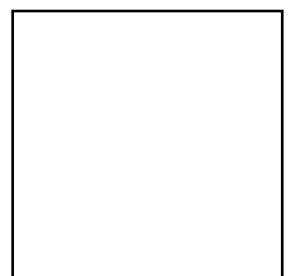
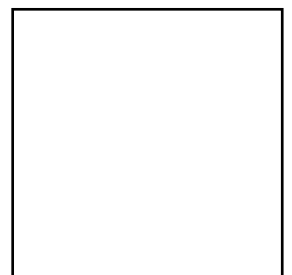
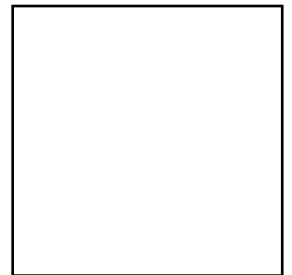


**Nelson Thornes
Distance Learning**

A2 Economics

Steve Margetts



Nelson Thornes

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Contents



Introduction	v
Study Calendar	vii
Module 3 Business Economics and the Distribution of Income	1
Unit 3.1 Production in the Short and Long Run	1
Unit 3.2 The Objectives of Firms	19
Unit 3.3 Competitive Markets: Perfect Competition	31
Unit 3.4 Concentrated Markets: Monopoly	43
Unit 3.5 Concentrated Markets: Oligopoly	63
Unit 3.6 Efficiency and Competition Policy	75
Unit 3.7 The Demand and Supply of Labour	97
Unit 3.8 The Determination of Relative Wage Rates	115
Unit 3.9 The Distribution of Income and Wealth	127
Unit 3.10 Government Intervention in the Market	155
Module 4 The National and International Economy	173
Unit 4.1 The Economic Cycle and Economic Growth	173
Unit 4.2 Inflation	195
Unit 4.3 Unemployment	211
Unit 4.4 Fiscal and Supply-side Policies	221
Unit 4.5 Monetary Policy	235
Unit 4.6 Globalisation	243
Unit 4.7 Trade	255
Unit 4.8 Balance of Payments	267
Unit 4.9 Exchange Rates	275
Unit 4.10 The European Union	285
Revision	297
Glossary	299

Introduction



Welcome to the A2 Economics distance learning pack.

You will find the style of the notes exactly the same as the AS. These resources will prepare you for the two exams you will sit in the summer:

- Module 3 Economics: Business Economics and the Distribution of Income
- Module 4 Economics: The National and International Economy

Each exam is worth 50 per cent of the A2 (this means it is also worth 25 per cent of the final A-level). They are both two hours long and consist of two sections:

- Section A: Two optional data response questions are set; you have to answer one. (40 marks) One question will always relate to the global context and the other to the European Union context.
- Section B: Three optional essay questions are set; you have to answer one. (40 marks)

It will help you greatly if you are able to keep up with current economic events; reading the BBC website is a good starting point, but I would recommend looking at the quality newspapers' websites for more in-depth economic analysis.

I wish you all the best.

Steve Margetts

June 2010

Key to icons used throughout this pack:



Writing



Internet research or online activity

Study Calendar



A2 Economics | 2010–2011

Study week	Unit start date	Unit	Externally assessed assignment	Work due date
		Introduction		
1		Unit 3.1 Production in the Short and Long Term		
2		Unit 3.2 The Objectives of Firms		
3		Unit 3.3 Competitive Markets: Perfect Competition		
4		Unit 3.4 Concentrated Markets: Monopoly		
5		Unit 3.5 Concentrated Markets: Oligopoly		
6		Unit 3.6 Efficiency and Competition Policy		
7		Unit 3.7 The Demand and Supply of Labour		
8		Unit 3.8 The Determination of Relative Wage Rates		
9		Unit 3.9 The Distribution of Income and Wealth		
10		Unit 3.10 Government Intervention in the Market		
11		Unit 4.1 The Economic Cycle and Economic Growth		
12		Unit 4.2 Inflation		
13		Unit 4.3 Unemployment		
14		Unit 4.4 Fiscal and Supply-side Policies		
15		Unit 4.5 Monetary Policy		
16		Unit 4.6 Globalisation		
17		Unit 4.7 Trade		

Study week	Unit start date	Unit	Externally Assessed Assignment	Work due date
18		Unit 4.8 Balance of Payments		
19		Unit 4.9 Exchange Rates		
20		Unit 4.10 The European Union		
21		Revision		

Module 3 Business Economics and the Distribution of Income

Unit 1 Production in the Short and Long Run

By the end of this unit you should be able to:

- Distinguish between the short run and long run.
- Explain the theory of marginal returns.
- Explain the theory of economies of scale.
- Distinguish between production in the short run and long run.
- Outline the relationship between short-run and long-run average costs.
- Distinguish between an economist's and accountant's definition of costs.
- Distinguish between fixed and variable costs.
- Explain semi-variable costs.
- Explain the relationship between total and average costs, total and average variable costs and total and average marginal costs.
- Explain the relationship between total revenue, average revenue and marginal revenue.
- Distinguish between the revenue curves under perfectly and imperfectly competitive markets.
- Distinguish between an economist's and accountant's definition of profit.
- Distinguish between normal and abnormal profits and an economic loss.

Definitions

You should complete the following definitions in your glossary before starting this unit:

- Accounting cost
- Accounting profit
- Average costs
- Average product
- Average revenue
- Capital
- Diminishing marginal returns
- Diseconomies of scale
- Economic cost
- Economic profit
- Economies of scale
- Envelope curve
- Factor of production
- Fixed costs
- Imperfectly competitive market
- Labour
- Land
- Long run
- Long-run average costs
- Marginal product
- Marginal revenue
- Opportunity cost
- Perfectly competitive market
- Productively efficient
- Profit
- Returns to scale
- Semi-variable costs
- Short run
- Short-run average costs
- Total costs
- Total product
- Total revenue
- Variable costs
- Very long run

Introduction

This unit will introduce you to the basic concepts of cost, revenue and profit. A good understanding of these concepts is vital to A2 Economics. Ensure that you fully understand all sections before moving on.

Short run and long run

In the short run, we assume that the amounts of land and labour available to a firm are variable and capital is fixed. This is not an unreasonable assumption as a firm can increase the number of hours its employees work or buy more raw materials, in other words labour and land are variable in the short run. However, the amount of capital, for example factory space and machinery, is fixed as it cannot simply be added.

In the long run, it is possible to increase all economic resources. The only variable that is fixed is the level of technology, but this can be changed in the very long run, for example, new ICT systems or production techniques are introduced.

There is no single definition for measuring for these time periods; they will vary greatly from industry to industry. For example, market traders can increase their capital (the market stall) a lot quicker than an oil company can (a new oil rig).

Production in the short run

If a new pizza takeaway opens, it will have a fixed quantity of capital in the short run. This means that if it wishes to increase output, it can expand the workforce and buy more ingredients (labour and land).

As the firm increases the number of staff it employs, it will see the average numbers of pizzas the workers are able to make will increase as specialisation occurs. We describe the average numbers of pizzas produced as the average product; it is calculated by dividing the total product (total number of pizzas) by the number of workers.

The marginal product is the extra output produced by an additional worker; for example, if the first worker is able to make 8 pizzas, his marginal output is 8. If the second worker can produce an additional 12 pizzas, then her marginal output is 12. When the marginal product is rising, we refer to it as increasing marginal returns.

