). This does not always mean that they are maximising profits – to achieve sales growth firms may have to reduce the price of their goods and services.

Other objectives of a firm

- **Increasing market share**

A firm may also take the view that a short-term goal may be to improve the **proportion of the market share** that they have. This means that they will need to take customers off their competition or start to sell a higher proportion of goods than their competitors. The firm may hope that they gain more **customer loyalty** and maintain profits over an extended period of time.

Other objectives of a firm

- **Social enterprises**

  Some firms may not wish to make large profits at all but want their business to provide a social purpose. For example, supermarkets may sell **Fair Trade** foodstuffs at high prices and with low profit margins but will be content that they are **supporting farmers in poorer communities**.

- There may also be some other objectives.

- Objectives vary among different firms.

ACTIVITY 1

Consider the table below on market share for supermarkets in the UK.

Grocery Market Shares April 2016	Market Share (%)
Tesco	28
Asda	17
Sainsburys	16
Morrisons	11
Co-Op	6
Aldi	6
Waitrose	5
Lidl	4
Iceland	2

Activity

- Although they have been established since 1913 in Germany, the first Aldi store in the UK was only opened in 1990. Now it has over 300 stores nationwide and its market share continues to increase – over-taking the long-established UK brand Waitrose.
- Suggest two possible advantages for Aldi from growing its market share in the UK.

Costs of production

Calculating costs and revenues

Activity:
Bear Necessities

Calculating costs and revenues

1. **Fixed costs (FC)**

   e.g. factory rent, machinery hire charges, electricity supply, bank loan repayments

2. **Variable costs (VC)**

   e.g. fabric, foam, wages

Fixed costs (FC): are (short-run) costs that do not change with output.

Variable costs (VC): are costs that change with output.

Bears produced per week	Total fixed costs $	Total variable costs $	Total cost $	Average cost per bear $
0	200	0	200	--
50	200	400	600	12
100	200	800	1000	10
200	200	1600	1800	9
300	200	2400	2600	8.67
400	200	3,200	3,400	8.5
500	200	4,000	4,200	8.4
600	200	4800	5000	8.3
700	200	5600	5800	8.28
800	200	6400	6600	8.25
900	200	7200	7400	8.22
1,000	200	8000	8200	8.2

8

Bears produced and sold per week	Total revenue $	Total cost $	Profit or loss $
0	0	200	-200
50	500	600	-100
100	1000	1000	0
200	2000	1800	200
300	3000	2600	400
400	4,000	3,400	600
500	5,000	4,200	800
600	6000	5000	1000
700	7000	5800	1200
800	8000	6600	1400
900	9000	7400	1600
1,000	10000	8200	1800

15

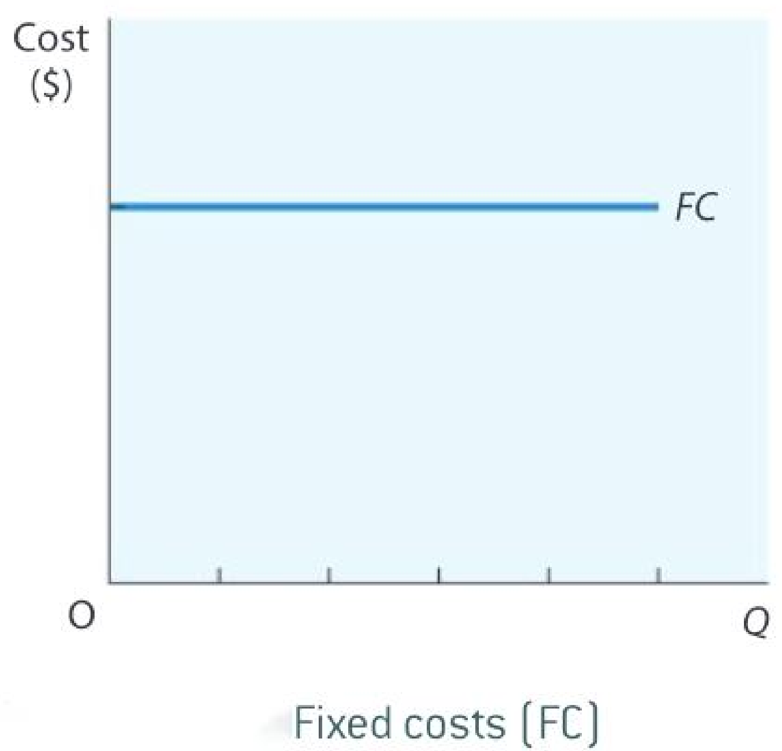
- As output increases, average fixed cost decreases at a decreasing rate. this is because the fixed cost is spread over an increasing number of output.

