

---

# AS AND A-LEVEL ECONOMICS

AS (7135)

A-level (7136)

---

## Specifications

For teaching from September 2015 onwards

For AS exams in May/June 2016 onwards

For A-level exams in May/June 2017 onwards

---

Version 1.2 18 November 2021





# Contents

---

<b>1 Introduction</b>	<b>5</b>
1.1 Why choose AQA for AS and A-level Economics	5
1.2 Support and resources to help you teach	6
<b>2 Specification at a glance</b>	<b>8</b>
2.1 AS	8
2.2 A-level	9
<b>3 Subject content – AS</b>	<b>13</b>
3.1 The operation of markets and market failure	13
3.2 The national economy in a global context	23
<b>4 Subject content – A-level</b>	<b>31</b>
4.1 Individuals, firms, markets and market failure	31
4.2 The national and international economy	49
<b>5 Scheme of assessment</b>	<b>63</b>
5.1 Aims	64
5.2 Assessment objectives	64
5.3 Assessment weightings	65
<b>6 General administration</b>	<b>67</b>
6.1 Entries and codes	67
6.2 Overlaps with other qualifications	67
6.3 Awarding grades and reporting results	67
6.4 Re-sits and shelf life	68
6.5 Previous learning and prerequisites	68
6.6 Access to assessment: diversity and inclusion	68
6.7 Working with AQA for the first time	69
6.8 Private candidates	69
<b>7 Annex: Quantitative skills in Economics</b>	<b>71</b>
7.1 AS	71
7.2 A-level	71

---

## Are you using the latest version of this specification?

- You will always find the most up-to-date version of this specification on our website at
- We will write to you if there are significant changes to the specification.

# 1 Introduction

---

## 1.1 Why choose AQA for AS and A-level Economics

### Relevant content designed by experts

Our approach to Economics is to apply economic theory to support analysis of current economic problems and issues, and encourage students to appreciate the interrelationships between microeconomics and macroeconomics.

We have worked closely with teachers and universities to develop engaging and up-to-date content so that students can relate what they are learning to the world around them – locally, nationally and globally.

### Real life skills

Students develop the knowledge and skills needed to understand and analyse data, think critically about issues and make informed decisions.

They will also build upon their quantitative skills and appreciate that, when evaluating arguments, both qualitative and quantitative evidence are important.

### Assessment success

Our question papers use a variety of assessment styles including real-life case studies and data exercises to better prepare students for further study and employment.

Working with our assessment specialists, our question papers have been developed so that they provide clear opportunities for students to apply their knowledge and skills, enabling them to achieve their potential.

### Flexibility on teaching

Both our AS and A-level provide strong stand-alone qualifications that can be taught together or independently of one another, allowing you to choose the approach that is best suited to your needs and those of your students.

### Comprehensive support

To assist you in delivering our specifications, we offer a comprehensive range of support and resources, including direct contact with our Economics subject team, resources to help you plan and deliver our courses and teacher continuing professional development (CPD) courses.

At AQA, we help your students get the results they deserve, from the exam board you can trust.

Learn more about our Economics qualifications at [aqa.org.uk/economics](https://www.aqa.org.uk/economics).

---

## 1.2 Support and resources to help you teach

We know that support and resources are vital for your teaching and that you have limited time to find or develop good quality materials. So we've worked with experienced teachers to provide you with a range of resources that will help you confidently plan, teach and prepare for exams.

### Teaching resources

We have too many Economics resources to list here so visit [aqa.org.uk/7136](https://aqa.org.uk/7136) to see them all. They include:

- flexible sample schemes of work to help you plan for course delivery in your own way
- individual lesson plans on specific topic areas to assist you in providing continuity and progression in teaching
- student textbooks and e-learning materials that have been scrutinised by AQA
- training courses to help you deliver AQA Economics qualifications
- subject expertise courses for all teachers, from newly qualified teachers who are just getting started to experienced teachers looking for fresh inspiration.

### Preparing for exams

Visit [aqa.org.uk/7136](https://aqa.org.uk/7136) for everything you need to prepare for our exams, including:

- past papers, mark schemes and examiners' reports
- specimen papers and mark schemes for new courses
- exemplar student answers with examiner commentaries.

### Analyse your students' results with Enhanced Results Analysis (ERA)

Find out which questions were the most challenging, how the results compare to previous years and where your students need to improve. ERA, our free online results analysis tool, will help you see where to focus your teaching. Register at [aqa.org.uk/era](https://aqa.org.uk/era)

For information about results, including maintaining standards over time, grade boundaries and our post-results services, visit [aqa.org.uk/results](https://aqa.org.uk/results)

### Keep your skills up to date with professional development

Wherever you are in your career, there's always something new to learn. As well as subject-specific training, we offer a range of courses to help boost your skills:

- improve your teaching skills in areas including differentiation, teaching literacy and meeting Ofsted requirements
- help you prepare for a new role with our leadership and management courses.

You can attend a course at venues around the country, in your school or online – whatever suits your needs and availability. Find out more at [coursesandevents.aqa.org.uk](https://coursesandevents.aqa.org.uk)

### Get help and support

Visit our website for information, guidance, support and resources at [aqa.org.uk/7136](https://aqa.org.uk/7136)

You can talk directly to the Economics subject team:

E: [economics@aqa.org.uk](mailto:economics@aqa.org.uk)

T: 01483 477 863

# 2 Specification at a glance

## 2.1 AS

### Subject content

[The operation of markets and market failure](#) (page 13)

- 1 [Economic methodology and the economic problem](#) (page 14)
- 2 [Price determination in a competitive market](#) (page 15)
- 3 [Production, costs and revenue](#) (page 17)
- 4 [Competitive and concentrated markets](#) (page 18)
- 5 [The market mechanism, market failure and government intervention in markets](#) (page 20)

[The national economy in a global context](#) (page 23)

- 6 [The measurement of macroeconomic performance](#) (page 24)
- 7 [How the macroeconomy works : the circular flow of income, AD/AS analysis, and related concepts](#) (page 25)
- 8 [Economic performance](#) (page 27)
- 9 [Macroeconomic policy](#) (page 29)

### Assessments

Paper 1: The operation of markets and market failure	
<b>What's assessed</b>	Content 1–5 above
<b>Assessed</b>	<ul style="list-style-type: none"><li>• written exam: 1 hour 30 minutes</li><li>• 70 marks</li><li>• 50% of AS</li></ul>
<b>Questions</b>	<ul style="list-style-type: none"><li>• Section A: 20 multiple choice questions worth 20 marks</li><li>• Section B: data response questions requiring written answers, choice of one from two contexts worth 50 marks</li></ul>





Paper 2: The national economy in a global context	
<b>What's assessed</b>	Content 6–9 above
<b>Assessed</b>	<ul style="list-style-type: none"> <li>written exam: 1 hour 30 minutes</li> <li>70 marks</li> <li>50% of AS</li> </ul>
<b>Questions</b>	<ul style="list-style-type: none"> <li>Section A: 20 multiple choice questions worth 20 marks</li> <li>Section B: data response questions requiring written answers, choice of one from two contexts worth 50 marks</li> </ul>

All the question papers are compulsory

## 2.2 A-level

### Subject content

[Individuals, firms, markets and market failure](#) (page 31)

- 1 [The economic problem and economic methodology](#) (page 32)
- 2 [Individual economic decision making](#) (page 33)
- 3 [Price determination in a competitive market](#) (page 34)
- 4 [Production, costs and revenue](#) (page 36)
- 5 [Perfect competition, imperfectly competitive markets and monopoly](#) (page 38)
- 6 [The labour market](#) (page 42)
- 7 [The distribution of income and wealth: poverty and inequality](#) (page 44)
- 8 [The market mechanism, market failure and government intervention in markets](#) (page 45)

[The national and international economy](#) (page 49)

- 9 [The measurement of macroeconomic performance](#) (page 49)
- 10 [How the macroeconomy works : the circular flow of income, AD/AS analysis, and related concepts](#) (page 50)
- 11 [Economic performance](#) (page 53)
- 12 [Financial markets and monetary policy](#) (page 55)
- 13 [Fiscal policy and supply-side policies](#) (page 58)
- 14 [The international economy](#) (page 59)

## Assessments

### Paper 1: Markets and market failure

#### What's assessed

Content 1–8 above

#### Assessed

- written exam: 2 hours
- 80 marks
- 33.3% of A-level

#### Questions

- Section A: data response questions requiring written answers, choice of one from two contexts worth 40 marks
- Section B: essay questions requiring written answers, choice of one from three worth 40 marks



### Paper 2: National and international economy

#### What's assessed

Content 9–14 above

#### Assessed

- written exam 2 hours
- 80 marks
- 33.3% of A-level

#### Questions

- Section A: data response questions requiring written answers, choice of one from two contexts worth 40 marks
- Section B: essay questions requiring written answers, choice of one from three worth 40 marks



Paper 3: Economic principles and issues	
<b>What's assessed</b>	All content 1–14 above
<b>Assessed</b>	<ul style="list-style-type: none"><li>• written exam: 2 hours</li><li>• 80 marks</li><li>• 33.3% of A-level</li></ul>
<b>Questions</b>	<ul style="list-style-type: none"><li>• Section A: multiple choice questions worth 30 marks</li><li>• Section B: case study questions requiring written answers, worth 50 marks</li></ul>

All the question papers are compulsory



## 3 Subject content – AS

---

During their course of study, students should be encouraged to develop a critical approach to economic models and methods of enquiry. They should have a good knowledge of developments in the UK economy and government policies over the past fifteen years.

Students will be assessed through two examination papers. The first paper will examine mainly the microeconomic topics that are outlined in Section 3.1 of the specification but economic principles included in Section 3.2 of the specification may also enrich a student's response to some questions. Similarly, the second paper will examine mainly the macroeconomic topics that are outlined in Section 3.2 of the specification but may draw on economic principles from Section 3.1.

Students will be expected to acquire competence in quantitative skills that are relevant to the subject content and be familiar with the various types of statistical and other data which are commonly used by economists. They should be able to make relevant calculations from economic data and be able to interpret data presented in the form of index numbers. Examples of other relevant quantitative skills include: the construction and use of graphs and the application of statistical measures such as the mean and median.

Students should understand the role of evidence in economic decision making but should appreciate the importance of value judgements.

It is expected that students will acquire a good knowledge of trends and developments in the economy which have taken place over the past fifteen years and also have an awareness of earlier events where this helps to give recent developments a longer term perspective.

### 3.1 The operation of markets and market failure

This section of the specification is primarily about microeconomics. Students will be required to acquire knowledge and understanding of a selection of microeconomic models and to apply these to current problems and issues. Microeconomic models such as demand and supply, the operation of the price mechanism and causes of market failure are central to this part of the specification. Students should be provided with opportunities to use these models to explore current economic behaviour. When applying and evaluating all the microeconomic models in the specification, such as supply and demand theory and production possibility curves, students should be critically aware of the assumptions upon which these models are based and their limitations when they are used to make sense of real world phenomena. Students should be able to apply their knowledge and skills to a wide variety of situations and to different markets and examples of market failure, including environmental market failures. They should appreciate that economic decisions relating to individual markets may be affected by developments in the macroeconomy.

## 3.1.1 Economic methodology and the economic problem

### 3.1.1.1 Economic methodology

Content	Additional information
<ul style="list-style-type: none"><li>• Economics as a social science.</li><li>• Similarities to and differences in methodology from natural and other sciences.</li><li>• The difference between positive and normative statements.</li><li>• How value judgements influence economic decision making and policy.</li><li>• People's views concerning the best option are influenced by the positive consequences of different decisions and by moral and political judgements.</li></ul>	Students should understand how thinking as an economist may differ from other forms of scientific enquiry.

