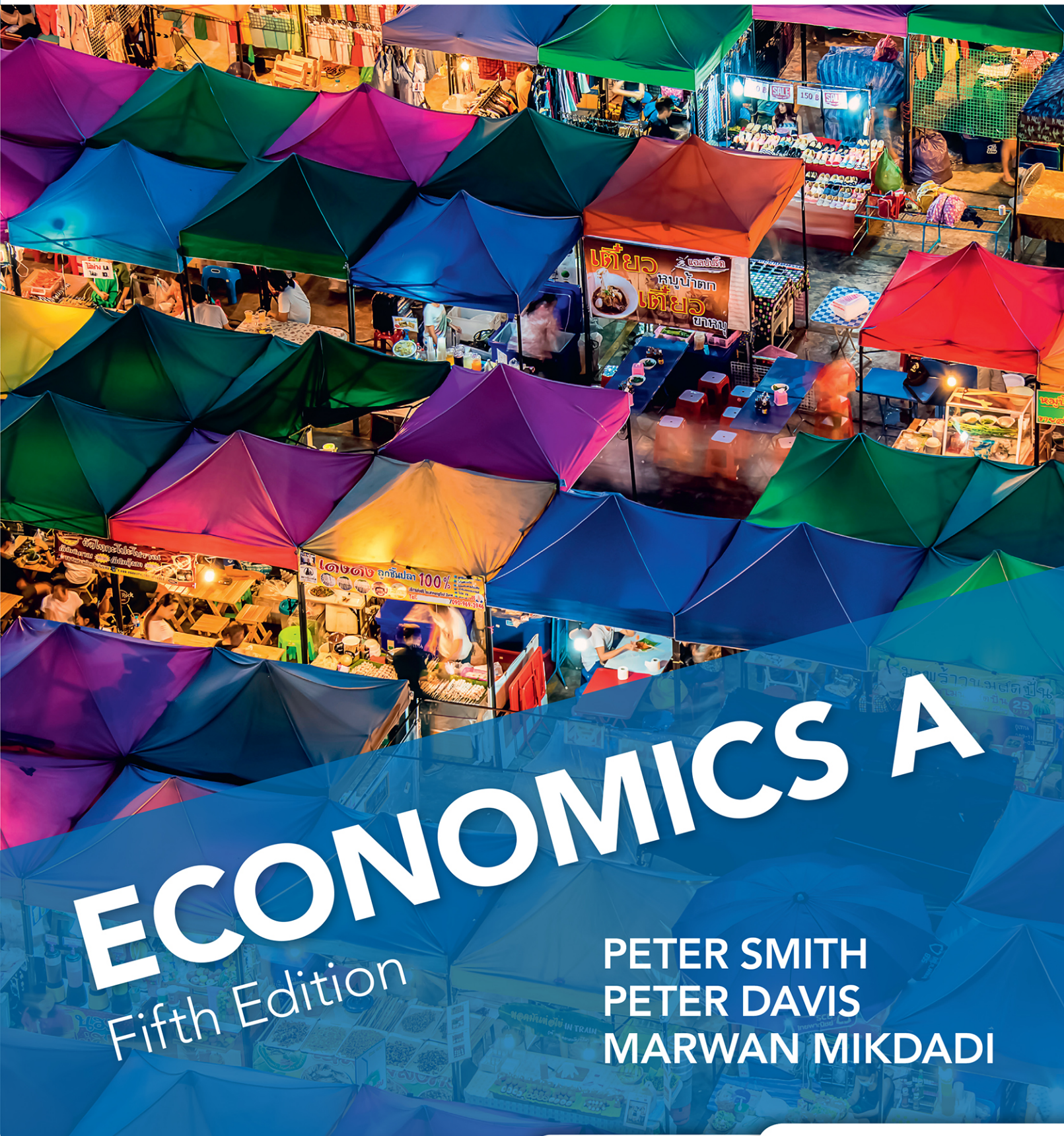


PEARSON EDEXCEL A LEVEL



ECONOMICS A

Fifth Edition

PETER SMITH
PETER DAVIS
MARWAN MIKDADI



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Pearson Edexcel
Qualifications



