Scheme of Work

Cambridge International AS & A Level

Economics

9708

For examination from 2016

# Contents

[Introduction 3](#_Toc443388515)

[Basic economic ideas and resource allocation (AS Level) 8](#_Toc443388516)

[The price system and the micro economy (AS Level) 23](#_Toc443388517)

[Government microeconomic intervention (AS Level) 43](#_Toc443388518)

[The macro economy (AS Level) 55](#_Toc443388519)

[Government macro intervention (AS Level) 78](#_Toc443388520)

[Basic economic ideas and resource allocation (A Level) 84](#_Toc443388521)

[The price system and the micro economy (A Level) 96](#_Toc443388522)

[Government microeconomic intervention (A Level) 117](#_Toc443388523)

[The macro economy (A Level) 132](#_Toc443388524)

[Government macro intervention (A Level) 154](#_Toc443388525)

# [Introduction](#_Contents)

This scheme of work for AS and A Level Economics (9708) has been developed for teachers to help provide ideas about how to construct and deliver this course. It does this by breaking down the syllabus into an accessible number of AS and A Level topics, with suggested teaching activities, resources and teaching notes provided for each. This document also provides a suggested teaching order for use or adaptation, and an indication of the amount of teaching time you might want to allow for each topic. The AS topics come first to help ensure that it will support Centres teaching the AS award or the full A Level via a modular or linear routes effectively.

## Recommended prior knowledge

Prior study of Cambridge IGCSE or O Level Economics does give learners a good and thorough preparation for this course. It is still possible to take Cambridge AS and A Level Economics (9708) without any prior study of Economics, however. In this case, learners will need to be able to:

* think logically and critically
* express their thinking accurately
* handle data with confidence
* be aware of current events
* be familiar with the use of IT
* be confident in using practical mathematics.

## Outline

The scheme of work is divided into the following topics, and the rationale for this is to ensure that teachers have clear and visible coverage of the whole syllabus.The activities provided for each topic are only suggestions and there are many other useful activities to be found in the materials referred to in the learning resource list.

The topics within this scheme of work are:

| **Topic areas** | **Level** | **Suggested AS Level time allocation (%)** | **Suggested A Level time allocation (%)** | **Suggested total time allocation %** |
| --- | --- | --- | --- | --- |
| **Basic economic ideas and resource allocation** | **AS Level** | **20%** | **–** | **10%** |
| **The price system and the micro economy** | **AS Level** | **20%** | **–** | **10%** |
| **Government micro economic intervention** | **AS Level** | **10%** | **–** | **5%** |
| **The macro economy** | **AS Level** | **40%** | **–** | **20%** |
| **Government macro intervention** | **AS Level** | **10%** | **–** | **5%** |
| **Basic economic ideas and resource allocation** | **A Level** | **–** | **10%** | **5%** |
| **The price system and the micro economy** | **A Level** | **–** | **30%** | **15%** |
| **Government micro economic intervention** | **A Level** | **–** | **20%** | **10%** |
| **The macro economy** | **A Level** | **–** | **30%** | **15%** |
| **Government macro intervention** | **A Level** | **–** | **10%** | **5%** |

## Suggested teaching order

Teachers will have different views about the correct order to teach specific topics for this syllabus, but this scheme of work is set out in this way for a particular reason. There is a logic in starting with basic economic ideas, progressing through microeconomics in terms of both the price system and government intervention, and then going on to focus on macroeconomics issues and possible reasons for government intervention. Of course, there are other possible alternative teaching approaches. For example, some teachers might prefer to start with macro issues and then go on to study micro-economics. The teaching order would also depend on whether it was decided to teach AS and A Level in separate years or to teach them together. Decisions about the teaching order are also likely to depend on whether a centre has just one teacher of Economics or a number of teachers teaching the subject.

## Teaching approach

Research undertaken by Cambridge has shown that an active teaching approach enables learners to become more confident, assured and engaged in their studies, and providing a variety of teaching methods and learner-centred approaches is recognised as a key part of this. So, for every suggested teaching activity in this scheme of work, we have indicated possible approaches by denoting whole class **(W)**, group work **(G)**, pair **(P)** and individual activities **(I)**. Suggestions for homework **(H)** and formative assessment **(F)** are also provided where appropriate.

Opportunities for differentiation are indicated as **basic** and **challenging**; there is the potential for differentiation by resource, length, grouping, expected level of outcome, and degree of support by teacher, throughout the scheme of work. Length of time allocated to a task is another possible area for differentiation.

There are also a number of references to mentoring throughout this scheme of work. Mentoring is based on the idea that other learners are able to act as a ‘critical friend’. The process of mentoring means that learners can make the best use of other people in the class, supporting each other in active learning. The benefit of mentoring is that it can contribute positively to a culture of effective and supportive learning in a centre.

## Key concepts

Key concepts are an important new feature of this syllabus and have been specifically designed to help and enrich the process of teaching and learning. They are intended as a way of enabling teachers to link units and topics together into wider themes that encourage greater depth and breadth in subject understanding.

There are five key concepts in the A Level Economics syllabus:

* **Scarcity and choice**: the fundamental problem in Economics is that resources are scarce and wants are unlimited, so there is always a choice required between competing uses for the resources
* **The margin and change**: decision-making by individuals, firms and governments is based on choices at the margin – that is, once behaviour has been optimised, any change will be detrimental as long as conditions remain the same
* **Equilibrium and efficiency**: prices are set by markets, are always moving into and out of equilibrium, and can be both efficient and inefficient in different ways and over different time periods
* **Regulation and equity**: there is a trade-off between, on the one hand, freedom for firms and individuals in unregulated markets and, on the other hand, greater social equality and equity through the government regulation of individuals and markets
* **Progress and development**: Economics studies how societies can progress in measurable money terms and develop in a wider, more normative, sense.

This scheme of work suggests a wide range of potential opportunities to focus on these key concepts to help make teachers aware of which topics in the syllabus could help exemplify the key concepts. The accompanying guidance also provides suggestions on how the key concepts can be used to aid lesson planning.

It is envisaged that a focus on these key concepts will result in a number of benefits for learners, including the following:

* a greater depth and breadth of subject knowledge, such as in relation to economic efficiency and decision-making at the margin
* the bringing together of areas of related knowledge so that learners can gain a deeper understanding of different parts of the syllabus, leading to a better level of performance, and better quality answers, in examinations
* the opportunity to introduce and recap topics, such as in relation to scarcity and choice
* the opportunity to consolidate learning, such as in relation to regulation and equity
* the provision of an appropriate context for certain harder-to-teach elements of the syllabus, such as Pareto optimality
* a recognition of clear links to real-world research, such as assisting the economic development of countries by making the link between the types of economic system operating in a country and the country’s level of economic development
* the enhanced commitment and motivation of learners, enabling them to benefit positively from the Economics course
* a means of extending more able learners, such as in relation to examples of marginal decision-making
* a better understanding of contemporary economic developments in the news, such as in terms of the progress of economic communities
* better preparation for higher education interviews, whether in relation to an Economics course or to any other subject
* a good building block for university study, facilitating the transition to university or career; this would again apply not only to Economics, but to other subjects.

The key concepts are an important teaching and learning tool and, as such, will not be directly assessed or included in mark schemes, although clearly a good grasp of them could lead to better quality answers. Some examples of how they might be applied are included above, but it is important to stress that these are simply examples. They can be used to empower both teachers and learners, but they can be applied usefully in a range of contexts and not simply in the ones referred to above. Teachers and learners can apply and adapt them in a variety of contexts and the outcome will be a more lively and enriching experience for both.

## Teacher guidance notes

For each topic covered in this scheme of work, in addition to information on key concepts, the third column of the suggested teaching activities table contains guidance notes to help make you aware when there are particular content areas you might want to give particular attention to. For example, guidance is given on how to address harder-to-teach elements or on how learners can avoid common pitfalls.

## Teacher support

Teacher Support ([teachers.cie.org.uk](http://teachers.cie.org.uk)) is a secure online resource bank and community forum for Cambridge teachers, where you can download specimen and past question papers, mark schemes and other resources. We also encourage teachers to join the discussion forum specific to the syllabus, where topics and issues can be shared. We also offer online and face-to-face training – details of forthcoming training opportunities are posted online.

This scheme of work is available as PDF and an editable version in Microsoft Word format; both are available on Teacher Support at [teachers.cie.org.uk](http://teachers.cie.org.uk). If you are unable to use Microsoft Word you can download Open Office free of charge from [www.openoffice.org](http://www.openoffice.org/).

## Resources

This scheme of work provides ideas for useful resources to accompany each suggested activity in column 4 of the topic tables. In addition, an up-to-date resource list for this subject can be found at [www.cie.org.uk](http://www.cie.org.uk) and at [teachers.cie.org.uk](http://teachers.cie.org.uk).