### 3.1.1.2 The nature and purpose of economic activity

Content	Additional information
<ul style="list-style-type: none"><li>• The central purpose of economic activity is the production of goods and services to satisfy needs and wants.</li><li>• The key economic decisions are: what to produce, how to produce, and who is to benefit from the goods and services produced.</li></ul>	

### 3.1.1.3 Economic resources

Content	Additional information
<ul style="list-style-type: none"><li>• The economists' classification of economic resources into land, labour, capital and enterprise, which are the factors of production.</li><li>• The environment is a scarce resource.</li></ul>	

### 3.1.1.4 Scarcity, choice and the allocation of resources

Content	Additional information
<ul style="list-style-type: none"><li>• The fundamental economic problem is scarcity and that it results from limited resources and unlimited wants.</li><li>• Scarcity means that choices have to be made about how scarce resources are allocated between different uses.</li><li>• Choices have an opportunity cost.</li></ul>	

### 3.1.1.5 Production possibility diagrams

Content	Additional information
<ul style="list-style-type: none"> <li>Production possibility diagrams illustrate different features of the fundamental economic problem, such as: resource allocation, opportunity cost and trade-offs, unemployment of economic resources, economic growth.</li> <li>Why all points on the boundary are productively efficient but not all points on the boundary are allocatively efficient.</li> </ul>	Students should be able to use production possibility diagrams to illustrate these features.

## 3.1.2 Price determination in a competitive market

### 3.1.2.1 The determinants of the demand for goods and services

Content	Additional information
<ul style="list-style-type: none"> <li>The factors which determine the demand for a good or service.</li> <li>A demand curve shows the relationship between price and quantity demanded.</li> <li>The causes of shifts in the demand curve.</li> </ul>	Students should understand the factors that influence the spending decisions of consumers, including: price, income, wealth, the price of substitutes and complementary goods, and individual preferences. They should also appreciate that such decisions are influenced by social and emotional factors.

### 3.1.2.2 Price, income and cross elasticities of demand

Content	Additional information
<ul style="list-style-type: none"> <li>Be able to calculate price, income and cross elasticities of demand.</li> <li>The relationship between income elasticity of demand and normal and inferior goods.</li> <li>The relationship between cross elasticity of demand and substitute and complementary goods.</li> <li>The relationships between price elasticity of demand and firms' total revenue (total expenditure).</li> <li>The factors that influence these elasticities of demand.</li> </ul>	Students should be able to interpret numerical values of these elasticities of demand.

### 3.1.2.3 The determinants of the supply of goods and services

Content	Additional information
<ul style="list-style-type: none"><li>• The factors which determine the supply of a good or service.</li><li>• A supply curve shows the relationship between price and quantity supplied.</li><li>• Understand higher prices imply higher profits and that this will provide the incentive to expand production.</li><li>• The causes of shifts in the supply curve.</li></ul>	

### 3.1.2.4 Price elasticity of supply

Content	Additional information
<ul style="list-style-type: none"><li>• Be able to calculate price elasticity of supply.</li><li>• The factors that influence price elasticity of supply.</li></ul>	Students should be able to interpret numerical values of price elasticity of supply.

### 3.1.2.5 The determination of equilibrium market prices

Content	Additional information
<ul style="list-style-type: none"><li>• How the interaction of demand and supply determines equilibrium prices in a market economy.</li><li>• The difference between equilibrium and disequilibrium.</li><li>• Why excess demand and excess supply lead to changes in price.</li></ul>	<p>Students should be able to use demand and supply diagrams to help them to analyse causes of changes in equilibrium market prices.</p> <p>They should be able to apply their knowledge of the basic model of demand and supply to a variety of real-world markets.</p>

### 3.1.2.6 The interrelationship between markets

Content	Additional information
<ul style="list-style-type: none"><li>• Changes in a particular market are likely to affect other markets.</li><li>• The implications of joint demand, demand for substitute goods, composite demand, derived demand and joint supply.</li></ul>	Students should, for example, be able to explore the impact of changes in demand, supply and price in one market upon other related markets.



### 3.1.3 Production, costs and revenue

#### 3.1.3.1 Production and productivity

Content	Additional information
<ul style="list-style-type: none"> <li>• Production converts inputs, or the services of factors of production such as capital and labour, into final output.</li> <li>• The meaning of productivity, including labour productivity.</li> </ul>	

#### 3.1.3.2 Specialisation, division of labour and exchange

Content	Additional information
<ul style="list-style-type: none"> <li>• The benefits of specialisation and division of labour.</li> <li>• Why specialisation necessitates an efficient means of exchanging goods and services, such as the use of money as a medium of exchange.</li> </ul>	

#### 3.1.3.3 Costs of production

Content	Additional information
<ul style="list-style-type: none"> <li>• The difference between the short run and the long run.</li> <li>• The difference between fixed and variable costs.</li> <li>• The difference between average and total costs.</li> </ul>	<p>Students should be able to calculate average and total costs from given data.</p> <p>Students should appreciate that the short-run average cost curve is likely to be U-shaped but a formal link with the law of diminishing returns is <b>not</b> expected. They should understand that the shape of the long-run average cost curve is determined by economies and diseconomies of scale.</p>

#### 3.1.3.4 Economies and diseconomies of scale

Content	Additional information
<ul style="list-style-type: none"> <li>• The difference between internal and external economies of scale.</li> <li>• Reasons for diseconomies of scale.</li> <li>• The relationship between economies of scale, diseconomies of scale and the shape of the long-run average cost curve.</li> </ul>	<p>Students should be able to categorise and give examples of both internal and external economies of scale.</p>

### 3.1.3.5 Average revenue, total revenue and profit

Content	Additional information
<ul style="list-style-type: none"><li>• The difference between average and total revenue.</li><li>• Why the average revenue curve is the firm's demand curve.</li><li>• Profit is the difference between total revenue and total costs.</li></ul>	Students should be able to calculate average, total revenue and profit from given data.

## 3.1.4 Competitive and concentrated markets

### 3.1.4.1 Market structures

Content	Additional information
<ul style="list-style-type: none"><li>• There is a range of market structures.</li><li>• Factors such as the number of firms, the degree of product differentiation and ease of entry are used to distinguish between different market structures.</li></ul>	Students are <b>not</b> required to draw or use the traditional 'theory of the firm' diagrams.

### 3.1.4.2 The objectives of firms

Content	Additional information
<ul style="list-style-type: none"><li>• Profit is an important objective of most firms.</li><li>• Firms may also have other objectives such as survival, growth and increasing their market share.</li></ul>	Students should be aware that firms may have a variety of objectives but a detailed knowledge of these objectives is <b>not</b> required. However, students should appreciate that the objectives of a firm will affect its behaviour.

### 3.1.4.3 Competitive markets

Content	Additional information
<ul style="list-style-type: none"><li>• The main characteristics of a perfectly competitive market.</li><li>• In such markets the price is determined by the interaction of demand and supply.</li><li>• Why profits are likely to be lower in a competitive market than in a market which is dominated by a few large firms.</li></ul>	An understanding of the formal model of perfect competition and the associated diagrams is <b>not</b> required.

### 3.1.4.4 Monopoly and monopoly power

Content	Additional information
<ul style="list-style-type: none"> <li>The difference between pure monopoly and monopoly power.</li> <li>Monopoly power is influenced by factors such as barriers to entry, the number of competitors, advertising and the degree of product differentiation.</li> <li>Concentration ratios and how to calculate a concentration ratio.</li> <li>The basic model of monopoly suggests that higher prices and profits and inefficiency may result in a misallocation of resources compared to the outcome in a competitive market.</li> <li>The potential benefits from monopoly, for example, economies of scale and possibly more invention and innovation.</li> </ul>	<p>Students should appreciate that there are few examples of pure monopoly but many firms have monopoly power.</p> <p>A formal diagrammatic analysis of monopoly is <b>not</b> required but students should be able to use a demand curve to illustrate that if a monopolist raises the market price above the competitive level, output will fall. They should also be able to use a long-run average cost curve to illustrate the benefits from economies of scale that may result from monopoly.</p> <p>Students should appreciate the various factors which affect the behaviour and performance of firms in a variety of real-world markets.</p>

### 3.1.4.5 The competitive market process

Content	Additional information
<ul style="list-style-type: none"> <li>Firms do not just compete on the basis of price but that competition will, for example, also lead firms to strive to improve products, reduce costs, improve the quality of the service provided.</li> </ul>	<p>Students should recognise that many large firms compete vigorously with each other but monopoly power may lead to consumers being exploited.</p>

### 3.1.5 The market mechanism, market failure and government intervention in markets

#### 3.1.5.1 How markets and prices allocate resources

Content	Additional information
<ul style="list-style-type: none"><li>• The rationing, incentive and signalling functions of prices in allocating resources and coordinating the decisions of buyers and sellers in a market economy.</li><li>• The price mechanism is the way in which the basic economic problem is resolved in a market economy.</li></ul>	Students should understand how economic incentives influence what, how and for whom goods and services are produced.

#### 3.1.5.2 The meaning of market failure

Content	Additional information
<ul style="list-style-type: none"><li>• Market failure occurs whenever a market leads to a misallocation of resources.</li><li>• What is meant by a misallocation of resources.</li><li>• The difference between complete market failure (resulting in a missing market) and partial market failure (where a market exists but contributes to resource misallocation).</li><li>• How public goods, positive and negative externalities, merit and demerit goods, monopoly and other market imperfections, and inequalities in the distribution of income and wealth can lead to market failure.</li></ul>	Students should be able to provide examples to inform their discussion of each of these causes of market failure.

#### 3.1.5.3 Public goods, private goods and quasi-public goods

Content	Additional information
<ul style="list-style-type: none"><li>• Pure public goods are non-rival and non-excludable and recognition of the significance of these characteristics.</li><li>• The difference between a public good and a private good.</li><li>• Circumstances when a public good may take on some of the characteristics of a private good and become a quasi-public good.</li><li>• The significance of technological change, e.g. television broadcasting is now excludable.</li><li>• The free-rider problem.</li></ul>	

### 3.1.5.4 Positive and negative externalities in consumption and production

Content	Additional information
<ul style="list-style-type: none"> <li>Externalities exist when there is a divergence between private and social costs and benefits.</li> <li>Why negative externalities are likely to result in over-production and that positive externalities are likely to result in under-production.</li> </ul>	<p>Students should be able to illustrate the misallocation of resources resulting from externalities in both production and consumption, using demand and supply diagrams.</p> <p>Students are <b>not</b> required to use Marginal Social Cost/ Marginal Social Benefit (MSC/MSB) diagrams.</p>

### 3.1.5.5 Merit and demerit goods

Content	Additional information
<ul style="list-style-type: none"> <li>The classification of merit and demerit goods depends upon a value judgement.</li> <li>Such products may be subject to positive and negative externalities in consumption.</li> <li>How under-provision of merit goods and over-provision of demerit goods may also result from imperfect information.</li> </ul>	<p>Students should be able to illustrate the misallocation of resources resulting from the consumption of merit and demerit goods using demand and supply diagrams.</p> <p>Students are <b>not</b> required to use MSC/MSB diagrams.</p> <p>It should be understood that not all products that result in positive or negative externalities in consumption are either merit or demerit goods.</p>

### 3.1.5.6 Market imperfections

Content	Additional information
<ul style="list-style-type: none"> <li>Why imperfect and asymmetric information can lead to market failure.</li> <li>Why the existence of monopoly and monopoly power can lead to market failure.</li> <li>Why the immobility of factors of production can lead to market failure.</li> </ul>	

### 3.1.5.7 An inequitable distribution of income and wealth

Content	Additional information
<ul style="list-style-type: none"><li>• In the absence of government intervention, the market mechanism is likely to result in a very unequal and inequitable distribution of income and wealth.</li><li>• In a market economy, an individual's ability to consume goods and services depends upon their income and wealth and an inequitable distribution of income and wealth is likely to lead to a misallocation of resources and hence market failure.</li></ul>	At AS, students are <b>not</b> expected to have an in-depth knowledge of the causes of inequality but they should be aware that progressive taxes and government spending are used to reduce inequality.

