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Executive
Preview

Economics

for Cambridge International AS & A Level

MULTI-COMPONENT SAMPLE

Colin Bamford, Susan Grant,
George Vlachonikolis, Roger Croft & Mark Collins



Fourth edition

Digital Access

 Cambridge Assessment
International Education

Endorsed for full syllabus coverage



Brighter Thinking

Better Learning

Dear teacher,

Welcome to the new edition of our *Economics for Cambridge International AS & A Level* series, offering in-depth support for the new Cambridge International AS & A Level Economics syllabus (9708) for examination from 2023.

This executive preview gives you a first look at our new resources and shows you how the key components – coursebook with digital access, workbook with digital access and a digital teacher’s resource – work together to support you and your learners. In developing the series, we carried out extensive research with teachers around the world to make sure we understood your needs and challenges and how to best support you and your learners.

The **coursebook** includes comprehensive coverage of the syllabus with chapters devoted to each of the 53 topics covered, as well as a range of features that make economics relevant to the real world.

- **A new ‘Getting started with Cambridge International AS & A Level Economics’** chapter helps learners understand the key skills needed to study economics
- **‘Economics in context’** is a real-world case study which opens each chapter and provides a focus for discussions on key issues
- **Key terms** are defined to help learners understand the main concepts
- **Activities** engage learners and ensure that they can use the knowledge and skills they have gained in a variety of ways
- **Key concepts** show how aspects of a topic can be related to the key concepts identified in the syllabus
- **Tips** help learners avoid common mistakes and provide some guidance on writing answers
- **‘Think like an economist’** case studies provide learners with the opportunity to apply the skills they are gaining to issues that economists are currently exploring
- **Self-evaluation checklists** check learners’ level of understanding after completing each topic
- **Exam-style questions** throughout the coursebook and exam-style data response and essay questions at the end of each unit build up learners’ understanding of economics and develop their skills, including evaluation and analysis, so they can make meaningful judgements
- **The ‘Preparing for assessment’ chapter** helps learners understand the meaning of assessment objectives, the structure of essay questions and how to revise in an effective way

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The **workbook** supports learners' progress even further, tests their understanding and enables them to gain more experience of demonstrating the key subject skills. It has guidance on command words to help learners understand how to approach answering exam-style questions. Plenty of key skills exercises, worked examples and exam-style questions support learners' progression through the course and enable them to put into practice what they have learnt.

The **teacher's resource** is at the heart of this new series, helping you to use the resources effectively. This includes teaching notes, differentiation and assessment ideas, suggestions on how to tackle common misconceptions, and language support ideas as well as a lesson plan template and an exemplar.

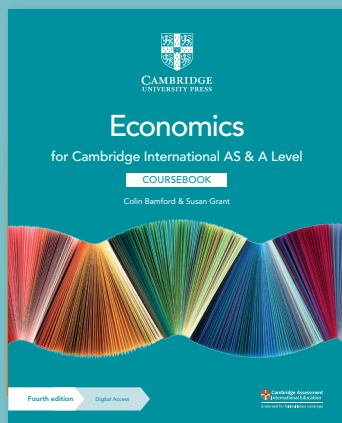
For each topic, there is a selection of starter ideas, main teaching ideas and plenary ideas. The teaching notes include a range of downloadable resources, such as language worksheets, topic worksheets and PowerPoint presentations. These supporting resources will help you to deliver the topics to your class, provide additional support in key areas and save you lesson-planning time.

We're very pleased to share with you sample chapters from our forthcoming coursebook, workbook and teacher's resource. We hope you enjoy looking through them and considering how they will support you and your learners. If you would like more information or have any questions, please contact your local sales representative: cambridge.org/education/find-your-sales-consultant

Biljana Savikj
Commissioning Editor for Economics
Cambridge University Press

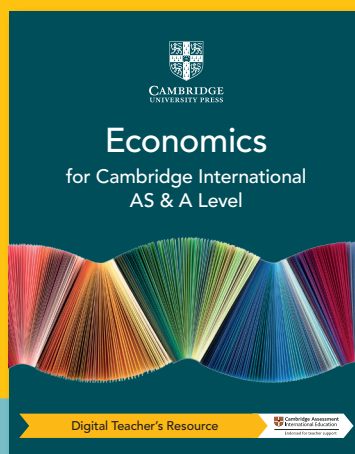
> How to use this series

This suite of resources supports learners and teachers following the Cambridge International AS & A Level Economics syllabus (9708). All of the components in the series are designed to work together and help learners develop the necessary knowledge and skills for this subject. With clear language and style, they are designed for international learners.

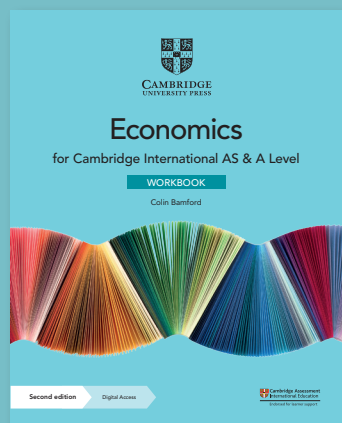


The coursebook is designed for learners to use in class with guidance from the teacher. It offers complete coverage of the Cambridge International AS & A Level Economics syllabus. Each chapter contains in-depth explanation of Economics concepts with a variety of activities, case studies and images to engage learners, help them make real-world connections, and develop their analysis and evaluation skills.

The teacher's resource is the foundation of this series because it offers inspiring ideas about how to teach this course. Teachers will find everything they need to deliver this course in here, including teaching guidance, lesson plans, suggestions for differentiation, assessment and language support, answers and extra materials, including downloadable worksheets and PowerPoint presentations.



The workbook provides further practice of all the skills presented in the coursebook and is ideal for use in class or as homework. It provides engaging exercises, worked examples and opportunities for learners to evaluate sample answers so they can put into practice what they have learnt.



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Economics

for Cambridge International AS & A Level

COURSEBOOK

Colin Bamford & Susan Grant



Fourth edition

Digital Access



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How to use this book

Throughout this coursebook, you will notice recurring features that are designed to help your learning. Here is a brief overview of what you will find.

LEARNING INTENTIONS

Learning intentions open each chapter. They help with navigation through the coursebook and indicate the important concepts in each topic.

ECONOMICS IN CONTEXT

Economics in context introduces you to the content in a chapter. These place some of the key ideas contained in the chapter into a real-world economics context. They raise important issues for discussion, with questions that allow you to look in more detail at the topic.

KEY TERMS

Key vocabulary and formulae are highlighted in the text when they are first introduced. An accompanying definition explains the meanings of these words and phrases. You will also find definitions of these words in the glossary at the back of this book. There is also a separate appendix for all key formulae.

TIPS

Tips are provided throughout this coursebook to help with your learning. The tips might cover how to avoid common errors or misconceptions, advice on essay-writing, evaluation and analysis, or guidance on how answers are arrived at.

KEY CONCEPT LINKS

These links explain how the coursebook's topics are integrated with the key concepts in the Cambridge International AS & A Level Economics syllabus.

ACTIVITY

There are various activities throughout this coursebook. These include short case studies with evaluative or analytic questions, as well as opportunities to produce your own work either individually, in pairs or in groups.

REFLECTION

Reflection questions direct you to look back on an activity and encourage you to think about your learning. You will reflect on and assess the process that you used to arrive at your answers.

THINK LIKE AN ECONOMIST

Think like an economist provides you with an opportunity to apply economics principles to current events in various international settings. You will look at your life through an economics lens, and also apply your analysis skills and use evidence to look at the world of work. Designed to encourage group discussion, the short case studies and accompanying questions will help you to make connections between employment and studying economics.

SELF-EVALUATION CHECKLIST

At the end of each chapter, you will find a series of statements outlining the content that you should now understand. You might find it helpful to rate how confident you are for each of these statements when you are revising. You should revisit any topics that you rated 'Needs more work' or 'Almost there'.

EXAM-STYLE QUESTIONS

Each chapter contains a set of multiple-choice questions. You can use these to assess the knowledge you have gained on this section of the syllabus. In addition, each unit ends with a set of more demanding data response and essay questions. These can be used to assess what you have learnt across several chapters of the coursebook.

Note: Throughout the text, dollars (\$) refer to US dollars, unless otherwise stated.

> Unit 1

Basic economic ideas and resource allocation

UNIT INTRODUCTION

This unit provides you with an introduction to studying economics. The chapters introduce you to terms and concepts that form part of 'the economist's tool kit'. You will find these terms and concepts invaluable as your study of economics progresses.

The subject of economics has grown out of the fundamental economic problem. When resources such as an individual's income are limited, choices have to be made. A simple model, the production possibility curve, is used to show how the fundamental economic problem applies in an economy. The unit explains why governments find it necessary to provide some goods and services for us.

> Chapter 1

Scarcity, choice and opportunity cost

LEARNING INTENTIONS

In this chapter you will learn how to:

- explain the fundamental economic problem of scarcity
- explain the need for individuals, firms and governments to make choices
- define the meaning of opportunity cost
- explain how opportunity cost results from the need to make choices
- explain the basic questions of resource allocation.

ECONOMICS IN CONTEXT

The economist's role in a changing world

This is certainly an interesting time to be studying economics given all the problems in the global economy. As the 2019 joint Nobel Prize economist, Esther Duflo, has said, 'Economists have something to contribute'. Let us look at the topic of climate change, where this is undoubtedly true.

Few would now disagree that the effects of climate change can no longer be ignored. Issues to be addressed include:

- Should we fly less?
- Should we source more of our needs locally?
- Should we eat less meat and fewer animal products?
- Should high-income countries do more to help other countries?

The list does not stop here. In all these issues, economists have something to contribute.

Discuss in a pair or a group:

- Is there anything you could do to reduce your carbon footprint?
- What do you think economists could suggest to help combat climate change?



Figure 1.1: In 2019, the French–American economist Esther Duflo was jointly awarded the Nobel Prize in Economic Sciences with economists Abhijit Banerjee and Michael Kremer for 'their experimental approach to alleviating world poverty'

1.1 The fundamental economic problem

The **fundamental economic problem** arises because **resources** (inputs used to produce goods and services) are scarce while people's **wants** are unlimited. Wants are unlimited because there is always likely to be something else that a person wants whatever their income. For an individual on a low income, a want may be a car; for a millionaire a want may be a personal jet aircraft. Both wants are unobtainable on each individual's current amount of income.

It is important not to confuse wants and **needs**. Needs are things like food, shelter and clothing that are needed for survival.

The fundamental economic problem means that individuals, firms and governments have to make choices due to the **scarcity** of resources. Making a **choice** involves taking decisions on how to allocate scarce resources between many competing uses.

Figure 1.2 shows the fundamental economic problem.

KEY TERMS

fundamental economic problem: scarce resources but unlimited wants; sometimes called the basic economic problem.

resources: inputs available for the production of goods and services.

wants: the goods and services that people may like to have but are not always realised.

needs: things that are necessary for survival, such as food.

scarcity: a situation in which wants and needs are greater than the resources available.

choice: resources are scarce so individuals, firms and governments have to consider alternatives.

TIP

In economics, a need is not the same as a want. Learners often confuse need and want. An individual may not have the income required to satisfy all their wants. A need tends to be more important than a want because needs are required for survival.

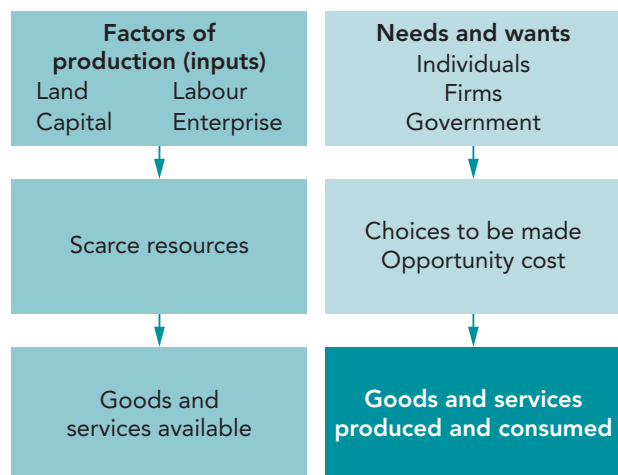


Figure 1.2: The fundamental economic problem

KEY CONCEPT LINK

Scarcity and choice: The fundamental problem in economics is that wants are unlimited, but resources are scarce. This means a choice always has to be made between competing uses for resources. There will be an opportunity cost each time a choice is made. Look out for the theme of scarcity and choice in economics.

ACTIVITY 1.1

- 1
 - a Write a list of ten wants starting with your most important want first. Do not discuss your list with other learners. Ask your teacher to make their own list too. Once everyone has completed their list, share the results in class.
 - b What did you find? You probably agreed on the first few choices, but it is likely you saw a big variation in your choices further down the list.
- 2 In a group, discuss how your list compares to lists compiled by others with very different life experiences, such as your economics teacher.
- 3 Discuss whether there is likely to be an end to your list if you are not limited to ten choices. Remember that wants are continually expanding, developing and changing.

1.2 Unlimited wants

There are certain basic needs that must be satisfied if we are to stay alive. These include the essentials items of food, shelter and clothing. Also, you might identify wants that

seem less essential but that improve the quality of life, for example television, cars and trips to the cinema. These wants are sometimes called luxuries, but remember that what is a luxury for one individual may be considered an essential for others. This is because everyone has a scale of preference, on which you place your more urgent wants at the top and the less urgent ones at the bottom. Each individual's scale of preference is a product of a set of influences, including culture, upbringing and life experiences. Together these influence your likes and dislikes. Unsurprisingly, scales of preference may vary widely between individuals.

Some wants expand as we grow older and make different life choices. Imagine how an individual's needs may change as they move from a single-person household to a family household (for example, how their wants may change from a small car with two doors to a large, family car with five doors).

Some wants may develop and expand when individuals see others enjoying particular goods and services and so desire to have those goods as well. Sometimes wants change as a result of new experiences (for example, people may want to improve their fitness after seeing a TV programme about obesity).

All of this points to the fact that people will always have wants. While businesses are continually finding new, more efficient ways to produce more and more goods and services with the resources available, society is still faced with the fundamental economic problem of limited resources and unlimited wants.

1.3 Choice and opportunity cost

Given limited resources and unlimited wants, individuals, firms and governments have to choose which wants to satisfy. They have to make a choice between alternative wants. The true cost of any choice made between alternatives is expressed by economists in terms of **opportunity cost**. Opportunity cost is the cost of the choice in terms of the next best alternative. For example, suppose you have \$15 to spend on yourself. You can either buy a

KEY TERM

factors of production: resources or inputs available in an economy that are used in the production of goods and services.

firm: any business that hires factors of production to produce goods and services

opportunity cost: the cost expressed in terms of the next best alternative that is foregone when a choice is made.

video game that costs \$15 or two paperback books for \$7.50 each. You cannot buy both the video game and the books. You have to choose between the alternatives. You decide to buy the video game. The next best alternative is the books. Therefore, the opportunity cost of the video game is the two books.

Opportunity cost shows you the real cost of your choices. It can be applied in a variety of contexts and is helpful for decision-makers such as individuals, firms and governments.

TIP

Opportunity cost is a recurring topic throughout the AS and A Level Economics syllabus. Remember to consider opportunity cost whenever you are studying situations where choices have to be made.

ACTIVITY 1.2

Air transport is one of the biggest contributors to the emission of greenhouse gases.

In a group, consider the opportunity costs involved if the future growth of air transport is restricted. Produce a poster for your classroom wall to show all the points that need to be considered.

REFLECTION

In your answer to Activity 1.1, you ranked your top ten 'wants' in order. Why do you think people might have to do this in real life? How does this increase your understanding of the concept of 'wants'? Have you ever thought about how you might put your own 'wants' in rank order?

1.4 What to produce, how to produce and for whom to produce?

The fundamental economic problem leads to three important questions. The three questions are related to the allocation of resources. All economies have to answer these questions.

- What to produce?
- How to produce?
- For whom to produce?

What to produce?

Economies cannot produce everything, so they must decide what to produce and in what quantities. For example, firms and governments have to choose whether to produce lots of goods and services, such as food, clothing and vehicles, to improve the standard of living, or whether to produce lots of military equipment to improve national defence. The evidence for this is that some countries spend a lot more than others on their national defence.

How to produce?