Activity 1

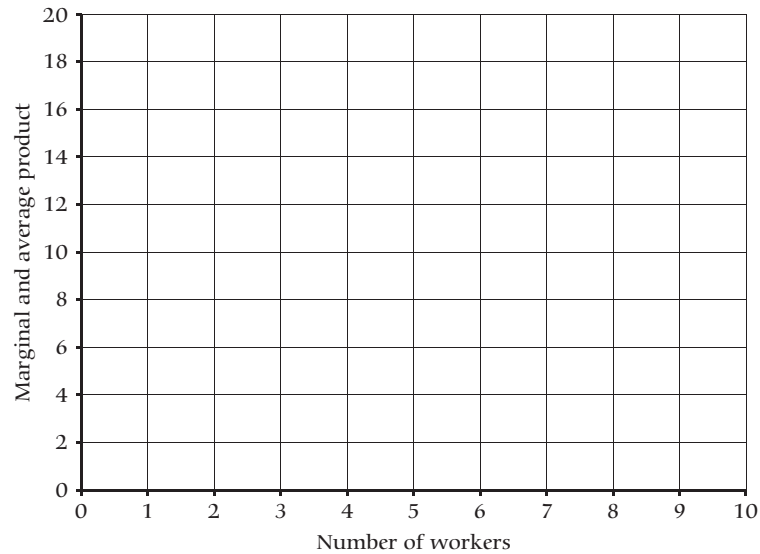


- 1 Complete the table below for the pizza takeaway.

Number of workers	Total product (pizzas)	Marginal product (pizzas)	Average product (pizzas)
1	8	8	8
2	20	12	10
3	35		
4	53		
5	73		
6	88		
7	98		
8	103		
9	103		
10	100		

- 2 What happens to the marginal product when the sixth worker is employed?
- 3 Why do you think this has happened?
- 4 When the marginal product is falling we refer to it as diminishing marginal returns. What happens to the marginal product when the tenth worker is employed?
- 5 Why do you think this has happened?

- 6 When the marginal product is a minus figure, we refer to it as negative marginal returns. Plot the average and marginal product curves on the chart below:



- 7 Where do the average and marginal product curves intersect?



We can explain production in the short run as suffering from the law of diminishing marginal returns.

Production in the long run

In the long run, the firm is able to vary all of the factors of production. This will allow it to overcome diminishing marginal returns as it can increase the amount of capital.

It is now possible to calculate the average cost of producing different quantities. When the average cost falls, the firm is experiencing increasing returns to scale; economies of scale (see AS Unit 1.6 Production and efficiency) lead to the fall in average cost.

We have already highlighted a number of internal economies of scale during the AS course:

- Technical economies – large firms are able to buy expensive equipment that will make tasks easier. It would not be economical for small businesses to buy expensive specialised machinery as it would be left unused for long periods of time.
- Increased specialisation – small businesses are not able to take advantage of division of labour in the same way that large businesses are able to as they do not have enough workers to divide the tasks among.
- Increasing dimensions – by doubling the height and width of a warehouse or ship the volume will increase by a greater amount.
- Managerial economies – large businesses are able to employ specialist managers to carry out narrow tasks, whereas smaller ones will have to employ staff able to carry out a number of different roles.
- Marketing economies – large businesses are able to spread the cost of their marketing campaigns over a large volume of output. A large business will be able to spend significantly more on marketing than a smaller competitor, but the cost of advertising per unit sold will be lower.

- Purchasing economies – large businesses are able to negotiate discounts as they will purchase huge volumes directly from the manufacturer. Smaller rivals may have to buy from a wholesaler and consequently pay a higher price.
- Financial economies – larger businesses will usually be deemed to be more credit worthy and they will be lent money at a lower rate of interest than a smaller business. If the business sells its shares on the stock exchange, it can raise extra funds by selling more shares – something that has a very low cost. Smaller businesses, who are statistically more likely to go bankrupt, will struggle to borrow money and if they persuade a bank to lend them money, it will usually be at a higher rate of interest.

External economies of scale occur due to factors the business is unable to control. There are a number of different types:

- Growth of industry – if other firms locate nearby, better roads and other facilities may be built. The business may be able to poach workers that have been trained by rival firms. It is possible that suppliers will move to the area as well and that will reduce transportation costs.
- Research and development – universities and other businesses will spend significant amounts of money on research and development.
- New technology – technology may become available that can reduce average costs.

Diseconomies of scale are an increase in the average costs and they may occur if the business gets too large. The causes of diseconomies of scale are often bundled together and called X-inefficiency; this is made up of the following problems:

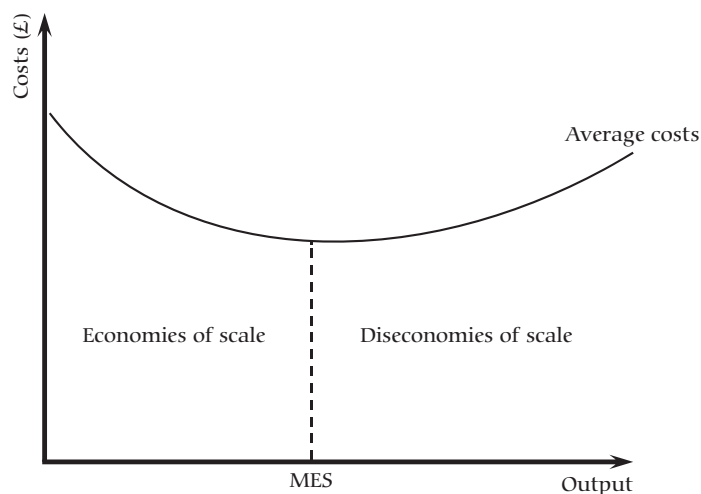
- Control – monitoring the activity, productivity and quality of thousands of workers spread over many countries can be difficult and costly.
- Coordination – efficiently coordinating many suppliers, customers, wholesalers, transporters and so on is very difficult and expensive.
- Motivation – workers can feel alienated as they don't feel part of the business.
- Communication – can be difficult with so many employees in a variety of locations.

It is possible for constant returns to scale to exist when the average cost remains the same. The onset of diseconomies of scale will lead to average costs increasing and diminishing returns to scale to occur.

Activity 2

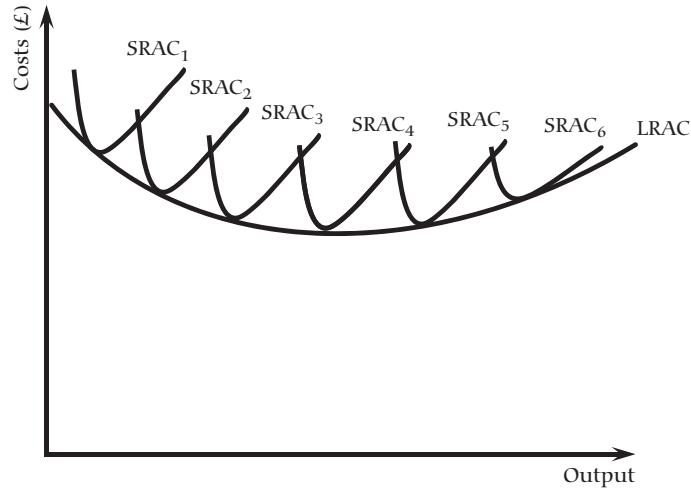


- 1 Highlight on the chart below where increasing returns to scale, constant returns to scale and diminishing returns to scale exist.



2 When is the firm productively efficient?

The chart below shows the relationship between the short-run average costs (SRAC) and the long-run average costs (LRAC). Each SRAC represents the firm with a fixed level of capital; as it increases its level of capital, the SRAC will shift to the right. The LRAC is then drawn from the minimum point on the SRAC curves. You will sometimes hear the LRAC called the envelope curve – this is because it is an envelope to the SRAC curves.