### 3.1.5.8 Government intervention in markets

Content	Additional information
<ul style="list-style-type: none"><li>• The existence of market failure, in its various forms, provides an argument for government intervention in markets.</li><li>• Governments influence the allocation of resources in a variety of ways, including through public expenditure, taxation and regulations.</li><li>• Governments have a range of objectives and these affect how they intervene in a mixed economy to influence the allocation of resources.</li><li>• The use of indirect taxation, subsidies, price controls, state provision and regulation to correct market failure.</li></ul>	<p>Students should be able to apply economic models to assess the role of markets and the government in a variety of situations.</p> <p>Students should appreciate the consequences of government intervention in markets for consumers, producers and other economic agents.</p> <p>Students should be able to evaluate the case for and against government intervention in particular markets and to assess the relative merits of different methods of intervention.</p>

### 3.1.5.9 Government failure

Content	Additional information
<ul style="list-style-type: none"> <li>Government failure occurs when government intervention in the economy leads to a misallocation of resources.</li> <li>Inadequate information, conflicting objectives and administrative costs are possible sources of government failure.</li> <li>Governments may create, rather than remove, market distortions.</li> <li>Government intervention can lead to unintended consequences.</li> </ul>	<p>Students should appreciate that the possibility of government failure means that, even when there is market failure, government intervention will not necessarily improve economic welfare.</p> <p>Students should understand that consumers and producers may not have access to the same information and that this may contribute to markets operating inefficiently.</p>

## 3.2 The national economy in a global context

This section of the specification is primarily about macroeconomics. However, students should understand that microeconomic principles underpin the behaviour of the macroeconomy. Understanding some aspects of macroeconomic behaviour requires that students have a firm grasp of related microeconomic principles, for example, understanding of price elasticity of demand is essential when analysing the extent to which a fall in the exchange rate will lead to an increase in exports.

Students will be required to acquire knowledge and understanding of AD/AS analysis and should be provided with opportunities to use this analysis to explore recent and current economic behaviour. They should understand, and be able to analyse and evaluate, macroeconomic policy.

When applying and evaluating all the macroeconomic models in the specification, such as the circular flow of income and the multiplier process, students should be critically aware of the assumptions upon which these models are based and their limitations when investigating macroeconomic and global issues.

Students should have a good knowledge of developments in the UK economy and government policies over the past fifteen years.

**The following content is out of date and should not be taught. It will be removed from the specification in September 2022:** They should also be aware that the performance of the United Kingdom economy is influenced by its membership of the European Union (EU) and by external events in the international economy.

## 3.2.1 The measurement of macroeconomic performance

### 3.2.1.1 The objectives of government economic policy

Content	Additional information
<ul style="list-style-type: none"><li>• The main objectives of government macroeconomic policy: economic growth, price stability, minimising unemployment and a stable balance of payments on current account.</li><li>• The possibility of conflict arising, at least in the short run, when attempting to achieve these objectives.</li></ul>	<p>Students should be aware that governments may also have other objectives of macroeconomic policy, such as balancing the budget and achieving an equitable distribution of income.</p> <p>They should be aware that the importance attached to the different objectives changes over time.</p>

### 3.2.1.2 Macroeconomic indicators

Content	Additional information
<ul style="list-style-type: none"><li>• Data which is commonly used to measure the performance of an economy, such as: real GDP, real GDP per capita, Consumer Prices and Retail Prices Indices (CPI/RPI), measures of unemployment, productivity and the balance of payments on current account.</li></ul>	

### 3.2.1.3 Uses of index numbers

Content	Additional information
<ul style="list-style-type: none"><li>• How index numbers are calculated and interpreted, including the base year and the use of weights.</li><li>• How index numbers are used to measure changes in the price level and changes in other economic variables.</li></ul>	<p>A detailed technical knowledge is <b>not</b> expected of indices such as the Retail Prices Index (RPI) and Consumer Prices Index (CPI), but students should have an awareness of their underlying features, for example, the concept of the 'average family' and a 'basket of goods and services'.</p>



## 3.2.2 How the macroeconomy works: the circular flow of income, aggregate demand/aggregate supply analysis, and related concepts

### 3.2.2.1 The circular flow of income

Content	Additional information
<ul style="list-style-type: none"> <li>What national income measures.</li> <li>The difference between nominal and real income.</li> <li>Real national income as an indicator of economic performance.</li> <li>The circular flow of income concept, the equation <math>\text{income} = \text{output} = \text{expenditure}</math>, and the concepts of equilibrium and full employment income.</li> <li>The difference between injections and withdrawals into the circular flow of income.</li> <li>The effect of changes in injections and withdrawals on national income.</li> </ul>	Students are <b>not</b> expected to have a detailed knowledge of the construction of national income accounts.

### 3.2.2.2 Aggregate demand and aggregate supply analysis

Content	Additional information
<ul style="list-style-type: none"> <li>Changes in the price level are represented by movements along the aggregate demand (AD) and aggregate supply (AS) curves.</li> <li>The various factors that shift the AD curve and the short-run AS curve.</li> <li>The factors which affect long-run AS distinguish them from those which affect short-run AS.</li> <li>Underlying economic growth is represented by a rightward shift in the long-run AS curve.</li> <li>How to use AD/AS diagrams to illustrate macroeconomic equilibrium.</li> <li>How both demand-side and supply-side shocks affect the macroeconomy.</li> </ul>	<p>Students should be able to use AD and AS analysis to help them explain macroeconomic problems and issues. For example, they should be able to use AD and AS diagrams to illustrate changes in the price level, demand-deficient (cyclical) unemployment and economic growth.</p> <p>Students should also understand how global economic events can affect the domestic economy.</p>

### 3.2.2.3 The determinants of aggregate demand

Content	Additional information
<ul style="list-style-type: none"><li>• What is meant by AD.</li><li>• The determinants of AD, ie the determinants of consumption, investment, government spending, exports and imports.</li><li>• The basic accelerator process.</li><li>• The determinants of savings.</li><li>• The difference between saving and investment.</li></ul>	<p>Students will <b>not</b> be required to undertake calculations to illustrate the operation of the accelerator.</p> <p>Students should understand how changes in net exports affect AD and how global events affect economic performance.</p>

### 3.2.2.4 Aggregate demand and the level of economic activity

Content	Additional information
<ul style="list-style-type: none"><li>• The role of AD in influencing the level of economic activity.</li><li>• The multiplier process and an explanation of why an initial change in expenditure may lead to a larger impact on local or national income.</li></ul>	<p>Students will <b>not</b> be required to calculate the value of the multiplier using the marginal propensity to consume or the propensities to withdraw. However, they should be able to calculate the value of the multiplier from an initial change in injections and the resulting change in national income.</p>

### 3.2.2.5 Determinants of short-run aggregate supply

Content	Additional information
<ul style="list-style-type: none"><li>• The price level and production costs are the main determinants of the short-run AS.</li><li>• Changes in costs, such as: money wage rates, raw material prices, business taxation and productivity, will shift the short-run AS curve.</li></ul>	

### 3.2.2.6 Determinants of long-run aggregate supply

Content	Additional information
<ul style="list-style-type: none"><li>• The fundamental determinants of long-run AS such as technology, productivity, attitudes, enterprise, factor mobility, and economic incentives.</li><li>• The position of the vertical long-run AS curve represents the normal capacity level of output of the economy.</li></ul>	<p>It is assumed that the long-run AS curve is vertical.</p>

### 3.2.3 Economic performance

#### 3.2.3.1 Economic growth and the economic cycle

Content	Additional information
<ul style="list-style-type: none"> <li>• The difference between short-run and long-run growth.</li> <li>• The various demand-side and supply-side determinants of short-run growth of real national income and the long-run trend rate of economic growth.</li> <li>• The concept of the economic cycle and the use of a range of economic indicators, such as real GDP, the rate of inflation, unemployment and investment, to identify the various phases of the economic cycle.</li> <li>• The difference between positive and negative output gaps.</li> <li>• How demand-side and supply-side shocks, including those that occur in the global economy, affect domestic economic activity.</li> </ul>	<p>Students should be able to use a production possibility curve and AD/AS diagrams to illustrate the distinction between short-run and long-run economic growth.</p> <p>Students should understand that long-run economic growth occurs when the productive capacity of the economy is increasing and is a term used to refer to the trend rate of growth of real national output in an economy over time.</p> <p>Students should understand that a positive output gap occurs when real GDP is above the productive potential of the economy, and a negative output gap occurs when real GDP is below the economy's productive potential.</p>

#### 3.2.3.2 Employment and unemployment

Content	Additional information
<ul style="list-style-type: none"> <li>• The main UK measures of unemployment, ie the claimant count and the Labour Force Survey measure.</li> <li>• The terms seasonal, frictional, structural and cyclical unemployment.</li> <li>• How employment and unemployment may be determined by both demand-side and supply-side factors.</li> <li>• How changes in the rest of the world affect employment and unemployment in the UK.</li> </ul>	<p>Students should appreciate that unemployment has a variety of causes and hence the appropriate policies to reduce unemployment depend on the cause.</p>

### 3.2.3.3 Inflation and deflation

Content	Additional information
<ul style="list-style-type: none"><li>• The concepts of inflation and deflation.</li><li>• Demand-pull and cost-push influences on the price level.</li><li>• How changes in world commodity prices affect domestic inflation.</li><li>• How changes in other economies can affect inflation in the UK.</li></ul>	<p>Students should understand that deflation exists when the price level is falling whereas disinflation is when the rate of inflation is falling.</p> <p>Students should appreciate that deflationary policies are policies to reduce aggregate demand and do not necessarily result in deflation.</p>

### 3.2.3.4 The balance of payments on current account

Content	Additional information
<ul style="list-style-type: none"><li>• The importance of international trade for an economy such as the UK.</li><li>• The current account comprises trade in goods, trade in services, primary income and secondary income.</li><li>• The meaning of a deficit and a surplus on current account.</li><li>• The factors that influence a country's current account balance such as productivity, inflation and the exchange rate and economic activity in other countries.</li></ul>	<p>Students should be aware that the current account is only one part of the balance of payments but knowledge of the other parts of the account is <b>not</b> expected.</p>

### 3.2.3.5 Possible conflicts between macroeconomic policy objectives

Content	Additional information
<ul style="list-style-type: none"><li>• How negative and positive output gaps relate to unemployment and inflationary pressures.</li><li>• How economic policies may be used to try to reconcile possible policy conflicts both in the short run and the long run.</li></ul>	<p>Students should be able to use macroeconomic models, including the AD/AS model, to analyse the causes of possible conflicts between policy objectives in the short run and long run.</p>

## 3.2.4 Macroeconomic policy

### 3.2.4.1 Monetary policy

Content	Additional information
<ul style="list-style-type: none"> <li>Monetary policy involves the central bank taking action to influence the manipulation of interest rates, the supply of money and credit, and the exchange rate.</li> <li>The current objectives of monetary policy, set by the government.</li> <li>The role of the Monetary Policy Committee of the Bank of England (MPC) and how it uses changes in bank rate to try to achieve the objectives for monetary policy, including the government's target rate of inflation.</li> <li>The factors considered by the MPC when setting bank rate.</li> <li>How changes in the exchange rate affect aggregate demand and the various macroeconomic policy objectives.</li> </ul>	<p>Students do <b>not</b> need to know how interest rates and the exchange rate are determined but they do need to know how changes in interest rates and the exchange rate affect macroeconomic performance.</p>

### 3.2.4.2 Fiscal policy

Content	Additional information
<ul style="list-style-type: none"> <li>Fiscal policy involves the manipulation of government spending, taxation and the budget balance.</li> <li>Fiscal policy can have both macroeconomic and microeconomic functions.</li> <li>How fiscal policy can be used to influence aggregate demand.</li> <li>How fiscal policy can be used to influence aggregate supply.</li> <li>How government spending and taxation can affect the pattern of economic activity.</li> <li>The difference between direct and indirect taxes.</li> <li>The difference between progressive, proportional and regressive taxes.</li> <li>The relationship between the budget balance and the national debt.</li> </ul>	<p>Students should be aware of the main taxes in the UK and the main categories of government spending, eg spending on defence, health, education and welfare.</p> <p>Students should appreciate that governments may deliberately run budget deficits and surpluses to try to influence aggregate demand but they are <b>not</b> required to understand the arguments relating to the pros and cons of balancing the budget or attempting to limit the size of the national debt.</p>

### 3.2.4.3 Supply-side policies

Content	Additional information
<ul style="list-style-type: none"><li>• The difference between supply-side policies and supply-side improvements in the economy.</li><li>• How supply-side policies can help to achieve supply-side improvements in the economy.</li><li>• How supply-side policies, such as tax changes designed to change personal incentives, may increase the potential output of the economy and improve the underlying trend rate of economic growth.</li><li>• How supply-side policies can affect unemployment, the rate of change of prices and UK external performance, as reflected in the balance of payments on current account.</li><li>• Supply-side policies include measures such as government spending on education and training, cuts in income and corporation tax, welfare reform, and industrial policy.</li></ul>	Students should recognise that supply-side improvements in the economy often originate in the private sector, independently of government, eg through productivity improvements, innovation and investment.