**Endorsed textbooks:**

Textbooks which are endorsed by Cambridge cover the syllabus for which they were written and have been through a quality assurance process to ensure they meet our required standards. The endorsed textbooks for A Level Economics at the time of writing are:

Bamford C, Grant S *Cambridge International AS and A Level Economics* Cambridge University Press, 2010 ISBN: 9780521 126656

We continually add to our range of Cambridge endorsed textbooks. For an up-to-date list of what’s currently available, see [www.cie.org.uk](http://www.cie.org.uk) and [teachers.cie.org.uk](http://teachers.cie.org.uk).

**Other textbooks included in this scheme of work include:**

Anderton A *Economics* Causeway Press, 2006 ISBN: 9781902 796925

Cook T *Cambridge International AS and A Level Economics Revision Guide* Hodder Education, 2013 ISBN: 978144 191974

Gillespie A *AS & A Level Economics Through Diagrams Third Edition* Oxford University Press, 2009 ISBN: 9780199 180899

Howells, P, Bain, K *Financial Markets and Institutions* Prentice Hall 2004 ISBN 9780273 682837

Sloman J, Garratt D *Essentials of Economics* Pearson Education Limited, 2013 ISBN: 9780273 783794

Stanlake G, Grant S J *Stanlake’s Introductory Economics* Longman, 2000 ISBN: 9780582 405486

Threadgould A, Meachen A *Macroeconomics for AS level* Anforme2008 ISBN: 9781905 504206

While these titles do not necessarily cover the whole Cambridge syllabus or present topics in the same order, they have been recognised as providing useful support for the areas indicated in this scheme of work as well as providing a valuable additional source of materials and ideas for teachers.

**Websites:**

This scheme of work includes website links providing direct access to internet resources. Cambridge International Examinations is not responsible for the accuracy or content of information contained in these sites. The inclusion of a link to an external website should not be understood to be an endorsement of that website or the site's owners (or their products/services).

The particular website pages in the learning resource column of this scheme of work were selected when the scheme of work was produced. Other aspects of the sites were not checked and only the particular resources are recommended.

**General Economics websites:**

[www.bized.co.uk](http://www.bized.co.uk)

[www.businesseconomics.com](http://www.businesseconomics.com)

[www.tutor2u.net](http://www.tutor2u.net)

[www.s-cool.co.uk/a-level/economics](http://www.s-cool.co.uk/a-level/economics)

[www.sparknotes.com/economics](http://www.sparknotes.com/economics)

[www.pinkmonkey.com](http://www.pinkmonkey.com)

[www.jusbiz.org](http://www.jusbiz.org)

[www.oheschools.org](http://www.oheschools.org)

**National and International Economic Organisations:**

[www.statistics.gov.uk](http://www.statistics.gov.uk)

[www.bankofengland.co.uk](http://www.bankofengland.co.uk)

[www.cia.gov/library/publications/the-world-factbook/](http://www.cia.gov/library/publications/the-world-factbook/)

[www.imf.org](http://www.imf.org)

[www.oecd.org](http://www.oecd.org)

[www.un.org](http://www.un.org)

[www.worldbank.org](http://www.worldbank.org)

[www.wto.org](http://www.wto.org)

**Newspapers and magazines:**

[www.economicsonline.co.uk](http://www.economicsonline.co.uk)

[www.economist.com](http://www.economist.com)

[www.ft.com/home/uk](http://www.ft.com/home/uk)

[www.guardian.co.uk](http://www.guardian.co.uk)

[www.independent.co.uk](http://www.independent.co.uk)

[www.telegraph.co.uk](http://www.telegraph.co.uk)

[www.timesonline.co.uk](http://www.timesonline.co.uk)

[www.bbc.co.uk](http://www.bbc.co.uk)

[www.cnn.com](http://www.cnn.com)

[www.thebigproject.co.uk](http://www.thebigproject.co.uk)

# [Basic economic ideas and resource allocation (AS Level)](#_Contents)

## Recommended prior knowledge

No specific prior knowledge is required for this unit, although basic literacy skills combined with an ability to handle data and produce graphs and diagrams would be helpful. Learners who have previously studied IGCSE or O level Economics may be able to progress more quickly through certain topics in this section.

## Context

At the outset of the course, it is essential that learners develop their understanding of the basic economic problem of scarcity and choice, and why this arises. This section also introduces the key fundamental economic ideas and principles which will underpin learning throughout the rest of the course. In particular, basic economic concepts and their links to the key concept *Scarcity and choice*are examined in detail.

## Outline

The AS Level topics covered in this section are:

* scarcity, choice and opportunity cost
* positive and normative statements
* factors of production
* resource allocation in different economic systems and issues of transition
* production possibility curves
* money
* classification of goods and services.

## Suggested teaching time

It is recommended that this section should take approximately 20% of the AS course (10% of the whole AS and A Level programme).

| **Learning objectives** | **Suggested teaching activities** | **Teacher guidance notes and key concepts** | **Learning resources** |
| --- | --- | --- | --- |
| **Scarcity, choice and opportunity cost** | | | |
| The fundamental economic problem  The meaning of scarcity and the inevitability of choices at all levels (individuals, firms, governments) | Introduce the idea of economic ‘needs’ and ‘wants’ (and the difference to general non-economic needs and wants.) Ask learners individually to list their economic ‘needs’ and then their economic ‘wants’. **(I)**  As a class, share and discuss learners’ ideas. Is there a limit to their economic needs? Is there a limit to their economic wants?  Can all their wants be fulfilled? If not, why not? **(W)(F)**  Use the class discussion to introduce the remaining fundamental key terms in economics:   * Factors of production (resources) * Scarcity * Choice.   Ask groups to produce a ‘mind map’ which illustrates the connections between the key terms explained and what we mean by the term ‘economics’. More confident learners can produce their map on the whiteboard for the rest of the class to discuss. **(G) (F) (Challenging)**.  Explain that it is the factors of production which are scarce and it is this which forms the basis of the economic problem.  Divide learners into groups representing one of: individuals, firms, governments. In groups think of and note down:  the scarcities you have (e.g. individuals - lack of money);  the economic choices you have to make. **(G) (F)**  As a class, share and compare the answers from the different groups. **(W)(F)** | It is important to stress at this point that economists assume that wants are unlimited. This is a key assumption.  At this point it is sufficient to list the factors of production and point out that a more detailed explanation will follow.  **KEY CONCEPT 1: SCARCITY AND CHOICE**  This is a good time to introduce the idea of **key concepts** and explain how they will run throughout the study of AS/A Economics.  Then link this concept to the preceding teaching. It is important to stress that the idea of scarcity is fundamental, and how to use scarce resources requires choices to be made. If scarcity did not exist there would be no need for the subject of economics. | Bamford, ch 1 Basic economic ideas  Anderton, units 1-3, p.2-17  Gillespie, p.3-5  [www.tutor2u.net/economics/revision-notes/as-markets-scarcity-and-choice.html](http://www.tutor2u.net/economics/revision-notes/as-markets-scarcity-and-choice.html)  [www.bized.co.uk/educators/16-19/economics/micro/presentation/econintro\_map.htm](http://www.bized.co.uk/educators/16-19/economics/micro/presentation/econintro_map.htm) |
| The basic questions of what will be produced, how and for whom | Using class question and answer, discuss how scarcity requires key economic decisions: what to produce, how to produce, for whom to produce the final product. Use an example firm (e.g. producing biscuits):   * Should they produce all types of biscuit, or certain types? * Should they make them by hand / in a factory? * Should they make them for people living in cities/villages/for the rich/for people on lower incomes?   In each case, discuss the resources required, and how the scarcity of different resources affects the decisions. **(W)** | The question of ‘to whom’ includes distribution of the product. |  |
| The meaning of the term ‘ceteris paribus’ | Based on the previous example, ask learners what factors might influence the number of biscuits sold. Can all these factors be examined at the same time? **(W)**  Use a graph to demonstrate the meaning of the term ‘ceteris paribus’ (‘other things being equal’) i.e. assume that all other variables which might change remain constant: and how it allows economists to examine the effect of the change in **one** variable on **one** other variable. |  | [www.tutor2u.net/economics/revision-notes/as-markets-demand.html](http://www.tutor2u.net/economics/revision-notes/as-markets-demand.html) |
| The margin and decision making at the margin | Learners could work in pairs or small groups and discuss at least one example of decision making at the margin by an individual, a firm and a government. This activity would require prior input by the teacher. | Teachers need to stress that many decisions are taken at the margin. This would apply to decisions taken by individuals, firms and governments. The concept of the margin could be discussed at this point in the course, but teachers will come back to it at many other times, such as with marginal cost, marginal efficiency of capital, marginal physical product and marginal revenue.  **KEY CONCEPT 2: THE MARGIN AND CHANGE**  The importance of the fact that many decisions in Economics are based on choices at the margin is reflected in its selection as one of the Key Concepts in the syllabus. | Cook, Ch 1, p13  Cook et al |
| Short run, long run, very long run | Learners could work in pairs or small groups and select a particular form of production. They could then discuss what would be fixed in the short run compared to the long run. As a development of this, they could consider how the quality of the four factors of production could be improved in the very long run. | The distinction between these three distinct time periods is another topic that will be revisited again in the course, but it would be good if learners had an understanding of the differences between the three time periods at an early stage. For example, they could consider how education and training over the very long run could improve the quality of a country’s labour force. | Cook et al  Anderton, Ch 46, p 311-313  Stanlake, C 10, p 96-98  Sloman, Ch 4, p 71-82  Gillespie, p 37-38  [www.tutor2u.net/economics/revision-notes/a2-micro-supply-shortrun-costs.html](http://www.tutor2u.net/economics/revision-notes/a2-micro-supply-shortrun-costs.html)  [www.tutor2u.net/economics/revision-notes/a2-micro-technological-change.html](http://www.tutor2u.net/economics/revision-notes/a2-micro-technological-change.html) |