Firms have to consider how resources are used so that they achieve the best outcome. Firms need to consider how they can get the maximum use out of the resources available. Sometimes firms need to consider issues other than purely economic concerns when deciding how to produce. It may be that an economy could produce more goods and services by using cheap labour, but there may be moral objections to the use of cheap labour.

Crop yields could be increased through more intensive methods of cultivation. Also, better use might be made of underground water supplies, as seen in Egypt where potatoes and other crops are grown in the Sahara desert.

For whom to produce?

Governments have to decide whether everyone is going to have a more or less equal share of what is produced or whether some will have more than others. Some economies aim to create a more equal society through policies that redistribute wealth and income from the rich to the poor. This could be achieved through the use of taxation. There are other economies, by contrast, that have extreme inequalities of income and wealth, often based upon inheritance. Inequality is a significant issue in most emerging economies where there is a widening gap between rich people and people living in poverty.

ACTIVITY 1.3

In 2019, 28% of Japan's population was aged 65 years and over; by 2050, this figure is estimated at 38%. Total population is also projected to fall from 125m in 2019 to 100m in 2050. Suggest the likely effect of these changes on

- a what to produce
- b how to produce
- c for whom to produce.

KEY CONCEPT LINK

Scarcity and choice: The three fundamental economics questions are typical of a trade-off between economic freedom for firms and individuals and a government that desires greater social equality and fairness.

THINK LIKE AN ECONOMIST

Healthcare funding issues in Africa

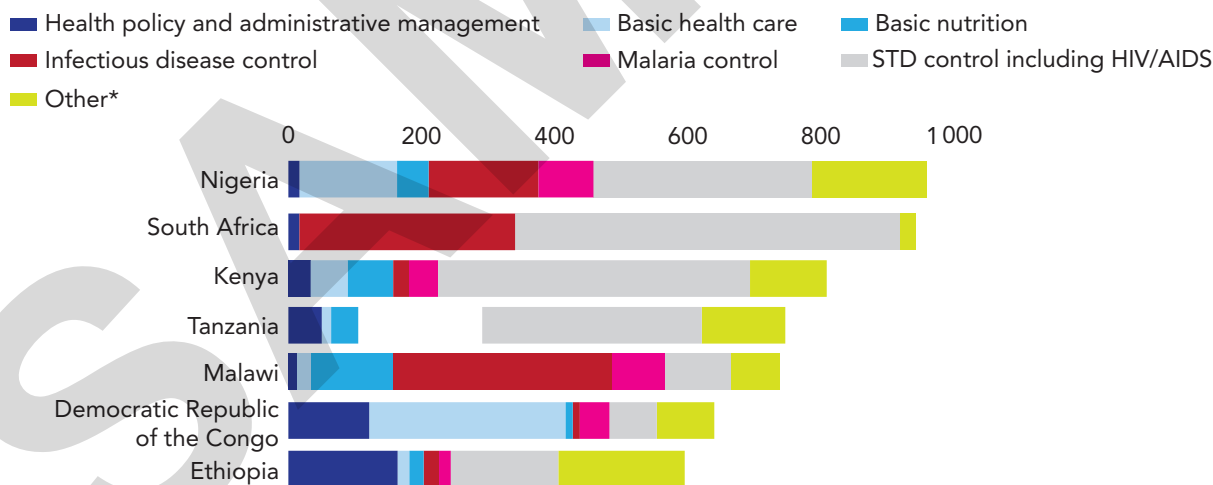
The World Health Organization (WHO) has warned that a lack of funding is hindering the fight to improve healthcare in Africa. Governments in Africa spend just 1% of the world's financial resources on healthcare but bear 24% of the global burden of diseases. Spending by individual governments varies greatly – spending is highest in Namibia and South Africa, both of which spend 10 times more per head than in Kenya and Tanzania and at least 20 times more per head than in Ethiopia and the Democratic Republic of Congo, according to the WHO study.

The data can be misleading since the World Bank, the private sector and charities such as the Gates Foundation spend huge sums on funding healthcare, especially in Sub-Saharan Africa.

Total funding is not the only challenge. Because not all wants can be satisfied, funding has to be directed to those areas of healthcare where there is most need. Figure 1.4 shows how spending on different types of healthcare varies greatly from country to country.



Figure 1.3: Healthcare in the Democratic Republic of Congo



*includes medical training, research, services, basic health infrastructure, family planning and tuberculosis control.

Figure 1.4: Healthcare spending by type for selected African countries (\$ million) 2016

Funding for healthcare in Africa is inadequate in relation to what is needed. Imagine you are an economist employed by the WHO.

- 1 Consider how you might obtain more funding for healthcare in Africa.
- 2 How could the additional funds be allocated to give maximum benefit?

EXAM-STYLE QUESTIONS: MULTIPLE CHOICE

- 1 The fundamental economic problem exists because:
 - A resources are scarce in relation to unlimited wants.
 - B a business does not know how much it can sell.
 - C resources are scarce in relation to needs.
 - D we cannot always have what we want.
- 2 Wants are unlimited because:
 - A there will always be something we would like to have.
 - B there will always be something we need.
 - C our income is limited.
 - D we are never aware of what we might want in the future.
- 3 A government has limited resources to fund the wants of its population. This means that:
 - A the government has to make choices.
 - B the government is unable to provide any goods free of charge.
 - C the government has to cut the pay of government workers.
 - D the government is unable to borrow more funds.
- 4 A teacher usually marks examination papers during the school break. She receives \$900. Instead, this time, she has decided to do some maintenance work on her apartment. To get someone to do the work would cost \$600. What is the opportunity cost if the teacher decides to do the maintenance work herself rather than mark examination papers?
 - A \$300
 - B \$600
 - C \$900
 - D \$1500
- 5 You are a student preparing for an assessment. A friend calls round and asks you to play a game of football. You decide to stay at home to prepare your assessment. What is the opportunity cost?
 - A Your friend's team loses the football match.
 - B You save money on bus fares by not playing.
 - C The healthy exercise you will get by playing football.
 - D A higher mark for your assessment.
- 6 Which of these questions is not one an economy has to address?
 - A how resources are used
 - B for what resources are used
 - C where resources are used
 - D for whom resources are used

SELF-EVALUATION CHECKLIST

After studying this chapter, complete a table like this:

You should be able to:	Needs more work	Almost there	Ready to move on
Understand why the fundamental economic problem of scarcity occurs			
Understand why individuals, firms and governments have to make choices because resources are scarce			
Understand that opportunity cost results from the need to make choices and is the next best alternative that is foregone			
Analyse why the fundamental economic problem requires all economies to answer three important questions: what to produce, how to produce, for whom to produce			

SAMPLE

> Chapter 2

Economic methodology

LEARNING INTENTIONS

In this chapter you will learn how to:

- explain why economics is a social science
- differentiate between facts and opinions (positive and normative statements)
- explain why economists use the term *ceteris paribus*
- explain when to refer to a time period such as 'short run', 'long run' and 'very long run'.

ECONOMICS IN CONTEXT

Why economics is important

Economics covers a wide range of issues like the ones in the media headlines in Figure 2.1. You are likely to learn about economics issues in newspapers, on television and through the internet.

Economists have developed their own language of terms and concepts that they use to explain and evaluate the issues that affect our world and everyday lives. In this book you will learn the terminology used by economists. Some of the words may seem familiar, for example 'demand', 'market', 'unemployment', 'inflation' and so on. Other terms will be new to you. By the end of your AS Level studies, you should be able to use these words and terms in a useful way to enable you to think like an economist.

The words in colour in the headlines are in general everyday use. The words have very specific meanings when used in economics, as you will see as you study this book.

Discuss in a pair or a group:

- Look at two or three recent newspapers. Identify any key economic terms you can find.
- Select one article. Summarise the main points. State why these points may be of interest to economists.

Vietnam **growth** to reach **5.5%**

Price of bread to rise after wheat **costs** reach record high

Oil supply crisis to send **prices** soaring

Just what polluted India needs... more electric cars to come to the **market**

Brazil battles against rising **inflation**

UK pound **exchange rate** at all-time low against dollar

Figure 2.1: These media headlines from around the world show the sorts of issues and concerns that interest economists

2.1 What is economics?

Think back to Section 1.1 and your understanding of the fundamental economic problem. You can use your understanding to write a simple definition of economics, for example 'the study of how to allocate scarce resources in the most efficient way'.

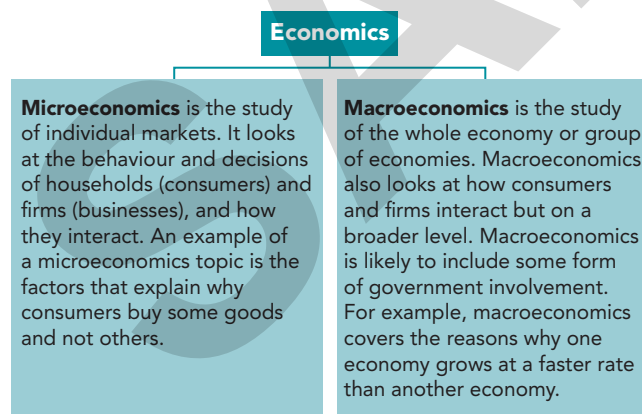


Figure 2.2: The study of economics is divided into microeconomics and macroeconomics.

TIP

Try to read the business section of a good newspaper at least once a week. You might be surprised by how much economics it usually contains.

The study of economics is divided into two parts: **microeconomics** and **macroeconomics**, as shown in Figure 2.2.

Nowadays, the division of economics between microeconomics and macroeconomics is less clear cut. For example, some aspects of the operation of markets affect the macroeconomy, such as an increase in demand for cars could affect an economy's export and import trade.

KEY TERMS

macroeconomics: the study of an economy or a group of economies.

microeconomics: the study of individual markets (households and firms).



Figure 2.3: Economics as a science

TIP

The division of economics between microeconomics and macroeconomics is not always a clear one. You need to remember this when answering questions.

2.2 Economics as a social science

Economics is a social science. The ‘social’ aspect is because economics looks at human behaviour, particularly in relation to satisfying human needs and wants. Economics is also a ‘science’. This is because of the way that economists put forward and investigate theories in the same way as scientists. Like scientists, economists put forward new ideas that seek to explain the ever and rapidly changing global economy in which we all work and live. Figure 2.3 shows a simplified view of how the scientific process comes about.

The theories put forward by economists are often referred to as **models**. Models are a simplified representation of what has actually taken place and are usually explained mathematically. The value of models is that they can be used over and over again to test a theory in many different contexts.

KEY TERM

model: a simplified view of reality used to explain economic problems and issues.

2.3 Positive and normative statements

Economists may analyse facts without making any value judgements. For example, an economist might make these statements:

- A fall in supply of petrol leads to an increase in its price.
- A 10% increase in tourist numbers in Mauritius has created 10% more employment.
- An increase in taxation on cars results in fewer cars being sold.
- The inflation rate in 2021 is 8%.

All of the above statements refer to what will happen, based on actual evidence or observation. The economist does not give their opinion or make a value judgement. Statements like these are known as **positive statements**.

When an economist expresses an opinion or makes a value judgement within their analysis, the statement can no longer be proven. Statements that express a value judgement are referred to as **normative statements**. For example, each of the normative statements below contains a value judgement within the analysis:

- A fall in the supply of petrol should lead to an increase in its price.
- A 10% increase in tourist numbers in Mauritius is likely to create at least 15% more jobs in the tourist industry.
- An increase in taxation on cars might result in a fall in demand for new cars.
- The inflation rate of 8% in 2021 was the worst in 10 years.

KEY TERMS

positive statement: a statement that is based on facts or actual evidence.

normative statement: a statement that is based on the economist’s opinion or value judgement and which cannot be proven.



Figure 2.4: A street market in Mauritius

ACTIVITY 2.1

- Convert each of the normative statements below into positive statements:
 - The price of onions should increase due to prolonged drought.
 - An increase in government spending on the railways is the best way to increase employment in India.
 - It is wrong to always assume a more equal distribution of income in a planned economy compared to a market economy.
- Discuss in a pair: What difference does this make to an economist's explanation of each statement?

2.4 Meaning of the term *ceteris paribus*

Ceteris paribus is a Latin term widely used by economists to refer to a situation where 'other things remain equal' or are unchanged. *Ceteris paribus* allows economists to simplify a situation by assuming that apart from a single change of circumstances, everything else is unchanged. In this way, economists can model the effects of one change at a time.

For example, when analysing the reasons why consumers purchase a product, there may be many reasons. The most important reason is usually price. In analysing the effect of a change in price, it is understood that all other factors that determine consumer demand are *ceteris paribus*. In other words, they are not subject to change.

KEY TERM

ceteris paribus: a Latin phrase meaning 'other things equal' or 'other things are unchanged'; used by economists to model the effects of one change at a time.

TIP

As you study economics, you will realise the importance of the term *ceteris paribus* when explaining change. *Ceteris paribus* simply means 'other things equal'. Remember to include the term in any written answers where relevant.

The margin

Like *ceteris paribus*, 'the margin' is another tool economists use to simplify a situation. Many aspects of microeconomics involve analysing decisions 'at the margin'. By this, economists mean that a small change in one variable, such as consumer income, will lead to further (small) changes in other variables, such as consumer spending and imports. Using the margin to analyse issues enables economists to predict what the likely impact of change might be.

KEY CONCEPT LINK

The margin and decision-making: Decision-making by consumers, firms and governments is based on choices at the margin. For example, firms will produce up to the point where the revenue generated by an extra unit of output is equal to the cost of producing it. This concept – like scarcity and choice – can be applied in many different situations that economists study.

REFLECTION

Do you think that you are beginning to understand some of the topics that are part of economics? If not, what can you do to improve your understanding?

2.5 The importance of time periods

We live in a world of change. Change is all around us – in daily life, at home, at work, and in the ways in which economies function. Economists take change into account in their analysis of situations. They use time periods to assess how, over time, change can influence the concepts that economists seek to model and explain. For example, the following time periods are often used when economists discuss the factors of production (resources or inputs that are used in the production of goods and services – land, labour, capital, enterprise):

- The **short run** is a time period in which it is possible to change only some inputs. Typically, it is when labour, a variable resource or factor of production, can be increased or decreased to change what is produced. So, with all other factors of production such as capital resources remaining the same (*ceteris paribus*), a firm taking on more workers may be able to increase the quantity of goods it produces.

- In the **long run**, it is possible for all factors of production or resources to change. So, in the long run, a firm may improve the quality and quantity of its capital by building a new factory to increase its output. This will usually allow the firm to be more efficient since it has had time to assess the best way to achieve its objectives.
- The **very long run** is where not only are all factors of production variable but all other key inputs are variable. Key inputs can include technology, government regulations and social concerns. The key concept 'Time' may be used to show where the distinction between the short run and the long run is an important consideration.

KEY TERMS

short run: time period when a firm can change at least one but not all factor inputs.

long run: time period when all factors of production are variable but with a constant, such as the state of technology.

very long run: time period when all key inputs into production are variable.

TIP

Time periods do not have an exact timescale such as three months or one year. Remember that the timescale depends on whether any or all of the factors of production can be changed.

ACTIVITY 2.2

In pairs, look again at the newspaper article you selected at the start of this chapter, or choose another news story.

Prepare a short presentation in which you explain the points that would interest economists in the article. You may use a presentation app if you wish. Make your presentation to the class.

THINK LIKE AN ECONOMIST

Are economists' models flawed?



Figure 2.5: Japanese consumers

Most economists agree that low interest rates provide a monetary stimulus whereby firms increase their investments in the business and consumers spend more.

In taking this position, economists have developed models of the relationship and tested the models in the real world; governments worldwide have applied this policy when faced with a situation in which their economy needs to expand.

Since the financial crisis of 2008, interest rates have been drastically cut to record low levels such as the UK's 0.25% from 2016 to 2018. Japan has even had a negative interest rate of -0.1% since 2016.

The reality does not match what the economist's models say should happen. Firms are holding back from investing in new capital and consumers are reluctant to spend even though the financial return on savings is negligible or, in the case of Japan, negative.

So, what is happening?

Divide into two groups. One group should consider the situation from the viewpoint of the UK, the other group should consider the situation from the viewpoint of Japan. Imagine you are:

- 1 yourself, as a consumer
- 2 the chief executive of a large firm
- 3 a government finance minister.

Discuss what you would do in each case. Why might you believe that the economists' models are flawed?

Each group should prepare a short presentation to give to the other group.