## 4 Subject content – A-level

---

The specification is split into two main sections, the first section introduces students to microeconomic issues and the second section covers mainly macroeconomic issues. However, students should appreciate that microeconomics and macroeconomics are not entirely distinct areas of study. For example, microeconomic principles often provide fundamental insights into understanding aspects of the macroeconomy. Similarly, economic issues and problems often contain both a microeconomic and macroeconomic dimension.

Students will be assessed through three examination papers. The first paper will examine mainly the topics that are outlined in Section 4.1 of the specification but economic principles included in Section 4.2 of the specification may also enrich a student's response to some questions. Similarly, the second paper will examine mainly the topics that are outlined in Section 4.2 of the specification but may draw on economic principles from Section 4.1. The third paper will include topics from both sections of the specification and students, particularly when answering questions linked to the case study, will be expected to recognise when it is appropriate to use microeconomic and/or macroeconomic models.

Students will be expected to acquire competence in quantitative skills that are relevant to the subject content and be familiar with the various types of statistical and other data which are commonly used by economists. They should be able to make relevant calculations from economic data and be able to interpret data presented in the form of index numbers. Examples of other relevant quantitative skills include: the construction and use of graphs and the application of statistical measures such as the mean, median and relevant quantiles.

When delivering this specification, teachers should provide students with the opportunity to explore the disagreements that exist between economists and current economic controversies. During their course of study, they should come to appreciate why such disagreements exist and the basis upon which judgements are made. They will be assessed on their ability to use both quantitative and qualitative evidence to evaluate arguments and to support judgements relating to economic issues and problems.

Students should be encouraged to develop a critical approach to economic models and methods of enquiry. They should appreciate that value judgements play an important role in economic decision making. They should understand the methodology of economics and the role of evidence whilst recognising that economics is a social science and that people's behaviour is not necessarily rational or predictable.

It is expected that students will acquire a good knowledge of trends and developments in the economy which have taken place over the past fifteen years and also have an awareness of earlier events where this helps to give recent developments a longer term perspective.

### 4.1 Individuals, firms, markets and market failure

This section of the specification is primarily about microeconomics.

Students will be required to acquire knowledge and understanding of a selection of microeconomic models and to apply these to current problems and issues. Microeconomic models such as demand and supply, perfect competition, monopoly, the operation of the price mechanism and the causes of market failure are central to this part of the specification. Students will need to demonstrate a realistic understanding of the decisions made by firms and how their behaviour can be affected by the structure and characteristics of the industry in which they operate. Other key

models relate to the operation of labour markets, wage determination and causes of inequalities in the distribution of income and wealth.

Students will be expected to understand that traditional economic theory generally assumes that economic agents act rationally but they should also be introduced to models that recognise that consumer and firms' behaviour is often governed by more complex influences.

During their course of study, students should be provided with opportunities to use economic models to explore current economic behaviour. They should be able to apply their knowledge and skills to a wide variety of situations and to different markets and examples of market failure, including environmental and labour market failures. They should appreciate and be able to assess the impact that developments in the European Union and in the global economy have upon microeconomic behaviour and performance.

## 4.1.1 Economic methodology and the economic problem

### 4.1.1.1 Economic methodology

Content	Additional information
<ul style="list-style-type: none"><li>• Economics as a social science.</li><li>• Similarities to and differences in methodology from natural and other sciences.</li><li>• The difference between positive and normative statements.</li><li>• How value judgements influence economic decision making and policy.</li><li>• People's views concerning the best option are influenced by the positive consequences of different decisions and by moral and political judgements.</li></ul>	Students should understand how thinking as an economist may differ from other forms of scientific enquiry.

### 4.1.1.2 The nature and purpose of economic activity

Content	Additional information
<ul style="list-style-type: none"><li>• The central purpose of economic activity is the production of goods and services to satisfy needs and wants.</li><li>• The key economic decisions are: what to produce, how to produce and who is to benefit from the goods and services produced.</li></ul>	

### 4.1.1.3 Economic resources

Content	Additional information
<ul style="list-style-type: none"><li>• The economists' classification of economic resources into land, labour, capital and enterprise, which are the factors of production.</li><li>• The environment is a scarce resource.</li></ul>	



#### 4.1.1.4 Scarcity, choice and the allocation of resources

Content	Additional information
<ul style="list-style-type: none"> <li>The fundamental economic problem is scarcity and that it results from limited resources and unlimited wants.</li> <li>Scarcity means that choices have to be made about how scarce resources are allocated between different uses.</li> <li>Choices have an opportunity cost.</li> </ul>	

#### 4.1.1.5 Production possibility diagrams

Content	Additional information
<ul style="list-style-type: none"> <li>Production possibility diagrams illustrate different features of the fundamental economic problem, such as: resource allocation, opportunity cost and trade-offs, unemployment of economic resources, economic growth.</li> <li>Why all points on the boundary are productively efficient but not all points on the boundary are allocatively efficient.</li> </ul>	Students should be able to use production possibility diagrams to illustrate these features.

### 4.1.2 Individual economic decision making

#### 4.1.2.1 Consumer behaviour

Content	Additional information
<ul style="list-style-type: none"> <li>Rational economic decision making and economic incentives.</li> <li>Utility theory: total and marginal utility, and the hypothesis of diminishing marginal utility.</li> <li>Utility maximisation.</li> <li>The importance of the margin when making choices.</li> </ul>	Students should appreciate that the hypothesis of diminishing marginal utility supports a downward sloping demand curve but they are <b>not</b> expected to understand the principle of equi-marginal utility or to use this principle to explain why there is likely to be an inverse relationship between price and quantity demanded.

#### 4.1.2.2 Imperfect information

Content	Additional information
<ul style="list-style-type: none"> <li>The importance of information for decision making.</li> <li>The significance of asymmetric information.</li> </ul>	Students should recognise that imperfect information makes it difficult for economic agents to make rational decisions and is a potential source of market failure.

#### 4.1.2.3 Aspects of behavioural economic theory

Content	Additional information
<ul style="list-style-type: none"><li>• Bounded rationality and bounded self-control.</li><li>• Biases in decision making: rules of thumb, anchoring, availability and social norms.</li><li>• The importance of altruism and perceptions of fairness.</li></ul>	Students should appreciate that behavioural economists question the assumption of traditional economic theory that individuals are rational decision makers who endeavour to maximise their utility. They should understand some of the reasons why an individual's economic decisions may be biased.

#### 4.1.2.4 Behavioural economics and economic policy

Content	Additional information
<ul style="list-style-type: none"><li>• Choice architecture and framing.</li><li>• Nudges.</li><li>• Default choices, restricted choice and mandated choice.</li></ul>	Students should appreciate that insights provided by behavioural economists can help governments and other agencies influence economic decision making.

### 4.1.3 Price determination in a competitive market

#### 4.1.3.1 The determinants of the demand for goods and services

Content	Additional information
<ul style="list-style-type: none"><li>• A demand curve shows the relationship between price and quantity demanded.</li><li>• The causes of shifts in the demand curve.</li></ul>	

#### 4.1.3.2 Price, income and cross elasticities of demand

Content	Additional information
<ul style="list-style-type: none"> <li>• Be able to calculate price, income and cross elasticities of demand.</li> <li>• The relationship between income elasticity of demand and normal and inferior goods.</li> <li>• The relationship between cross elasticity of demand and substitute and complementary goods.</li> <li>• The relationships between price elasticity of demand and firms' total revenue (total expenditure).</li> <li>• The factors that influence these elasticities of demand.</li> </ul>	Students should be able to interpret numerical values of these elasticities of demand.

#### 4.1.3.3 The determinants of the supply of goods and services

Content	Additional information
<ul style="list-style-type: none"> <li>• A supply curve shows the relationship between price and quantity supplied.</li> <li>• Understand that higher prices imply higher profits and that this will provide the incentive to expand production.</li> <li>• The causes of shifts in the supply curve.</li> </ul>	Students should also know that, under perfect competition, the supply curve is the marginal cost curve.

#### 4.1.3.4 Price elasticity of supply

Content	Additional information
<ul style="list-style-type: none"> <li>• Be able to calculate price elasticity of supply.</li> <li>• The factors that influence price elasticity of supply.</li> </ul>	Students should be able to interpret numerical values of price elasticity of supply.

#### 4.1.3.5 The determination of equilibrium market prices

Content	Additional information
<ul style="list-style-type: none"> <li>• How the interaction of demand and supply determines equilibrium prices in a market economy.</li> <li>• The difference between equilibrium and disequilibrium.</li> <li>• Why excess demand and excess supply lead to changes in price.</li> </ul>	<p>Students should be able to use demand and supply diagrams to help them to analyse causes of changes in equilibrium market prices.</p> <p>They should be able to apply their knowledge of the basic model of demand and supply to a variety of real-world markets.</p> <p>They should be aware of the assumptions of the model of supply and demand.</p>

#### 4.1.3.6 The interrelationship between markets

Content	Additional information
<ul style="list-style-type: none"><li>• Changes in a particular market are likely to affect other markets.</li><li>• The implications of joint demand, competitive demand, composite demand, derived demand and joint supply.</li></ul>	Students should, for example, be able to explore the impact of changes in demand, supply and price in one market upon other related markets.

### 4.1.4 Production, costs and revenue

#### 4.1.4.1 Production and productivity

Content	Additional information
<ul style="list-style-type: none"><li>• Production converts inputs, or the services of factors of production such as capital and labour, into final output.</li><li>• The meaning of productivity, including labour productivity.</li></ul>	

#### 4.1.4.2 Specialisation, division of labour and exchange

Content	Additional information
<ul style="list-style-type: none"><li>• The benefits of specialisation and division of labour.</li><li>• Why specialisation necessitates an efficient means of exchanging goods and services, such as the use of money as a medium of exchange.</li></ul>	

#### 4.1.4.3 The law of diminishing returns and returns to scale

Content	Additional information
<ul style="list-style-type: none"><li>• The difference between the short run and the long run.</li><li>• The difference between marginal, average and total returns.</li><li>• The law of diminishing returns.</li><li>• Returns to scale.</li><li>• The difference between increasing, constant and decreasing returns to scale.</li></ul>	<p>Students should appreciate that both the law of diminishing returns and returns to scale explain relationships between inputs and output.</p> <p>They should also understand that these relationships have implications for costs of production.</p>

#### 4.1.4.4 Costs of production

Content	Additional information
<ul style="list-style-type: none"> <li>The difference between fixed and variable costs.</li> <li>The difference between marginal, average and total costs.</li> <li>The difference between short-run and long-run costs.</li> <li>The reasons for the shape of the marginal, average and total cost curves.</li> <li>How factor prices and productivity affect firms' costs of production and their choice of factor inputs.</li> </ul>	Students should be able to calculate different costs from given data. They should also be able to draw and interpret cost curves.

#### 4.1.4.5 Economies and diseconomies of scale

Content	Additional information
<ul style="list-style-type: none"> <li>The difference between internal and external economies of scale.</li> <li>Reasons for diseconomies of scale.</li> <li>The relationship between returns to scale and economies or diseconomies of scale.</li> <li>The relationship between economies of scale, diseconomies of scale and the shape of the long-run average cost curve.</li> <li>The L-shaped long-run average cost curve.</li> <li>The concept of the minimum efficient scale of production.</li> </ul>	<p>Students should be able to categorise and give examples of both internal and external economies of scale.</p> <p>Students should understand the significance of the minimum efficient scale for the structure of an industry and barriers to entry.</p>

#### 4.1.4.6 Marginal, average and total revenue

Content	Additional information
<ul style="list-style-type: none"> <li>The difference between marginal, average and total revenue.</li> <li>Why the average revenue curve is the firm's demand curve.</li> <li>The relationship between average and marginal revenue.</li> <li>The relationship between marginal revenue and total revenue.</li> </ul>	Students should be able to calculate marginal, average and total revenue from given data. They should also be able to draw and interpret revenue curves.