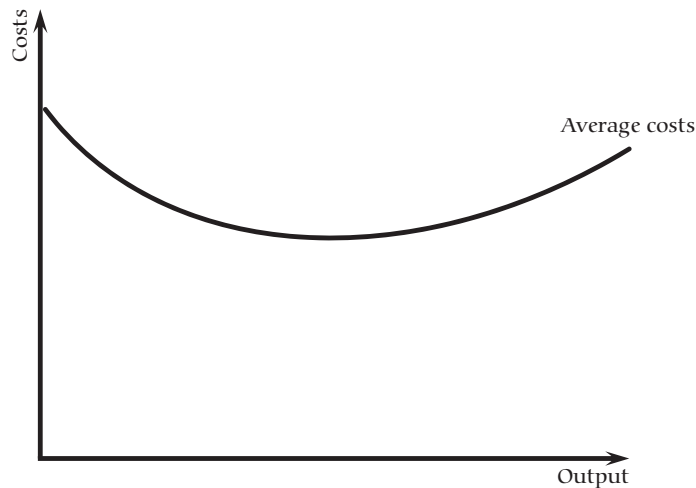
Production in the very long run

In the very long run, technological change and technical progress are affecting the structure of markets and the production and consumption of goods and services. Invention, innovation and technological change will impact upon a firm’s methods of production, its efficiency and its cost structure.

Activity 3



Show the impact of technological change upon a firm’s LRAC curve.



Costs

Economists work out costs slightly differently from an accountant. We include the opportunity cost of a factor of production when calculating the costs. In order to calculate the costs to a firm, we must add the cost of using factors of production (this is the same cost that an accountant would use) and then we add the opportunity cost of it.

$$\text{Economic cost} = \text{Accounting cost} + \text{Opportunity cost}$$

The following are examples of an opportunity cost that would have to be added to the accounting cost:

- The owner of a business could work for somebody else's company and earn £20,000. This £20,000 is the opportunity cost of the owner's labour.
- The shop that the hairdresser owns could be rented out for £500 per week. This £500 per week is the opportunity cost of using the shop.
- The owner spends £10,000 of his own money to refurbish the shop. The opportunity cost of this £10,000 is the interest that it would have received if it were placed in the bank.

Activity 4

Give two examples of how accounting costs differ from economic costs.

We can identify two types of cost: fixed and variable. Fixed costs do not vary with the level of production in the short run. Output can rise or even fall to zero and the firm will still have to pay the same fixed costs; for example, rent or mortgages, insurance costs, business rates, staff with contracts, depreciation and advertising campaigns that have already started. Fixed costs are sometimes called overhead or indirect costs.

Variable costs differ because they vary directly with the level of output. As the quantity produced increases so do the variable costs; for example, raw materials and commission-based and piece-rate workers. If output fell to zero, then the variable costs would also equal zero.

Some costs are very difficult to classify as either fixed or variable – these are called semi-variable costs. These costs have an element of fixed and variable; for example, some electricity has to be paid for even if output falls to zero, but more will be used if production increases.

Activity 5

Can you think of any other examples of semi-variable costs?



Total costs (TC) are calculated by adding the total fixed costs (TFC) and total variable costs (TVC). Average costs (AFC, AVC and ATC) are found by dividing the relevant total costs (TFC, TVC and TC) by the quantity produced (Q). The marginal cost (MC) is equal to the extra cost of increasing the quantity produced by one.

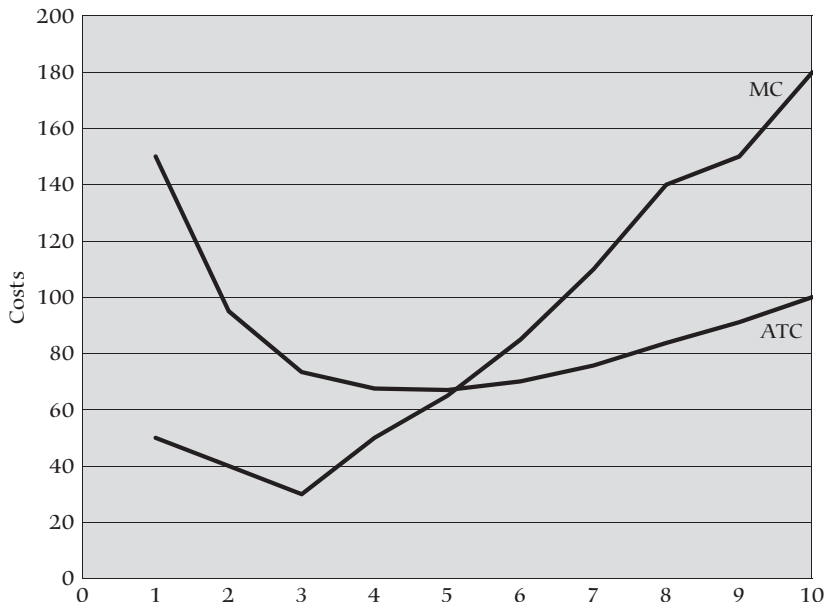
Activity 6



Calculate the missing costs in the table below:

Quantity	Total fixed cost (TFC)	Total variable cost (TVC)	Total cost fixed + variable (TC)	Average fixed cost (AFC)	Average variable cost (AVC)	Average total cost (ATC)	Marginal cost (MC)
0	100	0					
1	100	50					
2	100	90					
3	100	120					
4	100	170					
5	100	235					
6	100	320					
7	100	430					
8	100	570					
9	100	720					
10	100	900					

The relationship between the average and marginal cost may not be obvious at first. It can be explained quite easily if you think about a number of marks that you score in your economics homework. If your average mark for data responses is 75 and in your next piece of work you get 80, the marginal mark (your average mark) will be pulled up. If your next mark is below the average, your marginal mark will get dragged down.



This relationship between the MC and ATC can be summarised as follows:

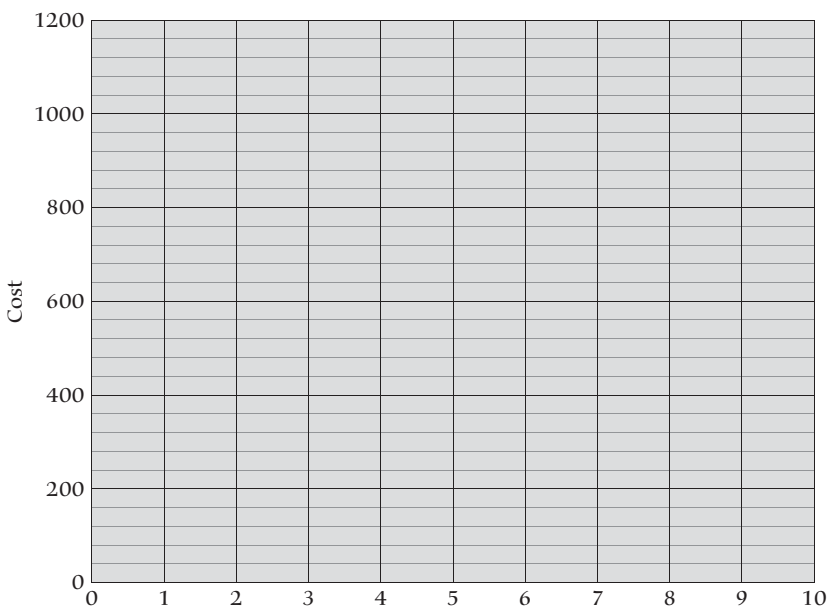
- If the MC is below the ATC, then it will drag the average down and the ATC will be falling.
- If the MC is above the ATC, then it will pull the average up.