EXAM-STYLE QUESTIONS: MULTIPLE CHOICE

- 1 Which of these is a positive statement?
- A Wages in Indonesia are likely to be unevenly distributed.
 - B In 2019, the average wage in Indonesia was 3.8 million Indonesian Rupiah per month.
 - C The average hourly wage rate in Jakarta should be higher than elsewhere in Indonesia.
 - D The average wage in Indonesia depends on how it is measured.
- 2 Insert the correct words into this sentence.
- A ... (1) ... statement in economics is one that is subjective and ...(2)... be tested by using real world evidence.

	1	2
A	normative	cannot
B	normative	can
C	positive	cannot
D	positive	can

SELF-EVALUATION CHECKLIST

After studying this chapter, complete a table like this:

You should be able to:	Needs more work	Almost there	Ready to move on
Understand why economics is a social science			
Understand the difference between positive statements and normative statements			
Use the term <i>ceteris paribus</i> to describe a situation where 'other things remain equal' or unchanged			
Understand the importance of time periods to assess how over time, change can influence the concepts that economists seek to model and explain			

We are working with Cambridge Assessment International Education towards endorsement of these titles.

> Chapter 3

Factors of production

LEARNING INTENTIONS

In this chapter you will learn how to:

- define the meaning of the factors of production: land, labour, capital and enterprise
- explain the importance of the factors of production
- describe the rewards to the factors of production
- explain the difference between human capital and physical capital
- explain the division of labour and specialisation
- explain the role of the entrepreneur in the organisation of the factors of production in 21st century economies and as a risk taker.

ECONOMICS IN CONTEXT

James Dyson, entrepreneur

James Dyson is a well-known global **entrepreneur**. An entrepreneur is someone who seeks out new business opportunities and is willing to take risks. Dyson's range of products such as vacuum cleaners, fans and hand dryers are used around the world in homes, hotels, factories, offices and airports.

James Dyson is best known for his bagless vacuum cleaner. As an engineer, the idea for the cleaner developed from a new industrial dust extractor that Dyson built for his small engineering company. By the early 1980s, Dyson had a working prototype of his vacuum cleaner, but it took a further 10 years for it to go on sale as a commercial product, and left him heavily in debt.

Launched in 1993, the Dyson bagless vacuum cleaner became a best seller. Dyson moved production of the vacuum cleaner from the UK to Malaysia in 2002. At the time, the move was controversial as it would result in job losses in the UK. Once the patent expired, other manufacturers copied Dyson's design.

More recently, Dyson's company has developed and manufactured a range of hand dryers, hair dryers, fans and lights using the latest Dyson technology. His revolutionary washing machine was not successful.

His latest project has been to build an electric car at a new factory in Singapore. Despite a huge investment, Dyson has been forced to abandon the project as it would not be commercially viable. It is likely there will be other new ventures to follow but this shows the risks involved even for an experienced and highly successful entrepreneur.

In 2019, the US business magazine Forbes estimated James Dyson's net worth to be over \$5 billion.

Discuss in a pair or a group:

- What qualities do you think a successful entrepreneur like James Dyson is likely to have?
- Why might Dyson have failed?



Figure 3.1: James Dyson

KEY TERM

entrepreneur: an individual who seeks out new business opportunities and is willing to take risks.

3.1 The factors of production

The fundamental economic problem of scarcity was explained in Section 1.1: resources are scarce in relation to wants, which are unlimited. Scarce resources and unlimited wants result in the need to make choices.

Economists refer to the resources available in an economy as the factors of production. Factors of production are the means by which an economy produces a whole range of goods and services to meet the needs of its population. The owners of factors of production receive payments when the factors are used by others.

There are four main types of factors of production, as shown in Figure 3.2.

Land

Land is a natural resource. This factor of production includes a wide range of things such as mineral deposits

like oil and coal, the earth's rivers and lakes, climate and the land itself, in terms of the soil for agriculture and trees and vegetation. This factor of production can be used to describe the natural resources such as sea, sand and sun that are important for the development of tourism and leisure activities.

The quality as well as the quantity of land as a factor of production is important. Too much sun, too little rain or poor soil can mean that this factor of production has little

KEY TERM

land: a factor of production; natural resources in an economy.

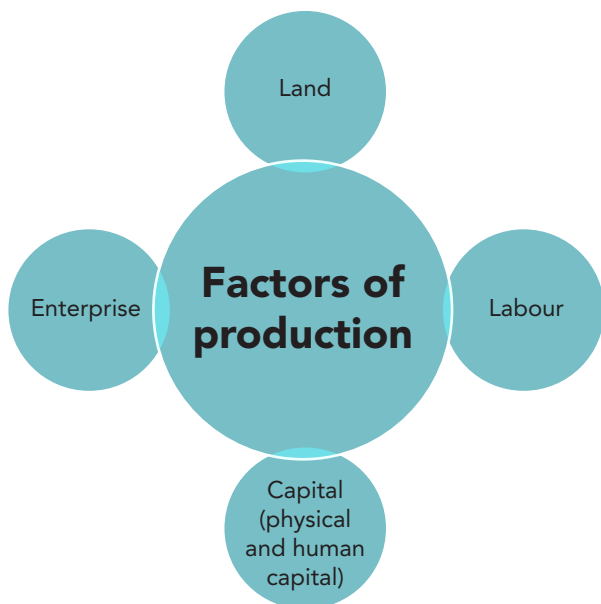


Figure 3.2: The factors of production

or no productive use. The quality of land as a factor of production is increasingly relevant in view of climate change.

The reward for owning land is the rent or income that its owners receive. In the case of minerals, such as coal or precious metals, this can be a payment that is made for the minerals after they have been extracted.

TIP

Some learners struggle to understand the scope of the 'land' factor of production. It is much broader than the physical space on which an office or factory is built. Remember that it includes oil reserves, climate, rain forests and other natural resources.

Labour

Labour is the human resources available in any economy.

The quantity and quality of labour is of major importance:

- Some economies, particularly **low-income countries**, often have large populations but suffer from a lack of a well-trained and well-educated labour force. Not all of the population is available for work. Some people are above or below the normal working age while others choose not to work for family or social reasons.
- In some economies there are cultural limitations on women working or the type of work that women are permitted to do.

- Some countries, for example China, Russia and Italy, have declining populations and rely on immigrant workers (workers from abroad) to do both skilled and unskilled jobs.
- The quality of labour is essential for economic progress. In India, emphasis has been given to increasing the IT skills of workers and has in part resulted in the growing importance of India in the global economy.
- The reward for labour is the wage or earnings paid for labour's services. The payment received depends on the value of labour to whoever is hiring the labour.

Capital

Capital is a type of physical resource including anything that can be regarded as made by humans to aid production. Capital covers a wide range of items such as factories, office blocks, machinery, information technology, transport vehicles and infrastructure in the form of roads, railways, pipelines, electricity supplies, water supplies and so on.

Capital is combined with land and labour to produce goods and services that are required. The quality as well as the quantity of capital is important, particularly in low-income economies where essential services may be unreliable.

The reward for using capital is the financial return that is earned or income if the capital resource is rented.

Enterprise

Enterprise is a form of human capital. As a factor of production, enterprise has two main functions:

- It organises the other factors of production so as to produce goods and services.

KEY TERMS

labour: a factor of production; human resources available in an economy.

low-income countries: economies where income per head was \$1025 or less in 2018 (World Bank).

capital: a factor of production; a physical resource made by humans that aids the production of goods and services.

enterprise: as a factor of production, enterprise involves organising production and taking risks.

- It refers to the ability and inventiveness of the entrepreneurs who are prepared to take risks. Well-known entrepreneurs include: Richard Branson (Virgin Group), Jeff Bezos (Amazon), Cher Wang (HTC Corporation), Jack Ma (Alibaba), Folorunsho Alakija (Rose of Sharon Group), Mukesh Ambani (Reliance Industries), Indra Nooyi (PepsiCo) and Bill Gates (joint founder, Microsoft). More typical though are the millions of people who own small businesses and organise the factors of production in order to make a profit. This is the reward for enterprise.

ACTIVITY 3.1

Think about where you live. Make a list of examples of each of the factors of production in your area.

Once you have completed the activity, share your list with another learner. Have you got the same examples?

In a group, discuss how relevant the factors are to the local economy.

TIP

It is often overlooked that the quality of a factor of production is often more important than the quantity. Remember this point when writing about labour and capital as factors of production.

3.2 The difference between human capital and physical capital

As a factor of production, 'capital' can be more correctly described as **physical capital**.

It is the result of more resources being made by businesses and government in the wide range of items such as factories, machinery and infrastructure referred to earlier. The quality as well as the quantity of physical capital is often considered to be the most important source of **economic growth** in low-income and **lower-middle-income countries**.

The importance of the quality of labour as a factor of production has been referred to earlier. Building on this idea, economists often refer to **human capital**. This is the value of labour in contributing to the productive potential or future growth in an economy. Human capital can apply to individuals as well as to the population as a whole. It covers the skills, knowledge and experience of labour that is being used to produce goods and services. These

skills may affect the future earnings of individuals and of the economy. Therefore, human capital can be seen as an investment by individuals, employers and the government to increase the future rate of economic growth.

KEY TERMS

physical capital: factors of production such as machinery, buildings and infrastructure.

economic growth: an increase in an economy's productive potential (future growth).

lower-middle-income countries: economies where income per head was between \$1026 and \$3995 in 2018 (World Bank).

human capital: the value of labour to the productive potential (future growth) of an economy.

3.3 Specialisation and the division of labour

One of the ways in which more goods and services can be produced in the economy is through the process of **specialisation**.

Specialisation refers to a situation where individuals and firms, regions and entire economies concentrate on producing some goods and services rather than others. For example, at the individual level, within the household there may be some specialisation in the performance of household tasks, with one person doing the ironing and gardening while another does the shopping and cooking. In the workplace, of course, the fact that some people are labourers or lorry drivers while others have office jobs or are economics teachers is a reflection of specialisation. At this level, specialisation allows individuals to concentrate upon what they are best at doing, meaning more goods and services will be produced.

However, with specialisation, although more is produced, no one is self-sufficient (able to produce everything they need). It becomes necessary to exchange or trade goods and services. As an individual specialises, they will produce a surplus (more than their needs), which they can exchange for the surpluses of others.

KEY TERM

specialisation: the process by which individuals, firms and economies concentrate on producing those goods and services where they have an advantage over others.

ACTIVITY 3.2



Figure 3.3: Sugar cane harvest

Cane sugar is a valuable export crop for some of the world's lower-middle-income countries in Africa and in the Caribbean. Sugar, refined from sugar beet, is produced in the UK.

- 1 Explain why it is possible for producers in lower-middle-income countries and in the UK to each specialise in producing sugar.
- 2 Think about the likely benefits and the risks to sugar producers in lower-middle-income countries and in the UK. Where are the benefits likely to be greatest? Where are the risks likely to be greatest?

Specialisation has resulted in a major expansion in global living standards, but there are dangers too. The pace of technological change means there is always the possibility that the specialist skills and experience that any individual has acquired may become redundant as the economy develops. Individuals need to be flexible and multi-skilled and to be able to move between occupations. At regional and national levels, changes in consumers' wants can sometimes mean that the goods and services produced in a region or country are no longer required in the same quantity, so unemployment can result. Policies then have to be adopted to deal with the economic and social problems that arise.

ACTIVITY 3.3

The aim of this activity is for you to consider the specialisms in your own economy or an economy that is known to you. When you have completed this, list the factors of production that are responsible for why such specialisation has come about.

Try to rank the factors of production in terms of their importance.

In a pair, compare your list and your rankings.

REFLECTION

Activities 3.1 and 3.3 suggest that you compare your answers with those of others in your class. How did your factors of production and specialisms compare? How far were you able to agree any differences? Did you find this a helpful way of learning about factors of production?

The division of labour

With the technical advances of the last few hundred years, production of goods and services has taken place on a much bigger scale. Large numbers of workers within very large production units has allowed the process of production to be broken down into a series of tasks. This is called the **division of labour**. For example, the economist Adam Smith, writing at the end of the eighteenth century, showed how the production of pins would benefit from the application of the division of labour in a factory. He suggested that pin making could be divided into 18 distinct operations and that, if each employee carried out only one of the operations, production would rise to 5000 pins per employee per day. He had estimated that each employee would be able to produce only a few dozen (about 50) pins each day if they produced pins individually.

Modern manufacturing processes are usually split up into a number of tasks. A typical example is in a garment factory where each worker produces one part of an item of clothing such as a shirt sleeve, the front part or button holes. This division of labour is usually quicker and cheaper than having one person complete each garment on their own. It allows workers to become more specialised

KEY TERM

division of labour: where a manufacturing process is split into a sequence of individual tasks.

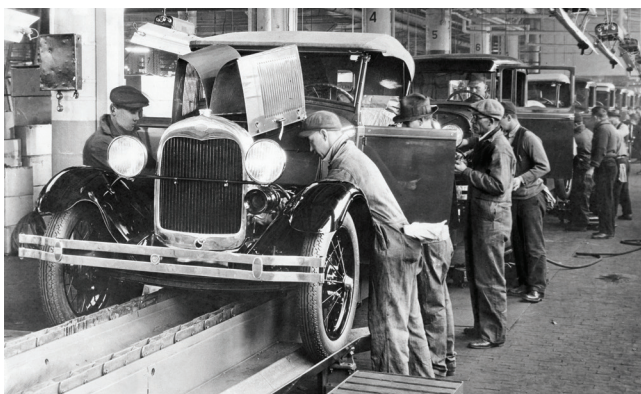


Figure 3.4: Conveyor belt production line at Ford's automobile factory, 1934

and can lead to an increase in output per worker and an improvement in the quality of the finished product.

In the United States, the division of labour was taken a stage further in the 1920s when Henry Ford introduced conveyor belt production into the automobile industry. Ford's method of automobile production provided the model for much of manufacturing production in the twentieth century.

Although the division of labour raises output, it often creates dissatisfaction among the workforce as they become de-skilled and bored with the repetitive nature of their work. In **high-income countries**, the dehumanising impact of production techniques, such as using a conveyor belt and robots, has been acknowledged and procedures introduced to counteract boredom such as moving workers around the production plant.

KEY TERM

high-income countries: economies where income per head was \$12,376 or more in 2018 (World Bank).

KEY CONCEPT LINK

Scarcity and choice: Through specialisation and the division of labour, resources that are available can be used to increase what is being produced, so meeting more wants.

3.4 The role of the entrepreneur

Entrepreneurs are individuals who:

- organise production by putting together the various factors of production to form a business opportunity
- are prepared to take risks by using their own money or by borrowing from banks or other people to try to achieve their ambitions. The risks are considerable and if their plans fail, they will lose their own money and that of others.

Successful entrepreneurs are creative and innovate to produce something that has recognised value in the market. They require the skills and passion to anticipate current and future needs. Figure 3.5 shows the qualities and skills needed to be a successful entrepreneur.

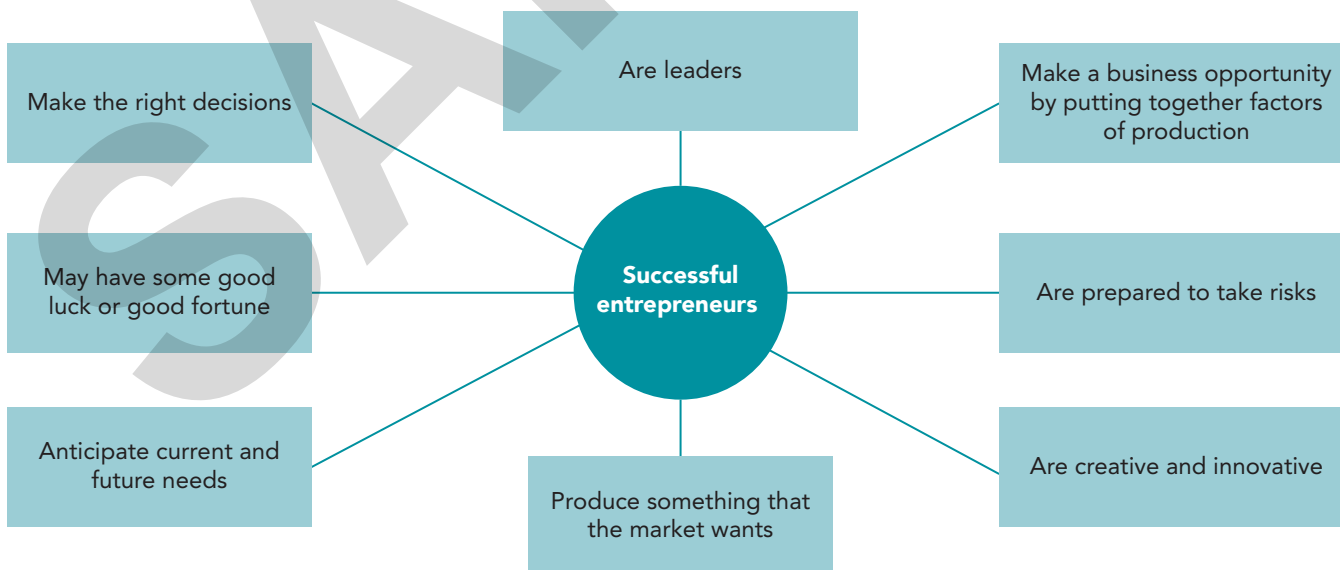


Figure 3.5: Entrepreneurs require a range of qualities and skills.