#### 4.1.4.7 Profit

Content	Additional information
<ul style="list-style-type: none"> <li>Profit is the difference between total revenue and total costs.</li> <li>The difference between normal and abnormal (supernormal) profit.</li> <li>The role of profit in a market economy.</li> </ul>	

#### 4.1.4.8 Technological change

Content	Additional information
<ul style="list-style-type: none"><li>• The difference between invention and innovation.</li><li>• Technological change can affect methods of production, productivity, efficiency and firms' costs of production.</li><li>• Technological change can lead to the development of new products, the development of new markets and may destroy existing markets.</li><li>• Technological change can influence the structure of markets.</li></ul>	Students should understand how the process of creative destruction is linked to technological change.

### 4.1.5 Perfect competition, imperfectly competitive markets and monopoly

#### 4.1.5.1 Market structures

Content	Additional information
<ul style="list-style-type: none"><li>• The spectrum of competition ranging from perfect competition at one end of the spectrum to pure monopoly at the other end of the spectrum.</li><li>• Factors such as the number of firms, the degree of product differentiation and ease of entry are used to distinguish between different market structures.</li></ul>	

#### 4.1.5.2 The objectives of firms

Content	Additional information
<ul style="list-style-type: none"><li>• The models that comprise the traditional theory of the firm are based upon the assumption that firms aim to maximise profits.</li><li>• The profit-maximising rule (<math>MC=MR</math>).</li><li>• The reasons for and the consequences of a divorce of ownership from control.</li><li>• Firms have a variety of other possible objectives.</li><li>• The satisficing principle.</li></ul>	<p>Students should recognise that firms have a range of possible objectives including survival, growth, quality, maximising their sales revenue and increasing their market share.</p> <p>Students should be able to discuss how the divorce of ownership from control may affect the objectives of firms, their conduct and performance.</p>

#### 4.1.5.3 Perfect competition

Content	Additional information
<ul style="list-style-type: none"> <li>The formal diagrammatic analysis of the perfectly competitive model in the short and long run.</li> <li>The implications of the following for the behaviour of firms and the industry: large numbers of producers, identical products, freedom of entry and exit, and perfect knowledge.</li> <li>Firms operating in perfectly competitive markets are price takers.</li> <li>The proposition that, given certain assumptions, relating for example to a lack of externalities, perfect competition will result in an efficient allocation of resources.</li> </ul>	<p>Students should be aware that perfect competition, in both product and labour markets, provides a yardstick for judging the extent to which real world markets perform efficiently or inefficiently, and the extent to which a misallocation of resources occurs.</p> <p>Students should also be able to assess critically the proposition that perfectly competitive markets lead to an efficient allocation of resources.</p>

#### 4.1.5.4 Monopolistic competition

Content	Additional information
<ul style="list-style-type: none"> <li>The formal diagrammatic analysis of the monopolistically competitive model in the short and long run.</li> <li>The main characteristics of monopolistically competitive markets.</li> <li>Monopolistically competitive markets will be subject to non-price competition.</li> </ul>	

#### 4.1.5.5 Oligopoly

Content	Additional information
<ul style="list-style-type: none"><li>• The main characteristics of oligopolistic markets.</li><li>• Oligopolistic markets can be very different in relation to, for example, the number of firms, the degree of product differentiation and ease of entry.</li><li>• Oligopoly can be defined in terms of market structure or in terms of market conduct (behaviour).</li><li>• Concentration ratios and how to calculate a concentration ratio.</li><li>• The difference between collusive and non-collusive oligopoly.</li><li>• The difference between cooperation and collusion.</li><li>• The kinked demand curve model.</li><li>• The reasons for non-price competition, the operation of cartels, price leadership, price agreements, price wars and barriers to entry.</li><li>• The factors which influence prices, output, investment, expenditure on research and advertising in oligopolistic industries.</li><li>• The significance of interdependence and uncertainty in oligopoly.</li><li>• The advantages and disadvantages of oligopoly.</li></ul>	<p>Students should be aware of the various factors which affect the behaviour and performance of firms in a variety of real world markets. The factors include different barriers to entry and the degree of concentration and product differentiation.</p> <p>The kinked demand curve model should be used as an illustration of the interdependence between firms and not taught as if it is the only model of oligopoly.</p> <p>Students should recognise that collusion may allow oligopolists to act as a monopolist and maximise their joint profits.</p>

#### 4.1.5.6 Monopoly and monopoly power

Content	Additional information
<ul style="list-style-type: none"><li>• The formal diagrammatic analysis of the monopoly model.</li><li>• That monopoly power is influenced by factors such as barriers to entry, the number of competitors, advertising and the degree of product differentiation.</li><li>• The advantages and disadvantages of monopoly.</li></ul>	<p>Students should appreciate that firms operating in monopolistically competitive and oligopolistic markets are price makers and have varying degrees of monopoly power.</p>

#### 4.1.5.7 Price discrimination

Content	Additional information
<ul style="list-style-type: none"><li>• The conditions necessary for price discrimination.</li><li>• The advantages and disadvantages of price discrimination.</li></ul>	<p>Students should be aware of real-world examples of price discrimination and be able to assess its impact on producers and consumers.</p> <p>A diagrammatic analysis of price discrimination is expected.</p>



#### 4.1.5.8 The dynamics of competition and competitive market processes

Content	Additional information
<ul style="list-style-type: none"> <li>Both the short-run and long-run benefits which are likely to result from competition.</li> <li>That firms do not just compete on the basis of price but that competition will, for example, also lead firms to strive to improve products, reduce costs, improve the quality of the service provided.</li> <li>The process of creative destruction.</li> </ul>	<p>Students should understand that if firms have monopoly power and are making large profits, over time there will be an incentive for new firms to enter the market and to innovate to overcome the existing barriers to entry. Students should understand that this process of creative destruction is a fundamental feature of the way in which competition operates in a market economy.</p>

#### 4.1.5.9 Contestable and non-contestable markets

Content	Additional information
<ul style="list-style-type: none"> <li>The significance of market contestability for the performance of an industry.</li> <li>Concepts such as sunk costs and hit-and-run competition.</li> </ul>	

#### 4.1.5.10 Market structure, static efficiency, dynamic efficiency and resource allocation

Content	Additional information
<ul style="list-style-type: none"> <li>The difference between static efficiency and dynamic efficiency.</li> <li>The conditions required for productive efficiency (minimising average total costs) and allocative efficiency (price = marginal cost).</li> <li>Dynamic efficiency is influenced by, for example, research and development, investment in human and non-human capital and technological change.</li> </ul>	<p>Students should be able to apply efficiency concepts when comparing the performance of firms in markets with different structures. They should understand how conduct and performance indicators can be used to compare market structures.</p>

#### 4.1.5.11 Consumer and producer surplus

Content	Additional information
<ul style="list-style-type: none"> <li>Be able to apply these concepts when discussing economic efficiency and welfare issues, such as price discrimination and the dead-weight losses associated with monopoly.</li> </ul>	<p>Diagrammatic analysis is expected.</p>

## 4.1.6 The labour market

### 4.1.6.1 The demand for labour, marginal productivity theory

Content	Additional information
<ul style="list-style-type: none"><li>• The demand for a factor is derived from the demand for the product.</li><li>• The marginal productivity theory of the demand for labour.</li><li>• The demand curve for labour shows the relationship between the wage rate and number of workers employed.</li><li>• The causes of shifts in the demand curve for labour.</li><li>• The determinants of the elasticity of demand for labour.</li></ul>	

### 4.1.6.2 Influences upon the supply of labour to different markets

Content	Additional information
<ul style="list-style-type: none"><li>• The supply of labour to a particular occupation is influenced by monetary and non-monetary considerations.</li><li>• Non-monetary considerations include job satisfaction and dissatisfaction and working conditions.</li><li>• The supply curve for labour shows the relationship between the wage rate and number of workers willing to work in an occupation.</li><li>• The causes of shifts in the market supply curve for labour.</li></ul>	Students will not be required to understand the determinants of an individual's supply of labour or the backward-bending supply curve.

### 4.1.6.3 The determination of relative wage rates and levels of employment in perfectly competitive labour markets

Content	Additional information
<ul style="list-style-type: none"><li>• The economists' model of wage determination in a perfectly competitive labour market.</li><li>• Role of market forces in determining relative wage rates.</li></ul>	Students should appreciate that all real-world markets are imperfectly competitive to a greater or lesser extent.

### 4.1.6.4 The determination of relative wage rates and levels of employment in imperfectly competitive labour markets

Content	Additional information
<ul style="list-style-type: none"><li>• How various factors such as monopsony power, trade unions and imperfect information contribute to imperfections in a labour market.</li><li>• How, in a monopsony labour market, the employer can use market power to reduce both the relative wage rate and the level of employment below those that would exist in a perfectly competitive labour market.</li></ul>	The use of relevant diagrams is expected.

#### 4.1.6.5 The Influence of trade unions in determining wages and levels of employment

Content	Additional information
<ul style="list-style-type: none"> <li>The various factors that affect the ability of trade unions to influence wages and levels of employment in different labour markets.</li> <li>How wages and employment are likely to be affected by the introduction of a trade union into a previously perfectly competitive labour market and into a monopsony labour market.</li> </ul>	The use of relevant diagrams is expected.

#### 4.1.6.6 The National Minimum Wage

Content	Additional information
<ul style="list-style-type: none"> <li>The effects of a national minimum wage upon labour markets.</li> <li>The advantages and disadvantages of a national minimum wage.</li> </ul>	

#### 4.1.6.7 Discrimination in the labour market

Content	Additional information
<ul style="list-style-type: none"> <li>The conditions necessary for wage discrimination.</li> <li>The impact of gender, ethnicity and other forms of discrimination on wages, levels and types of employment.</li> </ul>	<p>Real-world examples should be used to illustrate wage discrimination.</p> <p>Students should be able to assess the advantages and disadvantages of wage discrimination for workers, employers and the economy as a whole.</p>

## 4.1.7 The distribution of income and wealth: poverty and inequality

### 4.1.7.1 The distribution of income and wealth

Content	Additional information
<ul style="list-style-type: none"><li>• The difference between income and wealth.</li><li>• The various factors which influence the distribution of income and wealth.</li><li>• The difference between equality and equity in relation to the distribution of income and wealth.</li><li>• The Lorenz curve and Gini coefficient.</li><li>• The likely benefits and costs of more equal and more unequal distributions.</li></ul>	<p>Some knowledge of the distribution of household income and wealth in the United Kingdom is expected.</p> <p>Students should understand that the degree of inequality can be measured but that whether or not a given distribution of income is equitable (fair and just) involves a value judgement.</p> <p>Students will be expected to interpret measures of inequality such as the Gini coefficient but they will not be expected to calculate the Gini coefficient.</p> <p>Students should understand that excessive inequality is both a cause and consequence of market failure. They should also appreciate that value judgements will influence people's views of what constitutes an equitable distribution of income and wealth and that these views will influence policy prescriptions.</p>

### 4.1.7.2 The problem of poverty

Content	Additional information
<ul style="list-style-type: none"><li>• The difference between relative and absolute poverty.</li><li>• The causes and effects of poverty.</li></ul>	

#### 4.1.7.3 Government policies to alleviate poverty and to influence the distribution of income and wealth

Content	Additional information
<ul style="list-style-type: none"> <li>The policies which are available to influence the distribution of income and wealth and to alleviate poverty.</li> <li>The economic consequences of such policies.</li> </ul>	<p>Students should be able to evaluate the various approaches to redistributing income and wealth and alleviating poverty, recognising the moral and political perspectives.</p>

#### 4.1.8 The market mechanism, market failure and government intervention in markets

##### 4.1.8.1 How markets and prices allocate resources

Content	Additional information
<ul style="list-style-type: none"> <li>The rationing, incentive and signalling functions of prices in allocating resources and coordinating the decisions of buyers and sellers in a market economy.</li> <li>The advantages and disadvantages of the price mechanism and of extending its use into new areas of activity.</li> </ul>	<p>Students should understand how economic incentives influence what, how and for whom goods and services are produced.</p> <p>Students should be able to assess the view that the price mechanism is an impersonal method of allocating resources.</p> <p>They should also be able to assess the view that introducing the price mechanism and markets into some fields of human activity may be undesirable and is likely to affect the nature of the activity, eg introducing a market for blood changes the nature of the transaction and the incentives involved.</p>

#### 4.1.8.2 The meaning of market failure

Content	Additional information
<ul style="list-style-type: none"><li>• Market failure occurs whenever a market leads to a misallocation of resources.</li><li>• The difference between complete market failure (resulting in a missing market) and partial market failure (where a market exists but contributes to resource misallocation).</li><li>• How public goods, positive and negative externalities, merit and demerit goods, monopoly and other market imperfections, and inequalities in the distribution of income and wealth can lead to market failure.</li></ul>	Students should be able to provide examples to inform their discussion of each of these causes of market failure.