This will mean that the MC will always intersect the ATC at its minimum. Plot and label the TFC, TVC and TC on the chart below:

Activity 7



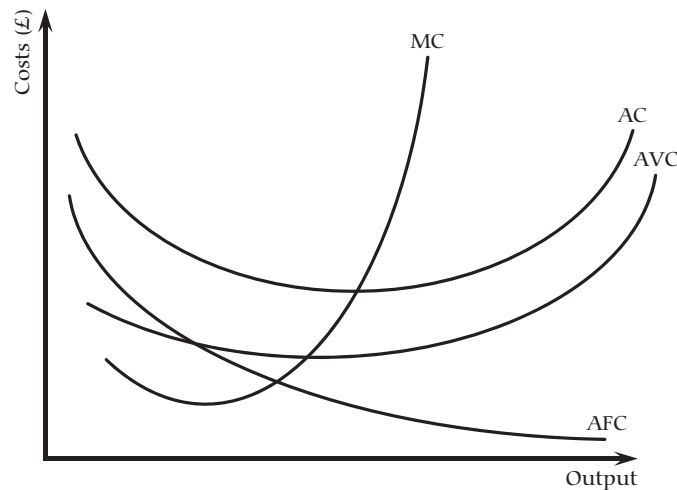
Plot and label the AFC, AVC, AC and MC on the chart below:



Activity 8



Your chart above will hopefully look similar to this generalised diagram. Note that the ATC is often simply written as AC, average cost.



There are three general rules that apply to cost curves:

- The MC intersects the AC at its minimum.
- The MC is upward sloping.
- The AC is U shaped.

Revenue

We will need to understand total revenue (TR), average revenue (AR) and marginal revenue (MR) curves. Total revenue is equal to all of the money received from the sale of goods or services. It is equal to the quantity sold multiplied by the price.

Average revenue is the average amount received per item sold. If all output is sold at the same price, then the average revenue must equal the price. Marginal revenue is the amount received from selling an extra unit of output, that is, how much has the total revenue changed by.

Perfectly competitive market

Activity 9



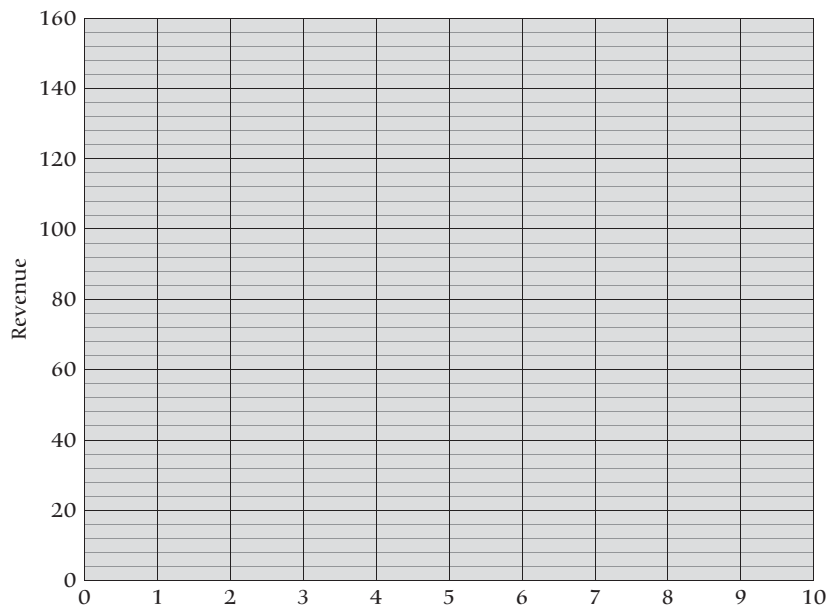
In a perfectly competitive market, all of a firm's output is sold at the same price.

1 Complete the table below.

Quantity	Total revenue (£)	Marginal revenue (£)	Average revenue (£)
0	0		
1	15	15	15
2	30	15	15
3	45		
4	60		
5	75		
6	90		
7	105		
8	120		
9	135		
10	150		

2 Plot the TR, MR and AR curves on the chart below.

3 Describe the shape of the TR, MR and AR curves.



Imperfectly competitive market

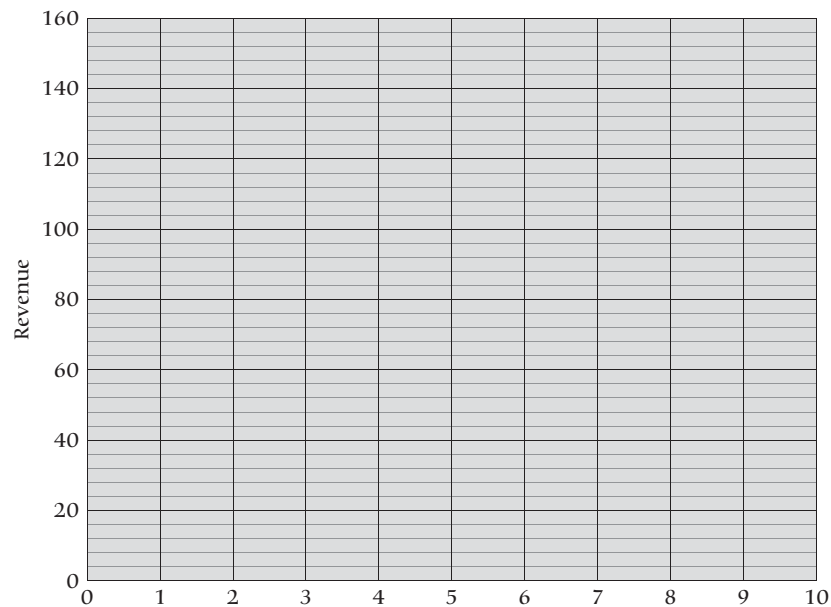
Activity 10



1 Complete the table below.

Quantity	Total revenue (£)	Marginal revenue (£)	Average revenue (£)
0	0		0
1	8	8	8
2	20	12	10
3	35		
4	53		
5	73		
6	88		
7	98		
8	103		
9	103		
10	100		

2 Plot the TR, MR and AR curves on the chart below.



3 Describe the shape of the TR, MR and AR curves.



It is important to remember that the average revenue equals price; the terms may be interchanged in the same way that AC and ATC are.

The marginal revenue curve intersects the quantity axis at exactly half the distance from where the average revenue curve intersects the quantity axis and the origin.

Profit

Profit is very simply revenue minus costs. It is very important to remember that economists calculate costs in a different way to accountants – we include the opportunity cost of the economic resources employed in the total cost.

You run your own hairdressers and total revenue is £30,000 and total costs are £20,000. You could work for a large hairdressing salon and earn £20,000.

The accounting profit for your hairdressing business is:

$$\begin{aligned}\text{Accounting profit} &= \text{Total revenue} - \text{Total costs} \\ £10,000 &= £30,000 - £20,000\end{aligned}$$

When calculating the economic profit, we also include the opportunity cost of the factors of production. In this example, the opportunity cost of labour is the £20,000 that could be earned working for a large salon.

$$\begin{aligned}\text{Economic profit} &= \text{Total revenue} - \text{Total costs} - \text{Opportunity cost} \\ -£10,000 &= £30,000 - £20,000 - £20,000\end{aligned}$$

This example shows that you are in effect losing money by owning your own company, as your labour would be better employed with the large hairdressing salon. This does, however, ignore the other benefits of working for yourself.

It is possible to highlight another example using capital. You were offered the chance to invest £10,000 into a business that would yield a 10 per cent accounting profit – £1,000. In order to calculate the economic profit, you would have to take away the opportunity cost from the £1,000 accounting profit; the opportunity cost could be £500 that could be earned at 5 per cent interest from the bank. The economic profit is therefore £500 (£1,000 – £500).