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Fifth Edition

**PETER SMITH
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ISBN: 978 1 3983 7471 3

© Peter Smith, Peter Davis and Marwan Mikdadi

First published in 2008
This edition published in 2023 by
Hodder Education,
An Hachette UK Company
Carmelite House
50 Victoria Embankment
London EC4Y 0DZ

www.hoddereducation.co.uk

Impression number 10 9 8 7 6 5 4 3 2 1

Year 2027 2026 2025 2024 2023

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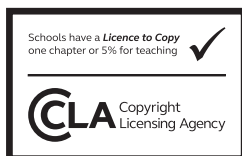
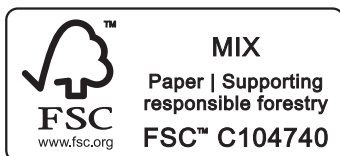
Cover photo © Manjik photography – stock.adobe.com

Typeset in India by Aptara, Inc.

Illustrations by Aptara, Inc.

Printed in Bosnia & Herzegovina

A catalogue record for this title is available from the British Library.



Getting the most from this book

This textbook provides an introduction to economics. It has been tailored explicitly to cover the content of the Edexcel specification for A level in Economics A. The specification is divided into four themes corresponding to the Edexcel specification.

The text provides the foundation for studying Edexcel Economics, but you will no doubt wish to keep up to date by referring to additional topical sources of information about economic events. This can be done by reading the serious newspapers, visiting key sites on the internet, and reading such magazines as *Economic Review*.

Special features

In this chapter

A statement of the intended learning objectives for each chapter. References to the relevant specification content are also provided at the start of each chapter.

Key terms

Clear, concise definitions of essential key terms, with a list at the end of each theme.

Quantitative skills

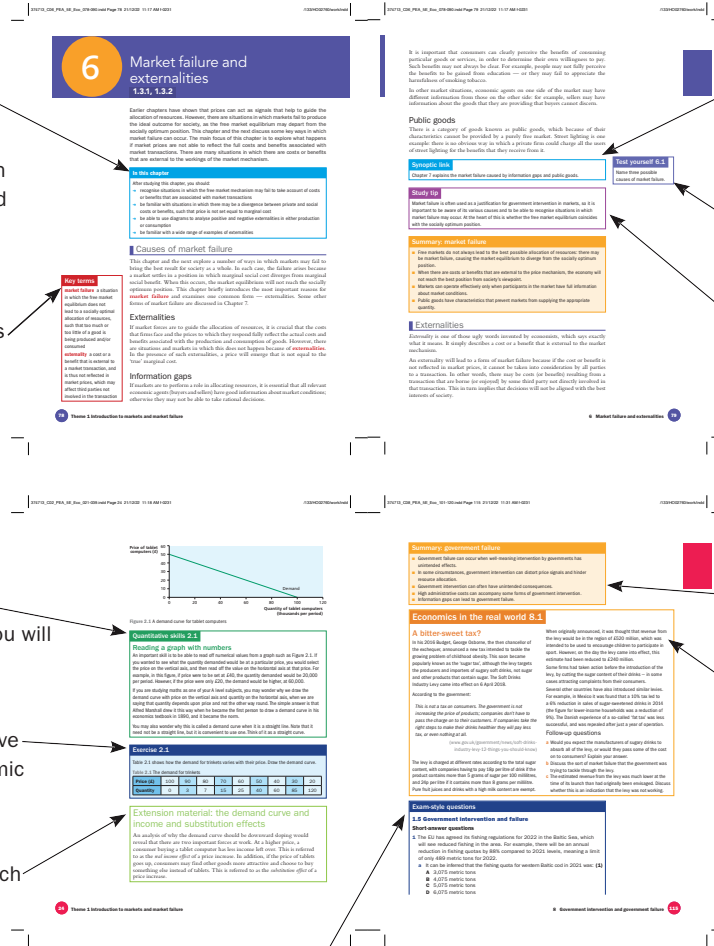
Worked examples of quantitative skills that you will need to develop.

Exercises

Exercises to provide active engagement with economic analysis.

Extension material

Extension points to stretch your understanding.



Synoptic links

Synoptic links showing the connections between the themes.

Test yourself

Short questions designed to allow you to check your understanding of key concepts.

Study tips

Short pieces of advice to help you present your ideas effectively and avoid potential pitfalls.

Summaries

Bulleted summaries of each topic that can be used as a revision tool.

Economics in the real world

Case studies to show economic concepts applied to real-world situations.

Exam-style questions

Exam-style questions feature at the end of chapters and at the end of the book, to encourage you to think synoptically and allow you to consider the whole course.