#### 4.1.8.3 Public goods, private goods and quasi-public goods

Content	Additional information
<ul style="list-style-type: none"><li>• Pure public goods are non-rival and non-excludable and recognition of the significance of these characteristics.</li><li>• The difference between a public good and a private good.</li><li>• Circumstances when a public good may take on some of the characteristics of a private good and become a quasi-public good.</li><li>• The significance of technological change, eg television broadcasting is now excludable.</li><li>• The free-rider problem.</li><li>• The tragedy of the commons.</li></ul>	Students should appreciate the relevance of the 'tragedy of the commons' for environmental market failures.

#### 4.1.8.4 Positive and negative externalities in consumption and production

Content	Additional information
<ul style="list-style-type: none"><li>• Externalities exist when there is a divergence between private and social costs and benefits.</li><li>• Why negative externalities are likely to result in over-production and that positive externalities are likely to result in under-production.</li><li>• Why the absence of property rights leads to externalities in both production and consumption and hence market failure.</li></ul>	Students should be able to illustrate the misallocation of resources resulting from externalities in both production and consumption, using diagrams showing marginal private and social cost and benefit curves.

#### 4.1.8.5 Merit and demerit goods

Content	Additional information
<ul style="list-style-type: none"> <li>The classification of merit and demerit goods depends upon a value judgement.</li> <li>Such products may be subject to positive and negative externalities in consumption.</li> <li>How under-provision of merit goods and over-provision of demerit goods may also result from imperfect information.</li> </ul>	<p>Students should be able to illustrate the misallocation of resources resulting from the consumption of merit and demerit goods using diagrams showing marginal private and social cost and benefit curves.</p> <p>It should be understood that not all products that result in positive or negative externalities in consumption are either merit or demerit goods.</p>

#### 4.1.8.6 Market imperfections

Content	Additional information
<ul style="list-style-type: none"> <li>Why imperfect and asymmetric information can lead to market failure.</li> <li>Why the existence of monopoly and monopoly power can lead to market failure.</li> <li>Why the immobility of factors of production can lead to market failure.</li> </ul>	

#### 4.1.8.7 Competition policy

Content	Additional information
<ul style="list-style-type: none"> <li>The general principles of UK competition policy and some awareness of EU competition policy.</li> <li>The costs and benefits of such policies.</li> </ul>	<p>Examples of real-world applications of such policies should provide contexts in which students can evaluate the use of economic models to explore economic behaviour and further develop their appreciation of the behaviour of firms.</p> <p>Detailed knowledge of UK and EU competition law is <b>not</b> required.</p>

#### 4.1.8.8 Public ownership, privatisation, regulation and deregulation of markets

Content	Additional information
<ul style="list-style-type: none"><li>• The arguments for and against the public ownership of firms and industries.</li><li>• The arguments for and against the privatisation of state-owned enterprises.</li><li>• The arguments for and against the regulation of markets.</li><li>• The arguments for and against the deregulation of markets.</li><li>• The problem of regulatory capture.</li></ul>	Students should be able to assess the application of such policies in the United Kingdom and be able to evaluate their effects on economic performance.

#### 4.1.8.9 Government intervention in markets

Content	Additional information
<ul style="list-style-type: none"><li>• The existence of market failure, in its various forms, provides an argument for government intervention in markets.</li><li>• Governments influence the allocation of resources in a variety of ways, including through public expenditure, taxation and regulation.</li><li>• Governments have a range of objectives and these affect how they intervene in a mixed economy to influence the allocation of resources.</li><li>• The use of indirect taxation, subsidies, price controls, state provision and regulation, the extension of property rights and pollution permits to correct market failure.</li></ul>	<p>Students should be able to apply economic models to assess the role of markets and the government in a variety of situations.</p> <p>Students should be able to explain, analyse and evaluate the strengths and weaknesses of the market economy and the role of government within it.</p> <p>Students should be able to evaluate the case for and against government intervention in particular markets and to assess the relative merits of different methods of intervention.</p>

#### 4.1.8.10 Government failure

Content	Additional information
<ul style="list-style-type: none"><li>• Government failure occurs when government intervention in the economy leads to a misallocation of resources.</li><li>• Inadequate information, conflicting objectives and administrative costs are possible sources of government failure.</li><li>• Governments may create, rather than remove, market distortions.</li><li>• Government intervention can lead to unintended consequences.</li></ul>	Students should appreciate that the possibility of government failure means that, even when there is market failure, government intervention will not necessarily improve economic welfare.



## 4.2 The national and international economy

This section of the specification is primarily about macroeconomics. However, students should understand that microeconomic principles underpin the behaviour of the macroeconomy. Understanding some aspects of macroeconomic behaviour requires that students have a firm grasp of related microeconomic principles, for example, understanding of price elasticity of demand is essential when analysing the impact of changes in the exchange rate on an economy.

Students should have a good knowledge of developments in the UK economy and government policies over the past fifteen years. They should also be aware of developments in the world economy, including the European Union, and how these have affected the UK. They are not required to have specific knowledge of economic developments in any individual country, other than the UK, but if this is needed, relevant data will be presented to students.

Students should recognise that there are a number of models demonstrating how the macroeconomy works and should appreciate that different economic models provide insights into different aspects of the behaviour of the macroeconomy. When using these models students should be critically aware of the assumptions upon which they are based and their limitations when they are used to make sense of real world phenomena. Furthermore, they should be prepared to propose, analyse and evaluate possible solutions to macroeconomic problems. They will be required to assess the impact and effectiveness of current government policies to deal with these problems, as well as considering alternative policies and approaches.

### 4.2.1 The measurement of macroeconomic performance

#### 4.2.1.1 The objectives of government economic policy

Content	Additional information
<ul style="list-style-type: none"> <li>The main objectives of government macroeconomic policy: economic growth, price stability, minimising unemployment and a stable balance of payments on current account.</li> <li>The possibility of conflict arising, at least in the short run, when attempting to achieve these objectives.</li> </ul>	<p>Students should be aware that governments may also have other objectives of macroeconomic policy, such as balancing the budget and achieving an equitable distribution of income.</p> <p>They should be aware that the importance attached to the different objectives changes over time.</p>

#### 4.2.1.2 Macroeconomic indicators

Content	Additional information
<ul style="list-style-type: none"> <li>Data which is commonly used to measure the performance of an economy, such as: real GDP, real GDP per capita, Consumer Prices and Retail Prices Indices (CPI/RPI), measures of unemployment, productivity and the balance of payments on current account.</li> </ul>	

### 4.2.1.3 Uses of index numbers

Content	Additional information
<ul style="list-style-type: none"><li>• How index numbers are calculated and interpreted, including the base year and the use of weights.</li><li>• How index numbers are used to measure changes in the price level and changes in other economic variables.</li></ul>	A detailed technical knowledge is <b>not</b> expected of indices such as the Retail Prices Index (RPI) and Consumer Prices Index (CPI), but students should have an awareness of their underlying features, for example, the concept of the 'average family' and a 'basket of goods and services'.

### 4.2.1.4 Uses of national income data

Content	Additional information
<ul style="list-style-type: none"><li>• The use and limitations of national income data to assess changes in living standards over time.</li><li>• The use and limitations of national income data to compare differences in living standards between countries.</li><li>• The importance of using purchasing power parity (PPP) exchange rates when making international comparisons of living standards.</li></ul>	

## 4.2.2 How the macroeconomy works: the circular flow of income, aggregate demand/aggregate supply analysis and related concepts

### 4.2.2.1 The circular flow of income

Content	Additional information
<ul style="list-style-type: none"><li>• What national income measures.</li><li>• The difference between nominal and real income.</li><li>• Real national income as an indicator of economic performance.</li><li>• The circular flow of income concept, the equation <math>\text{income} = \text{output} = \text{expenditure}</math>, and of the concepts of equilibrium and full employment income.</li><li>• The difference between injections and withdrawals into the circular flow of income.</li><li>• The effect of changes in injections and withdrawals on national income.</li></ul>	Students are <b>not</b> expected to have a detailed knowledge of the construction of national income accounts.

#### 4.2.2.2 Aggregate demand and aggregate supply analysis

Content	Additional information
<ul style="list-style-type: none"> <li>Changes in the price level are represented by movements along the aggregate demand (AD) and aggregate supply (AS) curves.</li> <li>The various factors that shift the AD curve and the short-run AS curve.</li> <li>The factors which affect long-run AS and distinguish them from those which affect short-run AS.</li> <li>Underlying economic growth is represented by a rightward shift in the long-run AS curve.</li> <li>How to use AD/AS diagrams to illustrate macroeconomic equilibrium.</li> <li>How both demand-side and supply-side shocks affect the macroeconomy</li> </ul>	<p>Students should be able to use AD and AS analysis to help them explain macroeconomic problems and issues. For example, they should be able to use AD and AS diagrams to illustrate changes in the price level, demand-deficient (cyclical) unemployment and economic growth.</p> <p>Students should also understand how global economic events can affect the domestic economy.</p>

#### 4.2.2.3 The determinants of aggregate demand

Content	Additional information
<ul style="list-style-type: none"> <li>What is meant by AD.</li> <li>The determinants of AD, ie the determinants of consumption, investment, government spending, exports and imports.</li> <li>The basic accelerator process.</li> <li>The determinants of savings.</li> <li>The difference between saving and investment.</li> </ul>	<p>Students will <b>not</b> be required to undertake calculations to illustrate the operation of the accelerator.</p> <p>Students should understand how changes in net exports affect aggregate demand and economic performance.</p>

#### 4.2.2.4 Aggregate demand and the level of economic activity

Content	Additional information
<ul style="list-style-type: none"> <li>The role of AD in influencing the level of economic activity.</li> <li>The multiplier process and an explanation of why an initial change in expenditure may lead to a larger impact on local or national income.</li> <li>The concept of the marginal propensity to consume and use the marginal propensity to consume to calculate the size of the multiplier.</li> <li>Why the size of the marginal propensity to consume determines the magnitude of the multiplier effect.</li> </ul>	<p>Students will only be required to calculate the multiplier from the marginal propensity to consume.</p> <p>Calculations from the marginal propensities to withdraw will not be expected.</p>

#### 4.2.2.5 Determinants of short-run aggregate supply

Content	Additional information
<ul style="list-style-type: none"><li>• The price level and production costs are the main determinants of the short-run AS.</li><li>• Changes in costs, such as: money wage rates, raw material prices, business taxation and productivity, will shift the short-run AS curve.</li></ul>	

#### 4.2.2.6 Determinants of long-run aggregate supply

Content	Additional information
<ul style="list-style-type: none"><li>• The fundamental determinants of long-run AS such as technology, productivity, attitudes, enterprise, factor mobility, and economic incentives.</li><li>• The position of the vertical long-run AS curve represents the normal capacity level of output of the economy.</li><li>• The importance of the institutional structure of the economy in determining aggregate supply, such as the role of the banking system in providing business investment funds, should also be understood.</li><li>• The Keynesian AS curve.</li></ul>	

## 4.2.3 Economic performance

### 4.2.3.1 Economic growth and the economic cycle

Content	Additional information
<ul style="list-style-type: none"> <li>• The difference between short-run and long-run growth.</li> <li>• The various demand-side and supply-side determinants of short-run growth of real national income and the long-run trend rate of economic growth.</li> <li>• The costs and benefits of economic growth.</li> <li>• The impact of growth on individuals, the economy and the environment.</li> <li>• The concept of the economic cycle and the use of a range of economic indicators, such as real GDP, the rate of inflation, unemployment and investment, to identify the various phases of the economic cycle.</li> <li>• The difference between positive and negative output gaps.</li> <li>• The causes of changes in the various phases of the economic cycle, including both global and domestic demand-side and supply-side shocks.</li> </ul>	<p>Students should be able to use a production possibility curve and AD/AS diagrams to illustrate the distinction between short-run and long-run economic growth.</p> <p>Students should understand that long-run economic growth occurs when the productive capacity of the economy is increasing and is a term used to refer to the trend rate of growth of real national output in an economy over time.</p> <p>Students should be able to discuss the sustainability of economic growth.</p> <p>Students should understand that a positive output gap occurs when real GDP is above the productive potential of the economy, and a negative output gap occurs when real GDP is below the economy's productive potential.</p> <p>Students should be able to discuss causes of cyclical instability such as: excessive growth in credit and levels of debt, asset price bubbles, destabilising speculation and animal spirits or herding.</p>