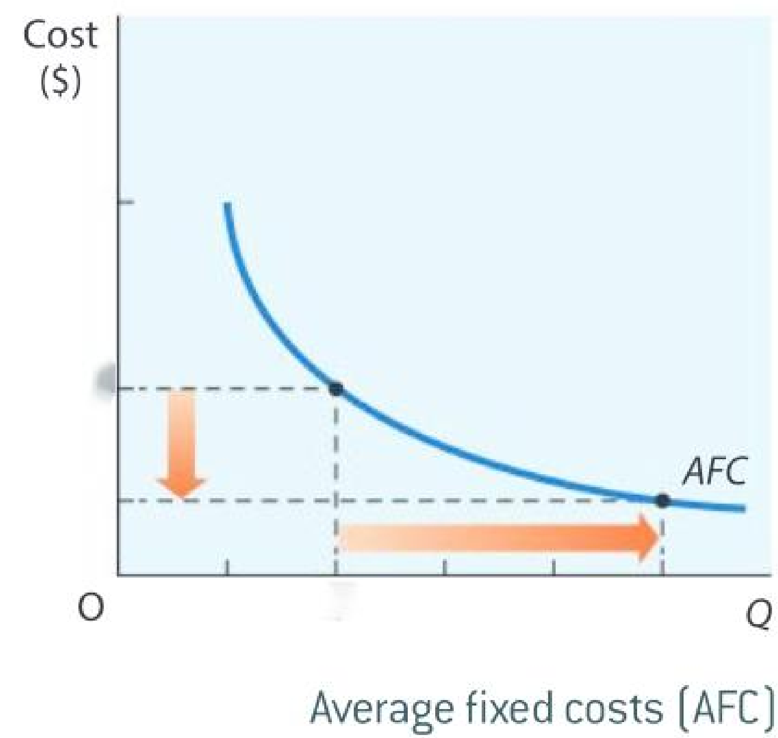
Calculating costs and revenues

1. **Fixed costs (FC):** are costs that do not change with output. e.g. rent
2. **Variable costs (VC):** are costs that change with output. e.g. wages
3. **Total cost (TC) = total fixed costs + total variable costs**
4. **Total revenue (TR) = price per bear × number of bears sold**
5. **profit = total revenue – total cost**
6. **Break-even** level of output occurs where TR = TC

   i.e. profit or loss is zero
7. Average revenue (AR) = total revenue / number of bears sold

Fixed cost vs. average fixed cost





Ethical and Moral Considerations in Business

- ‘**Ethics**’ is the concept that someone or an organisation should do the ‘right thing’ by society’s standards.
- ‘**Moral considerations**’ are referring to actions that contravene an individual’s or a group of people’s principles.
- Although profit will often be the most significant objective, businesses may still be under considerable pressure to ensure that they operate in an ethical or moral way, even if this may mean increasing average costs.

Ethical and Moral Issues in Business

1. **Ensuring sufficient business taxes are paid to central governments**

- Case Study:
  - Starbucks is a multinational coffee company with operations in various countries, including the UK.
  - Between 1998 and 2012, Starbucks paid only £8.4 million in corporation tax to the UK.

- If a business pays low levels of tax, some people will argue that the company is **not fulfilling its moral obligations**.

Ethical and Moral Issues in Business

2. **Equality of pay for staff**

   - Businesses are under pressure to ensure that the difference in income between the lowest paid and highest paid workers is fair.