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Introduction

Prior learning, knowledge and progression

Most students who choose to study A level Economics are meeting the subject for the first time, and no prior learning or knowledge of economics is required. The study of economics complements a range of other A level subjects, such as history, geography, business, mathematics and the sciences, and the way of thinking that you will develop as you study economics will help in interpreting issues that you will meet in many of these subjects. Studying economics can provide important employability skills and is a good preparation for those wishing to progress to higher education. If you intend to study economics at university, you may wish to consider studying mathematics as one of your other A level subjects.

Find out more about the Edexcel Economics offering, or other related qualifications, at <https://qualifications.pearson.com/en/qualifications/edexcel-a-levels.html>.

Assessment objectives

In common with other economics specifications, Edexcel Economics A entails four assessment objectives. Candidates will thus be expected to:

- demonstrate knowledge of terms/concepts and theories/models to show an understanding of the behaviour of economic agents and how they are affected by and respond to economic issues
- apply knowledge and understanding to various economic contexts to show how economic agents are affected by and respond to economic issues
- analyse issues within economics, showing an understanding of their impact on economic agents
- evaluate economic arguments and use qualitative and quantitative evidence to support informed judgements relating to economic issues

Assessment breakdown

The A level in Economics A will be assessed by three examinations. The first two deal respectively with ‘markets and business behaviour’ and the ‘national and global economy’. The third is a synoptic paper (‘microeconomics and macroeconomics’), in which you will be required to apply your knowledge and understanding, make connections and transfer higher-order skills across all four themes. Each will be a written paper lasting 2 hours. Further details are provided in the specification on the Edexcel website.

Economics in this book

The study of economics requires a familiarity with recent economic events in the UK and elsewhere, and candidates will be expected to show familiarity with ‘recent historical data’ — broadly defined as covering the last 7 to 10 years. The following websites will help you to keep up to date with recent trends and events:

- Recent and historical data about the UK economy can be found at the website of the Office for National Statistics (ONS) at: www.ons.gov.uk
- Also helpful is the site of HM Treasury at: www.hm-treasury.gov.uk
- The Bank of England site is well worth a visit, especially the *Inflation Report* and the Minutes of the Monetary Policy Committee: www.bankofengland.co.uk
- The Institute for Fiscal Studies offers an independent view of a range of economic topics: www.ifs.org.uk

For information about other countries, visit the following:

- www.oecd.org
- <http://ec.europa.eu/eurostat>
- www.worldbank.org
- www.undp.org

Finally, for answers to the test yourself questions, exercises, economics in the real world and practice questions featured in this book, please visit www.hoddereducation.co.uk/pearson-edexcel-economics-alevel and click ‘Download answers’.

How to study economics

There are two crucial aspects of studying economics. The first stage is to study the theory, which helps us to explain economic behaviour. However, in studying A level Economics it is equally important to be able to apply the theories and concepts that you meet, and to see just how these relate to the real world.

If you are to become competent at this, it is vital that you get plenty of practice. In part, this means working through the exercises and economics in the real world features that you will find in this text. However, it also means thinking about how economics helps us to explain news items and data that appear in the newspapers and on the television. Make sure that you practise as much as you can.

In economics, it is also important to be able to produce examples of economic phenomena. In reading this text, you will find some examples that help to illustrate ideas and concepts. Do not rely solely on the examples provided here, but look around the world to find your own examples, and keep a note of these ready for use in essays and exams. This will help to convince the examiners that you have understood economics. It will also help you to understand the theories.

Enjoy economics

Most important of all, I hope you will enjoy your study of economics. I have always been fascinated by the subject, and hope that you will capture something of the excitement and challenge of learning about how markets and the economy operate. I also wish you every success with your studies.