| **Learning objectives** | **Suggested teaching activities** | **Teacher guidance notes and key concepts** | **Learning resources** |
| --- | --- | --- | --- |
| **Positive and normative statements** | | | |
| The distinction between facts and value judgements | Introduce and define the term ‘positive statement’ as a factual, objective statements (i.e facts that are right or wrong or that can be proven) and ‘normative statement’ as a value judgement (based on subjective points of view which can be argued).  Give learners working in pairs a number of statements, some positive, and some normative. Ask learners to categorise them into the two types. **(P)**  Go through the answers as a class, asking learners to justify their conclusions verbally, and discussing any that learners have difficulty with (e.g. using ‘traffic lights’). **(W)**  Ask learners, individually or in pairs, to construct a positive and a normative statement themselves. **(I) (P)** | Ideally, the examples should relate to the economy of the learner’s country.  ‘Traffic lights’: give each learner a set of cards (red, amber, green) for them to show how well they have understood points, where green = understands, amber = doesn’t understand fully, red = doesn’t understand.  A more able learner can be paired with a less able learner to allow mentoring. | Bamford, ch 1 Basic economic ideas  [www.tutor2u.net/economics/revision-notes/as-markets-positive-normative.html](http://www.tutor2u.net/economics/revision-notes/as-markets-positive-normative.html) |

| **Learning objectives** | **Suggested teaching activities** | **Teacher guidance notes and key concepts** | **Learning resources** |
| --- | --- | --- | --- |
| **Factors of production** | | | |
| The rewards to the factors of production: land, labour, capital and enterprise | Explain to learners the meaning of and difference between the four factors of production (categories of resource): land, labour, capital and enterprise.  Ask learners to form small groups and choose a type of product (e.g. clothing, food, furniture, electrical equipment.). Each group has to identify four examples of factors of production (resources) that could be used to produce the product and how these factors might be used to fulfil the needs and wants of the group. **(G)**    Each group then presents its findings to the rest of the class, and allows the rest of the class to ask questions and evaluate the group’s choices. Award marks for:   * clarity of presentation; * correctly identifying four relevant factors of production; * being able to distinguish between using the factors to fulfil needs and to fulfil wants; * the ability to provide clear, effective responses to class questions. **(W)**   Give learners a worksheet listing a range of different resources that might be used in a modern economy and ask them to classify each resource according to type. Learners swap worksheets and assess each other’s work. **(I)(F)**  Discuss as a class any items that learners found difficult. **(W)** | Take care when explaining the terms. Economic ‘capital’, refers to assets, such as machines, used as a means of producing consumer goods/services, rather than valuable themselves. (This is not financial capital which refers to financial assets held in banks.)  ‘Land’ includes everything that we grow on the land, or use from the sea as well as all raw materials, for example wood, and iron.  Note: Enterprise is sometimes described as a ‘special type of labour’.  To achieve successful group outcomes, learners should:   * Treat each other with respect * Listen and value other opinions, even if they differ from your own * Share your ideas and participate alongside others * Give feedback which is constructive and supportive | Bamford, ch 1 Basic economic ideas  Anderton, units 1-3, p.2-17  [www.tutor2u.net/economics/content/topics/introduction/factor.htm](http://www.tutor2u.net/economics/content/topics/introduction/factor.htm)  [www.bized.co.uk/learn/economics/notes/problem.htm](http://www.bized.co.uk/learn/economics/notes/problem.htm) |
| The rewards to the factors of production: land, labour, capital and enterprise | Ask learners to work in pairs to construct a mind map linking each factor of production to a specific type of income. **(P)**  The teacher brings these ideas together to construct a diagram on the board. **(W)**  Ask learners to give practical examples of different sources of an individual’s income. **(P)**  Give learners four types of income. Ask learners working independently to match each type of income with each factor of production and explain their choice in writing. **(I) (F)** |  | Bamford, ch 1 Basic economic ideas  Anderton, units 1-3, p.2-17  [www.tutor2u.net/economics/content/topics/introduction/factor.htm](http://www.tutor2u.net/economics/content/topics/introduction/factor.htm)  [www.bized.co.uk/learn/economics/notes/problem.htm](http://www.bized.co.uk/learn/economics/notes/problem.htm) |
| Specialisation and the division of labour | Briefly revise the concept of scarcity – ask learners to explain what it is that is scarce. **(W) (F)** | **KEY CONCEPT 1: SCARCITY AND CHOICE.** This point provides a good opportunity to revise an important issue and reinforce this concept. |  |
| *Progress check – factors of production* | Consolidate learning based on a short answer or multiple choice questions selected from Cambridge past papers on the nature of factors of production to help consolidate learning on this topic. **(I) (f)**  Go through the answers with the class, inviting learners to discuss the reasons for the answers they gave. **(W)** | Multiple choice questions are particularly useful for this type of activity as learners can talk about their choices and explain why they rejected each of the alternative options, thus helping to consolidate learning. | Cambridge past papers and accompanying mark schemes are available at [teachers.cie.org.uk](http://teachers.cie.org.uk) |

| **Learning objectives** | **Suggested teaching activities** | **Teacher guidance notes and key concepts** | **Learning resources** |
| --- | --- | --- | --- |
| **Resource allocation in different economic systems and issues of transition** | | | |
| Decision making in market, planned and mixed economies | Class discussion on how resource allocation relates to each of the three key questions:   * what will be produced * how * for whom. **(W)(F)**   Provide a list of characteristics which are commonly associated with the three economic systems. Ask learners, individually or in pairs, to construct a diagram which shows each of the three economic systems and how they are different. **(I)(P)(F)**  Draw an appropriate diagram on whiteboard, using learners’ suggestions, or ask more able learners to draw their diagram. **(W)** (**Challenging**).  Learners discuss in pairs how resource allocation might differ between market, planned and mixed economies.  Share and compare answers as a class. **(P)(W)**  Ask each group to provide evidence to decide what kind of economic system might accurately represent their economy. **(G)(F)** | It is important to establish how economic systems address the basic economic problem.  Explain what the ‘mix’ refers to in a ‘Mixed Economy’  Distinguish between price mechanism and resource allocation in market system and how central governments allocate resources in a planned economy.  Allow learners to choose their own groups to begin, and then reallocate group members later to different groups. | Bamford, ch 1 Basic economic ideas  Anderton, units 41-44  Sloman, p.16-24  [www.tutor2u.net/assets/textfiles/sample\_econ\_wjec\_as\_companion\_2005.pdf](http://www.tutor2u.net/assets/textfiles/sample_econ_wjec_as_companion_2005.pdf)  [www.economicsnetwork.ac.uk/links/data\_free.htm](http://www.economicsnetwork.ac.uk/links/data_free.htm) |
| The role of the factor enterprise in a modern economy | Each learner imagines that they have recently been appointed to the role of managing director of an organisation of their choice. They list as many functions as they can that are necessary to successfully undertake this role. **(I)**  Collate the responses on the whiteboard. Identify the specific functions associated with the factor of enterprise. **(W)**  Examine the role of enterprise in a modern economy. | It is essential that key elements such as risk taking, organising the other factors of production and receiving profit are clearly linked to the factor enterprise. | Bamford, ch 1 Basic economic ideas |