Normal and abnormal profits

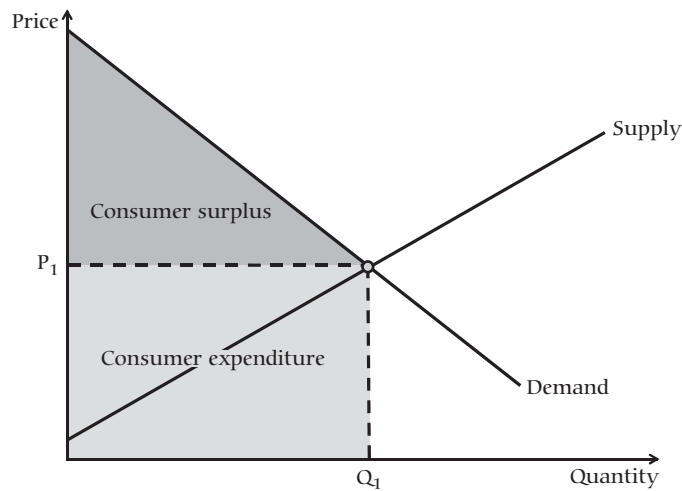
An economic profit of zero is described as being a normal profit (remember that accounting profits are still being earned). In other words, normal profit is the same as what could be earned by investing the factors of production in the next best alternative.

Abnormal profits occur when the economic profit is greater than zero. In other words, more money is earned by the factors of production in their current use than if they were used in the next best option.

An economic loss will indicate that the factors of production could be used in a more profitable way. It is possible that an accounting profit is still made when an economic loss occurs.

Consumer surplus

Consumer surplus is the difference between what consumers are willing to pay for a good or service and what they actually pay for it. The level of consumer surplus is shown by the area under the demand curve and above the equilibrium market price:



This diagram shows that consumers only have to pay P_1 for the product; however, the demand curve shows that many of them were willing to pay more.

Activity 11

Can you think of an example of where you have gained consumer surplus? Give a numeric example and calculate your consumer surplus.



If a zero price is charged, then the entire area under the demand curve will be consumer surplus.

Activity 12



Demonstrate this on the diagram below.



If the demand curve is perfectly elastic, then there will be no consumer surplus as the price that people pay equals the price they are willing to pay.

Activity 13



Demonstrate this on the diagram below.



When demand is perfectly inelastic, the amount of consumer surplus is infinite.

Activity 14










































Demonstrate this on the diagram below.



Self-assessment: 3.1 Production in the Short and Long Run

At the beginning of this unit, we identified a number of learning objectives. How confident are you that they have been achieved?

- | | | | |
|--|---|---|---|
| ◀ Distinguish between the short run and long run. |  |  |  |
| ◀ Explain the theory of marginal returns. |  |  |  |
| ◀ Explain the theory of economies of scale. |  |  |  |
| ◀ Distinguish between production in the short-run and long run. |  |  |  |
| ◀ Outline the relationship between short-run and long-run average costs. |  |  |  |
| ◀ Distinguish between an economist's and accountant's definition of costs. |  |  |  |
| ◀ Distinguish between fixed and variable costs. |  |  |  |
| ◀ Explain semi-variable costs. |  |  |  |
| ◀ Explain the relationship between total and average costs, total and average variable costs and total and average marginal costs. |  |  |  |
| ◀ Explain the relationship between total revenue, average revenue and marginal revenue. |  |  |  |
| ◀ Distinguish between the revenue curves under perfectly and imperfectly competitive markets. |  |  |  |
| ◀ Distinguish between economist's and accountant's definition of profit. |  |  |  |
| ◀ Distinguish between normal and abnormal profits and an economic loss. |  |  |  |

Action plan for completing knowledge

Area of concern	Action plan for improvement

Module 3 Business

Economics and the Distribution of Income

Unit 2 The Objectives of Firms

By the end of this unit you should be able to:

- Explain the profit maximisation level of output.
- Understand how mc and mr can be used to identify the profit maximisation point.
- Outline how profits can be calculated from a diagram.
- Define the revenue maximisation level of output.
- Analyse the reasons behind revenue maximisation.
- Define the sales maximisation level of output.
- Distinguish profit, revenue and sales maximisation points.
- Analyse the impact of divorce of ownership and control on a firm.
- Analyse the use of satisficing by firm.
- Outline how behavioural theories will affect a business's objectives.

Definitions

You should complete the following definitions in your glossary before starting this unit:

- $AC = AR$
- Average cost
- Average profit per unit sold
- Average revenue
- Behavioural theories
- Divorce of ownership and control
- Managerial theories
- Managers
- Marginal cost
- Marginal revenue
- $MC = MR$
- $MR = 0$
- Perfectly competitive
- Perks
- Profit
- Profit maximisation
- Profit satisficing
- Revenue maximisation
- Sales maximisation
- Satisficing
- Shareholders
- Unitary elasticity

Introduction

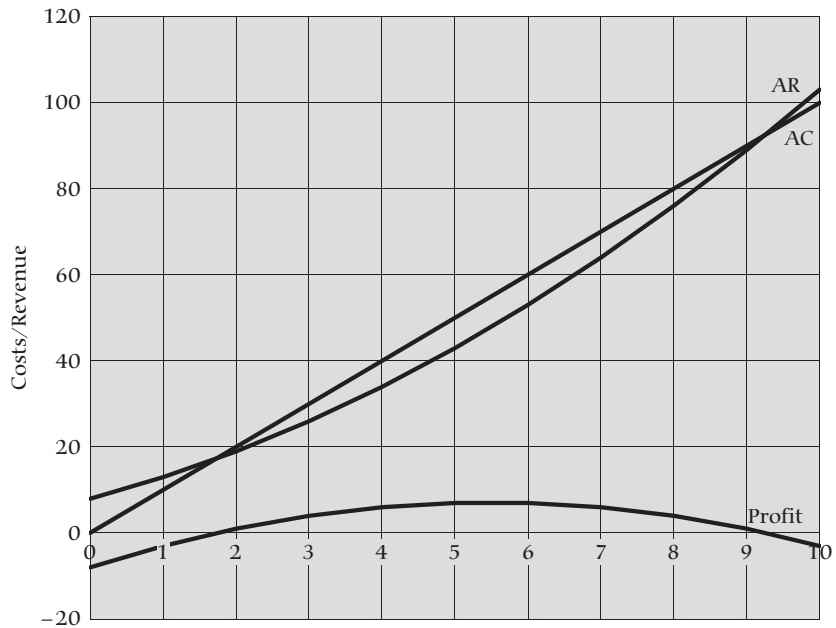
The generally accepted aim of a firm is profit maximisation. In addition to explaining profit maximisation, this chapter will look at some alternative objectives a firm and its managers might adopt.

Profit maximisation

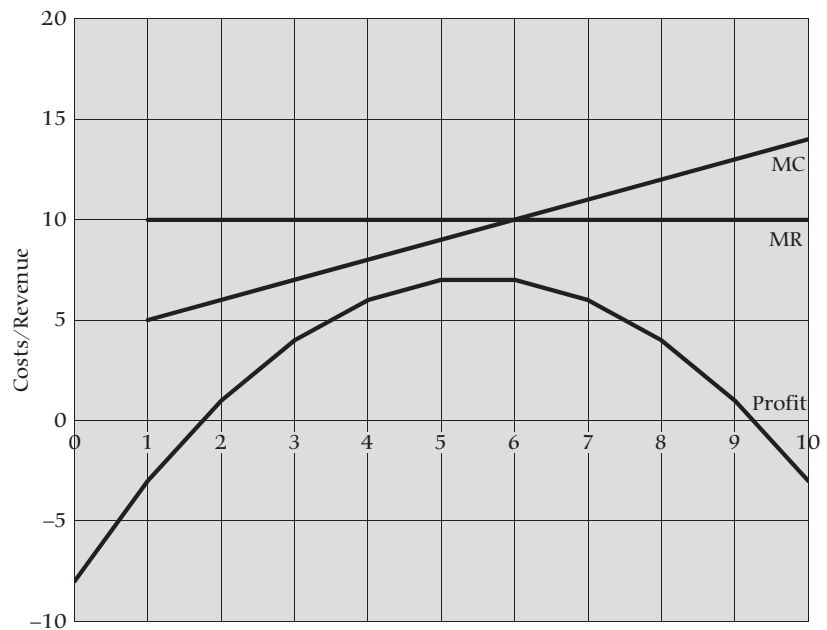
The objective of a competitive firm is to maximise its profits. The table below shows an example of a perfectly competitive firm's costs, revenue and profit.