Acknowledgements

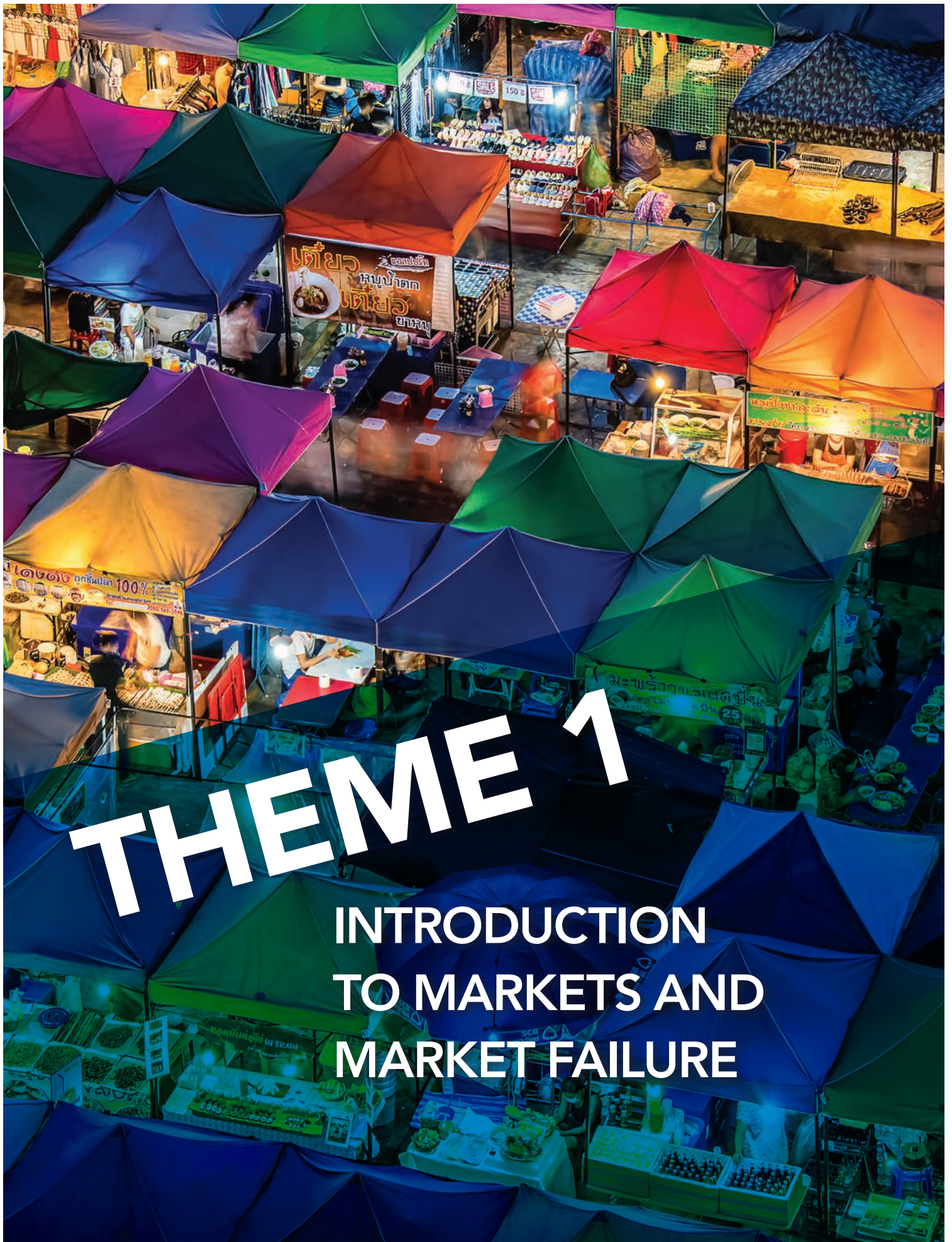
I would like to express my gratitude to the reviewers who commented on the previous edition, whose remarks and suggestions have enabled improvements in the content and style of this new edition. I would like to thank the Hodder team for their detailed reading of the text which helped to further focus the material on the needs of students studying Edexcel Economics.

Many of the data series shown in figures in this book were drawn from data obtained from the National Statistics website at www.ons.gov.uk, and contain public information licensed under the Open Government Licence v3.0.

Other data were from various sources, including the OECD, World Bank, United Nations Development Programme and other sources as specified.

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Peter Smith



THEME 1

INTRODUCTION
TO MARKETS AND
MARKET FAILURE

1

The nature of economics

1.1.1, 1.1.2, 1.1.3, 1.1.4, 1.1.5, 1.1.6

Welcome to economics. Many of you opening this book will be meeting economics for the first time, and you will want to know what is in store for you as you set out to study the subject. This opening chapter sets the scene by introducing you to some key ideas and identifying the scope of economic analysis. As you learn more of the subject, you will find that economics is a way of thinking that broadens your perspective on the world around you.