THINK LIKE AN ECONOMIST

India's top TEN richest people in 2019

Ranking	Name	Net worth in \$ billion	Source of wealth
1	Mukesh Ambani	51.4	Petrochemicals, oil, gas
2	Gautam Adani	15.7	Commodities, infrastructure
3	Hinduja brothers	15.6	Various
4	Pallonji Mistry	15.0	Construction
5	Uday Kotak	14.8	Banking
6	Shiv Nadar	14.4	Software services
7	Radhakishan Damani	14.3	Investments, retail
8	Godrej family	12.0	Godrej Group
9	Lakshmi Mittal	10.5	Steel
10	Kumar Birla	9.6	Commodities

Table 3.1: India's richest people in 2019

Look at Table 3.1. Then discuss the following statement in a group:

India has many rich people, yet many people are living in extreme poverty (defined as household income of less than \$1.90 per day).

In researching this topic, you may find it useful to look at the profiles of a selection of India's richest people and to see how they match the qualities and skills of entrepreneurs, as shown in Figure 3.3.

EXAM-STYLE QUESTIONS: MULTIPLE CHOICE

- What are the factors of production?
 - natural resources that are available for production
 - another term for resources in an economy
 - what are required in the future to produce goods and services
 - the human resources used in the production of goods and services
- The factor of production capital means:
 - what is combined with land and labour to produce goods and services.
 - the value of assets owned by a firm.
 - money needed to set up a firm.
 - money provided by shareholders to expand production in a firm.
- Which of these is the best explanation of how an economist describes an entrepreneur?
 - someone who is lucky and makes a lot of money
 - someone who succeeds in some but not all business activities
 - someone who is in charge of a firm
 - someone who seeks out business opportunities and is willing to take risks
- Which of these is an example of land as a factor of production?
 - an airline pilot
 - an airfield
 - an aeroplane
 - aircraft fuel

CONTINUED

- 5 Specialisation can only occur when:
- A a price has been agreed to buy and sell a product.
 - B a firm has modern methods of production.
 - C a firm is more efficient than all others in making a product.
 - D an entrepreneur sees a business opportunity.
- 6 Three workers (A, B and C) are employed in a shoe factory. The table below shows the output of each worker if they divide their time equally between the three stages in the production process.

	Soles	Uppers	Finishing and polishing
Worker A	100	40	40
Worker B	40	100	40
Worker C	40	40	100

Each worker is now asked to work on the part of the production process where they are a specialist. What would be the increase in the total production of shoes?

- A 140 shoes
 - B 180 shoes
 - C 360 shoes
 - D 540 shoes
- 7 Which reason is most likely to explain why an entrepreneur is prepared to take risks?
- A to secure a large bank loan
 - B to realise a business ambition
 - C to justify giving up a safe job
 - D to increase their self-esteem

SELF-EVALUATION CHECKLIST

After studying this chapter, complete a table like this:

You should be able to:	Needs more work	Almost there	Ready to move on
Understand the nature of the four factors of production: land, labour, capital, enterprise			
Describe the rewards for each of the factors of production			
Explain the difference between human capital and physical capital			
Explain why more goods and services can be produced in an economy through the process of specialisation			
Explain that the division of labour enables the more efficient use of factors of production			
Explain the role of the entrepreneur as an organiser of factors of production and a risk taker			

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> Chapter 4

Resource allocation in different economic systems

LEARNING INTENTIONS

In this chapter you will learn how to:

- explain decision-making in market, planned and mixed economic systems
- analyse the advantages and disadvantages of resource allocation in market, planned and mixed economic systems.

ECONOMICS IN CONTEXT

Vietnam: Asia's rising star

Over the past 30 years, Vietnam has changed from one of the world's poorest economies to a lower-middle-income country. This remarkable achievement originates from the development of its economic system. Since 1986, under the Doi Moi reforms, Vietnam has changed from a centrally planned economy to an economy that has the characteristics of both a state planned and a market economy.

Vietnam's recent economic growth has been spectacular. In 2019, growth was expected to reach 6.6%, slightly below the 7.1% which it achieved in 2018. This growth is largely attributed to the manufacturing of electronic goods, industrial parts and footwear for export as well as strong domestic demand.

Vietnam has embraced the global economy. The country has negotiated free trade deals including the Comprehensive and Progressive Agreement for a Trans-Pacific Partnership. Also, it has benefited, controversially, from the on-going trade dispute between China and the USA.

Vietnam's businesses remain state-owned. Some economists believe state ownership is a weakness. Private ownership and foreign investment are not allowed, in line with the government's socialist planning objectives.

Discuss in a pair or a group:

- What are the advantages and disadvantages of Vietnam's economic system?
- How might Vietnam's economic growth increase even further?



Figure 4.1: The business district of Ho Chi Minh City, Vietnam

4.1 What are economic systems?

The fundamental problem of scarcity requires choices to be made. The problem is common to all economies: low income, **middle income** and high income. The choices that are made and how they are made is determined by the **economic system** of a particular country. A country's economic system identifies the means by which households, firms and the government make decisions relating to the three resource allocation questions:

- What goods and services are to be produced?
- How are the goods and services to be produced?
- Who should receive the goods and services?

TIP

Re-read Sections 1.1 and 1.4 to remind yourself of the fundamental economic problem and the three questions related to the allocation of resources.

Traditionally, economists have recognised three main types of economic system: the **market economy**, the **planned economy** and the **mixed economy**. In market economies, resource allocation decisions are largely driven by the

market mechanism, whereby individuals and firms take these decisions without government intervention.

Over the past 30 years or so, the planned economy has been replaced by the mixed economy in many countries in

KEY TERMS

middle-income economies: economies where income per head was between £1026 and \$3995 (lower-middle-income economies) and \$3996 and \$12375 (upper-middle-income economies) in 2018 (World Bank).

economic system: the way in which production is organised and choices are made in an economy.

market economy: an economic system where most decisions are taken through the market mechanism.

planned economy: an economic system where resources are state owned and allocated by a central body.

mixed economy: an economic system where both market forces and government are involved in resource allocation decisions.

market mechanism: resource allocation decisions are taken by individual producers and consumers with no government intervention; also known as price mechanism.

Central and Eastern Europe, the former Soviet Union and southern Asia. The market has an increasing role to play in mixed economies as the countries face a range of problems and prospects.

KEY CONCEPT LINK

Scarcity and choice: Scarcity and choice apply in all economic systems. How choices are made in an economic system depends on the relative importance of government and the market mechanism.

4.2 The market economy

In the market economy, resources are allocated by the forces of demand and supply through the price mechanism (see Figure 4.2 below). Decisions on how resources are to be allocated are regularly taken by millions of individuals and thousands of firms. The government has little or no direct involvement in the process of resource allocation. Households and firms interact as buyers and sellers. Price and the unrestricted operation of the price mechanism are central to the way in which resources are allocated.

How the price mechanism works



Figure 4.2: The price mechanism at work

Figure 4.2 shows how the market may operate with no government interference. The starting point is that there is excess supply in the market – too much is being produced compared to demand. Excess supply results in goods being stockpiled in shops and warehouses. To encourage individuals to buy and so clear the excess stocks, firms reduce the price. This may clear the excess supply, but it is likely to mean that some firms which previously produced the good will now no longer be willing to do so. With less supply in the market, the price rises. In time, assuming no change in demand, firms may choose to re-enter the market. The increase in supply will lead to a fall in price and the whole process will continue. Therefore, prices and the self-interest of individuals and businesses act as a guide to the decisions that have to be made.

ACTIVITY 4.1

Using Figure 4.2, draw a similar diagram to show how the market responds to a situation where a firm is faced with a sudden, big increase in demand for one of its products.

Role of the government in a market economy

In principle, the government should have no direct role in the workings of the market economy and should not interfere in the operation of the price mechanism. As long as the price mechanism is working efficiently, the government’s role is to watch what is happening and only intervene when the price mechanism does not provide the best allocation of resources. Figure 4.3 shows how the market economy works.

When the price mechanism does not work efficiently, the market ‘fails’. Examples of market failure are where the government provides goods such as healthcare which would be underprovided, fire services which would not be provided at all,

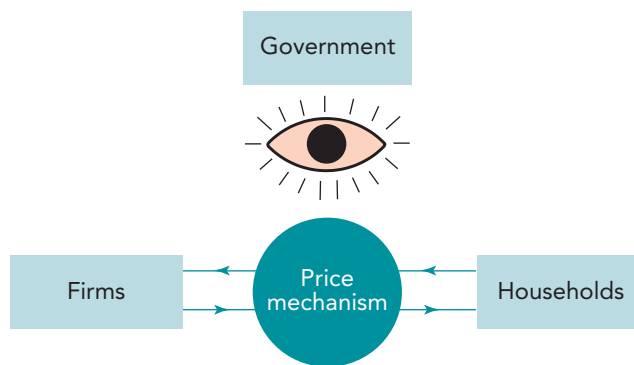


Figure 4.3: The market economy

and where it seeks to regulate situations to prevent firms using their power to control the market for excessive gain.

The true market economy is in certain respects an ideal. No actual economy operates as a pure market economy. In the US, federal and state governments have important roles to play in providing some limited public services.

Hong Kong SAR provides an interesting case of a near-perfect example of a market economy. All businesses are privately owned and Hong Kong's bus, rapid transit rail service (MTR) and road tunnels are operated by private companies. The economy is dominated by local, US- and European-owned multinational companies. Since 1997, a 'two systems, one country' structure has been in place, retaining many of the benefits of a market economy.

4.3 The planned economy

Like the market economy, the planned economy in its true form only exists in theory. (The planned economy may be referred to as the command economy or the centrally planned economy.)

In a planned economic system, the government has a central role in all decisions that are made. The choices in terms of what to produce, how to produce and for whom to produce are all centralised. Decision-making is taken by planning boards and organisations and, in principle, production is controlled by the state. Unlike the market economy, the preferences of consumers and manufacturing organisations in a planned economy are controlled centrally.

The key features of a planned economy are that central government and its organisations are responsible for the allocation of resources. Production targets are set for the main sectors of the economy, such as agriculture and manufacturing. Invariably, these are linked to planning for long-term growth through an increase in productive potential. Price control of most essential items and the determination of wages are also controlled. Finally, the ownership of most of the **productive resources** and property is in the hands of the state. In short, the market does not have a real role in the allocation of resources.

In a planned economy, government organisations find it necessary, for political as well as economic reasons, to control the workings of the market mechanism. A typical example is where basic foods such as bread and meat are hugely subsidised by the government to keep prices at a

KEY TERM

productive resources: resources that are available to be used.



Figure 4.4: Empty supermarket shelves in Poland in the early 1980s

low, fixed level. The rise and fall of prices, so important in the market economy, does not take place. A consequence of artificially low prices is often excess demand relative to supply. There are not enough basic foods for everyone, and queuing becomes a way of life. Private ownership of productive resources is restricted to small shops, restaurants and personal services, such as hairdressing.

Governments of planned economies tend to set goals which are different from those of governments in market economies. The objective is to achieve a high rate of growth in order to catch up on the progress made by the advanced market economies. Nowadays, there are very few planned economies; examples include Cuba and North Korea.

TIP

When writing an answer about a planned economy, try to include a present-day example. Cuba and North Korea are as close to planned economies as the theory suggests. Albania and Vietnam could be mentioned as socialist economies rather than full planned economies.

4.4 The mixed economy

The mixed economy is the typical economic system. In a mixed economy, both the **private sector** and **public sector** have a part to play in the allocation of resources. Decisions involve an interaction between firms, labour and the government mainly through the market mechanism. There is private ownership of most productive resources although there is some public ownership.

4 Resource allocation in different economic systems

Over the past 30 years or so, **privatisation** has been the trend. Privatisation involves the transfer of resources from public ownership to the private sector. This has been the case in many economies including the **emerging economies** of Central and Eastern Europe and Pakistan. The previously planned economies in Europe have had to move along this path towards a mixed economic system prior to becoming full members of the European Union (EU).

The increased emphasis on market forces has resulted in some problems. The UK, for example, has lost many jobs in manufacturing as factories have closed and production has moved to lower-cost locations mainly in China, the rest of Southeast Asia and in Central and Eastern Europe.

Elsewhere, there have been similar trends. One of the most dramatic has been in the former Soviet Union where the economy has been restructured (*perestroika*). This has been the case in its former satellites such as Poland, the Czech Republic, Slovakia, Hungary, Lithuania and Estonia. Opening up the economy in this way has resulted in huge inward flows of foreign investment, particularly in the manufacturing and retail sectors. There have been opportunities for private sector businesses to be developed – cafés, small shops and garages as well as the local ownership of productive resources are now the norm. In some cases, such as where former state-owned companies have been sold to the private sector, the new owners have made vast sums of money in a very short period of time through adapting the businesses to make the most of the opportunities of the market mechanism. Even in Albania, once seen as one of the few remaining planned economies, the government has recently decided to allow limited privatisation and a greater emphasis on the market mechanism.

The experience of the **Asian Tiger economies** varies. Singapore and Hong Kong, for example, have always focused strongly on the market to allocate resources. Their governments have created an economic situation where free enterprise is encouraged. The rewards can be high. Other economies have placed more emphasis on central planning, such as Malaysia, the Philippines and Indonesia. The extraordinary continual growth of China over the past 15 years or so is linked to the controlled management of the economy but with very clear opportunities for foreign investors as well as domestic companies to influence the allocation of resources.

Figure 4.5 provides a broad explanation of where selected economies fall in terms of the relative strengths of the market and planned systems of resource allocation. To clearly varying degrees, all countries would seem to fit within the definition of a mixed economy.

KEY TERMS

private sector: that part of an economy under private ownership.

public sector: that part of an economy under government ownership.

privatisation: where there is a change in ownership from the public to the private sector.

emerging economy: one that is becoming more engaged in international markets.

Asian Tiger economy: export-led, high growth economies in Asia.

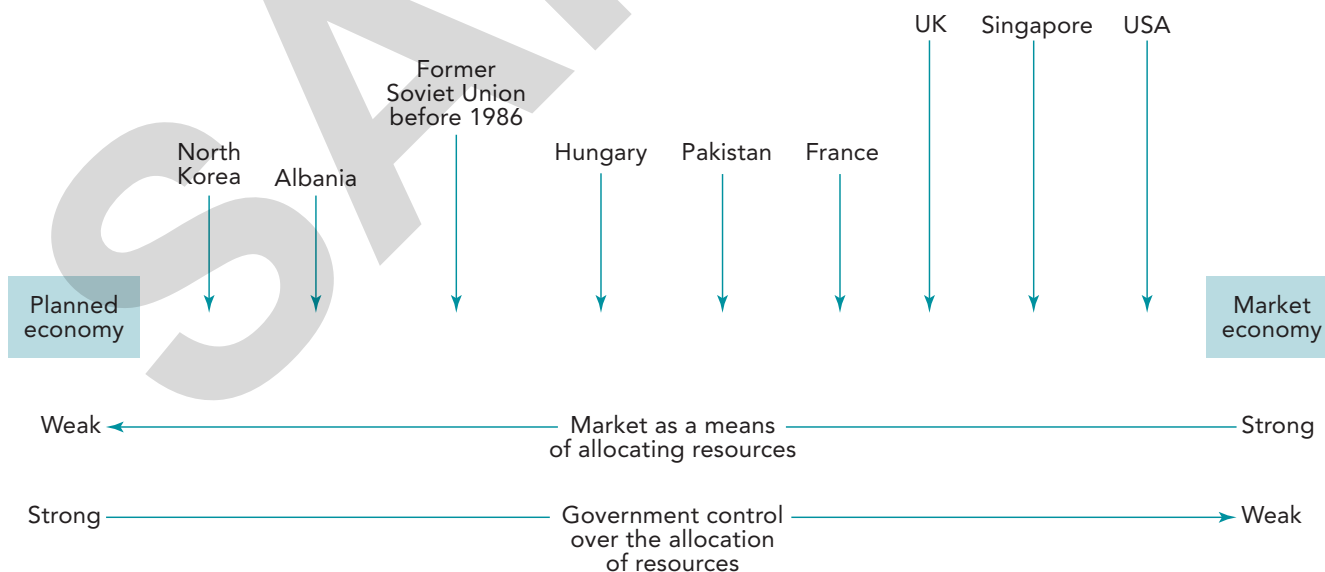


Figure 4.5: Mixed economic systems

ACTIVITY 4.2

In a pair or a group, select one of the former planned economies that joined the European Union (EU) in 2004: Czech Republic (Czechia), Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia.