| **Learning objectives** | **Suggested teaching activities** | **Teacher guidance notes and key concepts** | **Learning resources** |
| --- | --- | --- | --- |
| **Production possibility curves** | | | |
| Shape and shifts of the curve  Constant and increasing opportunity costs | Introduce the idea of production possibility curves and opportunity lost. Learners imagine they have a fixed amount of money to spend. Use a simple straight line graph of the possibilities between e.g. all electronic products, all books, and combinations of both, where one electronic product is equivalent to four books. (Use products relevant to the local context.)  Ask learners where on the graph they would choose? What have they lost in terms of the alternative product? **(W)**  Define opportunity cost as the **next best** foregone alternative. Explain that a production possibility curve is a simple economic model which makes predictions about the relationship between variables, based on simplifying assumptions.  Make sure learners understand that this is an example of fixed opportunity costs and results in a straight line production possibility graph.  Ask learners in pairs to assume a simple, two-product economy/firm. They think of examples of products and opportunity cost that clearly distinguish each of the following:   * a government decision; * a firm’s decision; * a consumer’s decision. **(P)**   Learners then feedback their ideas in a class discussion. **(W) (F)** | It should also be pointed out that this cost is measured in real terms not monetary terms and that we must assume that consumers can measure the amount of satisfaction gained by the consumption of a unit of a good/service.  This is an example of ‘ceteris paribus’: it assumes that all other factors which might affect the production output remain constant.  **KEY CONCEPT 1: SCARCITY AND CHOICE** | Bamford, ch 1 Basic economic ideas  Anderton, units 1-3, p.2-17  [www.tutor2u.net/economics/revision-notes/as-markets-production-possibility-frontier.html](http://www.tutor2u.net/economics/revision-notes/as-markets-production-possibility-frontier.html)  [www.bized.co.uk/reference/diagrams/Production-Possibility-Frontier](http://www.bized.co.uk/reference/diagrams/Production-Possibility-Frontier)  [www.bized.co.uk/reference/diagrams/Production-Possibility-Frontier---Economic-Growth](http://www.bized.co.uk/reference/diagrams/Production-Possibility-Frontier---Economic-Growth) |
| Shape and shifts of the curve  Constant and increasing opportunity costs | Provide learners with data on alternative levels of output (e.g.of agricultural and manufactured products) which produce an opportunity cost that is concave to the origin. Learners individually plot a graph of the production possibility curve. **(I) (F)**  Learners work in pairs, writing down their answers to the following:   * what does a single point on this curve represent? * comparing the opportunity cost in the output of one of the products at different points along the curve (i.e. as more units of the other product are produced) * explain what is happening to the opportunity cost. **(P)**   Learners feed back their answers for a class discussion.  Make sure learners understand that this illustrates increasing opportunity cost. Discuss the problem of choice facing a government. **(W)** | Ensure that learners understand that a production possibility curve describes all the combinations of two goods which can be produced, **using all available resources.**  Important that learners correctly label the axes. | Bamford, ch 1 Basic economic ideas  Anderton, units 1-3, p.2-17  Gillespie, p.4-5  [www.tutor2u.net/economics/revision-notes/as-markets-production-possibility-frontier.html](http://www.tutor2u.net/economics/revision-notes/as-markets-production-possibility-frontier.html)  [www.bized.co.uk/reference/diagrams/Production-Possibility-Frontier](http://www.bized.co.uk/reference/diagrams/Production-Possibility-Frontier)  [www.bized.co.uk/reference/diagrams/Production-Possibility-Frontier---Economic-Growth](http://www.bized.co.uk/reference/diagrams/Production-Possibility-Frontier---Economic-Growth) |
| Shape and shifts of the curve  Constant and increasing opportunity costs | Divide learners into groups. Provide each group with clearly labelled production possibility diagrams and shifts to illustrate: potential economic growth actual growth; efficiency.  Provide a set of questions which require use of the curves and labels to explain the economic concepts of: economic growth; unemployment and efficiency, for example:   * What causes the curve to shift outwards? * What is represented by a point **within** the curve? * What causes the curve to shift from within the curve towards the boundary? * What is represented by a point **on** the curve?   Groups write down their answers and then peer assess another group’s explanations. **(G) (F)**  Clarify unexplained points / misconceptions through a question and answer session. **(W)** | Potential economic growth = outward shift; actual economic growth = shift from within the curve towards the boundary.  Any point on the curve is consistent with **productive efficiency** because an economy is using all its resources. An alternative term for this position would be **technological efficiency.**  Unemployment relates to all factors of production and will be represented by a point **within** the curve. A rise in unemployment will **not** cause the curve to shift, but will lead only to a movement out towards the curve. | Bamford, ch 1 Basic economic ideas  Anderton, units 1-3, p.2-17  Gillespie, p.4-5  [www.tutor2u.net/economics/revision-notes/as-markets-production-possibility-frontier.html](http://www.tutor2u.net/economics/revision-notes/as-markets-production-possibility-frontier.html)  [www.bized.co.uk/reference/diagrams/Production-Possibility-Frontier](http://www.bized.co.uk/reference/diagrams/Production-Possibility-Frontier)  [www.bized.co.uk/reference/diagrams/Production-Possibility-Frontier---Economic-Growth](http://www.bized.co.uk/reference/diagrams/Production-Possibility-Frontier---Economic-Growth) |
| Shape and shifts of the curve  Constant and increasing opportunity costs | Ask learners to draw separate production possibility curves to illustrate: increasing costs; constant costs; economic growth. Learners explain the shape and shift of each production possibility curve to the rest of the class. **(I) (F) (Challenging)**  Class discussion to check and consolidate learning. **(W)** |  | Anderton, units 1-3, p.2-17  Gillespie, p.4-5  [www.tutor2u.net/economics/revision-notes/as-markets-production-possibility-frontier.html](http://www.tutor2u.net/economics/revision-notes/as-markets-production-possibility-frontier.html)  [www.bized.co.uk/reference/diagrams/Production-Possibility-Frontier](http://www.bized.co.uk/reference/diagrams/Production-Possibility-Frontier)  [www.bized.co.uk/reference/diagrams/Production-Possibility-Frontier---Economic-Growth](http://www.bized.co.uk/reference/diagrams/Production-Possibility-Frontier---Economic-Growth) |

| **Learning objectives** | **Suggested teaching activities** | **Teacher guidance notes and key concepts** | **Learning resources** |
| --- | --- | --- | --- |
| **Money** | | | |
| Functions and characteristics in a modern economy | Class discussion on functions and characteristics of money.   * What is used as money in the learners’ country? * What are the key characteristics of money? * What do learners do with their money?   Build notes on the whiteboard. **(W) (F)** | Learners should be referring to: durability; portability; acceptability; divisibility; scarcity. Anything with these characteristics can function as money (can give as less well known examples: cigarettes, shells or fur). | Bamford, ch 1 Basic economic ideas  Sloman, ch 18 |
| Functions and characteristics in a modern economy | List the four key functions of money on the whiteboard: a medium of exchange; a unit of account; a standard for deferred payment; a store of wealth.  Give learners working in pairs a worksheet with four columns, one for each of the four key functions. In each column, ask learners to explain how each function might be important in a modern economy. **(P) (F)**  Lead a class discussion based on learners’ completed worksheets. The discussion should focus on the relationship between the functions of money and the successful management of a modern economy. **(W) (F)**  This is a good opportunity to link to the global/European financial crisis.  Learners who are finding these concepts easy to grasp could be directed to up-to-date reading of more advanced applied economics. **(I) (Challenging)** | Learners frequently confuse the characteristics of money with the functions. Explain the former enables identification of money while the latter is vital to explaining the importance of money in a modern economy.  Learners who find these concepts hard to grasp can be given extra support, e.g. a list of words / phrases to choose to put in each column, e.g.:   * medium of exchange allows specialisation which promotes economic growth * store of wealth allows savings which allow investment which promotes economic growth * a standard for deferred payment allows credit which promotes aggregate demand which promotes economic growth * a unit of account allows the operation of the price mechanism which enables the efficient allocation of resources which promotes economic growth. | Bamford, ch 1 Basic economic ideas  Sloman, ch 18  Gillespie, p77 -79 |
| Barter, cash and bank deposits, cheques, near money, liquidity | Learners imagine that the class are on a desert island and have to explain how they will exchange any goods that they produce. **(I)**  Explain the main characteristics of a barter system.  In groups, list reasons why a barter system might be difficult to operate.  Share ideas as a whole class. **(G)(W)** |  | Bamford, ch 1 Basic economic ideas  [www.bized.co.uk/educators/games/quiz/index.htm](http://www.bized.co.uk/educators/games/quiz/index.htm) (interactive quiz) |
| Barter, cash and bank deposits, cheques, near money, liquidity | Define the concept of liquidity. Refer to the speed at which an asset can be converted into cash, and that this must be without capital loss.  Provide examples of a retail bank balance sheet. Ask learners in pairs to locate and identify important assets on the retail bank balance sheet and answer related questions. **(P)**  Discuss answers as a class. **(W)(F)**  Ask learners to give examples of financial assets and examples of real assets. Identify and discuss characteristics which help to distinguish between real and financial assets. Which have the highest rates of return? Which have the most liquidity? What are the advantages of each? **(W)(F)**  Ask learners to justify in writing why it would be a good idea to include both types of asset in an individual’s wealth portfolio. **(I) Challenging)**  Share the answers as a class and lead onto a class discussion on the importance of both types of assets in relation to their country’s economy. **(W)(F)** **(Challenging)** | This latter part is frequently missed by learners and often leads to false conclusions such as, ‘equities are an example of a liquid asset’  For example, liquidity or the relative rate of return associated with each type of investment. A key outcome should be the recognition that there is an inverse relationship between liquidity and profitability.  This exercise will provide an opportunity for peer mentoring.  This will also provide a gentle introduction to material that will be covered later in the course, when looking at international payments. | Bamford, ch 1 Basic economic ideas  [www.bized.co.uk/educators/games/quiz/index.htm](http://www.bized.co.uk/educators/games/quiz/index.htm) (interactive quiz) |