In this chapter

This chapter will introduce you to:

- the nature and scope of economic analysis
- the role of models and assumptions in economics
- positive and normative statements
- the importance of scarcity and choice
- the concept of opportunity cost
- the notion of factors of production
- the distinction between renewable and non-renewable resources and the idea of sustainability
- the production possibility frontier
- the concept of the division of labour
- how specialisation can improve productivity
- the role of markets and what is meant by a mixed economy
- alternative ways of coordinating the allocation of resources in society
- the distinction between microeconomics and macroeconomics

What is economics?

As its name suggests, economics deals with all aspects of economic behaviour. It explores the way that individuals, businesses and governments take economic decisions. For example, it highlights the factors that influence the decisions made by households in choosing what to consume, and the decisions made by firms about what goods and services to produce. It also examines the decisions made by governments about taxation and expenditure.

All these decisions interact with each other — and human behaviour is not always easy to understand — so economics faces a substantial challenge in trying to deal with the complexity of the real world.

If economists are to cope with this complexity, it is essential to simplify reality in some way; otherwise the task would be overwhelming. Economists therefore work with **models**. These are simplified versions of reality that are more manageable for analysis, allowing economists to focus on some key aspects of the world.

Often this works by allowing them to focus on one thing at a time. A model almost always begins with assumptions that help economists to simplify their questions. These assumptions can then be gradually relaxed so that the effect of each one of

Key term

model a simplified representation of reality used to provide insight into economic decisions and events

them can be observed. In this way, economists can gradually move towards a more complicated version of reality.

Chapter 2 considers the demand for a good, and the factors that affect how much of a good is demanded by consumers. Trying to analyse all the possible influences on these decisions would be difficult, so it is common to start by exploring how the price of a good affects the quantity demanded, under the assumption that all other influences stay the same. This is a common assumption in economics, which is sometimes expressed by the Latin phrase **ceteris paribus**, meaning 'other things being equal'. Given the complexity of the real world, it is often helpful to focus on one thing at a time.



Economics explores the way that individuals, businesses and governments take economic decisions

To evaluate a model, it is not necessary that it be totally realistic. The model's desired objective may be to help in predicting future behaviour, or in testing empirical evidence collected from the real world. If a model provides insights into how individuals take decisions, or helps to explain economic events, then it has some value, even if it seems remote from reality.

However, it is always important to examine the assumptions that are made, and to ask what happens if these assumptions do not hold.

Test yourself 1.1

What phrase is used by economists when assuming that some variables are to be held constant?

Economics as a social science

A question that is often raised in relation to economics as a subject is whether it can be regarded as a 'science', given that it deals with decisions taken by human beings. Economics attempts to study economic aspects of society using a scientific approach, and as such can be seen as a **social science**.

In many physical sciences, investigation can proceed by testing hypotheses in the laboratory through carrying out experiments. Experimental economics is a rapidly expanding area in the subject, but although this allows economists to improve their understanding of individual behaviour, there are still many areas of economics where it is not possible to rely on experiments to advance knowledge.

Key terms

ceteris paribus a Latin phrase meaning 'other things being equal'; it is used in economics when we focus on changes in one variable while holding other influences constant

social science a subject involving the scientific study of human beings

Economists can stage experiments in which they ask a sample of individuals how they would act in various situations — for example, what they would pay for a good or service. This can provide insights into economic behaviour. However, there are situations in which it is simply not possible to set up an experiment. A government cannot decide to double the rate of income tax to find out what would happen. A firm would be wary of making a substantial increase in the price of its product just to see what happens.

Astrophysics faces similar challenges, as it cannot move stars and planets around to see what happens! Instead it relies on observations to develop its theories. Economics also relies on observation and assumptions to interpret the way in which economic decisions are taken. It then attempts to apply logic and scientific reasoning to build on assumptions in order to explain behaviour.

Key terms

positive statement a statement about what is (i.e. about facts)

normative statement a statement that involves a value judgement about what *ought to be*

value judgement a statement based on your opinion or beliefs, rather than on facts

Study tip

Notice that the word ‘positive’ here is not used in the sense of being opposite to ‘negative’. A positive statement that is found to be false is still a positive economic statement, as it is a statement about facts.

Synoptic link

The effect of a tax on cigarettes is examined in Chapter 5.

Test yourself 1.2

Is the following statement a normative or a positive statement? ‘The government ought to raise unemployment benefits.’