#### 4.2.3.2 Employment and unemployment

Content	Additional information
<ul style="list-style-type: none"><li>• The main UK measures of unemployment, ie the claimant count and the Labour Force Survey measure.</li><li>• The concepts of voluntary and involuntary unemployment.</li><li>• The terms seasonal, frictional, structural and cyclical unemployment.</li><li>• How employment and unemployment may be determined by both demand-side and supply-side factors.</li><li>• The concept of, and the factors which determine, real wage unemployment.</li><li>• The concept of, and the factors which determine, the natural rate of unemployment.</li><li>• The consequences of unemployment for individuals and for the performance of the economy.</li></ul>	<p>Students should appreciate that unemployment has a variety of causes and hence the appropriate policies to reduce unemployment depend on the cause.</p> <p>They should understand that a negative output gap is linked to cyclical unemployment and that supply-side causes of unemployment affect the position of the long-run aggregate supply curve.</p>

#### 4.2.3.3 Inflation and deflation

Content	Additional information
<ul style="list-style-type: none"><li>• The concepts of inflation, deflation and disinflation.</li><li>• Demand-pull and cost-push influences on the price level.</li><li>• Fisher's equation of exchange <math>MV = PQ</math> and the Quantity Theory of Money in relation to the monetarist model.</li><li>• The effects of expectations on changes in the price level</li><li>• The consequences of inflation for both individuals and the performance of the economy.</li><li>• The consequences of deflation for both individuals and the performance of the economy.</li><li>• How changes in world commodity prices affect domestic inflation.</li><li>• How changes in other economies can affect inflation in the UK.</li></ul>	<p>Students should understand that deflation exists when the price level is falling, whereas disinflation is when the rate of inflation is falling.</p> <p>Students should appreciate that deflationary policies are policies to reduce aggregate demand and do not necessarily result in deflation.</p> <p>Students can use <math>T</math> instead of <math>Q</math> in the Fisher equation but using <math>Q</math> means that <math>PQ</math> is nominal national income and overcomes the difficulties associated with the inclusion of intermediate transactions.</p>

#### 4.2.3.4 Possible conflicts between macroeconomic policy objectives

Content	Additional information
<ul style="list-style-type: none"> <li>How negative and positive output gaps relate to unemployment and inflationary pressures.</li> <li>Both the short-run Phillips curve and the long-run, L-shaped Phillips curve.</li> <li>The implications of the short-run Phillips curve and the long-run, L-shaped Phillips curve for economic policy.</li> <li>How economic policies may be used to try to reconcile possible policy conflicts both in the short run and the long run.</li> </ul>	<p>Students should be able to use macroeconomic models, including the AD/AS model, to analyse the causes of possible conflicts between policy objectives in the short run and long run. They should be able to discuss approaches to reconciling these conflicts and the monetarist/supply-side view that the major macroeconomic objectives are compatible in the long run.</p> <p>The L-shaped Phillips curve is also known as the vertical long-run Phillips curve.</p>

#### 4.2.4 Financial markets and monetary policy

##### 4.2.4.1 The structure of financial markets and financial assets

Content	Additional information
<ul style="list-style-type: none"> <li>The characteristics and functions of money.</li> <li>Definitions of the money supply and the distinction between narrow money and broad money.</li> <li>The difference between the money market, the capital market and the foreign exchange market.</li> <li>The role of financial markets in the wider economy.</li> <li>The difference between debt and equity.</li> <li>Why there is an inverse relationship between market interest rates and bond prices.</li> </ul>	<p>Students should know that ways in which firms raise finance include: issuing shares, issuing corporate bonds and borrowing from a bank.</p> <p>Students should know the terms coupon and maturity in relation to government bonds and be able to calculate the yield on a government bond.</p>

#### 4.2.4.2 Commercial banks and investment banks

Content	Additional information
<ul style="list-style-type: none"><li>• The difference between a commercial bank and an investment bank.</li><li>• The main functions of a commercial bank.</li><li>• The structure of a commercial bank's balance sheet.</li><li>• The objectives of a commercial bank, ie liquidity, profitability and security.</li><li>• Potential conflicts between these objectives.</li><li>• How banks create credit.</li></ul>	<p>Students should be aware of the differences between a commercial bank and an investment bank but they do <b>not</b> need a detailed knowledge of the activities and functions of an investment bank. They should also be aware that many banks are engaged in both investment banking and commercial banking activities and that this may increase systemic risk.</p> <p>Students should be aware that there are other institutions that operate in financial markets but they do <b>not</b> need to know about their activities or their functions.</p> <p>Students will <b>not</b> be required to calculate the credit multiplier.</p>



#### 4.2.4.3 Central banks and monetary policy

Content	Additional information
<ul style="list-style-type: none"> <li>The main functions of a central bank.</li> <li>That monetary policy involves the central bank taking action to influence interest rates, the supply of money and credit and the exchange rate.</li> <li>The current objectives of monetary policy set by the government.</li> <li>The role of the Monetary Policy Committee of the Bank of England (MPC) and how it uses changes in bank rate to try to achieve the objectives for monetary policy, including the government's target rate of inflation.</li> <li>The factors considered by the MPC when setting the bank rate.</li> <li>How changes in the exchange rate affect aggregate demand and the various macroeconomic policy objectives.</li> <li>The monetary policy transmission mechanism, including the relationship between changes in interest rates and the exchange rate.</li> <li>How the Bank of England can influence the growth of the money supply.</li> </ul>	<p>Students should understand current and recent instruments of monetary policy such as: quantitative easing, Funding for Lending and forward guidance.</p> <p>Students should understand how the MPC of the Bank of England uses changes in bank rate to try to achieve the objectives for monetary policy, including the government's target rate of inflation.</p>

#### 4.2.4.4 The regulation of the financial system

Content	Additional information
<ul style="list-style-type: none"> <li>Regulation of the financial system in the UK, eg the role of the Bank of England, the Prudential Regulation Authority (PRA), the Financial Policy Committee (FPC) and the Financial Conduct Authority (FCA).</li> <li>Why a bank might fail, including the risks involved in lending long term and borrowing short term.</li> <li>Liquidity ratios and capital ratios and how they affect the stability of a financial institution.</li> <li>Moral hazard.</li> <li>Systemic risk and the impact of problems that arise in financial markets upon the real economy.</li> </ul>	<p>An in-depth knowledge of the PRA, FPC and the FCA is <b>not</b> expected but students should appreciate their role in trying to maintain the stability of the financial system.</p> <p>Students will <b>not</b> be required to calculate liquidity or capital ratios.</p>

## 4.2.5 Fiscal policy and supply-side policies

### 4.2.5.1 Fiscal policy

Content	Additional information
<ul style="list-style-type: none"><li>• Fiscal policy involves the manipulation of government spending, taxation and the budget balance.</li><li>• Fiscal policy can have both macroeconomic and microeconomic functions.</li><li>• How fiscal policy can be used to influence aggregate demand.</li><li>• How fiscal policy can be used to influence aggregate supply.</li><li>• How government spending and taxation can affect the pattern of economic activity.</li><li>• The types of and reasons for public expenditure.</li><li>• Why governments levy taxes.</li><li>• The difference between direct and indirect taxes.</li><li>• The difference between progressive, proportional and regressive taxes.</li><li>• The principles of taxation, such as that taxes should be equitable.</li><li>• The role and relative merits of different UK taxes.</li><li>• The relationship between the budget balance and the national debt.</li><li>• Cyclical and structural budget deficits and surpluses.</li><li>• The consequences of budget deficits and surpluses for macroeconomic performance.</li><li>• The significance of the size of the national debt.</li><li>• The role of the Office for Budget Responsibility.</li></ul>	<p>Students should be able to assess the economic significance of changes in the level and distribution of both public expenditure and taxation.</p> <p>They should be able to discuss the issue of the budget balance and be able to evaluate the possible economic consequences of a government running a budget deficit or budget surplus.</p> <p>They should be able to assess the impact of measures used to rebalance the budget.</p>

### 4.2.5.2 Supply-side policies

Content	Additional information
<ul style="list-style-type: none"> <li>• The difference between supply-side policies and supply-side improvements in the economy.</li> <li>• How supply-side policies can help to achieve supply-side improvements in the economy.</li> <li>• How supply-side policies, such as tax changes designed to change personal incentives, may increase the potential output of the economy and improve the underlying trend rate of economic growth.</li> <li>• How supply-side policies can affect unemployment, the rate of change of prices and UK external performance, as reflected in the balance of payments on current account.</li> <li>• The role of supply-side policies in reducing the natural rate of unemployment.</li> <li>• Free market supply-side policies include measures such as: tax cuts, privatisation, deregulation and some labour market reforms.</li> <li>• Interventionist supply-side policies include measures such as: government spending on education and training, industrial policy, subsidising spending on research and development.</li> <li>• Supply-side policies can have microeconomic as well as macroeconomic effects.</li> </ul>	<p>Students should recognise that supply-side changes in the economy often originate in the private sector, independently of government, eg through productivity improvements, innovation and investment.</p> <p>Students should recognise that supply-side policies can involve government intervention to deal with market failures such as short-termism, as well as policies to improve economic incentives and the operation of markets.</p>

## 4.2.6 The international economy

### 4.2.6.1 Globalisation

Content	Additional information
<ul style="list-style-type: none"> <li>• The causes of globalisation.</li> <li>• The main characteristics of globalisation.</li> <li>• The consequences of globalisation for less-developed and for more-developed countries.</li> <li>• The role of multinational corporations in globalisation.</li> </ul>	

#### 4.2.6.2 Trade

Content	Additional information
<ul style="list-style-type: none"><li>• The model of comparative advantage.</li><li>• The distinction between comparative and absolute advantage.</li><li>• The model shows that specialisation and trade can increase total output.</li><li>• Other economic benefits of trade, such as the ability to exploit economies of scale and increased competition.</li><li>• The costs of international trade.</li><li>• The reasons for changes in the pattern of trade between the UK and the rest of the world.</li><li>• The nature of protectionist policies, such as: tariffs, quotas and export subsidies.</li><li>• The causes and consequences of countries adopting protectionist policies.</li><li>• The main features of a customs union.</li><li>• The main characteristics of the Single European Market (SEM).</li><li>• The role of the World Trade Organisation (WTO).</li></ul> <p><b>The following content is out of date and should not be taught. It will be removed from the specification in September 2022:</b></p> <ul style="list-style-type: none"><li>• The consequences for the UK of its membership of the European Union (EU).</li></ul>	<p>Students should be able to use a simple numerical example to illustrate the principle of comparative advantage and the associated benefits of trade.</p> <p>Students should be able to use a diagram to illustrate the effects of imposing a tariff on imports.</p> <p><b>The following content is out of date and should not be taught. It will be removed from the specification in September 2022:</b></p> <p>Students should be able to discuss the arguments for and against the UK's membership of the EU.</p>

### 4.2.6.3 The balance of payments

Content	Additional information
<ul style="list-style-type: none"> <li>• The difference between the current, capital and financial accounts on the balance of payments.</li> <li>• The current account comprises trade in goods, trade in services, primary income and secondary income.</li> <li>• The meaning of a deficit and a surplus on the current account.</li> <li>• The factors that influence a country's current account balance such as productivity, inflation and the exchange rate.</li> <li>• The consequences of investment flows between countries.</li> <li>• The policies that might be used to correct a balance of payments deficit or surplus.</li> <li>• Expenditure-switching and expenditure-reducing policies.</li> <li>• The effect policies used to correct a deficit or surplus may have upon other macroeconomic policy objectives.</li> <li>• The significance of deficits and surpluses for an individual economy.</li> <li>• The implications for the global economy of a major economy or economies with imbalances deciding to take corrective action.</li> </ul>	<p>Students should have a detailed knowledge of the structure of the current account of the balance of payments but only need a general appreciation of the other sections of the balance of payments account.</p> <p>Students should appreciate the difference between foreign direct investment (FDI) and portfolio investment.</p>

### 4.2.6.4 Exchange rate systems

Content	Additional information
<ul style="list-style-type: none"> <li>• How exchange rates are determined in freely floating exchange rate systems.</li> <li>• How governments can intervene to influence the exchange rate.</li> <li>• The advantages and disadvantages of fixed and floating exchange rate systems.</li> <li>• Advantages and disadvantages for a country of joining a currency union, eg the eurozone.</li> </ul>	

#### 4.2.6.5 Economic growth and development

Content	Additional information
<ul style="list-style-type: none"><li>• The difference between growth and development.</li><li>• The main characteristics of less-developed economies.</li><li>• The main indicators of development, including the Human Development Index (HDI).</li><li>• Factors that affect growth and development, such as: investment, education and training.</li><li>• Barriers to growth and development, such as: corruption, institutional factors, poor infrastructure, inadequate human capital, lack of property rights.</li><li>• Policies that might be adopted to promote economic growth and development.</li><li>• The role of aid and trade in promoting growth and development.</li></ul>	<p>Students should appreciate the links between this and other parts of the specification, such as: globalisation, trade, the determinants of economic growth and inequality.</p> <p>Students should be able to compare market-based strategies and interventionist strategies for promoting growth and development.</p>

# 5 Scheme of assessment

---

Find past papers and mark schemes, and specimen papers for new courses, on our website at [aqa.org.uk/pastpapers](http://aqa.org.uk/pastpapers)

The AS specification is designed to be taken over one or two years with all assessments taken at the end of the course. The A-level specification is designed to be taken over two years with all assessments taken at the end of the course.