3. **Environmental impact**

   - The impact on the environment either from production processes or from use of manufactured products needs to be considered.

Consequences of Ignoring Ethical and Moral Considerations

4. Exploitation of workers

- Some businesses reduce costs by using relatively cheap labour from developing nations. The business needs to be seen to pay such workers a fair pay and ensure that they work in a safe environment.

- Failure to consider these ethical and moral objections can lead to bad publicity and a reduction in sales for the business.

Review Questions

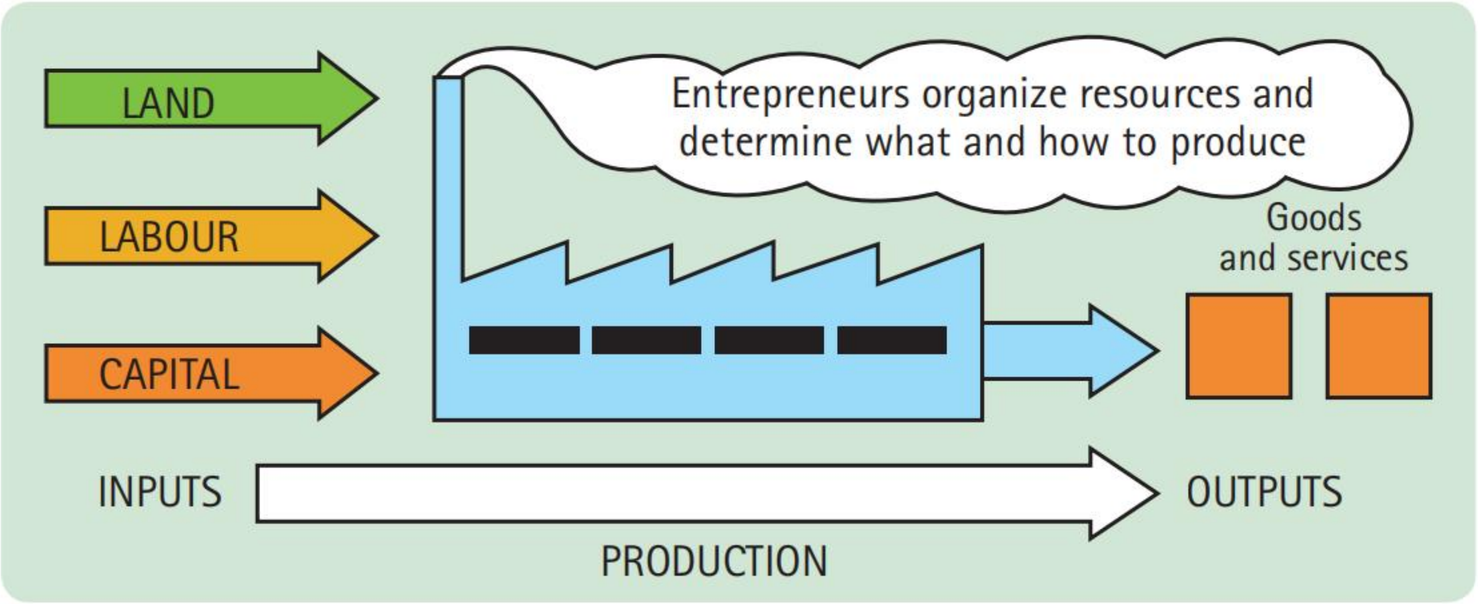
1. Define “fixed cost”.
2. How does the average fixed cost change with output in the short run? why?
3. Define “virable cost”.
4. How to calculate short-run average cost? Write down two ways of calculation.
5. Define “total revenue”, formula?
6. How to calculate profit?
7. Explain two ways of increasing profit.
8. List three ethical and moral issues that a firm may consider.

Increasing profit

- A firm can increase its profits by reducing costs or increasing revenue. For example, a firm could:
  - find cheaper supplies of raw materials to reduce costs
  - spend more on advertising to increase sales and revenue
  - change the price of its products to increase revenue
    - ✓ if a firm sells a product with price elastic demand, it would be likely to increase revenue by reducing price
    - ✓ in contrast, if a firm sells a product with price inelastic demand, it should increase revenue by increasing price

Production & Productivity

How do organizations produce goods and services?