Positive and normative economic statements

Economics aims to look at the causes and consequences of choices in an objective way. However, some of its subject matter requires careful attention if we are to remain objective. To achieve this, it is important to be clear about the difference between **positive** and **normative statements**.

In short, a positive statement is about *facts* and in principle is testable. A normative statement is about *what ought to be*. Another way of looking at this is that a statement becomes normative when it involves an opinion or **value judgement**.

Suppose the government is considering raising the tax on cigarettes. It may legitimately consult economists to discover what effect a higher tobacco tax will have on the consumption of cigarettes and on government revenues. This would be a *positive* investigation, in that the economists are being asked to use economic analysis to forecast what will happen when the tax is increased.

A very different situation will arise if the government asks whether it *should* raise the tax on cigarettes. This calls for an opinion to be expressed (a value judgement). For example, a response might be to say that the tax on cigarettes ought not to be raised because it discriminates against smokers. This would be a *normative* statement. There are some words that indicate normative statements, such as ‘should’ or ‘ought to’ — watch for these.

Most of this book is about positive economics. However, you should be aware that positive analysis is often called upon to inform normative judgements. If the aim of a policy is to stop people from smoking (which reflects a normative judgement about what *ought* to happen), then economic analysis may be used to highlight the strengths and weaknesses of those alternatives in a purely positive fashion.

Critics of economics often joke that economists always disagree with one another: for example, it has been said that if you put five economists in a room together, they will come up with at least six conflicting opinions. However, although economists may arrive at different value judgements, and have differences when it comes to normative issues, there is much greater agreement when it comes to positive analysis. Nonetheless, value judgements do influence economic decision making and policy because different people — and political parties — may have different views about what is desirable for society, even if they agree on how policies may work.

The economic problem

For any society in the world, the fundamental economic problem faced is that of **scarcity**. You might think that this is obvious for some societies in the developing world, where poverty and hunger are rife. But it is also true for relatively prosperous economies such as those of Switzerland, the USA and the UK.

It is true in the sense that all societies have *finite resources*, but people have unlimited wants. A big claim? Not really. There is no country in the world in which all wants can be met, and this is clearly true at the global level.

There is a difference between wants and needs. Everyone needs to breathe and to eat, so air and food are necessary for human life. However, there are also things that people would like to consume, and these are known as wants.

There are some goods that may be regarded as **free goods**. An example might be the earth's atmosphere, which would not normally be regarded as scarce. Goods that are scarce are known as **economic goods**. Most goods fall into this category.

Talking about scarcity in this sense is not the same as talking about **poverty**. Poverty might be seen as an extreme form of scarcity, in which individuals lack the basic necessities of life; whereas even relatively prosperous people face scarcity, because resources are limited.

Scarcity and choice

The key issue that arises from the existence of scarcity is that it forces people to make choices. Each individual must choose which goods and services to consume. In other words, everyone needs to prioritise the consumption of whatever commodities they need or would like to have, as they cannot satisfy all their wants. Similarly, at the national level, governments have to make choices between alternative uses of resources.

Test yourself 1.4

Give examples of the ways in which the government spends its funds.

It is this need to choose that underlies the subject matter of economics. Economic analysis is all about analysing those choices made by individual people, firms and governments.

Opportunity cost

This raises one of the most important concepts in all of economic analysis — the notion of **opportunity cost**. When an individual chooses to consume one good, they do so at the cost of the item that would have been next in their list of priorities. For example, suppose you are on a strict diet, and at the end of the day you can 'afford' either one chocolate or a piece of cheese. If you choose the cheese, the opportunity cost of the cheese is the chocolate that you could have had instead.

This important notion can be applied in many different contexts, because whenever you make a decision you reject an alternative in favour of your chosen option. You have chosen to read this book — when instead you could be watching television or meeting friends.

Test yourself 1.3

Thinking of yourself, give an example of a 'want' and of a 'need'.

Synoptic link

The meaning and causes of poverty are examined in Chapter 27, where you will see that although absolute poverty may only exist in developing countries, relative poverty also exists in advanced countries such as the UK.

Key terms

scarcity a situation that arises when people have unlimited wants in the face of limited resources

free goods goods such as the earth's atmosphere that are not normally regarded as being scarce

economic goods goods that are scarce

poverty a situation in which individuals lack the basic necessities of life or have low incomes relative to their fellow citizens

opportunity cost in decision making, the value of the next-best alternative forgone

Key term

marginal analysis an approach to economic decision making based on considering the additional (marginal) benefits and costs of a change in behaviour

Study tip

Opportunity cost is a key concept in economics, and is important in a variety of contexts. Similarly, marginal analysis is a key part of economic thinking, so make sure that you understand these fully from the outset.