Assessments and certification for the AS specification are available for the first time in May/June 2016 and then every May/June for the life of the specification.

Assessments and certification for the A-level specification are available for the first time in May/June 2017 and then every May/June for the life of the specification.

These are linear qualifications. In order to achieve the award, students must complete all exams in May/June in a single year. All assessments must be taken in the same series.

All materials are available in English only.

## AS

Our assessment in AS Economics includes questions that allow students to demonstrate their ability to:

- draw together their knowledge, skills and understanding from across the full course of study
- provide extended responses.

For example the final question in Section B of both Papers 1 and 2 are extended response questions which require a student to draw together different areas of the specification. An 'extended response' is evidence generated by a student which is of sufficient length to allow that student to demonstrate the ability to construct and develop a sustained line of reasoning which is coherent, relevant, substantiated and logically structured.

## A-level

Our assessment in A-level Economics includes questions that allow students to demonstrate their ability to:

- draw together their knowledge, skills and understanding from across the full course of study
- provide extended responses.

For example questions in Section B of Paper 3 are extended response questions which require a student to draw together different areas of the specification. An 'extended response' is evidence generated by a student which is of sufficient length to allow that student to demonstrate the ability to construct and develop a sustained line of reasoning which is coherent, relevant, substantiated and logically structured.

## 5.1 Aims

Courses based on these specifications must encourage students to:

- develop an interest in and enthusiasm for the subject
- appreciate the contribution of economics to the understanding of the wider economic and social environment
- develop an understanding of a range of concepts and an ability to use those concepts in a variety of different contexts
- use an enquiring, critical and thoughtful approach to the study of economics and develop an ability to think as an economist
- understand that economic behaviour can be studied from a range of perspectives
- develop analytical and quantitative skills, together with qualities and attitudes which will equip them for the challenges, opportunities and responsibilities of adult and working life.

## 5.2 Assessment objectives

Assessment objectives (AOs) are set by Ofqual and are the same across all AS and A-level Economics specifications and all exam boards.

The exams will measure how students have achieved the following assessment objectives.

- AO1: Demonstrate knowledge of terms/concepts and theories/models to show an understanding of the behaviour of economic agents and how they are affected by and respond to economic issues
- AO2: Apply knowledge and understanding to various economic contexts to show how economic agents are affected by and respond to economic issues
- AO3: Analyse issues within economics, showing an understanding of their impact on economic agents
- AO4: Evaluate economic arguments and use qualitative and quantitative evidence to support informed judgements relating to economic issues

### Weighting of assessment objectives for AS Economics

Assessment objectives (AOs)	Component weightings (approx %)		Overall weighting (approx %)
	Paper 1	Paper 2	
AO1	14–16	14–16	29–31
AO2	15–17	15–17	31–33
AO3	10–12	10–12	21–23
AO4	7–9	7–9	15–17
Overall weighting of components	50	50	100



## Weighting of assessment objectives for A-level Economics

Assessment objectives (AOs)	Component weightings (approx %)			Overall weighting (approx %)
	Paper 1	Paper 2	Paper 3	
AO1	5–8	5–8	7–10	20–23
AO2	7–10	7–10	9–12	26–29
AO3	9–11	9–11	6–9	26–29
AO4	7–10	7–10	5–8	22–25
Overall weighting of components	33.3	33.3	33.3	100

## 5.3 Assessment weightings

The marks awarded on the papers will be scaled to meet the weighting of the components. Students' final marks will be calculated by adding together the scaled marks for each component. Grade boundaries will be set using this total scaled mark. The scaling and total scaled marks are shown in the table below.

### AS

Component	Maximum raw mark	Scaling factor	Maximum scaled mark
Paper 1: The operation of markets and market failure	70	x1	70
Paper 2: The national economy in a global context	70	x1	70
		Total scaled mark:	140

### A-level

Component	Maximum raw mark	Scaling factor	Maximum scaled mark
Paper 1: Markets and market failure	80	x1	80
Paper 2: National and international economy	80	x1	80
Paper 3: Economic principles and issues	80	x1	80
		Total scaled mark:	240



# 6 General administration

You can find information about all aspects of administration, as well as all the forms you need, at [aqa.org.uk/examsadmin](http://aqa.org.uk/examsadmin)

## 6.1 Entries and codes

You only need to make one entry for each qualification – this will cover all the question papers and certification.

Every specification is given a national discount (classification) code by the Department for Education (DfE), which indicates its subject area.

If a student takes two specifications with the same discount code, Further and Higher Education providers are likely to take the view that they have only achieved one of the two qualifications. Please check this before your students start their course.

Qualification title	AQA entry code	DfE discount code
AQA Advanced Subsidiary GCE in Economics	7135	4410 (post-16), EB (KS4)
AQA Advanced Level GCE in Economics	7136	4410 (post-16), EB (KS4)

These specifications comply with Ofqual's:

- *General conditions of recognition* that apply to all regulated qualifications
- GCE qualification level conditions that apply to all GCEs
- GCE subject level conditions that apply to all GCEs in this subject
- all relevant regulatory documents.

Ofqual has accredited these specifications. The qualification accreditation number (QAN) for the AS is 601/4372/1. The QAN for the A-level is 601/4371/X.

## 6.2 Overlaps with other qualifications

There is overlapping content in the AS and A-level Economics specifications. This helps you teach the AS and A-level together.

## 6.3 Awarding grades and reporting results

The AS qualification will be graded on a five-point scale: A, B, C, D and E.

---

The A-level qualification will be graded on a six-point scale: A\*, A, B, C, D and E.

Students who fail to reach the minimum standard for grade E will be recorded as U (unclassified) and will not receive a qualification certificate.

## 6.4 Re-sits and shelf life

Students can re-sit the qualifications as many times as they wish, within the shelf life of the qualifications.

## 6.5 Previous learning and prerequisites

There are no previous learning requirements. Any requirements for entry to a course based on these specifications are at the discretion of schools and colleges.

## 6.6 Access to assessment: diversity and inclusion

General qualifications are designed to prepare students for a wide range of occupations and further study. Therefore our qualifications must assess a wide range of competences.

The subject criteria have been assessed to see if any of the skills or knowledge required present any possible difficulty to any students, whatever their ethnic background, religion, sex, age, disability or sexuality. If any difficulties were encountered, the criteria were reviewed again to make sure that tests of specific competences were only included if they were important to the subject.

As members of the Joint Council for Qualifications (JCQ) we participate in the production of the JCQ document *Access Arrangements and Reasonable Adjustments: General and Vocational qualifications*. We follow these guidelines when assessing the needs of individual students who may require an access arrangement or reasonable adjustment. This document is published on the JCQ website at [jcq.org.uk](http://jcq.org.uk)

### Students with disabilities and special needs

We can make arrangements for disabled students and students with special needs to help them access the assessments, as long as the competences being tested are not changed. Access arrangements must be agreed **before** the assessment. For example, a Braille paper would be a reasonable adjustment for a Braille reader but not for a student who does not read Braille.

We are required by the Equality Act 2010 to make reasonable adjustments to remove or lessen any disadvantage that affects a disabled student.

If you have students who need access arrangements or reasonable adjustments, you can apply using the Access arrangements online service at [aqa.org.uk/eaqa](http://aqa.org.uk/eaqa)

### Special consideration

We can give special consideration to students who have been disadvantaged at the time of the assessment through no fault of their own – for example a temporary illness, injury or serious problem such as the death of a relative. We can only do this **after** the assessment.

Your exams officer should apply online for special consideration at [aqa.org.uk/eaqa](http://aqa.org.uk/eaqa)

For more information and advice about access arrangements, reasonable adjustments and special consideration please see [aqa.org.uk/access](http://aqa.org.uk/access) or email [accessarrangementsqueries@aqa.org.uk](mailto:accessarrangementsqueries@aqa.org.uk)

## 6.7 Working with AQA for the first time

If your school or college has not previously offered any AQA specification, you need to register as an AQA centre to offer our specifications to your students. Find out how at [aqa.org.uk/becomeacentre](https://www.aqa.org.uk/becomeacentre)

If your school or college is new to these specifications, please let us know by completing an Intention to enter form. The easiest way to do this is via e-AQA at [aqa.org.uk/eaqa](https://www.aqa.org.uk/eaqa)

## 6.8 Private candidates

A private candidate is someone who enters for exams through an AQA-approved school or college but is not enrolled as a student there.

If you are a private candidate you may be self-taught, home-schooled or have private tuition, either with a tutor or through a distance learning organisation. You must be based in the UK.

If you have any queries as a private candidate, you can:

- speak to the exams officer at the school or college where you intend to take your exams
- visit our website at [aqa.org.uk/examsadmin](https://www.aqa.org.uk/examsadmin)
- email: [privatecandidates@aqa.org.uk](mailto:privatecandidates@aqa.org.uk)



# 7 Annex: Quantitative skills in Economics

---

## 7.1 AS

In order to develop their skills, knowledge and understanding in economics, students need to have acquired competence in the quantitative skills that are relevant to the subject content and which are applied in the context of an economics AS, including:

- calculate, use and understand ratios and fractions
- calculate, use and understand percentages and percentage changes
- understand and use the terms mean, median
- construct and interpret a range of standard graphical forms
- calculate and interpret index numbers
- calculate cost, revenue and profit (average, totals)
- make calculations to convert from money to real terms
- make calculations of elasticity and interpret the result
- interpret, apply and analyse information in written, graphical and numerical forms

The assessment of quantitative skills will include at least Level 2 mathematical skills as a minimum of 15% of the overall AS marks. These skills may be assessed across the assessment objectives.

## 7.2 A-level

In order to develop their skills, knowledge and understanding in economics, students need to have acquired competence in the quantitative skills that are relevant to the subject content and which are applied in the context of an economics A-level, including:

- calculate, use and understand ratios and fractions
- calculate, use and understand percentages and percentage changes
- understand and use the terms mean, median and relevant quantiles
- construct and interpret a range of standard graphical forms
- calculate and interpret index numbers
- calculate cost, revenue and profit (marginal, average, totals)
- make calculations to convert from money to real terms
- make calculations of elasticity and interpret the result
- interpret, apply and analyse information in written, graphical and numerical forms.

The assessment of quantitative skills will include at least Level 2 mathematical skills as a minimum of 20% of the overall A-level marks. These skills may be assessed across the assessment objectives.

## Get help and support

Visit our website for information, guidance, support and resources at

You can talk directly to the Economics subject team:

E: [economics@aqa.org.uk](mailto:economics@aqa.org.uk)

T: 01483 477 863