Production

- Some firms concentrate on producing only one part of a product which they are best at.
  - specialization

- Some firms may produce a range of different products in case consumer demand for any one of them falls.

- Production will normally involve a chain of productive activity.

Production: (a process that) converts/turns inputs, such as raw materials, capital and labour, into final output.

Dough!

1 The jumble of cartoons and numbered descriptions that follow on the next page together describe how bread is produced. Match each picture to a description. Write down the descriptions to form a chain of the productive activities involved in bread production, right through to final sale to consumers. Some descriptions may be used more than once.

1 Wheat, water, yeast and other ingredients are mixed together to produce dough
2 Coal and oil are used to power electricity stations for use by firms and households
3 Farms plant seeds to grow wheat
4 Supermarkets and other shops sell bread to consumers
5 Road haulage service providers transport harvested wheat and finished breads
6 Consumers buy bread
7 Wheat is harvested
8 Insurance firms provide insurance to protect firms from risk of damage or theft
9 Dough is poured into baking pans and placed in ovens to cook
10 Sealed packets for the bread are produced and labelled in printing machines
11 Consumers make sandwiches or toast to consume
12 Finished loaves of bread are sealed in plastic packaging
13 Commercial banks provide loans and payment services to firms
14 Food inspectors check the quality and hygiene of the breads and the bakery

3 Farms plant seeds to grow wheat

7 Wheat is harvested

5 Road haulage service providers transport harvested wheat ~~and finished breads~~

13 (Commercial banks provide loans and payment services to firms)

1 Wheat, water, yeast and other ingredients are mixed together to produce dough

2 (Coal and oil are used to power electricity stations for use by firms and households)

9 Dough is poured into baking pans and placed in ovens to cook

8 (Insurance firms provide insurance to protect firms from risk of damage or theft)

12 Finished loaves of bread are sealed in plastic packaging

10 Sealed packets for the bread are produced and labeled in printing machines

14 Food inspectors check the quality and hygiene of the breads and the bakery

5 Road haulage service providers transport ~~harvested wheat and~~ finished breads to supermarket

4 Supermarkets and other shops sell bread to consumers

6 Consumers buy bread

11 Consumers make sandwiches or toast to consume

- Each chain of productive activity will link together many different firms and activities:
  - produce natural resources to those who use these materials
  - make component parts and finished goods and services for consumers
  - operate warehouses
  - transport services
  - sell products to customers
  - ...

Another Meaning of Production

- Besides a process, production has another meaning.

Production: the total output produced in a given time.

- How to increase production?
  - ■Using more inputs of factors of production
  - ■Increasing the **productivity** of exsiting factors of production

Productivity

- What is productivity?

■ Example:
  - ✓ **Firm A** uses 10 units of resources to produce 40 units of output per week
  - ✓ **Firm B** uses 10 units of the same resources to produce 20 units of output per week
  - ✓ Which firm is more productive?

Productivity: measures how much a unit of a factor of production produces in a given time.

$$\frac{total\ output\ per\ period}{input\ factors\ of\ production}$$

Production vs. Productivity

- What's the relationship and difference between productivity and production?
  - Productivity measures how efficiently resources are being used in production.
- In general, **productivity** in a business will have increased if:
  - more output or revenue is produced from the same amount of resources
  - the same output or revenue can be produced using fewer resources

Factors that influence productivity

- How to improve productivity? think of at least 3 different methods. (5-min discussion)

- Productivity can be increased by improving the quality or efficiency of inputs into the production process. there are several says this can happen.

Factors that influence productivity

- **Investment**

  - Investment involves increasing or improving capital equipment, for example, by creating better machinery or developing new technology.

  - This should allow a firm to produce more output per unit of factor of production per period of time.