The notion of opportunity cost is related to an important tool in economics known as **marginal analysis**. This is based on the idea that people take decisions by considering small changes that could be made. For example, in choosing whether to read this book, you may consider if the extra (marginal) benefit you will receive from doing so will exceed the additional benefit you would receive from watching television. Firms may also take decisions in this way, perhaps by checking whether the cost of producing and selling an additional unit of output will exceed the extra (marginal) return they receive from selling it. This approach will become familiar to you as you continue to study economics.

Exercise 1.1

Asif has just started his A level courses, and has chosen to take Economics, Mathematics and French. Although he was certain about the first two, it was a close call between French and English. What is Asif's opportunity cost of choosing French?

As you move further into studying economics, you will encounter this notion of opportunity cost again and again. A household choosing to buy a new car faces an opportunity cost in having to forgo a holiday. A farmer choosing to grow onions incurs an opportunity cost in not being able to grow potatoes. The need to balance the relative merits of alternative choices is challenging, but crucial. Economic thinking helps to explain how such choices are made, and how they could be improved.

Test yourself 1.5

Suppose your school or college wants to build a new sports hall. Identify possible elements of the opportunity cost of such a project.

Economic agents

In analysing the process by which choices are made, it is important to be aware of the various economic agents that are responsible for making decisions. In economic analysis, there are three key groups of decision makers: consumers, producers and government.

- *Consumers* (individuals and households) make choices about their expenditure. In this role, they are consumers who demand goods and services. In order to be able to buy goods, consumers need income, so they also take decisions about the supply of their labour, which is discussed in the next section.
- *Producers* (firms or businesses) exist in order to produce output of goods or services. Producers also make choices, particularly about which goods or services to produce, and the techniques of production to be used. The prices at which they can sell are also important in economic analysis. Firms also have a dual role, as they need to purchase machines and raw materials if they are to produce goods and services.
- *Government* fulfils several roles in society. It undertakes expenditure, and influences the economy through its taxation and regulation of markets.

Opportunity cost is crucial for each of these economic agents, because they each face constraints on their choices. As soon as they choose one course of action, they forgo the possibility of taking an alternative decision.

Factors of production

People in a society play two quite different roles. On the one hand, they are the consumers, the ultimate beneficiaries of the process of production. On the other hand, they are a key part of the production process in that they are instrumental in producing goods and services by supplying labour. The production process requires not only labour but other resources as well. These productive resources are known as the **factors of production**. The main types are outlined in Table 1.1.

Table 1.1 The factors of production

Labour	The most obvious human resource, labour is a key input into production. There are many different types of labour, encompassing different skill levels and working in different ways, from unskilled labourers to web designers or brain surgeons.
Capital	The term 'capital' covers inputs such as plant and machinery, transport equipment and factory buildings.
Enterprise	Enterprise is another human resource. An entrepreneur is someone who organises production and identifies projects to be undertaken, bearing the risk of the activity. This is an important role in the modern economy, where firms need to be alert for market opportunities. Management is also sometimes classified as a human resource, although it might be seen as a particular form of labour.
Land	Land covers the inputs provided by nature — both the land itself and the natural resources that nature provides in the form of raw materials.

The way in which these inputs are combined in order to produce output is another key part of the allocation of resources. Firms need to take decisions about the mix of inputs used in order to produce their output. Such decisions are required no matter what form of economic activity a firm is engaged in.

The rewards to factors of production

The factors of production need to be rewarded in return for the services that they provide, as shown in Table 1.2.

Table 1.2 Rewards to the factors of production

Labour	Households supply their labour in return for wages and salaries. The wage is therefore the reward for the labour services that they supply, for which they must give up their leisure time.
Capital	Interest is the return on the use of capital services. It is the return that the firm gains from using the capital goods in the production process. In doing this, the firm forgoes the interest that it could have gained from investing in a financial asset.
Enterprise	Profit is the reward for enterprise. By recognising income-earning opportunities for the firm, the entrepreneur is able to make profit for the business.
Land	It is the rental that constitutes the reward for the use of land in production.

Synoptic link

The decisions taken by producers are discussed later, in particular in Chapter 18, but first you need to understand more about the behaviour of households and firms.