Quantity	Total cost (TC)	Marginal cost (AC)	Average cost (MC)	Total revenue (TR)	Marginal revenue (MR)	Average revenue (AR)	Profit (II)
0	8	-	-	0	-	-	-8
1	13	5	13	10	10	10	-3
2	19	6	9.5	20	10	10	1
3	26	7	8.66	30	10	10	4
4	34	8	8.5	40	10	10	6
5	43	9	8.6	50	10	10	7
6	53	10	8.83	60	10	10	7
7	64	11	9.14	70	10	10	6
8	76	12	9.5	80	10	10	4
9	89	13	9.89	90	10	10	1
10	103	14	10.3	100	10	10	-3

It is possible to draw profit, average cost and revenue curves.



This chart confirms what the table tells us: that profit is maximised where the difference between average cost and average revenue is greatest. The profit, marginal cost and revenue curves can also be drawn.



It is possible to analyse the profit maximisation of a firm by looking at its marginal revenue and cost curves. If the firm was producing at an output of 1, it would need to decide whether to increase output to 2. Increasing to 2 would lead to a marginal revenue of 10 and marginal costs of 6; in other words, its revenue will increase by 10 and it costs will go up by 6. Therefore, it should increase production as its marginal profit, the amount its profits will change by, is +£6. The firm will continue to increase its profits by increasing output so long as the marginal revenue is greater than the marginal cost. This occurs until an output of 6 is reached; here, both the marginal cost and revenue equal 10. It makes sense for the firm to continue increasing output as normal profits are still earned on the 6th unit of output (and there will be a positive accounting profit).

Activity 1

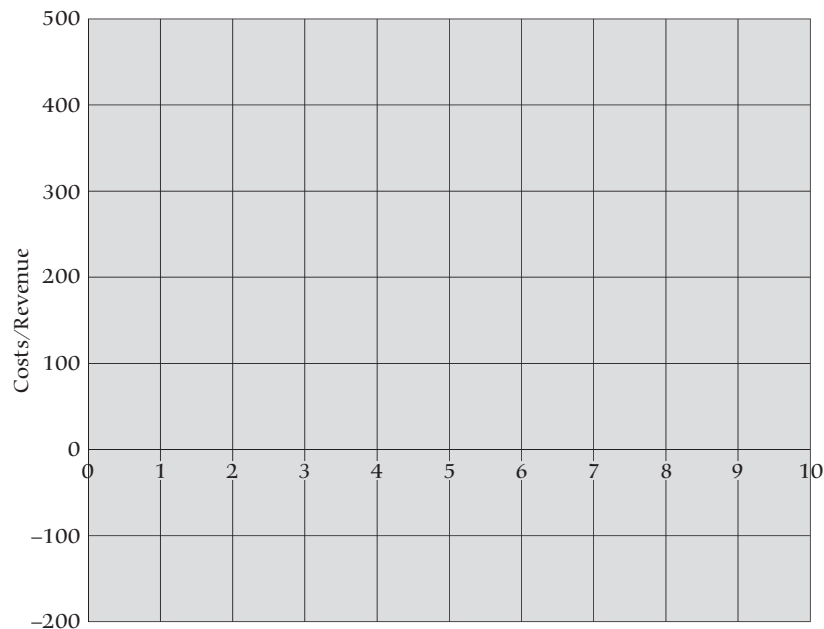


1 Complete the table below:

Quantity	Total cost (TC)	Marginal cost (MC)	Average cost (AC)	Total revenue (TR)	Marginal revenue (MR)	Average revenue (AR)	Profit (Π)
0	100	-	-	0	-	-	-100
1	150	50	150	80	80	80	-70
2	190			200			
3	220			350			
4	270			530			
5	335			730			
6	420			880			
7	530			980			
8	670			1030			
9	820			1030			
10	1000			1000			

2 What do you think is the profit maximising level of output for the firm in this example?

3 Draw the profit, marginal cost and revenue curves.



4 Explain the firm's decision to increase output using the table below:

Quantity	Marginal cost (MC)	Marginal revenue (MR)	Marginal profit (Π)	Should the firm increase its output to this level?
0				
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				



It is possible for us to calculate the total profit for the firm by using the average cost and average revenue curves.

$$\text{Average Profit per unit sold} = \text{Average Revenue} - \text{Average Cost}$$

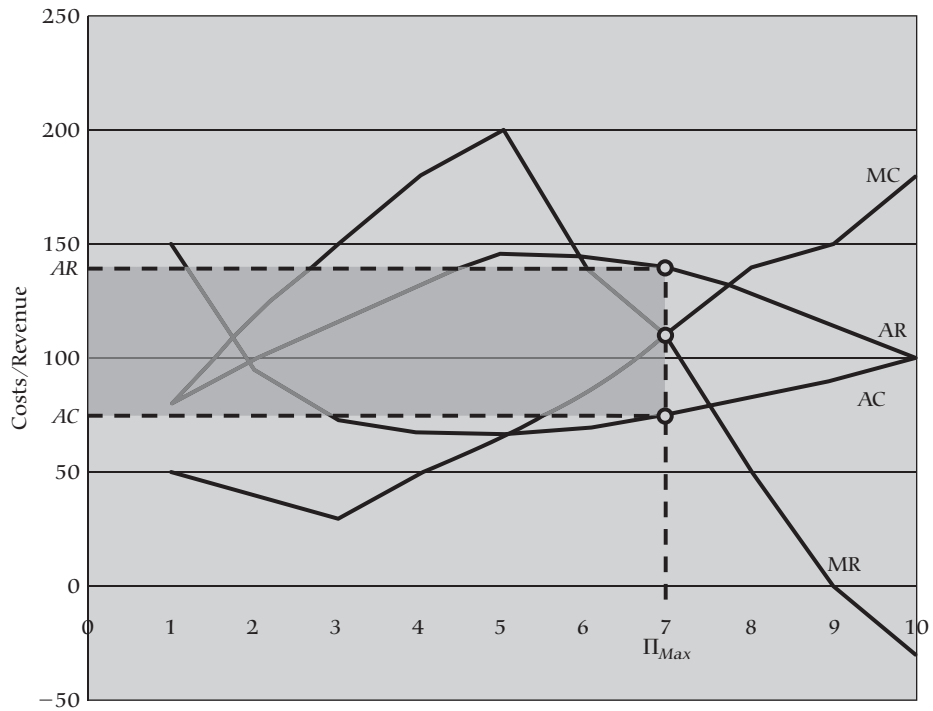
$$\text{Total Profit} = \text{Average Profit per unit sold} \times \text{Quantity sold}$$

Activity 2



Calculate the total profit for outputs of 2 and 6. Show your workings.