Each pair or group should focus on a different country so that you cover as many countries as possible between you.

For each country:

- 1 Try to find out what percentage of the economy is in the control of the government and what percentage of resource allocation is by the private sector.
- 2 Obtain information on the importance of the country's manufacturing sector such as types of good, firms and what is exported to the rest of the EU.
- 3 Obtain data on the country's annual economic growth rate since 2004.

Display your findings on a poster for the classroom wall. If there is time, each pair or group could present its findings to the class.

TIP

A common misconception is that the classification of economies is exact. Most economies are some form of mixed system which depends on the relative importance of the roles of the market mechanism and government.

KEY CONCEPT LINK

Scarcity and choice: The fundamental economic problem exists in all three types of economy.

REFLECTION

Activity 4.2 required you to collect some data on a former planned economy that is now a member of the EU. How did you decide on which country to select? How did you set about collecting the data? What were some of the data interpretation problems you experienced?

THINK LIKE AN ECONOMIST

New Zealand's near market economy



Figure 4.6: New Zealand is a leading exporter of kiwifruit

New Zealand is one of the top-ranked market economies in the world. In 2019, it was placed third in the Heritage Foundation's Index of Economic Freedom. Only Hong Kong and Singapore have a higher score.

New Zealand has followed a market-orientated economy for many years. It has fully accepted the principle that prices must be determined by supply and demand and that economic activity, including trade, should be as free from regulation as possible. Since 1980, New Zealand's governments have pursued policies of deregulation and privatisation to liberalise the economy.

The country has a range of free trade agreements, particularly with Australia and other Southeast Asian countries. It is a member of the Comprehensive and Progressive Agreement for a Trans-Pacific Partnership.

New Zealand is the sixth richest country in the world in terms of gross domestic product (GDP) per head (a measure of national income) and has experienced steady economic growth since 2000, except for 2010–2012 when its economy was slightly affected by the global downturn.

- 1 Explore the Index of Economic Freedom to see how New Zealand compares with your country or one that you are familiar with.
- 2 How relevant are the comparisons you might make?

EXAM-STYLE QUESTIONS: MULTIPLE CHOICE

- 1 Which of these terms describes a country where government planning, regulations and directives are responsible for the allocation of resources?
 - A capitalist economy
 - B mixed economy
 - C market economy
 - D planned economy
- 2 A criticism of a planned economy is that it puts more emphasis on producing capital goods than producing consumer goods. This is because:
 - A the system of decision-making is too centralised.
 - B there are shortages of many consumer goods.
 - C the government's focus is on growth and not current consumption.
 - D consumers cannot afford to buy any more consumer goods.
- 3 A planned economy has recently become a mixed economy. This process has involved a change in the composition of what it produces. What is the most likely consequence of this change?
 - A an increase in food prices
 - B an increase in imports
 - C an increase in structural unemployment
 - D an increase in the growth rate of the economy
- 4 A mixed economy can best be described as one in which:
 - A production is determined by the central government and the market mechanism.
 - B agricultural and manufactured goods are produced.
 - C production is determined by entrepreneurs.
 - D consumer goods and capital goods are produced.
- 5 Which of these is the most likely outcome when a mixed economy privatises its rail services?
 - A Peak train fares will increase.
 - B Off-peak train fares will decrease.
 - C Fewer rail services will be provided.
 - D Train fares will now be determined by supply and demand.
- 6 After a planned economy changed to a more market economy, there was a reduction in the proportion of household income that was being saved. How might this be explained?
 - A Households were more concerned about the economy's future economic prospects.
 - B More 'big ticket' goods had become available.
 - C New charges were introduced for secondary education.
 - D Household incomes fell.

SELF-EVALUATION CHECKLIST

After studying this chapter, complete a table like this:

You should be able to:	Needs more work	Almost there	Ready to move on
Understand the roles of government and the market in the three types of economic system: market, planned, mixed			
Analyse the advantages and disadvantages of resource allocation in each of the economic systems			

SAMPLE

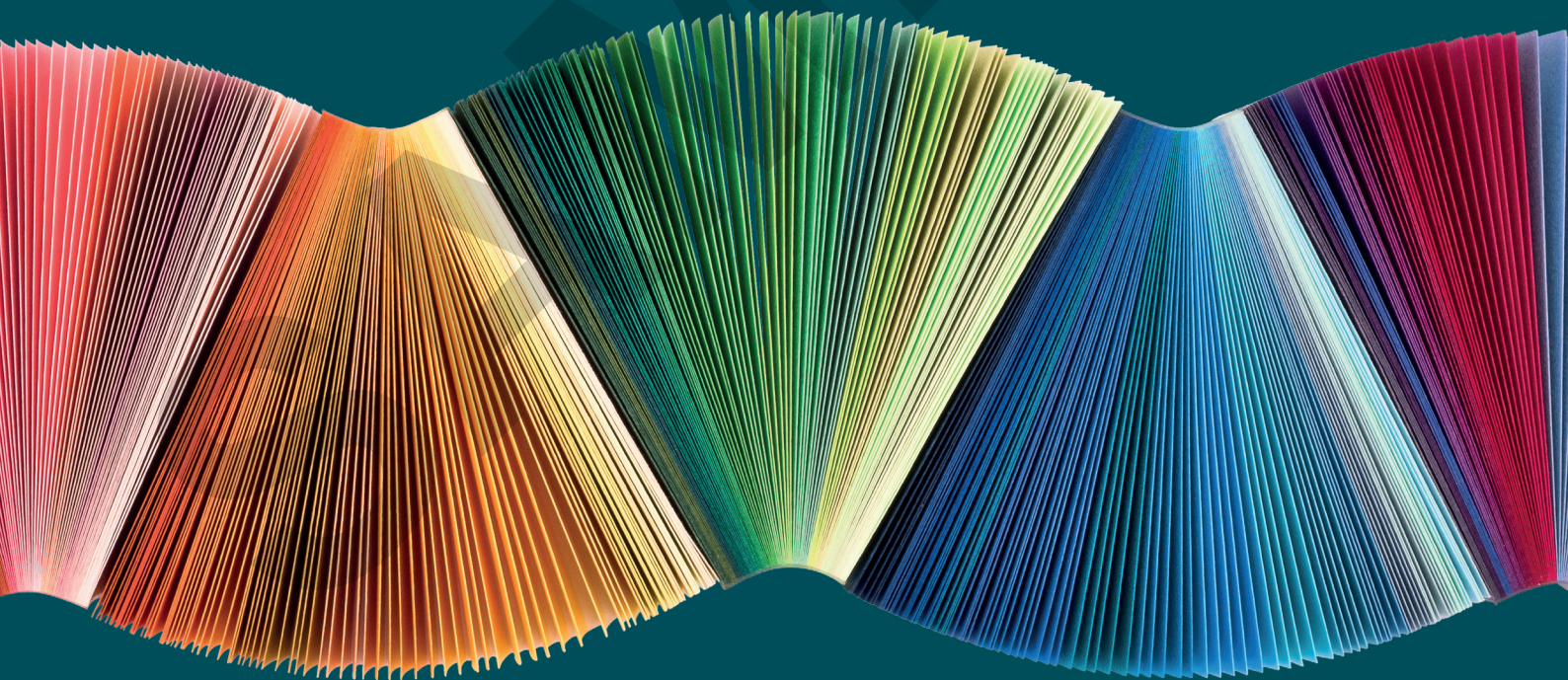
We are working with Cambridge Assessment International Education towards endorsement of these titles.



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- 48** Policies to correct disequilibrium in the balance of payments
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Acknowledgements

SAMPLE

> 1 Scarcity, choice and opportunity cost

Teaching plan

Topic	Approximate number of learning hours	Learning content	Resources
1.1 Fundamental economic problem of scarcity	4 hours	<p>What is meant by the phrase 'the basic economic problem'?</p> <p>What is meant by the concept of opportunity cost?</p>	<p>Coursebook: Economics in context Activities 1.1–1.3 Think like an economist Exam-style questions: Multiple choice 1–6 Exam-style questions: Unit 1 Data response 1 (a)–(d)</p> <p>Workbook: Key skills exercises 1–11 Exam-style questions: Data response 1(a)–(b), essay 1</p>

BACKGROUND KNOWLEDGE

- No background knowledge is assumed but it would be useful for learners to understand the difference between goods and services, the difference between needs and wants, and the meaning of resources. Check that learners understand these terms before beginning activities.
- You could begin with a discussion about what learners think is involved in studying economics before beginning this course.
- The debate in economics is largely between efficiency (making best use of scarce resources) and equity (fairness in the allocation of resources). This should be introduced early on as it will help with discussion work and essay writing.
- In addition, learners should become familiar with the various economic agents -i.e. households (which consist of consumers and workers), firms (local, national and international) and government (both domestic and overseas). This will help when analysing economic issues.
- The questions of what to produce, how to produce and for whom to produce will be covered in more detail in Chapter 4.

LANGUAGE SUPPORT

- Learners should be offered a robust definition of opportunity cost. This is a key issue that underpins a lot of economic theory. Learners need to remember that the opportunity cost of choosing option 1 is the benefits given up from not choosing option 2, i.e. the next best alternative.
- In economics, there are no certainties, therefore we tend to use words like 'might' or 'could' rather than 'will' when analysing an economic issue (e.g. a benefit to households might be... however a problem could be; the government could introduce Policy A...the benefit of this might be... but the problem of this might be...overall the best policy in this case would be...because).

Common misconceptions

Misconception	How to elicit	How to overcome
Economics is primarily concerned with the allocation of scarce resources, although many learners think it is the study of money.	At the end of this topic, ask learners if they can recall what the basic economic problem is.	Perhaps define money as a medium of exchange or a store of value. It is neither a resource nor a good/service and, therefore, it has no role in the basic economic problem.
Learners might think that we need money to survive.	Ask learners: what people need to survive.	If learners do state money, then explain that we only need money in order to buy goods and services.
A common misconception is that an increase in the quantity of money can increase standards of living.	Ask learners: will printing money mean that individuals will become better off?	Ask learners to find out about hyperinflation in Germany in 1923 or Zimbabwe in 2008 to illustrate the impact of printing more money.
It is often assumed that the opportunity cost is the money which could have been used for alternative purposes.	Ask learners: what is the opportunity cost of choosing to study economics? What was the next best alternative subject they could have studied?	Explain that in choosing between two options, we consider the benefits of each and in choosing one option we are giving up the benefits of the other.

1.1 Fundamental economic problem of scarcity

LEARNING PLAN		
Syllabus learning objectives	Learning intentions	Success criteria
1.1.1. fundamental economic problem of scarcity 1.1.2. need to make choices at all levels (individuals, firms, governments) 1.1.3. nature and definition of opportunity cost, arising from choices 1.1.4. basic questions of resource allocation: <ul style="list-style-type: none"> • what to produce • how to produce • for whom to produce 	<ul style="list-style-type: none"> • Explain the fundamental economic problem of scarcity. • Explain the need for individuals, firms and governments to make choices. • Define the meaning of opportunity cost. • Explain how opportunity cost results from the need to make choices. • Explain the basic questions of resource allocation. 	<ul style="list-style-type: none"> • Understand why the fundamental economic problem of scarcity occurs. • Understand why individuals, firms and governments have to make choices because resources are scarce. • Understand that opportunity cost results from the need to make choices and is the next best alternative. • Analyse why the fundamental economic problem requires all economies to answer three important questions: what to produce, how to produce, for whom to produce.

Starter idea

Wish list (20 minutes)

Resources: Coursebook Activity 1.1

Description and purpose: Learners should complete Activity 1.1. Before doing this, ask learners to write down the things they need to survive (e.g. food, shelter and water) and a list of things they would really like to buy (e.g. sports car, private jet, swimming pool). This activity will enable learners to distinguish between needs and wants and practically demonstrates that wants are unlimited. Make sure that learners do not just write 'money' on their list, since we want money for the goods and services we can buy with it, i.e. money is of no value in itself.

What to do next: Use the results of this activity to discuss the resources which are needed to produce all the things on their lists. Ask how long the list would be if we asked everyone on the planet to write down all the things they would like to have. This will also introduce learners to the concept of resources, which will be addressed later on.

Main teaching ideas

1 End-of-year party budget (40 minutes)

Learning outcome: Explain that, because of the scarcity of resources, individuals, firms and governments have to make choices.

Resources: None

Description and purpose: Split learners into groups of three to four. Give each group a virtual budget to organise an end-of-year party at school. Ask them to list all the things they would need to buy – (e.g. food, drinks, decorations, entertainment –) and estimate how much it would cost. The aim of this is to introduce the concept of limited budgets and having to make choices.

Ask learners to reflect on this activity. How did they decide what to buy? Do they think that they could keep their spending within budget? What would they have liked to buy but couldn't? This could also illustrate the concept of opportunity cost.

Answers:

Learners' own answers. The learners will offer you different ideas for their parties. You should challenge them on why they chose to buy particular goods instead of others.

➤ **Differentiation ideas:**

- **Support:** You could do the activity yourself and present them with your idea. You can also justify the choices you have made.
- **Challenge:** Ask learners what sort of choices a government might have to make with regards to budgets. This may be an opportunity for some quick research about how much the government spends in particular areas.

➤ **Assessment ideas:** It would be unfair to grade learners on the choices they make. Instead you can assess how well the learners have participated in the activity and whether or not they understand the key concepts it was meant to illustrate: scarcity and opportunity cost.

2 Opportunity cost (40 minutes)

Learning outcome: Explain the need for individuals, firms and governments to make choices.

Resources: Paper

Description and purpose: Ask learners to consider the costs and benefits of each of the following choices (or options) for each group. They should discuss which one they think is the better option.

- **Individual:** going to university or getting a job?
- **Organisation:** paying teachers more or investing in new computers?
- **Government:** building a new hospital or building a new airport?

Once the costs and benefits have been identified, you can point out that given limited time and finance we cannot have everything we want. Consequently, choosing option A means that we are giving up the benefits of option B. This introduces the concept of opportunity cost.

Answers:

Learners' own answers. The point of the activity is to highlight the fact that choices need to be made (which results in an opportunity cost). Also, learners are beginning to think like economists in the sense that they should be weighing up the costs and benefits of each proposal.

➤ **Differentiation ideas:**

- **Support:** You can talk through the first example with them. This may be useful because it will also give you a good idea about your learners' aspirations at the end of the course.
- **Challenge:** You could ask learners to create their own 'either/or' statements to share with their class.

➤ **Assessment ideas:** You can ask learners to write a small (500-word) summary of their plans after school. They should try to write in the style of an economist, i.e. using phrases such as costs and benefits, as well as comparing it to the next best alternative (the opportunity cost).

3 Climate change (40 minutes + additional time for presentations)

Learning outcome: Define the meaning of opportunity cost; explain how opportunity cost results from the need to make choices.

Resources: Ask learners to find images of climate change or provide some.

Description and purpose: Split the class into two equal groups. Split Group A into smaller groups of three to four and ask them what could the government of your country do to combat climate change.

Split Group B into smaller groups of three to four and ask them what can be done locally to combat climate change. Give each group ten minutes for this exercise. At the end of the allocated time, ask each group to explain their solutions. After this, have a discussion of the benefit of each suggestion and what might need to be given up in order to put the suggestion into practice. The aim of this activity is to introduce learners to some of the tough choices we face at the moment, as well as demonstrating the skills of application and analysis.