Key term

factors of production

resources used in the production process; inputs into production, particularly including labour, capital, land and enterprise

Test yourself 1.6

How do we refer to resources such as labour, land, capital and enterprise when they are used in production?

Factors of production – labour (workers), capital (buildings) and land



Renewable and non-renewable resources

An important distinction is between **renewable resources** such as forests, and **non-renewable resources** such as oil or coal.

In the case of renewable resources, there have been many debates in recent years about the dangers of depleting such resources at too rapid a rate to allow replacement. One example of this has been the stocks of some fish such as cod, where it has been argued that overfishing may lead to the extinction of the species. Similar arguments have been applied to other resources such as the rainforests. This has highlighted the importance of sustainable development, which has been defined as ‘development which meets the needs of the present without compromising the ability of future generations to meet their own needs’ (Brundtland Commission, 1987). Applying this to the case of cod fishing, for example, sustainable fishing would be seen in terms of not catching so many cod that the overall population becomes unsustainable.

For non-renewable resources, reserves are finite — by definition — so concern has arisen over their possible exhaustion. Attention has tended to focus on oil, which is much in demand, especially given rapidly rising car ownership. This has led to a search for renewable sources of energy (and the development of electric cars), which would also contribute to sustainability. One economic issue here is whether the prices of resources such as oil will rise as reserves are depleted. This could then have the effect of giving incentives to firms to develop alternative, ‘green’ sources of energy. It could also mean that some reserves of oil that are currently uneconomic may become viable. This is one example of how prices can be seen to guide resource allocation.

Key terms

renewable resources
natural resources that can be replenished, such as forests that can be replanted, or solar energy that does not get used up

non-renewable resources
natural resources that once used cannot be replenished, such as coal or oil

Test yourself 1.7

Name one example of a renewable energy resource, and one example of a non-renewable energy source.

Exercise 1.2

Classify each of the following as human, natural (renewable or non-renewable) or produced resources:

- a timber
- b the services of a window cleaner
- c a combine harvester
- d a computer programmer who sets up a company to market their software
- e a computer

The three key economic questions

By now you should be getting some idea of the subject matter of economics. The American economist Paul Samuelson (who won the Nobel Prize for Economic Sciences in 1970) identified three key questions that economics sets out to investigate:

- 1 *What?* What goods and services should be produced in a society from its scarce resources? In other words, how should resources be allocated among producing smartphones, potatoes, banking services and so on?
- 2 *How?* How should the productive resources of the economy be used to produce these various goods and services?
- 3 *For whom?* Having produced a range of goods and services, how should these be allocated among the population for consumption?

Test yourself 1.8

What were the three key questions that Samuelson identified for economics?

Exercise 1.3

With which of Samuelson's three questions (what, how, for whom) would you associate the following?

- a A firm chooses to switch from producing laptop computers in order to increase its output of tablet computers.
- b The government reduces the highest rate of income tax.
- c Faced with increased labour costs, a firm introduces labour-saving machinery.
- d There is an increase in social security benefits.
- e The owner of a fish-and-chip shop decides to close down and take a job in a local factory.

Summary: key economic ideas

- Positive statements are about what is, whereas normative statements are about what ought to be.
- The fundamental problem faced by any society is scarcity, because resources are finite but wants are unlimited. As a result, choices need to be made.
- Each choice has an opportunity cost – the value of the next-best alternative forgone.
- The amount of output produced in a period depends on the inputs of factors of production.
- The rate at which renewable resources are used needs to be seen in the light of the notion of sustainability.
- Economics deals with the questions of what should be produced, how it should be produced, and for whom.

The production possibility frontier

Economists rely heavily on diagrams to help in their analysis. In exploring the notion of opportunity cost, a helpful diagram is the **production possibility frontier (PPF)**. This shows the maximum combinations of goods that can be produced with a given set of resources.

First consider a simple example. In an earlier exercise, Asif was studying for his A levels. Suppose now that he has got behind with his homework. He has limited time available, and has five economics questions to answer and five maths exercises. An economics question takes the same time to answer as a maths exercise.

What are the options? Suppose he knows that in the time available he can tackle either all of the maths and none of the economics, or all of the economics and none of the maths. Alternatively, he can try to keep both teachers happy by doing some of each.

Key term

production possibility frontier (PPF) a curve showing the maximum combinations of goods or services that can be produced in a given period with available resources