| **Learning objectives** | **Suggested teaching activities** | **Teacher guidance notes and key concepts** | **Learning resources** |
| --- | --- | --- | --- |
| **Classification of goods and services** | | | |
| Free goods; private goods (economic goods); and public goods | Derive the key characteristics associated with free goods and private goods on the board through questions/answers within a class discussion, e.g. provide examples of each, and ask questions about whether there is any restriction to them (e.g. through pricing) if their supply is limited/unlimited, what consumption by one consumer will mean for consumption by others. **(W)(F)**  For private goods, focus on explaining that their consumption will reduce the amount available for another consumer as access is limited. For free goods, the good is in unlimited supply, there is no opportunity cost involved in consumption and no restrictions on access.  Ask learners to provide examples from their own experience. **(W)** | Make sure learners understand that the economist’s definition of a ‘free good’ is different to the general understanding of the term. It means a good that is not scarce and is therefore available in as great a quantity as desired with no factors of production (see the earlier activities on scarcity and factors of production). | Bamford, ch 1 Basic economic ideas (unlimited wants), ch 3 Government intervention in the price system (public goods, private goods) |
| Free goods; private goods (economic goods); and public goods | Describe characteristics of public goods: there is no restriction on access once the good is produced, and no reduction in availability due to consumption. Emphasise that these goods must possess the characteristics outlined.  Ask learners to give examples, ideally within the learner’s local environment, and explain their choice. **(W)(F)**  Ask learners, in pairs, to discuss why Public Goods are associated with market failure **(P) (F) (Challenging)** | Public goods must possess these characteristics to explain the ‘free rider problem’  This will provide further opportunity for peer mentoring. | Bamford, ch 3 Government intervention in the price system |
| Merit goods and demerit goods as the outcome of imperfect information by consumers | Provide a definition and examples of merit goods and demerit goods, in terms of imperfect information by consumers. Use diagrams to illustrate the differences between each type of good.  Ask learners to write down examples of merit and demerit goods with some justification for their choices. **(I)/(G)(F)**  Class discussion to establish examples of each type of good. **(W)** | Special care is needed when identifying key characteristics. | Bamford, ch 3 Government intervention in the price system  Sloman, p.326-328 |
| Merit goods and demerit goods as the outcome of imperfect information by consumers | Ask learners to identify possible externalities associated with merit and demerit goods, and construct a diagram to illustrate how these goods can impact on market efficiency and cause market failure. **(G)(F) (Challenging)**    Divide the class into groups of four. Learners construct the diagram by playing the ‘diagram game’:   * Learner 1: draw a diagram * Learner 2: labels the diagram * Learner 3: comments on or changes the labelling if necessary * Learner 4: decides the final diagram. **(G)(F)**   The teacher should provide final examples of appropriate diagrams. | Externalities are third-party (or ‘spill-over’) effects arising from the production and/or consumption of goods for which no appropriate compensation is paid.  Causing pollution in a production process is a negative externality, buying a certain model of car is a positive externality as it increases demand for mechanics able to maintain that model.  Ensure learners fully understand the importance of labelling every part of a diagram clearly and accurately. | Bamford, ch 3 Government intervention in the price system  Sloman, p.326-328  [www.bized.co.uk/educators/16-19/econ omics/marketfail/lesson/failure3.htm](http://www.bized.co.uk/educators/16-19/economics/marketfail/lesson/failure3.htm)  [www.bized.co.uk/sites/bized/files/docs/failure3.ppt](http://www.bized.co.uk/sites/bized/files/docs/failure3.ppt)  [www.tutor2u.net/economics/content/topics/externalities/what\_are\_externalities.htm](http://www.tutor2u.net/economics/content/topics/externalities/what_are_externalities.htm) |

# [The price system and the micro economy (AS Level)](#_Contents)

## Recommended prior knowledge

No specific prior knowledge is required for this unit, but learners will find it useful to have studied the previous unit on Basic Economic ideas first, particularly those new to the subject. Basic literacy skills combined with an ability to handle data, including graphs and diagrams, will also be required for this unit.

## Context

The theory of supply and demand and how it is used to determine market equilibrium levels of price and output are fundamental requirements for understanding and applying economic knowledge throughout the curriculum and in real-life practice. This section provides a basic platform from which learners are able to analyse and evaluate a variety of alternative market situations.

## Outline

The AS Level topics covered in this section are:

* demand and supply curves
* price elasticity, income elasticity and cross-elasticities of demand
* price elasticity of supply
* interaction of demand and supply
* market equilibrium and disequilibrium
* consumer and producer surplus.

## Suggested teaching time

It is recommended that this unit should take approximately 20% of the AS course (10% of the whole AS and A Level programme).

| **Learning objectives** | **Suggested teaching activities** | **Teacher guidance notes and key concepts** | **Learning resources** |
| --- | --- | --- | --- |
| **Demand and supply curves** | | | |
| Effective demand | Start with a whole class question and answer session to ensure learners can recognise the key difference between ‘demand’ and ‘effective demand’. To illustrate this, compare a child who demands sweets but has no money with a child demanding sweets who also has some money to purchase them with. The key difference is that effective demand is demand backed by the ability to pay. **(W)** | Stress here that it is only effective demand which matters to business organisations and therefore to economists. | Bamford, ch 2 The price system  Anderton, unit 15  Sloman, ch 2  [www.tutor2u.net/economics/revision-notes/as-markets-demand.html](http://www.tutor2u.net/economics/revision-notes/as-markets-demand.html) |
| Individual and market demand and supply | Start by defining ‘individual demand’ as the quantity of a good or service that purchasers are willing and able to buy at various prices in a particular time period. **(W)**  Then put learners into pairs and ask them to:   * decide how many cups of a suitable drink they would buy in a week at different given prices * produce a table illustrating this relationship between the price of the drink and the number of cups demanded * plot a graph of demand for based on this data * write down the relationship between their demand for the chosen drink and its price. **(P) (F)**   Follow this with a whole class question and answer session to ensure full understanding. As part of this use the demand curve graphs produced by the learners or a pre-prepared curve to:   * establish the meaning of the terms ‘extension of demand’ and ‘contraction of demand’ * explain that extensions/contractions only occur due to price changes * demonstrate the ‘law of demand’ through the downward slope of the curve – an increase in price leads to a decrease in quantity demanded, but a decrease in price leads to an increase in quantity demanded. **(W)**   Conclude by asking learners to suggest what an abnormal demand curve looks like and what may cause this. **(W) (Challenging)** | Stress throughout the importance of plotting graphs which are accurately labelled and use the full extent of both axes.  Remind learners to keep the graphs developed in the pair work task as they will be needed for the next activity.  Note that demand and supply curves are another example of ceteris paribus covered in the activities on scarcity choice and opportunity cost in the first AS unit on *Basic economic ideas*.  Both inferior goods for low income purchasers and luxury items can produce abnormal demand curves. | Bamford, ch 2 The price system  Anderton, units 4-5  Sloman, ch 2  Gillespie, p.6-7  [www.tutor2u.net/economics/revision-notes/as-markets-supply.html](http://www.tutor2u.net/economics/revision-notes/as-markets-supply.html)  [www.tutor2u.net/economics/revision-notes/as-markets-demand.html](http://www.tutor2u.net/economics/revision-notes/as-markets-demand.html) |
| Individual and market demand and supply | Put learners back into the same pairs as the previous activity and tell them they are now *selling* the drink they chose to do a demand curve for. Ask them to:   * produce a table of the number of cups of that drink they would be willing to sell at different prices * plot a graph of supply on the same graph paper they used to plot the demand curve. **(P)**   On completion, hold a class discussion to ensure understanding. As with the previous activity on demand, use the supply curve graphs produced by the learners or a pre-prepared curve to:   * define and demonstrate ‘extension of supply’ and ‘contraction of supply’ * show that the upward sloping shape of the supply curve represents costs and profits * explain the ‘law of supply’, i.e. an increase in price leads to an increase in quantity supplied, while a decrease in price leads to a decrease in quantity supplied. **(W)**   Conclude by asking learners if they can think of a situation when the supply curve might slope downwards to the right instead of upwards to the right. **(W) (Challenging)** | For the pair activity, remind learners that as suppliers they should:   * consider their costs and profit when deciding the quantities to sell at different prices * remember that the graph needs to plot selling price per unit against quantity supplied per period of time (e.g. week/month) – many learners forget to include the time element.   For the final discussion, a significant reduction in mass-production costs (e.g. via a technological breakthrough) would enable companies to reduce their prices, producing a downward curve, but they are only likely to do this if market competition forces them to.  Remind learners that they will need to keep the supply and demand curve they have produced for further use in later activities. | Bamford, ch 2 The price system  Anderton, units 4-5  Sloman, ch 2  Gillespie, p.6-7  [www.tutor2u.net/economics/revision-notes/as-markets-supply.html](http://www.tutor2u.net/economics/revision-notes/as-markets-supply.html)  [www.tutor2u.net/economics/revision-notes/as-markets-demand.html](http://www.tutor2u.net/economics/revision-notes/as-markets-demand.html) |
| Individual and market demand and supply | Start by putting learners into groups and asking them to calculate the market demand for the drink they calculated individual demand for two activities previously. **(G)**  Ask each group to give their estimate and how they arrived at it. Then define market demand as the total demand arrived at by adding together the demand of every individual willing and able to buy that good or service. **(W)**  Then ask each group to use their original demand data to produce a table of results and plot a graph to illustrate the relationship between price and market demand. **(G)**  Define market supply as the total supply of every seller willing and able to sell a particular good or service. **(W)**  Now ask each group to calculate the market supply for the chosen drink from the data they produced in the last activity, tabulating the results and adding a supply curve to the demand curve graph. **(G)**  Finish with a class discussion to consolidate learning onthe difference between individual and market demand curves. **(W)** | The demand and supply data learners produced in the previous two activities will be needed for the group tasks here. | Bamford, ch 2 The price system  Anderton, units 4-5  Sloman, ch 2  Gillespie, p.6-7  [www.tutor2u.net/economics/revision-notes/as-markets-supply.html](http://www.tutor2u.net/economics/revision-notes/as-markets-supply.html)  [www.tutor2u.net/economics/revision-notes/as-markets-demand.html](http://www.tutor2u.net/economics/revision-notes/as-markets-demand.html) |
| Factors influencing demand and supply | Put learners into pairs and ask them to think of anything else other than price that might affect demand for their chosen drink. **(P)**  Ask each pair to share their ideas with the rest of the class and then use this to produce a combined list of factors including:   * ability to pay * attitude towards products * availability * attractiveness of related products. **(W)**   Put learners back into their pairs to do the same exercise for factors other than price influencing supply. **(P)**  Again, use the resulting contributions to produce a final list of factors including raw material costs, labour costs, government policy, exchange rate fall. **(W)**  Conclude with a class discussion on factors influencing demand and supply, giving learners specific industry examples to illustrate the key points. **(W)**. | The two pair tasks in this activity provide a good opportunity for peer mentoring.  The Tutor2U website links is one source of useful examples to illustrate the main factors with real examples. | Bamford, ch 2 The price system  Anderton, units 4-5  Sloman, ch 2  Gillespie, p.6-7  [www.tutor2u.net/economics/revision-notes/as-markets-supply.html](http://www.tutor2u.net/economics/revision-notes/as-markets-supply.html)  [www.tutor2u.net/economics/revision-notes/as-markets-demand.html](http://www.tutor2u.net/economics/revision-notes/as-markets-demand.html) |
| *Progress check – demand and supply curves* | Consolidate learning on demand and supply by selecting questions or part-questions from Cambridge Specimen Paper 02 and previous Paper 2 past papers to set as a class test or homework. | Select questions that require learners to draw curves, graphs or diagrams such as Question 1b from Specimen Paper 2. | Cambridge specimen papers, past papers and mark schemes are available at [teachers.cie.org.uk](http://teachers.cie.org.uk) |