Factors that influence productivity

- **Specialisation and division of labour**

  - When factors of production such as labour specialise in making a particular product, or in a specific task, they become more experienced and efficient. This leads to increased output per worker per period of time.

Factors that influence productivity

- **Education and training**
  - More and better education and training should increase the knowledge and skills of the workforce. Training could also equip workers with the skill of using newer capital equipment. if each worker can produce a higher amount of output in a period of time, productivity will increase.

Factors that influence productivity

- **Better management and motivation**
  - If productive resources are managed more efficiently by senior employees, there will be less idle time between the stages of production and less waste.
  - If individual jobs are made more interesting, or if monetary and non-monetary incentives are used appropriately, workers may be motivated to work more productively.

Activity

Google have several offices around the world to house their employees and have plans to build a new one in London. A common theme throughout their offices are a series of resources to help its workers. These include swimming pools and 'nap' rooms for staff to have short sleep breaks, games rooms and zones that resemble children's play areas.

What benefits does Google provide for the workers?

Why would Google include these types of resources for their workers when they come at such a large cost?

Benefits of increased productivity

- **Lower costs**
  - If each worker and other factors of production can produce more units of output for the same hourly reward, the cost of producing each unit of output should fall. This reduces the total costs of production for a firm.
  - Higher productivity could lead to **higher wages** for workers (particularly if they are paid commission or by output).

Benefits of increased productivity

- **Increased competitiveness**

  - Reduced average costs of production mean that firms can cut their prices. This can lead to a firm being more competitive than rival firms in their market. This can help a firm to increase its share of the total market, which can also increase revenue.

Benefits of increased productivity

- **Higher profit**
  - If increased productivity leads to reduced costs, firms can keep their prices the same but make higher profits. This can increase the reward to entrepreneurs and other people that have invested in the business.
  - It can also enable a firm to put more profit back into the business to help it develop new products or expand.

Economies of Scale
Diseconomies of Scale

Charlene

Economies of scale

- How to calculate average cost?
  - *AC = TC / Q*

- Economies of scale means:
  - *a larger level of production scale can lower the average cost.*
  - *within a firm, economies of scale happens* ***when an increase in a firm's output results in a fall in average costs****.*

Economies of scale: a ***fall*** in ***average costs*** due to the ***growth of a firm or industry***.

Increasing the scale of production

Economies of scale

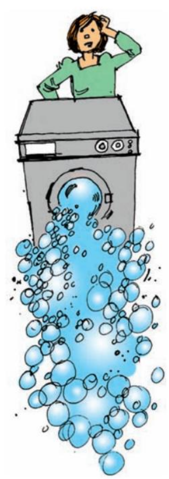
Big is beautiful

Case 1: Cleaning up their act

A global detergent manufacturer has recently decided to invest in new equipment to expand its production. The new machines are very expensive but can produce twice as many soaps each hour as their existing machines.

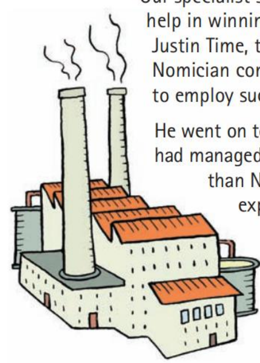
A bank loan will be used to finance the expansion. Banks are willing to lend to the firm on very reasonable terms because it owns many valuable assets it is able to use as security or collateral against loans. Banks also recognize that because the firm produces a wide range of detergents for many different overseas markets any demand fluctuations are unlikely to seriously affect the firm's ability to repay its debts. Smaller competitors, however, will find it difficult to raise money for their modernization. Even if loans are made available, interest charges tend to be higher because smaller firms are often less financially secure than larger ones and therefore their risk of business failure is higher.

The large manufacturer has a new soap coming on to the market next week and it is planning a big advertising campaign to launch it. The cost of the campaign is around $1 million, but with an output of 10 million bars of soap per month, this only adds 10 cents to the cost of producing each unit of soap. If it was producing, say only 2 million soap bars a month, like many of its smaller rivals, the campaign would add 50 cents to the unit cost of each bar.



Case 2: Blasting off!

