

## 3 A firm's costs – Part 1

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Name: \_\_\_\_\_ Class: \_\_\_\_\_ Date: \_\_\_\_\_

### Vocabulary

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*Write each word three times.*

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| English            | Write it 3 times (English) |
|--------------------|----------------------------|
| Fixed cost         | _____                      |
| Variable cost      | _____                      |
| Economies of scale | _____                      |

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### Recall

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Businesses have to think about costs:

- Some costs stay the same however much you make (rent).
- Other costs rise as you produce more (materials).
- Making things in bulk can lower the cost per item.

This sheet lines up a firm's costs. Each idea has a worked example.

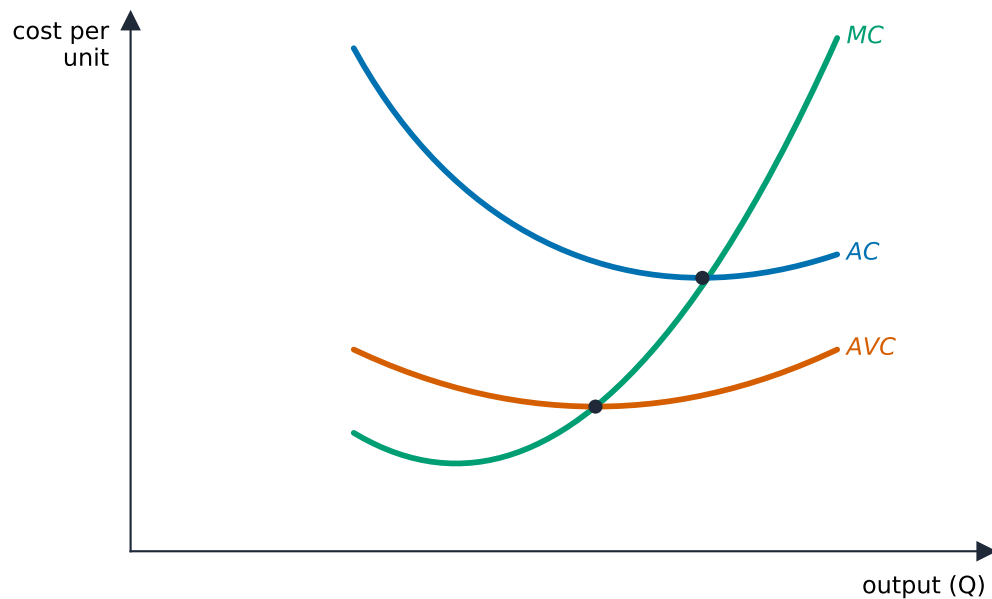
### New ideas

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#### ■ 1 Fixed and variable costs

- **Fixed cost** does not change with output (rent on the factory).
- **Variable cost** rises with output (materials, labour).
- Total cost = fixed + variable.

## ■ 2 Per-unit costs

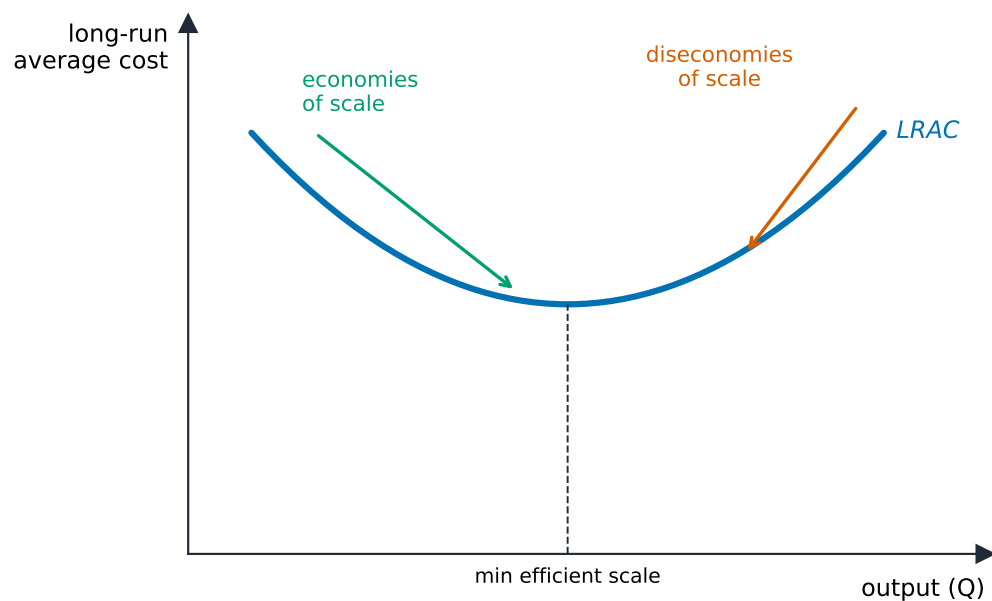


- **Average total cost (ATC)** = total cost  $\div$  quantity.
- **Marginal cost (MC)** = the cost of making one **more** unit.

*Worked example.* If total cost is \$300 for 10 units,  $ATC = \frac{300}{10} = \$30$ . If making an 11th unit raises total cost to \$325, the marginal cost of that unit is \$25.

## ■ 3 Economies of scale

**Economies of scale** mean the average cost **falls** as the firm grows – through bulk buying and specialization.



#### ■ 4 Diseconomies of scale

If a firm grows too big to manage well, average cost can start to **rise** again – diseconomies of scale.

**Watch out:** marginal cost is the cost of the **next** unit, not the average cost. A firm decides whether to make one more unit by looking at its marginal cost, not the average.

### Practice

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Try these in order. The methods are all above.

**2.1** State the difference between a fixed cost and a variable cost, with an example of each. [2]

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**2.2** A firm's total cost for 5 units is \$200. Find the average total cost. [2]

**2.3** Making a 6th unit raises total cost from \$200 to \$236. Find the marginal cost of that unit. [2]

**2.4** Explain what economies of scale are. [2]

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**2.5** State one reason a very large firm might face rising average costs. [1]

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