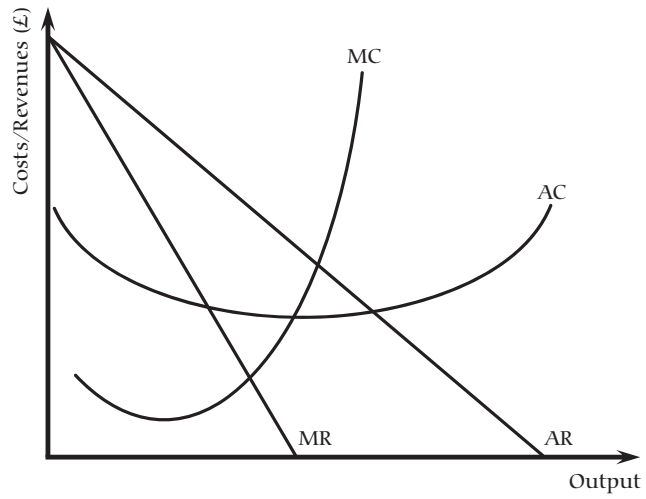


Using the data from the chart above, it is possible to show how the total profit for the firm at the profit maximising level of output is reached:

- Identify the profit maximising point where $MC = MR$.
- Draw a line down to the bottom axis – this is the profit maximising quantity of output – in this case 7.
- Make sure that the line from the 7 goes up to where it meets both the AC and AR – in this case it has to be extended upwards to reach the AR.
- From where the profit maximising line reaches the AR curve, draw a new line to the costs/revenue axis. This is the average revenue for each unit sold at the profit maximising level of output; in this example 140.
- From where the profit maximising line reaches the AC curve, draw a new line to the costs/revenue axis. This is the average cost for each unit sold at the profit maximising level of output; in this case 75.71.
- The difference between the AC and the AR is the average profit per unit sold: $140 - 75.71 = 64.29$.
- The average profit per unit sold is multiplied by the output to give total profit: $64.29 \times 7 = 450$.
- This is equal to the area of the shaded rectangle.

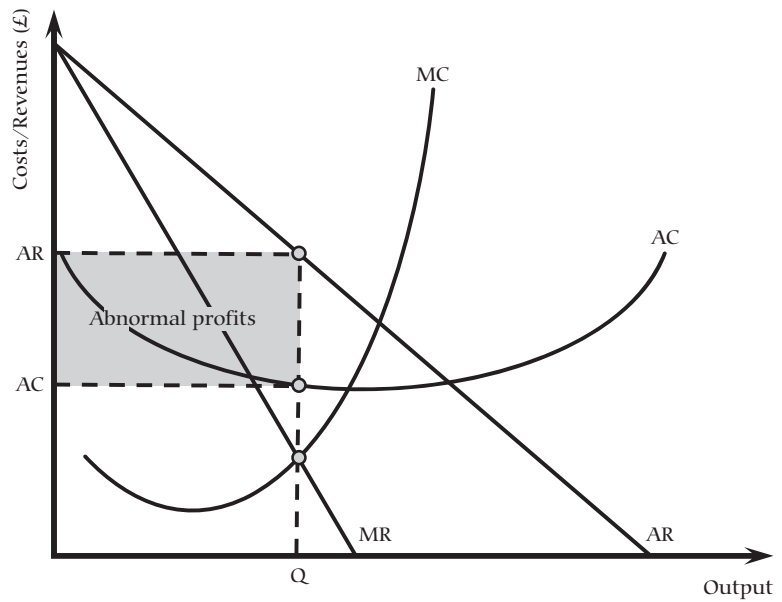
On the chart on page 25, identify:

- the profit maximising point and output
- the AC and AR at the profit maximising level of output.
- Shade the rectangle that is equivalent to the total profit at the profit maximising level of output.

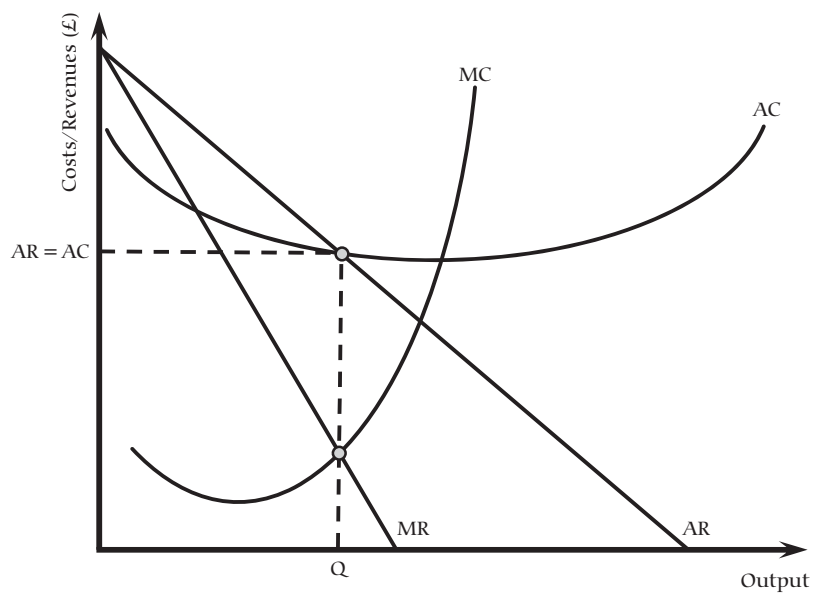


It is possible to highlight the different kinds of economic profit using diagrams.

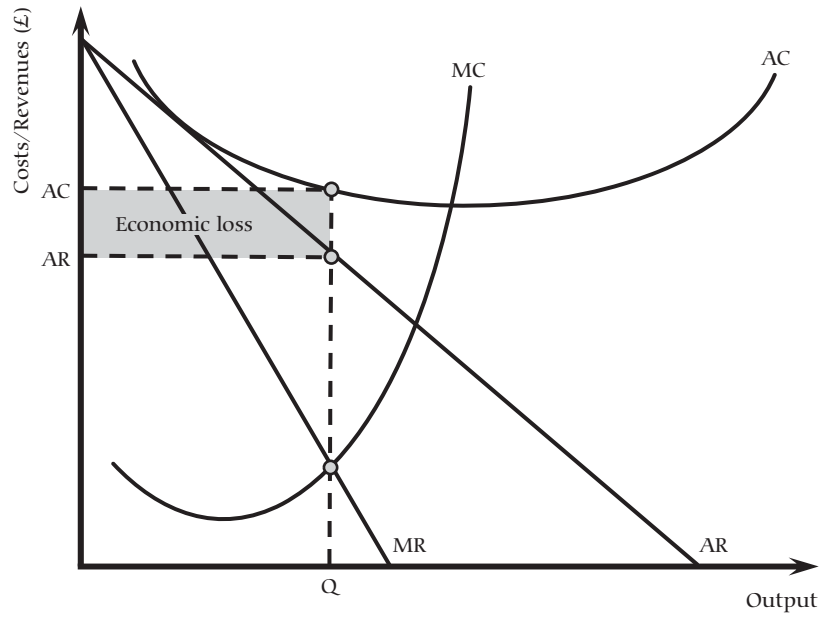
- Abnormal profits are earned when $AR > AC$:



- Normal profits are earned when $AR = AC$:



■ Economic loss is made when $AR < AC$:



Revenue maximisation

If the firm we looked at earlier wished to maximise its revenue, it would continue to do so until its marginal revenue equalled zero.

Activity 3



1 Indicate on the table below what a revenue maximising firm should choose to do when deciding whether or not to increase its output.