Answers:

Learners' own answers.

> **Differentiation ideas:**

- Support: Group learners with different strengths together in order to help in running this activity.
- Challenge: Learners could be encouraged to research the UN's Sustainable Development goals.

> **Assessment ideas:** Ask learners to give each other feedback on specific points, e.g. how interesting it was, whether they understood what was said and any questions they have.

Plenary idea

Poster activity (20 minutes)

Resources: Coursebook Activity 1.2

Description and purpose: Ask learners to read Activity 1.2 and plan their poster in groups of two or three. This could be finished for homework. Learners should use images in order to make the poster more colourful and engaging. The aim of this plenary is to help learners consider the benefits given up by society if air transport growth is restricted. It also encourages teamwork.

> **Assessment ideas:** Ask the groups to share their posters with each other. Each group should articulate one positive comment on each poster as feedback.



> 2 Economic methodology

Teaching plan

Topic	Approximate number of learning hours	Learning content	Resources
2.1 Positive and normative statements	4 hours	<p>What is meant by the term social science?</p> <p>The difference between positive and normative statements</p> <p>What is meant by the concept of <i>ceteris paribus</i>?</p> <p>The difference between the short run, long run and very long run</p>	<p>Coursebook: Economics in context Activities 2.1–2.2 Think like an economist Exam-style questions: Multiple choice 1–2</p> <p>Workbook: Key skills exercises 1–12 Exam-style question: Multiple choice 1 Topic worksheet 2.1</p>

BACKGROUND KNOWLEDGE

- Chapter 2 mainly covers the concept of economic methods, i.e. the building blocks of the subject.
- Methodology is important, not just as a learning objective in itself but because it will help learners to apply their skills to other areas of economics later on.
- An understanding of the difference between the Humanities and Sciences would be useful. If you have a learner studying a science subject, such as physics, chemistry or biology ask them to explain the methods used to study these subjects.
- Many learners might be planning to study at university, but do they know what universities do? The main purpose of universities is to maximise the positive impact for students and the public both through teaching and research. Therefore, a class discussion about the role of universities and academic research might be useful before beginning this section. If possible, invite a social science research student to come to talk to learners about their work.

LANGUAGE SUPPORT

- It is always vital for learners to understand the key terms of any new topic.
- Useful sentence structures for positive and normative statements are as follows:
 - *A positive statement is a statement of fact which can be proved or disproved by investigation and research. This statement is positive because it contains a fact or evidence, e.g., the statement says...*
 - *A normative statement is a statement of opinion, or a value judgement which cannot be proved or disproved by investigation or research. This statement is normative because it contains an opinion, e.g. the statement says...*
- Learners should try to become used to using the phrase *ceteris paribus* or 'other things being equal' when describing economic models. Relaxing assumptions allows us to bring in more variables and supports analysis, e.g. you could give them examples such as:
 - *The harder I work at economics, the better I will get ceteris paribus.*
 - *The longer I run, the further I get from the start ceteris paribus.*
- Ask learners what could change that would render these phrases incorrect.

Common misconceptions

Misconception	How to elicit	How to overcome
Learners might assume that positive statements are facts. However, they are <i>statements of fact</i> which can be proved or disproved through investigation and research.	Write some statements on the board such as: there is enough waste plastic to circle the world four times. Then ask, how could we test this?	You can play a game with your learners in which they have to offer three 'facts' about themselves: two of which are true and one of which is false. The rest of the class have to guess which is false. This is a fun two-minute exercise which shows that all three statements are <i>positive</i> even though they are not all <i>true</i> .

2.1 Positive and normative statements

LEARNING PLAN		
Syllabus learning objectives	Learning intentions	Success criteria
1.2.1 economics as a social science 1.2.2 positive and normative statements (the distinction between facts and value judgements) 1.2.3 meaning of the term <i>ceteris paribus</i> 1.2.4 importance of the time period (short run, long run, very long run)	<ul style="list-style-type: none"> • Explain why economics is a social science. • Differentiate between facts and opinions (positive and normative statements). • Explain why economists use the term <i>ceteris paribus</i>. • Explain when to refer to a time period such as 'short run', 'long run' and 'very long run'. 	<ul style="list-style-type: none"> • Understand why economics is a social science. • Understand the difference between positive statements and normative statements. • Use the term <i>ceteris paribus</i> to describe a situation where 'other things remain equal' or unchanged. • Understand the importance of time periods to assess how, over time, change can influence the concepts that economists seek to model and explain.

Starter idea

Economics in the news (20 minutes)

Resources: Economics in context in Chapter 2 of the Coursebook, various recent newspaper articles

Description and purpose: Learners should be split into pairs. Each pair should be given one newspaper article (of your choosing) or you can use the headlines from Economics in context. The learners should highlight any key economic terms they can find. The aim of this activity is to get used to reading and applying economic concepts to the real world. They should try to summarise the main points of the article and explain why these points may be of interest to economists.

What to do next: Each pair could present their findings to a different pair. Or, they could present to the rest of the class. In the longer term, you should encourage learners to keep a book or word app of useful vocabulary. There is also a glossary at the back of the Coursebook. Vocabulary revision could become a weekly activity. Set 10–15 minutes aside each week for this either at the beginning or end of the week. One learner per week could be selected to bring in at least one article and explain the economic concepts it contains.

Main teaching ideas

1 Economics as a social science (60 minutes)

Learning outcome: Explain why economics is a social science.

Resources: Paper cut outs

Description and purpose: The purpose of the activity is to introduce learners to the idea of scientific methodology in economics. In the first stage of the activity, you should write the following phrases onto pieces of paper and then cut them out (Note: don't write the number next to them):

- 1 Make observations.
- 2 Think of interesting questions.
- 3 Formulate hypothesis.

- 4 Develop testable prediction.
- 5 Gather data.
- 6 Refine, alter or reject hypothesis.
- 7 Develop general theories.

Ask learners to produce a flow chart showing the scientific method from these cut outs by putting them in the correct order. This can then be used for classroom display.

Then ask learners to think of a science experiment they have done in the past (or that they have heard of) that follows this process.

In the second stage of the activity, you should encourage learners to find out more about the work of economists, such as Esther Duflo, and to see the scientific methods in their work. Esther Duflo won the Nobel prize for economics in 2019 and your learners should watch her TED talk about social experiments to fight poverty. They should try to apply the seven-stage process to her work.

Answers:

The correct order is provided in the numbered list in the description above. It is a circular flow chart rather than linear so the start point could equally be 7 as it could be 1. There is also a view that points 4, 5 and 6 could become their own cycle within the larger cycle.

> **Differentiation ideas:**

- **Support:** You should pause at the end of the first activity and make sure that you explain why the various stages follow on from each other.
- **Challenge:** Ask learners to design an economic experiment.

> **Assessment ideas:** Ask learners to write one sentence to summarise what they have learned about the topic at the end of a lesson. You could focus this by telling them what to include, e.g. what is a social science?

2 Economic methodology worksheet (40 minutes)

Learning outcome: Differentiate between positive and normative statements; explain when to refer to a time period such as 'short run', 'long run' and 'very long run'.

Resources: Topic worksheet 2.1., Coursebook Activity 2.1

Description and purpose: The purpose of the worksheet is to assess learners' understanding of some of the content in this chapter, in particular, positive and normative statements, short run versus long run and definitions of various economic terms. Ask learners to complete all questions in the worksheet.

As an extension exercise for those learners who finish early, you can ask them to complete Coursebook Activity 2.1. The activity asks learners to convert three normative statements into positive statements.

Answers:

See Worksheet and Coursebook answers.

> **Differentiation ideas:**

- **Support:** You can ask learners to complete the worksheet in pairs so that they discuss their answers before writing them in.
- **Challenge:** Learners should try to find some newspaper articles and identify whether statements are positive or normative. This is an ideal activity for homework. You may need to guide them to suitable articles. Learners must make sure that they justify their choices, e.g. it is normative because it uses the word 'should'.

> **Assessment ideas:** Learners should submit their completed answers to you for marking.

3 Other things remain equal (30 minutes)

Learning outcome: Explain why economists use the term *ceteris paribus*.

Resources: Think like an economist in Chapter 2 of the Coursebook

Description and purpose: The purpose of the activity is to help learners understand that different economic agents will have different views about a particular policy issue and that the context makes a large difference. First, learners should read and note down the definition of *ceteris paribus*. Second, ensure that learners understand what is meant by interest rate, i.e. cost of borrowing and reward for saving. Then, split the learners into pairs or small groups to undertake the Think Like an Economist activity. Give each group the role of a different economic agent, e.g. a consumer, major shareholder of a large firm or a government finance minister. The central question is: what will they do when interest rates fall? Will they save more or spend more? But, you can also add a few more 'scenarios' such as:

- What if there is low business confidence?
- What if the country is in lockdown during a pandemic?
- What if other countries have lower interest rates?

The purpose here is to show that what might happen *ceteris paribus* is clearly very different to what might happen in different scenarios.

Answers:

Economic theory states that when interest rates fall, consumption and investment rise. But, clearly, during a recession or a pandemic, then 'other factors' may be more influential and the economy may not increase much.

> **Differentiation ideas:**

- Support: Before reading the activity, provide learners with some short notes explaining what interest rates are and how in theory low interest rates should lead to less saving and more borrowing because the reward for saving is low, as is the cost of borrowing. This could be done in advance of the lesson so that learners are familiar with the concept before coming to class.
- Challenge: Ask learners to find out the recent changes to interest rates in their own country and research if that has had the desired effect on the economy.

> **Assessment ideas:** Ask learners to contribute their ideas to the rest of the class. This will enable you to see if there are any areas which all learners are still struggling with.

Plenary idea

Practice questions (20 minutes + additional time for presentations)

Resources: Workbook analysis questions

Description and purpose: The purpose of the activity is for learners to complete the analysis questions 8–12 in the Workbook. The American Economic Association explanation is about what the study of economic entails, and the aim is to assess learners' understanding of the chapter content.

> **Assessment ideas:** Ask learners to swap their answers with another learner. They should discuss their answers and then try to identify areas in which they could improve their answers. You could ask learners to present their answers to the class at the end.

Downloadable resources

Topic worksheet

2.1 Economic methodology

A series of questions that will assess learners' understanding of the content in this chapter, in particular, positive and normative statements, short run v long run and definitions of various economic terms.



> 3 Factors of production

Teaching plan

Topic	Approximate number of learning hours	Learning content	Resources
3.1 Four factors of production	5 hours	<p>What are the four factors of production?</p> <p>What are the rewards to the factors of production?</p> <p>The difference between human capital and physical capital</p> <p>The difference between and division of labour and specialisation</p>	<p>Coursebook: Economics in context Activities 3.1–3.3 Think like an economist Exam-style questions: Multiple choice 1–7</p> <p>Workbook: Key skills exercises 1–15 Exam-style questions: Essay 1–2</p> <p>PowerPoint 3.1</p>

BACKGROUND KNOWLEDGE

- An understanding of economic agents will be useful here. Explain to learners that this is the framework for a great deal of economic analysis. That is, we consider the impact of economic events and policies on four major groups in society: households, firms, consumers and workers.
- The role of universities was discussed in Chapter 2 and can be used again in order to illustrate the concept of human capital and investment.
- Learners are not expected to have any background knowledge of entrepreneurs but, after the Starter idea (on entrepreneurs), they could be encouraged to produce a short biography of an entrepreneur before beginning the study of this chapter. This could be presented formally in class or as a short article (e.g. 500 words) including a picture, which could be displayed in class. The activity would, at least, provide learners with a case study for future reference.

LANGUAGE SUPPORT

- Useful sentence structures for factors of production are:
 - *Land refers to natural resources such as...and is important because much production could not take place without it. The reward for owning land is rent.*
 - *Labour refers to human resources such as... and is important because much production could not take place without it. The reward for providing labour is a wage.*
 - *Capital refers to physical resources such as... and is important because much production could not take place without it. The reward for offering capital is interest.*
 - *Enterprise is the skill of an entrepreneur. An entrepreneur combines the other factors of production. The reward for being an entrepreneur is profit.*
- When explaining terms, a definition and some more detail (such as an example) is often required, e.g. *risk refers to the chance of loss or failure. In the case of James Dyson, he has had to abandon his plan to build an electric car at a new factory in Singapore as it would not have been profitable. Therefore, he will have lost investment funds which could have been used for other purposes.*

Common misconceptions

Misconception	How to elicit	How to overcome
Learners might assume that land only refers to physical land, however it is also everything which grows on, above or below it.	Put examples of different resources on the board and ask learners to circle all the natural resources, e.g. cotton, gold, fish, uranium, sunlight, wind...	Ask learners to identify which resources are renewable or non-renewable.
Learners may not understand why interest is the reward for capital.	Ask learners what they think interest refers to in this context, i.e. the cost of borrowing and reward for saving. You might get definitions such as the amount added on to a loan.	Explain that money is often borrowed, i.e. from banks. This is referred to as financial capital and is used to purchase physical capital, therefore we state that interest is the reward for capital. The money we put into savings accounts is lent out, therefore we receive interest.

3.1 Four factors of production

LEARNING PLAN

Syllabus learning objectives	Learning intentions	Success criteria
1.3.1 nature and definition of factors of production: land, labour, capital and enterprise 1.3.2 difference between human capital and physical capital 1.3.3 rewards to the factors of production 1.3.4 division of labour and specialisation 1.3.5 role of the entrepreneur in contemporary economies: risk and organisation of the other factors of production	<ul style="list-style-type: none"> Define the meaning of the factors of production: land, labour, capital and enterprise. Explain the importance of the factors of production. Describe the rewards to the factors of production. Explain the difference between human capital and physical capital. Explain the division of labour and specialisation. Explain the role of the entrepreneur in the organisation of the factors of production in 21st century economies and as a risk taker. 	<ul style="list-style-type: none"> Understand the nature of the four factors of production: land, labour, capital, enterprise. Describe the rewards for each of the factors of production. Explain the difference between human capital and physical capital. Explain why more goods and services can be produced in an economy through the process of specialisation. Explain that the division of labour enables the more efficient use of factors of production. Explain the role of the entrepreneur as an organiser of factors of production and a risk taker.

Starter idea

Entrepreneurs (20 minutes)

Resources: Economics in context in Chapter 3 of the Coursebook

Description and purpose: The purpose of the activity is to introduce the idea of an entrepreneur and the factor of production known as ‘enterprise’/‘entrepreneurship’. In addition, this is an ideal opportunity to look at some entrepreneurs in a real-life context, such as James Dyson. You should read through the Economics in context case study in Chapter 3 with your class. Use the two questions as an introductory discussion.

What to do next: Learners could be asked to read Economics in context again on their own. They should write down in their books any words or phrases they do not understand, e.g. commercially viable. You should define any words or phrases that they have problems with. The aim of this is to help learners become familiar with the concept and importance of entrepreneurship.

Main teaching ideas

1 Factors of production (30 minutes)

Learning outcome: Define the meaning of the factors of production (FOP): land, labour, capital and enterprise AND describe the rewards to the factors of production.

Resources: Eight cards which have been written out by the learners themselves: four definitions (one for each FOP) and four rewards (one for each FOP)

Description and purpose: Explain that businesses produce outputs, but need inputs (or resources) for this to happen. Divide the class into pairs or small groups and ask them to create a set of cards with definitions of each factor of production. Show images of different resources (e.g. a machine, a field, a worker) and ask learners to hold up two cards: a definition card and a reward card. An element of competition could be added by making it into a team quiz. Select learners to explain why they chose the card they did. The aim of this is to help learners apply their understanding in unfamiliar situations.

Answers:

Image of FOP	Reward
Capital	Interest
Labour	Wages
Land	Rent
Entrepreneurship	Profit/Dividend

> **Differentiation ideas:**

- Support: Group learners with different strengths together.
- Challenge: Ask learners to find out about the UN's Sustainable Development Goals. Which ones refer to factors of production? They could produce a leaflet about it for the rest of the group.

> **Assessment ideas:** Assessment is built into this activity, as you will be able to tell who has a clear understanding of the terms and who does not.

2 Division of labour and specialisation (60 minutes)

Learning outcome: Explain the difference between division of labour and specialisation.