| **Learning objectives** | **Suggested teaching activities** | **Teacher guidance notes and key concepts** | **Learning resources** |
| --- | --- | --- | --- |
| **Price elasticity, income elasticity and cross-elasticities of demand** | | | |
| The meaning and calculation of elasticity of demand | Start by briefly demonstrating suitable elastic and inelastic materials to the class to illustrate that elasticity is about how responsive one variable is to a change in another. **(W)**  Ask learners to write down what the word ‘elasticity’ means. **(I) (F)**  Follow with a class discussion to establish the key idea of ‘responsiveness’. Then hand out pre-prepared worksheets containing data for several different goods, showing for each good:   * the price of that good * the amount sold at that price * the change in the amount sold when the price changes (increases/decreases).   Make sure learners understand what the data shows and then give them a formal definition of price elasticity of demand, together with a formula for measuring the value of elasticity. Do an example calculation with the class, showing that an inverse relationship between price and demand gives a negative coefficient. **(W)**  Then ask learners to calculate the elasticity for the other goods on the worksheet. **(I) (F)**  On completion, learners compare their answers in pairs. **(P)**  Conclude by explaining to the class that:   * different goods can have different elasticities, and what the possible reasons for this are * there are also alternative ways of calculating elasticity, using either *percentage* changes in price and quantity demanded or *proportionate* changes in price and quantity demanded, but both give the same result. **(W)** | This activity offers several opportunities for differentiation to help support learners of different ability levels with this topic. For example, you can:   * tailor the worksheet to provide questions with different levels of difficulty for more able and less confident learners * encourage peer mentoring by asking learners to review and discuss their answers with each other * ask more able learners to investigate the difference between arc elasticity and point elasticity. | Bamford, ch 2 The price system  Anderton, unit 9  Threadgould, ch 5  Gillespie, p.9-15  [www.tutor2u.net/economics/revision-notes/as-markets-price-elasticity-of-demand.html](http://www.tutor2u.net/economics/revision-notes/as-markets-price-elasticity-of-demand.html)  [www.bized.co.uk/virtual/vla/theories/determinants\_ped.htm](http://www.bized.co.uk/virtual/vla/theories/determinants_ped.htm)  [www.economicsonline.co.uk/Competitive\_markets/Elasticity.html](http://www.economicsonline.co.uk/Competitive_markets/Elasticity.html) (online quiz) |
| The meaning and calculation of elasticity of demand | Start with a class discussion about how the amount people spend changes (or doesn’t) when their income changes. For example, if someone’s income rose by 10% how does their demand for salt change compared to their change in demand for clothing? **(W)**  Then ask learners to give an example of a good/service which might experience a *fall* in demand when income rises. Use this to give the class a formal definition of income elasticity of demand. **(W)**  Hand out a pre-prepared worksheet requiring learners to calculate income elasticities of demand for a suitable range of normal, luxury and inferior goods. **(I)** | Income elasticity of demand measures the change in demand in relation to change in income, i.e. the percentage change in quantity demanded of a good divided by the percentage change in income.  Inferior goods such as junk food is one example of where demand might fall with a rise in income. | Bamford, ch 2 The price system  Anderton, unit 9  Threadgould, ch 5  Gillespie, p.9-15  [www.economicsonline.co.uk/Competitive\_markets/Income\_elasticity\_of\_demand.html](http://www.economicsonline.co.uk/Competitive_markets/Income_elasticity_of_demand.html) |
| The meaning and calculation of elasticity of demand | Start by asking learners to give examples of goods that substitute another good and then that and complement that original good. Then ask them to suggest what they think will happen to the demand of the substitute good and the complementary good if the price of the original good increases. **(W)**  Follow this by introducing the term ‘cross-price of demand’. Then ask learners to build on this and use their learning on income elasticity of demand from the previous activity to produce a formal definition of cross-price elasticity of demand. **(I)**  Learners share their ideas with class. Ensure everyone understands the correct definition. **(W)**  Then hand out a pre-prepared worksheet requiring learners to calculate values of cross-elasticity associated with complementary and substitute goods. Include questions that check learners’ understanding of the relationship between the value of cross-elasticity coefficients and complementary and substitute goods. **(I)** | Cross-price elasticity measures the responsiveness of demand for a good following a change in price for a related good, i.e the percentage change in quantity demanded of product A divided by the percentage change in price foir product B.  Complementary goods produce a negative sign and substitute goods generate a positive sign. This should be established by choosing goods, establishing their type and then calculating their cross-price elasticity. | Bamford, ch 2 The price system  Anderton, unit 9  Threadgould, ch 5  Gillespie, p.9-15  [www.tutor2u.net/economics/revision-notes/as-markets-crossprice-elasticity-of-demand.html](http://www.tutor2u.net/economics/revision-notes/as-markets-crossprice-elasticity-of-demand.html)  [www.bized.co.uk/virtual/vla/the\_cped/index.htm](http://www.bized.co.uk/virtual/vla/the_cped/index.htm) (cross-elasticity simulation) |
| The range of elasticities of demand | Start by explaining that elastic, the following three special cases of price elasticity of demand. **(W)**   * perfectly elastic (PED = infinity) * perfectly inelastic (PED = 0) * unitary elastic. (PED = –1) **(I)**   Then put learners into pairs and hand out a pre-prepared worksheet containing demand and price data for each type of special elasticity. Ask each pair to:   * calculate the percentage change in elasticity for each data set and identify which is perfectly elastic, perfectly inelastic and unitary elastic * construct graphs based on these coefficients to represent each of these three categories. **(P) (F)**   On completion go through with leaners and discuss the significance of these coefficients and the three cases they relate to. **(W) (F)**  Conclude by asking learners to suggest practical ways in which understanding of these coefficients could be applied of useful applications of this understanding, for example, the type of good that a government wishing to raise tax revenue, is likely to tax.**(W)** | Give learners plenty of opportunity to practice calculating and graphically representing the coefficients covered in this activity.  One real-world example in which knowledge of these co-efficients could be looked at for the concluding class discussion is maximising government income from ad valorem taxes (these are covered in more detail in the following unit). | Bamford, ch 2 The price system  Anderton, unit 9  Threadgould, ch 5  Gillespie, p.9-15  [www.economicsonline.co.uk/Competitive\_markets/Price\_elasticity\_of\_demand.html](http://www.economicsonline.co.uk/Competitive_markets/Price_elasticity_of_demand.html) |
| The factors affecting elasticity of demand | Start by suggesting a familiar brand of chocolate and asking learners to list as many factors as they can which could influence how their demand might change if the price rose/fell. **(I) (F)**  On completion ask learners to compare and improve their ideas in pairs and then share with the rest of the class. **(P and W)**  Then hand out a suitable list of products. Put learners into groups and ask each group to identify other factors which might influence the price elasticity of demand for each product on the list. **(G)**  Each group then shares its ideas with the rest of the class. Use this work to develop a definitive list, which should include:   * range and attractiveness of substitutes * quality and accessibility of information * degree of necessity * brand image * degree of habit forming/addiction * relative expense * time. **(W)** | You can differentiate learning in this activity by inviting learners who find these ideas easy to grasp to lead the class discussion for a particular factor.  Ensure that learners continue to look at how these factors differ between luxury, necessity and inferior goods.  In the final class discussion encourage learners to further differentiate the factors identified into substitution and non-substitution demand factors. | Bamford, ch 2 The price system  Anderton, unit 9  Threadgould, ch 5  Gillespie, p.9-15  [www.bized.co.uk/educators/games/ snickers/index.htm](http://www.bized.co.uk/educators/games/snickers/index.htm) (classroom game) |
| The implications for revenue and business decisions of price, income and cross-elasticities of demand | Start by handing out a pre-prepared worksheet containing a table of price and total revenue with gaps in the data and ask learners to calculate the revenue (price x quantity) both before and after the price change. **(I)**  On completion, hold a class discussion based on this work to establish the relationships between price changes, elasticity and changes in total revenue. **(W)**  Follow this by asking learners to plot a graph from given data showing the impact of variations in price elasticity of demand can lead to price volatility following a change in conditions of supply. **(I or P) (Challenging)**  Then ask learners to do an online quiz on price elasticity such as that on the Economics Online web link or the BizEd online simulation to consolidate learning. **(I or P) (F)** | Give learners plenty of opportunity to practice questions on this topic to ensure they understand both the economic concepts and the mathematical calculations.  This activity also provides a good opportunity for peer learning so those who find these concepts easier to grasp can support less confident learners.  You could re-use the worksheet you handed out for the activity on the meaning of elasticity of demand for the first task.  Bamford is one useful source for the graph plotting task. | Bamford, ch 2 The price system  Anderton, unit 9  Threadgould, ch 5  Gillespie, p.9-15  [www.economicsonline.co.uk/Competitive\_markets/Elasticity.html](http://www.economicsonline.co.uk/Competitive_markets/Elasticity.html) (online quiz)  [www.bized.co.uk/virtual/vla/the\_cped/index.htm](http://www.bized.co.uk/virtual/vla/the_cped/index.htm) (cross-price elasticity simulation) |
| The implications for revenue and business decisions of price, income and cross-elasticities of demand | Start by asking learners to divide a piece of paper horizontally into two halves. Tell them to represent:   * how the price elasticity of demand changes along a firm’s demand curve on the top half * the relationship between the amount sold and the total revenue the bottom half shows * the resulting relationship between price changes, elasticity and changes in total revenue. **(I) (F)**   Then hand out a worksheet with data and tables to complete requiring learners to:   * plot a demand curve * calculate the different price elasticity of demand for each price * calculate the total revenue received at each price. **(I) (Challenging)**   Follow with one or both of the following group games to consolidate learning:   * the ‘Snickers Effect’ game is designed to help learners revise many of the key issues relating to elasticity discussed in this unit * the ‘noughts and crosses’ game: learners are given a set of multiple choice questions, and each correct answer allows them to put a O or X on the board – the first to complete a straight line wins. **(G)** | This part of the syllabus is a more difficult topic area to teach and would require careful exposition.  The Tutor2u website link is one useful source of support for this activity.  Ask learners who are confident and accurate in the first two individual tasks to also link point elasticity along a firms’ demand curve and the firm’s total revenue at each of these prices.  Full instructions on how to plan, set up and deliver the ‘Snickers effect’ game are available on the BizEd website link. It requires two different bars of chocolate, a carton of milk, and a can of fizzy drink – the rest of the instructions, sheets and labels can be downloaded or prepared in class.  For the ‘noughts and crosses’ game, there are June and November Paper 1 multiple choice papers from the last five years on the Cambridge Teacher Support site that you can select relevant questions on elasticity from. | Bamford, ch 2 The price system  Anderton, unit 9  Threadgould, ch 5  Gillespie, p.9-15  [www.tutor2u.net/economics/revision-notes/as-markets-price-elasticity-of-demand.html](http://www.tutor2u.net/economics/revision-notes/as-markets-price-elasticity-of-demand.html)  [www.economicsonline.co.uk/Competitive\_markets/Price\_elasticity\_of\_demand.html](http://www.economicsonline.co.uk/Competitive_markets/Price_elasticity_of_demand.html)  [www.bized.co.uk/educators/games/snickers/index.htm](http://www.bized.co.uk/educators/games/snickers/index.htm)  Cambridge specimen papers, past papers and mark schemes are available at [teachers.cie.org.uk](http://teachers.cie.org.uk) |
| The implications for revenue and business decisions of price, income and cross-elasticities of demand | Put learners into groups and tell them they are representing a firm selling a product. Give each group a worksheet showing existing prices and sales levels for that product. Then hand out proposed new prices to and ask each group to analyse the potential impact on their sales and future pricing strategy by the following method:   * how large is the price change, and is it an increase or decrease? * are there alternative products available? * is the product a necessity or a luxury? * what is the likely price elasticity of demand? * what is the likely effect on revenue? * should the firm adopt the new price, and why/why not? **(G)**   On completion ask learners to write down their conclusions individually, i.e. the link between a change in price, price elasticity of demand and a change in a firm’s total revenue. **(I)**  Learners exchange their completed sheets with a partner to check responses. **(P)**  As a class, discuss learners’ conclusions (e.g. through brief presentations) including how the different products and pricing strategies differ.  Extended work could include the derivation of point elasticity and linking this to curved demand as well as straight line graphs.**(W)**  Give learner groups additional information on changes in income at a local and a national level. They then analyse the potential impact on their sales and future pricing strategy using similar questions to those for the price elasticity of demand. **(G)**  As a class, discuss the answers for different groups. Go on to consider how the knowledge of cross price elasticity might be useful to business pricing strategy **(W)** **(Challenging)**  If time permits, learners can use the Business Economics website to research changes in national income figures and then explain, using income elasticity of demand theory, how these changes might impact on the wider economy. **(I)(Challenging)** | Ensure here learners understand that elasticity changes as you move along the curve. | Bamford, ch 2 The price system  Anderton, unit 9  Threadgould, ch 5  Gillespie, p.9-15  [www.economicsonline.co.uk/Competitive\_markets/Price\_elasticity\_of\_demand.html](http://www.economicsonline.co.uk/Competitive_markets/Price_elasticity_of_demand.html) |