The large iron smelting company in Northern Ecoland has recently announced how pleased it is at having won a big overseas order as a result of it being able to offer a lower price than its main overseas rivals in Nomicia.



'Our specialist sales staff were a great help in winning the order,' enthused Mr Justin Time, the Company Director. 'Our Nomician competitors could not afford to employ such specialists.'

He went on to say how his company had managed to offer a lower price than Nomician producers. He explained that unit costs were much lower in Ecoland because its plant had managed to invest in a large blast furnace, while the smaller Nomician plants had to band together in certain areas to be able to afford such furnaces. Mr Time also added that some Nomician firms incurred higher transport costs as a result of their scale of operations being smaller. They have to use external road haulage services and therefore will be paying a profit margin in transport costs to these providers. The Ecoland Company, however, has its own fleet of juggernauts able to carry far more tons of iron than smaller trucks. Petrol costs per mile are lower and fewer drivers are also required.

Time also explained how his firm's average costs were lower because it is able to buy bulk quantities of iron ore. 'Because we buy 40 million tons of the stuff every year, our suppliers are willing to sell it for just $50 per ton,' he said, 'whereas the average Nomician firm only buys 10 million tons a year, but pays $60 per ton.'

- Read the two cases to find out how the firms lower the average costs when incrasing its production/output? (6 mins)

Economies of scale

- **Economies of scale** will reduce the average cost of producing each unit of output as the scale of production is expanded.

- There are five main types of internal economies of scale:
  - **Purchasing economies**
  - **Marketing economies**
  - **Financial economies**
  - **Technical economies**
  - **Risk-bearing economies**
  - **Managerial economies**

Economies of scale

- **Purchasing economies**
  - Large firms are often able to buy the materials, components and other supplies they need in bulk because of the large scale of their production.
  - Suppliers will usually offer price discounts for **bulk purchases** because it is cheaper for them to make one large delivery than several smaller deliveries.
  - When firms make bulk purchases, they have more bargaining power to negotiate for a lower price.

Economies of scale

- **Marketing economies**
  - The fixed costs of advertising in a newspaper or on television will be spread over a much larger output in a large firm than a small firm.

Economies of scale

- **Financial economies**
  - Larger firms can often borrow more money and at **lower interest rates** than smaller businesses.
  - Bank managers and other lenders often consider lending to big organizations as **less risky** than lending to smaller ones.
  - This is because large firms are usually more **financially secure** and can offer more assets, including property and other investments, they can use as **collateral against loans**. Banks can sell these assets in the event a firm fails and cannot repay its debts.

Economies of scale

- **Technical economies**
  - Larger businesses often have the financial resources available to invest in specialized machinery and equipment, to train and recruit highly skilled workers, and to research and develop new products and processes to increase the efficiency of their production.
  - Smaller firms may not be able to afford to do so.

Economies of scale

- **Risk-bearing economies**
  - Smaller firms tend to make a limited range of products in relatively small quantities. If demand suddenly falls for the products they make, there is a large risk of business failure.
  - Larger firms tend to make a greater range of producrs. If demand for one product falls, they are less likely to experience overall failure.

    ✓ For example, Unilever is famous for its soap and detergent products but it also has interests in the production of food, paper, plastics and transport.

Economies of scale

- **Managerial economies**
  - Larger firms are able to afford a greater number of professional and experienced managers, who can more effectively organize resources and enhance worker efficiency.

Review

- Define economies of scale.

- Read the two cases again, identify different types of **economies of scale** achieved by each firm and highlight the related description.

ACTIVITY 8

Identify the types of economies of scale occurring in these case studies:

	Type of economy of scale:
Paperworks paper manufacturing company was set up to offer good employment to people with registered disabilities and has just opened a much larger factory with state-of-the-art machinery. They now hope to supply paper to newspaper companies as well as stationery firms.	
Gordon Construction have grown so large they have been floated on the stock market. Now that they are completing massive building projects they are able to buy raw materials in large quantities at a discount.	

Can firms grow too much?

- When firms grow larger and larger, can they keep the advantage of economies of scale? Why?