Resources: PowerPoint 3.1

Description and purpose: Learners should read Coursebook Section 3.3 about specialisation and the division of labour. Ask learners to identify the advantages and disadvantages of the assembly line to individuals, the company Ford and government. This could be done for homework and the lesson would be an opportunity for learners to contribute their ideas. Ask learners to also identify factors of production and the skills of Henry Ford as an entrepreneur. The aim of this is to help learners to understand the advantages and disadvantages of division of labour as well as to reinforce understanding of factors of production, including entrepreneurship.

Answers:

Advantages of the assembly line include: increases efficiency; only one set of training for each member of staff. Some disadvantages include: loss of motivation for staff; if one member of staff is absent, then production ceases.

> **Differentiation ideas:**

- Support: Learners could read Coursebook Section 3.3 about specialisation and the division of labour before going through the PowerPoint. They could do this as homework before class. In this case, you should ask learners to write down any terms they are unfamiliar with and try to resolve any issues before following the PowerPoint slides.
- Challenge: Ask learners to devise a production line process for making a pizza. They should work out how the production process can be broken down into smaller activities and explain what the production line looks like.

> **Assessment ideas:** Ask learners to contribute their ideas to the class. This will enable you to see if there are any areas which learners are still struggling with.

3 Entrepreneurs as risk takers (60 minutes + additional time for presentations)

Learning outcome: Explain the role of the entrepreneur in the organisation of the factors of production in 21st century economies and as a risk taker.

Resources: Internet access

Description and purpose: You can then ask learners to research an entrepreneur of their choice on the internet. Some examples might include Richard Branson (Virgin Group), Jeff Bezos (Amazon), Cher Wang (HTC Corporation), Jack Ma (Alibaba), Folorunsho Alakija (Rose of Sharon Group), Mukesh Ambani (Reliance Industries). Learners should give a three-minute presentation to the class on their chosen entrepreneur, including the following information: What does the entrepreneur do? Why do they think the entrepreneur has been successful? Why is the entrepreneur important to the economy?

This should be followed by a class discussion on the role of that entrepreneur in their organisation. Students should refer to the factors of production in their answer. Learners could also be asked to identify the possible risks and rewards each entrepreneur faces as an entrepreneur as well as the choices he/she has had to make. This would be an opportunity to review the concept of opportunity costs.

Answers:

Learners' own answers.

> **Differentiation ideas:**

- Support: Give your own short presentation on your favourite entrepreneur. This will show your learners what you would like to see them produce.
- Challenge: You could ask learners to turn their presentation into a short video or podcast.

> **Assessment ideas:** Assess the learners on the quality of their presentations based on the quality of the research and information in the presentation, as well as clarity of delivery and engagement with the audience.

Plenary idea

Practice questions (15 minutes)

Resources: Coursebook Chapter 3: Exam-style questions: Multiple choice 1–7

Description and purpose: Ask learners to complete questions 1–7 in order to get used to the multiple-choice style of questioning. Ask learners to explain why they chose the option they did and/or why the other options are incorrect. This activity can be done in pairs.

> **Assessment ideas:** Give learners four cards – A, B, C, D – and ask them to show you their answers. If learners have chosen incorrectly, ask them to justify their response, i.e. why they chose that option, and ask another learner to explain why the answer is incorrect. Similarly, select a learner who has a correct response and ask them to justify their response.

Downloadable resources

PowerPoint presentation

3.1 Division of labour and specialisation

The purpose of this PowerPoint is to help learners to understand the advantages and disadvantages of division of labour, as well as to reinforce understanding of factors of production, including entrepreneurship.



> 4 Resource allocation in different economic systems

Teaching plan

Topic	Approximate number of learning hours	Learning content	Resources
4.1 Different economic systems	4 hours	The difference between economic systems What are the advantages and disadvantages of a market economy vs a planned economy?	Coursebook: Economics in context Activities 4.1–4.2 Think like an economist Exam-style questions: Multiple choice 1–6 Workbook: Key skills exercises 1–12 Exam-style questions: Multiple choice 1, Essay 1–2 Language worksheet 4.1

BACKGROUND KNOWLEDGE

- Learners studied scarcity, what to produce, how to produce and for whom to produce in Chapter 1. Learners should re-read Sections 1.1 and 1.4 to remind themselves of the fundamental economic problem and the three questions related to the allocation of resources.
- Factors of production and their rewards were covered in Chapter 3 and will be referred to when studying economic systems.
- Entrepreneurs were covered in Chapter 3 and should be referred to again in this section.
- Some knowledge of property rights would be useful as a successful market economy depends on upholding these rights.
- Before teaching this chapter, you might ask learners whether they have been to a theme park. This is a useful example for demonstrating both economic systems in operation side-by-side, e.g. once you have paid to enter, the rides are 'free'. What you notice is that queues build up for popular rides and you have to stand in line waiting unless you are willing to pay to jump the queue. Food and drink are also dependent on income. This could also stimulate a discussion about prices people are prepared to pay for the food inside a theme park – a topic which will be covered in Chapter 8.

LANGUAGE SUPPORT

- This may be the first occasion that learners come across different terms for the same concept, e.g. this book uses the terms planned economy and market economy. However, other economists may talk about *command economies* and *free markets*. Pointing out some synonyms will help learners understand the concepts.
- You could represent these two concepts as the two extremes on a spectrum (two polar opposites). This will help learners in their understanding of the terms but also in terms of identifying advantages of a market economy as disadvantages of a planned economy.
- When explaining the advantages or disadvantages of an economic system learners should think about economic agents, e.g. *an advantage of the free market to consumers could be ... However, a disadvantage to producers might be...*
- It might be useful to draw up a list of important economic agents for future reference.
- This is a great opportunity to provide learners with an opportunity to read some of the great economists' own words, e.g. you could ask them to read a chapter of *The Wealth of Nations* (Adam Smith), *The Communist Manifesto* (Karl Marx) or *The General Theory* (John Maynard Keynes). Note: These economists have been chosen because they represent the three main economic systems.

Common misconceptions

Misconception	How to elicit	How to overcome
Learners often assume that there is no government intervention in a free market.	Ask learners to consider what life might be like in a pure free market.	Explain that there will always be a role for government especially in enforcing property rights and maintaining law and order.
Learners often assume that the price mechanism is not used in a command economy.	Ask learners what might happen if goods are priced very cheaply in: <ul style="list-style-type: none"> • a free market • a command economy. 	Explain that prices of essentials might be set very low to encourage consumption, whereas luxuries might be set very high to reduce consumption. Prices are set by the government and are rarely changed.

4.1 Different economic systems

LEARNING PLAN

Syllabus learning objectives	Learning intentions	Success criteria
1.4.1 decision-making in market, planned and mixed economies 1.4.2 resource allocation in these economic systems	<ul style="list-style-type: none">• Explain decision-making in market, planned and mixed economic systems.• Analyse the advantages and disadvantages of resource allocation in market, planned and mixed economic systems.	<ul style="list-style-type: none">• Understand the roles of government and the market in the three types of economic system: market, planned, mixed.• Analyse the advantages and disadvantages of resource allocation in each of the economic systems.

Starter idea

Vietnam (15 minutes)

Resources: Economics in context in Chapter 4 of the Coursebook

Description and purpose: Learners should be split into pairs or small groups. Together, they can read Chapter 4 Economics in context. They should write down any words they do not understand and try to work out their meaning in their group. You can pause the activity at this point in order to resolve any vocabulary problems. Afterwards, some of the pairs should be tasked with trying to explain the advantages of Vietnam's move towards a market economy and some of the pairs should try to explain the disadvantages. Make sure learners use evidence to support their points. Go around the room listening to contributions. The aim of this is to introduce learners to some of the key concepts which will be studied in this chapter. Ask a member of each pair to explain one of the advantages or disadvantages they identified and put them on the board.

What to do next: In order to build evaluation skills, learners could identify the biggest advantage or disadvantage of the system. This will be a matter of judgement. Also, as a class, you can engage in a wider debate on how Vietnam's economic growth might increase even further.

Main teaching ideas

1 Transition economies – from planned to free market (45 minutes + additional time for presentations)

Learning outcome: Explain decision-making in market, planned and mixed economic systems; analyse the advantages and disadvantages of resource allocation in market, planned and mixed economic systems.

Resources: Coursebook Activity 4.2; internet access

Description and purpose: One of the aims of this activity is to encourage collaboration and get learners used to looking at economic data. Moreover, this activity will help to develop learners' independent research skills. It will also give them a real-life example of a planned economy for future reference. Learners could be split into pairs to research the economic performance of one of the former planned economies that joined the European Union (EU) in 2004. Useful resources for this activity can be found at The World Factbook or Trading Economics websites.

Answers:

Learners' own answers.



> **Differentiation ideas:**

- Support: You could prepare a series of helpful links to send to the learner in order to help them with their research.
- Challenge: Learners could be encouraged to read about the ideas of some famous economists such as Adam Smith, Karl Marx and John Maynard Keynes. In addition, you could set learners a short project on three main economic thinkers (Smith, Marx, Keynes) in which learners have to produce a short summary of their views on how an economy should be organised.

> **Assessment ideas:** Learners can present their findings to the rest of the class. Then you can ask learners whether they have considered what sort additional information they would need in order to make a more accurate assessment of the activities in Activity 4.2. This is a useful reflective question.

2 Start to write an essay (50 minutes)

Learning outcome: Explain decision-making in market, planned and mixed economic systems; analyse the advantages and disadvantages of resource allocation in market, planned and mixed economic systems.

Resources: Language worksheet 4.1, pen and paper

Description and purpose: The aim of the activity is to provide learners with a support structure to help them write an extended piece of writing for economics (perhaps for the first time in this course). Learners will use their knowledge from the chapter and follow the activities which bring them to the point where they have enough material to write an essay.

Answer:

See worksheet answers.

> **Differentiation ideas:**

- Support: The worksheet provides a strong level of support for learners to able to write the essay.
- Challenge: You could ask learners to write the extended piece of writing without reference to the earlier 'activities' on the worksheet. Or, learners could be asked to write in the context of a particular country, e.g. they could undertake research on the crisis in Venezuela.

> **Assessment ideas:** Set learners the extended piece of writing as a homework activity. This is the summative assessment for this topic and, as such, you should grade their work on the basis on how well they followed the scaffolding of the worksheet, e.g. are the learners including all of the different assessment objectives: knowledge, analysis and evaluation?

Plenary ideas

Index for Economic Freedom (15 minutes)

Resources: Think like an economist in Chapter 4 of the Coursebook; internet access

Description and purpose: The purpose of the activity is for learners to apply their knowledge from this chapter to a real-life scenario. Learners should read the Think like an economist section in Chapter 4 of the Coursebook, which is about New Zealand. In particular, they should note that the article mentions the Index of Economic Freedom. You should ask learners to discuss, considering what they know about the different economic systems, how they think Economic Freedom is measured. They should make a list of five or more things that they would measure.

Alternatively, you could give your learners the list of 12 quantitative and qualitative factors that are measured (see table below) and ask them to explain why this should be associated with a free market economic system.

1	Rule of law (property rights, government integrity, judicial effectiveness)
2	Government size (government spending, tax burden, fiscal health)
3	Regulatory efficiency (business freedom, labour freedom, monetary freedom)
4	Open markets (trade freedom, investment freedom, financial freedom)

> **Assessment ideas:** Walk around the class and listen to the conversations that are happening. Ask individuals to explain their thought process as they are discussing things.

Downloadable resources

Language worksheet

4.1 Different economic systems

This worksheet will help learners to think about key economic terminology and, ultimately, enable them to write their first essay or extended piece of writing in economics.

SAMPLE



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SAMPLE

> Unit 1

Basic economic ideas and resource allocation (AS Level)

> Chapter 1

Scarcity, choice and opportunity cost

LEARNING INTENTIONS

In this chapter you will:

- explain the fundamental economic problem of scarcity
- explain the need for individuals, firms and governments to make choices
- define the meaning of opportunity cost
- explain how opportunity cost results from the need to make choices
- explain the basic questions of resource allocation.

KEY TERMS

Choice Fundamental economic problem Needs Opportunity cost Resources Scarcity Wants

Key skills exercises

Knowledge and understanding

To answer the questions in this chapter, you need to know and understand:

- what the fundamental economic problem means
- why there is a need for individuals, firms and governments to make choices
- the meaning and significance of opportunity cost
- why opportunity cost is a consequence of the need to make choices
- the three basic questions of resource allocation.

- 1 What is the fundamental economic problem?
- 2 What are resources?
- 3 Describe the difference between a want and a need.
- 4 Why does scarcity occur?
- 5 Explain why individuals, firms and governments have to make choices.
- 6 Define ‘opportunity cost’.
- 7 Describe the three basic questions of resource allocation.

TIP

Learners sometimes confuse what is meant by a need and what is meant by a want. A need is something that is essential. A want is something that someone would like to have.



Analysis

Government spending in India, 2014–2020

The Union budget of India for 2019–2020 included measures to improve the rural economy, strengthen agriculture and help those who are economically less privileged.

Figure 1.1 shows the pattern of estimated spending compared to average spending over the previous five budgets.

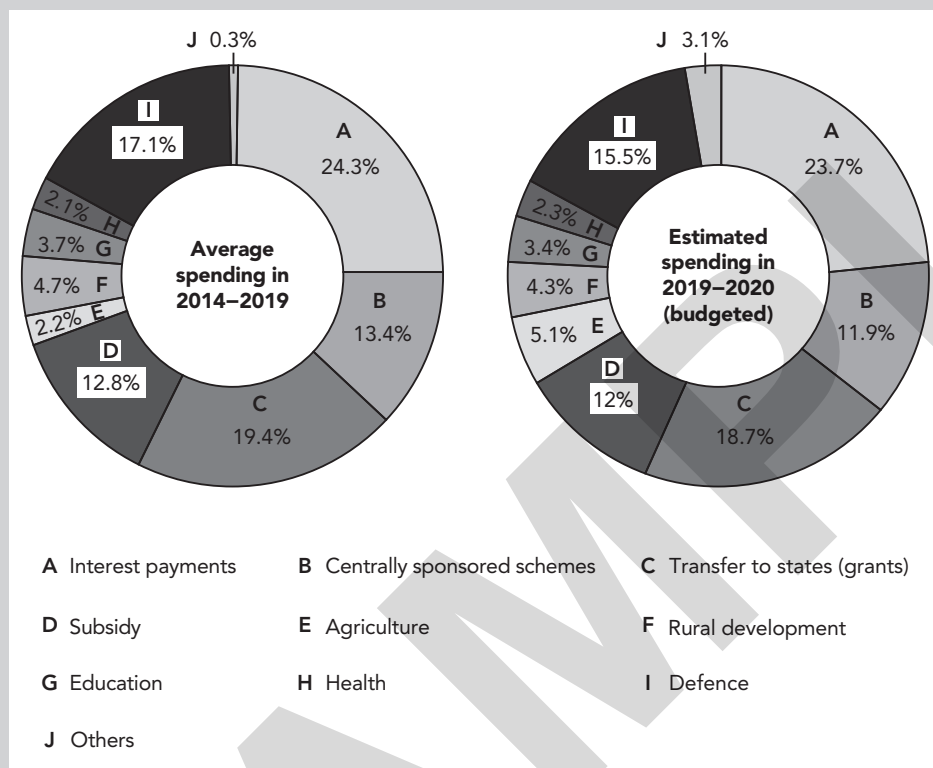


Figure 1.1: Government spending in India, 2014–2020

Source: Centre for Monitoring Indian Economy (CMIE)

The 2019–2020 budget is in deficit, with government spending more than government income.

- 8 Explain why the Indian government faces a fundamental economic problem when planning a budget.
- 9 What does the Indian government need to think about when setting its budget?
- 10 Explain how opportunity cost can be applied to the budgetary choices that have to be made.
- 11 Explain which of the three resource allocation questions the Indian government has addressed in its budget.

EXAM-STYLE QUESTIONS

Data response question

- 1 a Using the data in Figure 1.1, describe **three** ways in which the estimated 2019-2020 budget differs from average spending in 2014-2019. [3]
- b Explain possible reasons for these three differences. [6]

WORKED EXAMPLE FOR Q1

- a Three differences are:
- expenditure on defence is planned to fall
 - expenditure on agriculture is planned to increase
 - expenditure on health is planned to increase [K].
- b The new budget would appear to provide more government funding for the well-being of the people. This is a likely reason for the increase in healthcare funding. This will have an early and visible impact. The increased expenditure for agriculture is likely to improve the incomes of farmers and may be a way of increasing agricultural exports. Defence still takes up a large percentage of the budget compared to most other areas of government spending [A].