| **Learning objectives** | **Suggested teaching activities** | **Teacher guidance notes and key concepts** | **Learning resources** |
| --- | --- | --- | --- |
| **Price elasticity of supply** | | | |
| Meaning and calculation of elasticity of supply | Ask learners to refer to the definition of price elasticity of demand discussed earlier in the section and use this as a guide to formulating their definition and formula for price elasticity of supply **(I) (F)**  Invite learners to share their definitions with the rest of the class. **(W)**  Ask learners to complete worksheet questions and practise calculations using the online elasticity quiz. **(I) (F)**  Learners exchange completed answers and mark. Each learner gaining a correct answer explains this to a peer, if the peer did not answer correctly. **(P)**  Highlight the relationship between price and supply, and the sign of the coefficient: if the relationship is direct (as price increases, supply increases), the coefficient is positive. |  | Bamford, ch 2 The price system  Anderton, unit 9  [www.tutor2u.net/economics/content/topics/elasticity/elasticity\_of\_supply.htm](http://www.tutor2u.net/economics/content/topics/elasticity/elasticity_of_supply.htm)  [www.economicsonline.co.uk/Competitive\_markets/Elasticity.html](http://www.economicsonline.co.uk/Competitive_markets/Elasticity.html) (online quiz) |
| The range of elasticities of supply | Invite individual learners to draw and explain a supply curve on the whiteboard which is consistent with one of the three limiting cases (perfectly elastic, unitary, perfectly inelastic). **(I)**  The class then decides whether the diagram and explanation are correct and if not, why not. Repeat for the two remaining limiting cases. **(W) (F)**  Extend work through a demonstration of mathematical proof which explains why a unitary elastic supply curve can be represented by a straight line through the origin of two axes. **(Challenging)** | This exercise provides opportunities for the more confident learner to demonstrate their understanding and allow the rest of the class to partake in determining the solutions  This proof would require some knowledge of basic trigonometry but it gives the opportunity to link the subject of economics to other important subjects such as mathematics. | Bamford, ch 2 The price system  Anderton, unit 9  [www.tutor2u.net/economics/content/ topics/elasticity/elasticity\_of\_supply.htm](http://www.tutor2u.net/economics/content/topics/elasticity/elasticity_of_supply.htm) |
| The factors affecting elasticity of supply | Explore factors which influence supply through class question and answer, and establish the importance of the relative time period.  Use a graphical explanation of e.g. supply of fish in a three part diagram (momentary/short run/long run). **(W)**  Ask learners for examples of other products for which the time period is an important factor determining the price elasticity of supply.**(W) (F)**  Invite volunteers to use the graphs above to explain the relationship between time and price elasticity of supply. Rest of the class feed back any differences in how they would explain the graphs. **(I) (W)**  Learners use the tutor2u website to find an explanation of factors which influence elasticity of supply. They list the factors, based on their research. **(I)**  Use learner input to form a list of the main influences on the elasticity of supply for the whole class.**(W)**  Provide examples of different goods/services and learners decide (with explanations) which of these might be elastic or inelastic.**(W)** **(Challenging)** | The teacher could give each learner a hand-out which lists the key factors which determine the price elasticity of supply. | Bamford, ch 2 The price system  [www.tutor2u.net/economics/content/ topics/elasticity/elasticity\_of\_supply.htm](http://www.tutor2u.net/economics/content/topics/elasticity/elasticity_of_supply.htm)  [www.bized.co.uk/educators/level2/markets/activity/markets16.htm](http://www.bized.co.uk/educators/level2/markets/activity/markets16.htm) |
| Implications for speed and ease with which businesses react to changed market conditions | Draw a supply and demand diagram and illustrate the effect of a change in market condition. Introduce deliberate errors/omissions into the diagram. Ask the class whether they think the diagram is acceptable and if not why not. **(W)**  Ask learners to volunteer to use the diagram to explain how this subsidy might affect the consumer and the firm.  Change the slope (elasticity) of the demand curve and ask the learner to carry out the same analysis, or change the slope (elasticity) of the supply curve and ask the learner to carry out the same analysis **(I) (F)**  Ask groups to discuss how a government tax on a specific product might affect the consumer, the firm and the government.  Encourage learners to identify(with supporting explanations) the impact of a list supplied by you of changed market conditions on different products/services. **(G) (Challenging)**  Lead class discussion around learner’s responses to the questions.**(W)**  The teacher can link this exercise to a similar type of question from a past Cambridge AS Economics past paper. Use this to prepare learners to answer data response questions. | Stress the importance of providing clear, accurately labelled diagrams in economics.  This also provides a good link with earlier unit on supply and demand  This will allow the opportunity to test higher order skill of analysis and  **(Challenging)**  The teacher should link the nature of the product to its elasticity coefficient and then show how different products will have different impacts on price, output sold and tax revenue.  It is also a good point to revise data response technique. | Bamford, ch 2 The price system  Gillespie p.9-13  [www.bized.co.uk/sites/bized/files/docs/elasticity.ppt](http://www.bized.co.uk/sites/bized/files/docs/elasticity.ppt) (presentation on elasticity and total revenue)  [www.tutor2u.net/blog/index.php/economics/comments/unit-1-micro-key-diagrams-and-glossary](http://www.tutor2u.net/blog/index.php/economics/comments/unit-1-micro-key-diagrams-and-glossary) (diagrams)  [www.tutor2u.net/economics/revision-notes/as-markets-price-elasticity-of-demand.html](http://www.tutor2u.net/economics/revision-notes/as-markets-price-elasticity-of-demand.html) (notes) |