Quantity	Total revenue (TR)	Marginal revenue (MR)	Total profit (Π)	Should the firm increase its output to this level if it wishes to maximise revenue?
0	0	-	-100	
1	80	80	-70	
2	200	120	10	
3	350	150	130	
4	530	180	260	
5	730	200	395	
6	870	140	450	
7	980	110	450	
8	1030	50	360	
9	1030	0	210	
10	1000	-30	0	

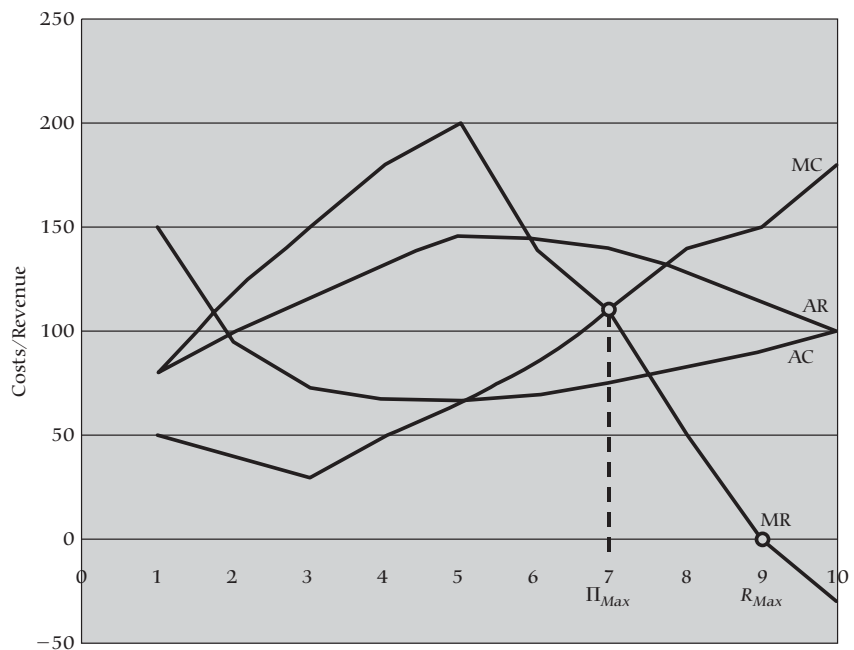
- 2 Explain the profit level at the revenue maximisation point.

- 3 How do you think the shareholders will feel about this?

- 4 Why would the managers want to revenue maximise?



The revenue maximising point on the diagram can be highlighted where $MR = 0$. The revenue maximising point and the profit maximising point are highlighted on the diagram below.

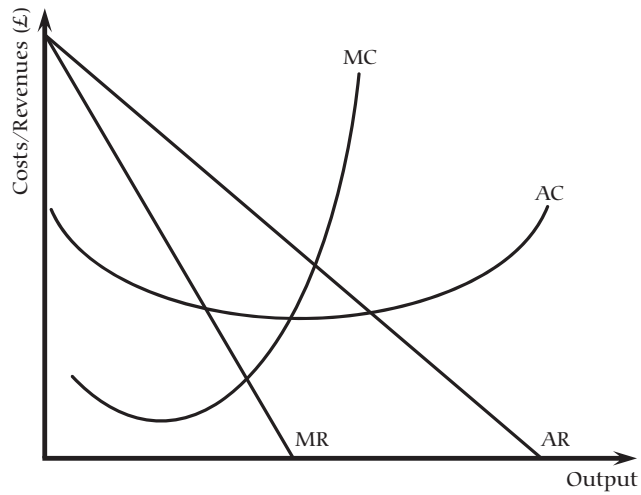


Activity 4

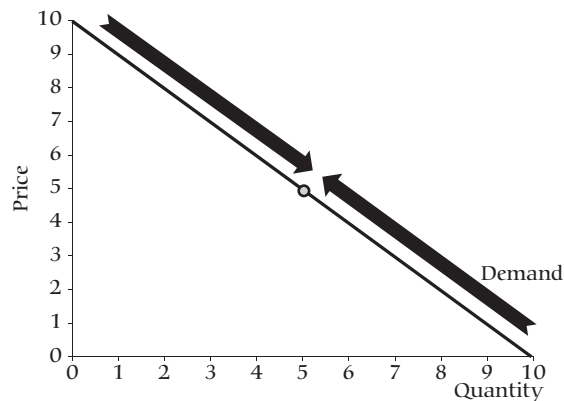
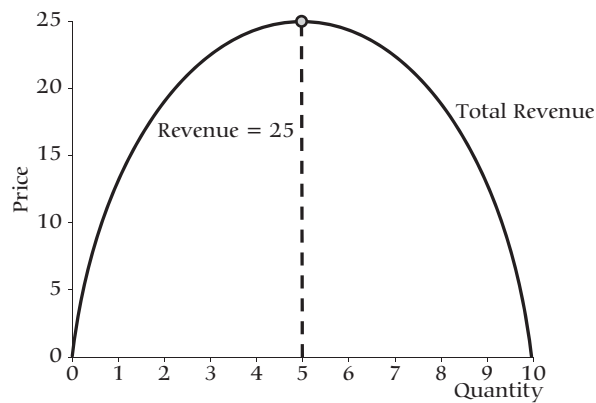


Using the generic diagram on p28, identify the revenue maximising point and the profit maximising point.





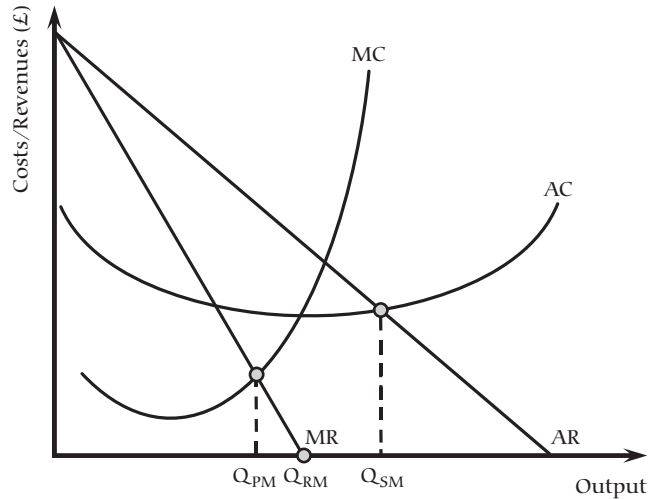
The revenue maximisation point of output will occur where elasticity is equal to one (unitary). This is shown on the diagram below.



A firm may pursue a policy of sales revenue maximisation if its managers are paid a sales-related salary. This would mean that the shareholders, who own the business, would receive fewer profits.

Sales maximisation

A firm may wish to maximise its sales in order to gain as large a share of the market as possible. This goal would have to be pursued subject to the constraint of earning at least normal economic profit. The firm will lower its price until the point where $AC = AR$, giving an output of Q_{SM} . This compares to the profit and revenue maximisation quantities of output, which are also shown on the diagram.



Managerial theories

Many companies have a divorce of ownership and control. This means the owners (shareholders) and those who control the firm (managers) are different groups with different objectives. The shareholders would like the managers to act as profit maximisers; however, the managers will more than likely have their own agenda. Managers may wish to have an easy life, maximise their prestige by having a large and expensive office or play golf after a long lunch – all of these behaviours will increase the costs of the business and may lead to a fall in revenue. This behaviour is described as profit satisficing – the managers make enough profit to keep the shareholders happy, while enjoying as many perks as possible.

Satisficing

As mentioned in the previous paragraph, satisficing can occur when managers enjoy expensive perks as long as the profit levels are high enough to keep the shareholders happy.

It is possible that a satisficing objective might include corporate and social responsibility; for example, a business is willing to lower its profit level by not using child labour or attempting to reduce its carbon footprint.

Activity 5



Why might following a socially responsible set of business objectives not lead to a fall in profits?