- Many firms can experience problems if they try to expand their size and production too much and too quickly.
- As a result, **productivity may fall** and **average costs will rise**. These problems are caused by **diseconomies of scale**.

Disconomies of scale

- Within a firm, diseconomies of scale happens when an increase in a firm's output in the long run results in an increase in its average costs.

Disconomies of scale: a ***rise*** in ***long-run average costs*** due to the ***growth*** of ***a firm or an industry***.

In 1998, Daimler-Benz, a German automobile manufacturer, merged with Chrysler Corporation, an American automotive company, to form DaimlerChrysler AG. The merger was anticipated to create a global powerhouse in the automotive industry. However, the integration process encountered significant challenges, leading to diseconomies of scale.

Communication problems played a crucial role in the difficulties faced by DaimlerChrysler. The merger involved combining two distinct corporate cultures, languages, and communication styles. The language barrier, differences in management practices, and organizational structures hindered effective communication between the German and American teams. Misunderstandings and misinterpretations hampered decision-making processes, leading to inefficiencies and increased costs.

Coordination and control problems were another factor contributing to diseconomies of scale. The merger involved the integration of various departments, such as research and development, procurement, and manufacturing, across different geographical locations. Coordinating activities and aligning strategies became challenging, as decision-making authority was often centralized, causing delays and inefficiencies. The lack of streamlined processes and control mechanisms resulted in duplicated efforts, increased costs, and decreased overall productivity.

The merger also suffered from a lack of morale within the organization. Cultural clashes, conflicting management styles, and power struggles led to a sense of uncertainty and demotivation among employees. The differences in compensation structures and benefits between the two companies further exacerbated the morale issues. Low morale negatively impacted productivity, employee engagement, and overall organizational performance, leading to higher average costs.

- Read the case, identify the reasons why Daimler-Benz experienced diseconomies of scale?
- Discuss in group. (5 mins)

Diseconomies of scale

- Reasons for diseconomies of scale:
  - **Communication problems** – as firms grow, especially if they operate in more than one country or continent, it can become more difficult to communicate clearly and effectively with staff across all locations. This can lead to messages being missed or not passed on, leading to delays in action.

Diseconomies of scale

- Reasons for diseconomies of scale:
  - **Co-ordination and control problems** – as businesses become bigger, it becomes difficult for senior managers to control and monitor all resources. This can lead to increased inefficiency, increasing average costs.
  - **Morale** – workers in a large company may feel less motivated in larger businesses because they have less contact with senior managers, leading to reduced productivity and higher average costs.

Benefits and costs of growth for a business

Benefits	Costs
• As a business increases its output, economies of scale mean that it can reduce its average costs. • This can mean the business can pass on these cost savings to consumers in the form of lower prices, giving it a competitive advantage in its market. • Alternatively, it can lead to higher profits, which can be re-invested in the business.	• As a business gets much larger, it may begin to experience diseconomies of scale as its average costs of production start to rise. • This can make a business less competitive if it needs to raise the price of its products to cover these higher costs. • If a business chooses to keep its prices steady, it may suffer reduced profits, limiting its ability to re-invest money into the business.