Essay question

- 1 Explain how the fundamental economic problem affects your family **and** consider how opportunity cost can be applied to the problem of resource allocation. [8]

Improve this answer

This is a sample answer to essay Q1.

The fundamental economic problem is very important when studying economics. It affects firms, governments and families. All face the problem because resources are scarce and wants and needs are unlimited [K]. This means choices have to be made.

In the case of my family, the income we receive is limited since there are only two family members who earn income from employment. Our wants and needs are many, so we have to make choices to make sure our limited income is shared in the best way possible [A].

All of us want more things. I would like a better mobile device or a newer scooter [A]. Until I start earning, these luxuries will have to wait.

Opportunity cost is defined as the cost expressed in terms of the next best alternative that is sacrificed for something else [A]. Opportunity cost can apply to our family in all sorts of ways. Our limited income means that there is a fixed sum for groceries and other expenses but there is often other money left to spend. Ideally the different ways of spending this additional money should be ranked in order of their benefit for the family. This will allow informed choices to be made [A].

Your challenge

See whether you can improve this answer. The answer covers the main parts of the question. The first paragraph is good but the remainder of the answer would benefit from being written in an analytical style. The answer should also define the difference between wants and needs. A better answer is given in the workbook answers – but write yours out first.

> Chapter 2

Economic methodology

LEARNING INTENTIONS

In this chapter you will:

- explain why economics is a social science
- differentiate between facts and opinions (positive and normative statements)
- explain why economists use the term *ceteris paribus*
- explain when to refer to a time period such as 'short run', 'long run' and 'very long run'.

KEY TERMS

ceteris paribus Long run Macroeconomics Microeconomics Model Normative statements
Positive statements Short run Very long run

Key skills exercises

Knowledge and understanding

To answer the questions in this chapter, you need to know and understand:

- the difference between microeconomics and macroeconomics
- why economists use models
- the difference between a positive statement and a normative statement
- the significance of the term *ceteris paribus*
- the difference between the short run, the long run and the very long run time periods.

- 1 What is microeconomics?
- 2 What is macroeconomics?
- 3 Explain why economists use models.
- 4 What is a positive statement?
- 5 What is a normative statement?
- 6 What is the significance of the term *ceteris paribus*?
- 7 Explain the difference between the short run, the long run and the very long time periods.

Analysis

What is economics?

In your first economics lesson, you may have had very little idea what the subject was about. You were probably aware that economics has something to do with ‘money’ (but the subject is much wider) or even something to do with ‘economical’ (again the subject is wider).

The American Economic Association explains the social science of economics:

- Why are some countries rich and some countries poor?
- Why do women earn less than men?
- How can data help us understand the world?
- Why do we ignore information that could help us make better decisions?
- What causes recessions?

Economics can help us answer these questions.

Economics can be defined in a few different ways. It’s the study of scarcity, the study of how people use resources and respond to incentives, or the study of decision-making. It often involves topics like wealth and finance, but it’s not all about money. Economics is a broad discipline that helps us understand historical trends, interpret today’s headlines, and make predictions about the coming years.

Economics ranges from the very small to the very large. The study of individual decisions is called microeconomics. The study of the economy as a whole is called macroeconomics. A microeconomist might focus on families’ medical debt, whereas a macroeconomist might focus on sovereign debt*.

What do economists do?

Economists have all kinds of jobs, such as professors, government advisors, consultants, and private sector employees. Using theoretical models or empirical data, they evaluate programs, study human behavior, and explain social phenomena. And, their contributions inform everything from public policy to household decisions.

Economics intersects many disciplines. Its applications include health, gender, the environment, education, and immigration.

Why should I care about economics?

Economics affects everyone’s lives. Learning about economic concepts can help you to understand the news, make financial decisions, shape public policy, and see the world in a new way.

* Sovereign debt: the amount of money a country’s government has borrowed

Source: American Economic Association, *What is economics? Understanding the discipline*

Economists use both simple and complex models to represent real world situations. These models enhance our understanding of economic relationships and allow economists to make forecasts. Economic models often require just one variable to change – all other variables remain the same. This situation is called *ceteris paribus*.

- 8 Which of the questions in the bulleted list on the previous page can be classified as microeconomics?
- 9 Which of the questions in the bulleted list on the previous page can be classified as macroeconomics?
- 10 Explain why all of the questions in the bulleted list on the previous page are normative statements.
- 11 Convert each of the questions in the bulleted list on the previous page into positive statements.

Evaluation

- 12 Comment on why economics is a social science.

EXAM-STYLE QUESTIONS

Multiple-choice question

- 1 Which of these best describes the definition of the long run time period in economics?
 - A No change can be made to production.
 - B All resources used in production can be changed.
 - C It is possible to think even further ahead in time.
 - D Only one of the resources used in production can be changed.

[1]

WORKED EXAMPLE FOR Q1

B.

In the long run time period, all resources are variable. A is wrong and does not apply to any of the time periods used in economics. C could apply to any of the time periods. D refers to the short run [K].

This chapter does not contain an 'Improve this answer' feature. This is because methodology is something that you should apply when writing answers to essay questions.

> Chapter 3

Factors of production

LEARNING INTENTIONS

In this chapter you will:

- define the meaning of factors of production: land, labour, capital and enterprise
- explain the importance of the factors of production
- describe the rewards to the factors of production
- explain the difference between human capital and physical capital
- explain the division of labour and specialisation
- explain the role of the entrepreneur in the organisation of factors of production in 21st century economies and as a risk taker.

KEY TERMS

Capital Division of labour Economic growth Enterprise Entrepreneur Factors of production
High-income countries Human capital Labour Land Low-income countries Lower middle-income countries
Physical capital Specialisation

Key skills exercises

Knowledge and understanding

To answer the questions in this chapter, you need to know and understand:

- what is meant by a factor of production
- the meaning of land, labour, capital and enterprise as factors of production
- why factors of production are important
- how the use of factors of production is rewarded
- the difference between physical and human capital
- the role of the entrepreneur.

- 1 Define 'factor of production'.
- 2 Define 'land' as a factor of production.
- 3 Define 'labour' as a factor of production.
- 4 Define 'capital' as a factor of production.
- 5 Define 'enterprise' as a factor of production.
- 6 Describe the differences between a low-income country, a low middle-income country, an upper middle-income country and a high-income country.
- 7 Explain the difference between physical capital and human capital.
- 8 Define 'economic growth'.
- 9 Explain the meaning of specialisation.
- 10 Explain the meaning of division of labour.

TIP

The classification of countries by the World Bank is used throughout the Workbook. It is based on Gross National Income (GNI) per head in 2018. The following levels apply:

Low-income country
\$1025 or less

- Lower middle-income country
\$1026 to \$3995
- Upper middle-income country
\$3996 to \$12375

High-income country
\$12376 and above

You will find it helpful to familiarise yourself with which countries fall into which of the four categories as these terms are also used in the exam-style questions. Note the wide range of GNI per head for middle-income countries.



Analysis

Mauritius: an upper middle-income economy

Mauritius, an island state in the Indian Ocean, has a population of 1.3m people. The country's economy is growing at a steady pace. Mauritius's economy is driven by construction and service industries such as tourism, banking and financial services and ICT. The country also has more traditional manufacturing and sugar production industries. However, the sugar production industry has declined in recent years.

As a tourist destination, Mauritius is best known for its beaches, lagoons and reefs as well as inland forests and wildlife. The importance of tourism results in significant risks due to external shocks such as downturns in the economies of high-income countries and pressures to cut back on emissions from flying to combat climate change. Mauritius is also very vulnerable to tropical storms.

The country's development has been financed internally and externally. Mauritius now has a growing number of wealthy entrepreneurs, such as Bashir Currimjee and P Arnaud Dalais, both of whom have headed companies with interests in all sectors of the island's economy. Although the unemployment rate is low, there is a lack of job opportunities for women. Youth unemployment is also an issue due to a skills mismatch and wages below the expectations of those entering the labour market.

- 11 Identify two examples of land in Mauritius.
- 12 Identify two examples of labour in Mauritius.
- 13 Identify two examples of capital in Mauritius.
- 14 Explain the risks facing entrepreneurs in Mauritius.

Evaluation

- 15 Consider how the two entrepreneurs have organised their businesses to minimise risk.

WORKED EXAMPLE FOR Q15

The second paragraph of the information states that Mauritius's economy is vulnerable to external shocks affecting the economies of high-income countries. The COVID-19 pandemic is an extreme example. Other external shocks include more regular recessions and a growing concern to reduce flying to combat climate change. Firms are also affected by annual tropical storms that hit the island [A]. The entrepreneurs have tried to minimise risk by diversifying their businesses to cover most of the key sectors that contribute to the island's economy. Tourism is the most vulnerable activity. Banking, finance and ICT are likely to be more stable [E].

EXAM-STYLE QUESTIONS

Multiple-choice question

- 1 Human capital is often referred to as a form of investment. Why is this?
- A Labour is required to produce all goods and services.
 - B Improved human capital can lead to increased economic growth.
 - C Human capital is costly like any investment.
 - D Top earners are able to invest some of their earnings.

[1]

Essay questions

- 1 Explain how capital and labour are needed for the manufacture of cotton garments **and** consider how an entrepreneur responds to an increase in demand for these garments.
- 2 Explain the difference between human capital and physical capital **and** consider which is likely to be most important for an entrepreneur to have when growing a business.

[8]

[8]

TIP

When writing answers to essay questions, avoid the use of 'I'. Try to make your answers impersonal.

Improve this answer

This is a sample answer to essay Q1.

A factor of production is something that is required in an economy for production to take place. Economists recognise four, namely land, labour, capital and enterprise [K]. I will now explain what is meant by capital and labour and then how each are needed in the manufacture of cotton garments.

Capital is defined as an aid to production that is human-made. It refers to many different things such as factory buildings, machinery, power supplies, IT systems, warehouses and container vessels. In a garment manufacturing business, the factory building and the machinery used to manufacture garments are examples of capital [K]. In a competitive industry, such as clothing, the quality of the capital employed rather than quantity is of considerable relevance. Old machinery that keeps breaking down is more likely to restrict production and productivity than the latest production technology, even if this is no more than high-quality sewing machines [A].

The quality and quantity of labour is also important. A garment manufacturer is likely to need most staff to have particular skills that can be applied in the production process. If there is a skill shortage then workers will have to be trained. Most manufacturers will also need low skilled and high skilled workers to complete the input of labour into the production process [A].

Enterprise is the role of the owner of the garment factory. This person needs to be able to know what is required in order to produce and sell the garments that are produced [A]. If successful, the business will grow.

Your challenge

See whether you can improve this answer. The first three paragraphs are generally good. Now, look at the concluding (final) paragraph. The paragraph is weak and does not explain how an entrepreneur might respond to an increase in demand for garments. Your challenge is write a new concluding paragraph. A better answer is given in the workbook answers – but write yours out first.

> Chapter 4

Resource allocation in different economic systems

LEARNING INTENTIONS

In this chapter you will:

- explain decision-making in market, planned and mixed economic systems
- analyse the advantages and disadvantages of resource allocation in market, planned and mixed economic systems.

KEY TERMS

Asian Tiger economy Economic system Emerging economy Market economy Market mechanism
Mixed economy Planned economy Private sector Privatisation Productive resources Public sector

Key skills exercises

Knowledge and understanding

To answer the questions in this chapter, you need to know and understand:

- why choices have to be made in any economic system
- the role of the market mechanism in market, planned and mixed economies
- the role of government in market, planned and mixed economies
- the role of the private sector and the public sector in market, planned and mixed economies.

- 1 Define the term 'market system'.
- 2 Define the term 'market economy'. Give an example of a market economy.
- 3 Define the term 'planned economy'. Give an example of a planned economy.
- 4 Define the term 'mixed economy'. Give an example of a mixed economy.
- 5 Compare the roles of the market and government in:
 - a market economies
 - b planned economies
 - c mixed economies.
- 6 Compare the roles of the private sector and the public sector in a mixed economy.
- 7 Describe the term 'emerging economy'. Give an example of an emerging economy.

Analysis

Poland's transformation to a mixed economy

Poland is one of the fastest growing economies in the world. The country's transformation from a planned economy to a more market-orientated economy began in 1989 with the end of communism.

Before 1989, Poland experienced the problems of most planned economies. Shops lacked supplies of meat, as well as everyday items such as soap and razor blades. Queuing was an accepted part of daily life. In cities like Krakow, the air was badly polluted from coal-burning steelworks and from the exhausts of poorly made Russian and East German vehicles.

Since 1989, Poland's GDP has increased by over 300%. Government expenditure as a percentage of GDP was estimated to be 41% in 2018, a drop of 10% since 2008. This figure is now very similar to that of the UK. The transformation has come about through foreign investment, Polish entrepreneurs prepared to take risks and the motivation of hard-working people keen to improve their standard of living. Poland's economic growth is also linked to the millions of euros in funding from the European Union (EU).

The costs of transition to a more market economy need to be considered. Millions of jobs have been lost from state-owned farms, food manufacturing and from heavy industries such as coal, steel and cement production. Hundreds of thousands of Polish people have migrated to other EU countries in search of a better life.

Many former migrants have now returned to Poland. The economy is relatively stable, new jobs are being created and manufacturing productivity has increased. It is a measure of success that car ownership in Poland is at about the same level as in France and Germany.

- 8 Explain some of the resource allocation problems that Poland had with its planned economy.
- 9 Explain how it is possible to tell if an economy like Poland is being transformed from a planned economy to one where market forces have an increasing role in decision-making.
- 10 Explain why Poland is now a mixed economy.
- 11 Analyse how free market forces have helped to increase Poland's rate of economic growth.

Evaluation

- 12 Consider the costs and benefits of Poland's transformation to a market economy.

WORKED EXAMPLE FOR Q12

The information refers to various costs and benefits. One of the first and most serious costs is that of increased unemployment [K]. In planned economies, jobs were virtually guaranteed, particularly in inefficient state-owned factories making iron and steel, vehicles and in coal mining. Many workers migrated once Poland became a full member of the EU. This can be considered a cost to the Polish economy, especially if the migrants were professional workers [A]. The benefits have come through increased economic growth [K]. In particular, there has been inward investment from elsewhere in the EU, creating new jobs. Polish agriculture has also benefited from access to new EU markets and through subsidised farm prices [A].

TIP

Learners often forget that it can take many years for an economy to move from a planned economy to one like Poland that has more of the features of a market economy. This is because it takes time for state-owned businesses to be sold off and for private sector buyers to accumulate the finance and expertise to run many new enterprises. In the cases of Poland, Hungary and the Baltic states of Estonia, Latvia and Lithuania, this process has taken over 20 years.

EXAM-STYLE QUESTIONS

Multiple-choice question

- 1 Which of these is a characteristic only of a pure market economy?
- A Prices are mainly determined by supply and demand.
 - B International trade is not encouraged.
 - C The government should regulate competition in markets.
 - D The public sector should only provide public goods.

[1]

Essay questions

- 1 Compare the ways in which resources are allocated in a market economy and in a mixed economy **and** consider in which type of economy consumers' needs are best provided.
- 2 Explain how an economy moves from a planned to a mixed economy **and** consider whether this can only succeed with enterprise.

[8]

[8]

Improve this answer

This is a sample answer to essay Q2.

A planned economy is one that has a strong central government function. The government owns all industries and plans the allocation of resources **[K]**. The private sector has little involvement apart from owning small shops and restaurants. There is therefore no particular place for enterprise. Today, North Korea and to a lesser extent Vietnam are planned economies **[K]**.

A mixed economy has both a market and a government sector. Both allocate resources for the benefit of their populations. The government provides public goods and some merit goods, especially for those who are in need. There may be a little state ownership but most productive resources are owned by the private sector following privatisation. In mixed economies there are opportunities for enterprising business people to succeed **[A]**.

Your challenge

See whether you can improve this answer. It contains some basic knowledge that is relevant to the question. The answer is short and lacks detail. It would benefit from a description of the process of moving from a planned to a mixed economy. A few examples of economies to which the process can be applied would also add to the answer's relevance. The second part of the question is only dealt with very briefly at the end. The consideration of the importance of enterprise needs to be expanded for the answer to demonstrate evaluation skills. A better answer is given in the workbook answers – but write yours out first.