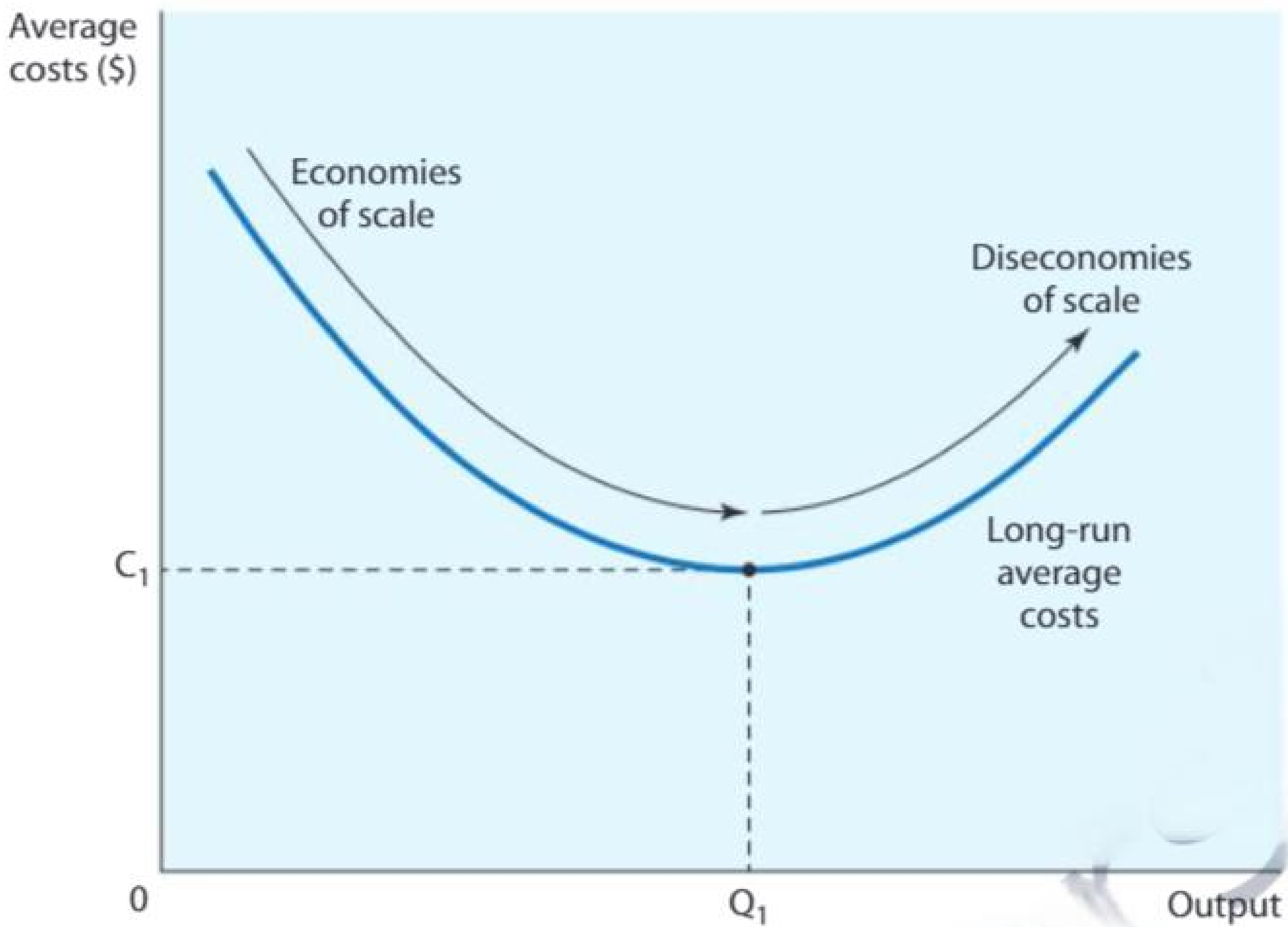
The relationship between costs and productive scale

- We know that as the production in a firm is expanded
  - It may enjoy a reduction in its average cost per unit of output at beginning
  - And then the AC may be unchanged
  - After a certain level of production the firm may experience diseconomies of scale

The relationship between costs and productive scale

- What should be the best size or **optimum size** for a firm?
  - It cannot be the larger the better.
  - When a firm increases its scale, it will firstly experience economies of scale. But up to a certain point, its average cost will rise (diseconomies of scale). So at the junction of economies and diseconomies of scale it will enjoy the lowest average cost.
  - The best size or optimum size for a firm is where it can reduce its **average costs to their lowest point.**

Figure 4.15 shows that as a business increases its output from 0 to Q_1, its average costs fall, indicating that it is benefiting from economies of scale. However, as output increases beyond Q_1, average costs begin to rise because of diseconomies of scale.



▲ Figure 4.15: The effect of economies and diseconomies of scale on average costs

Thank you for your attention!