| **Learning objectives** | **Suggested teaching activities** | **Teacher guidance notes and key concepts** | **Learning resources** |
| --- | --- | --- | --- |
| **Interaction of demand and supply; Market equilibrium and disequilibrium** | | | |
| Meaning of equilibrium and disequilibrium | Ask groups to use their graph of supply and demand of coffee (from the section on supply and demand curves) to decide their market equilibrium price. (Provide learners with questions if they need guidance, e.g. At what price is demand for the product the same as supply of the product? Is there any excess demand or supply at this price?) Learners explain their choice of price and output and identify any distinguishing characteristics. **(G) (F)**  Draw together conclusions from the group discussions, discuss common characteristics identified by each group and formulate conditions consistent with market equilibrium (i.e. supply and demand are equal; this is where the curves intersect) while carefully explaining the concept of **equilibrium**. Emphasise that a market equilibrium will be a **stable** situation, checking learners’ understanding of stability.**(W)**  Ask learners individually to use their graph of supply and demand to identify and explain in writing the concept of **disequilibrium**. Provide a clue by reminding learners how they defined an equilibrium situation. **(I)** (**Challenging**)  Use learners’ input to discuss the characteristics of disequilibrium (excess supply or demand, unstable conditions) and explain the meaning. **(W)** | **KEY CONCEPT 3: EQUILIBRIUM AND EFFICIENCY**  This is a good point to introduce learners to this key concept. The teacher can ask the learners to refer to their graphs to identify the key characteristics of equilibrium and efficiency.  It is important to expand the definition of equilibrium to ensure that learners understand that the market will not clear, i.e. there will not be excess demand or supply, but also the price will not change, because the market is balanced or stable | Bamford, ch 2 The price system  Anderton, units 6-7  Sloman, ch 2  [www.tutor2u.net/economics/content/topics/demandsupply/market\_equilibrium.htm](http://www.tutor2u.net/economics/content/topics/demandsupply/market_equilibrium.htm)  [www.bized.co.uk/sites/bized/files/docs/marketmech.ppt](http://www.bized.co.uk/sites/bized/files/docs/marketmech.ppt) |
| Effects of changes in supply and demand on equilibrium price and quantity | Demonstrate the use of **static comparative equilibrium analysis** to show how changes in market conditions of supply and/or demand will potentially impact upon the market price. Use diagrams combined with ‘real life’ market examples.  Ask learners to read material on the nature of the housing market on the BizEd web site and complete a worksheet, using comparative static equilibrium analysis, based on changing conditions in the housing market and their subsequent effect on house prices. **(I)**  Consolidate learning by setting some past paper multiple choice or short answer questions to check understanding of this part of the syllabus. **(I)** | This is an opportunity to use peer group mentoring. | Bamford, ch 2 The price system  Anderton, unit 6-7  Sloman, ch 2  [www.bized.co.uk/virtual/vla/house\_prices/index.htm](http://www.bized.co.uk/virtual/vla/house_prices/index.htm) (effect of supply and demand on housing) |
| Applications of demand and supply analysis | Learners could work in pairs or small groups and consider examples of demand and supply analysis that relate to their own lives. Examples could include the price of tickets for a concert or for a sporting event.  Gillespie has examples of the application of demand and supply to various markets, including agriculture, transport, health, housing and sport and leisure: these would be useful case studies for learners to research. Cook uses the example of cars to illustrate the application of demand and supply analysis. Tutor2u uses the example of coffee. | Demand and supply analysis is not only at the heart of this particular part of the syllabus, but is a key concept throughout the course. Learners will have a better understanding of the analysis if they see how it can be applied to their own lives. | Bamford, ch 2 The price system  Cook, Ch 2, p 18-35  Cook et al  Anderton, Ch 4 and 5, p 24-40  Stanlake, Ch 8-11, p 62-111  Sloman, Ch 2, p 26-46  Gillespie, p 14-25  [www.bized.co.uk/learn/economics/housing/index.htm](http://www.bized.co.uk/learn/economics/housing/index.htm)  [www.tutor2u.net/economics/revision-notes/as-markets-coffee.html](http://www.tutor2u.net/economics/revision-notes/as-markets-coffee.html) |
| Movements along and shifts of the demand and supply curves | Review briefly the factors other than price affecting demand and supply.  Using diagrams (invite learners to draw on the whiteboard) and question and answers, e.g. how would the factor affect demand at each price, what is the resulting plot on the graph, show how an **increase** in demand causes the whole demand curve to shift to the right **(increase)** and a **decrease** shifts the whole curve to shift to the left**.** **(W) (F)**  Repeat to show shifts of a supply curve. **(W) (F)**  Use diagrams and learner input to look at movement **along** the demand and supply curves and revise the meaning of **contraction** and **extension** (i.e. change in price causing change in quantity demanded/supplied). Re-emphasise the differences between **decrease and contraction** of supply and demand, and **increase and extension** of supply and demand. **(W) (F)** | The teacher might pair able learners with a learner who is finding difficulty with this section of the course. This will provide a further opportunity for peer mentoring. | Bamford, ch 2 The price system  Gillespie, p.6-12  [www.tutor2u.net/blog/index.php/economics/comments/unit-1-micro-key-diagrams-and-glossary](http://www.tutor2u.net/blog/index.php/economics/comments/unit-1-micro-key-diagrams-and-glossary) |
| Joint demand (complements) and alternative demand (substitutes) | Recall the concept of complementary and substitute goods from the section on cross-elasticity. Ask learners for examples. **(I) (W)**  Use diagram and learner input to show how a decrease in the price of a good that is complementary to product A might cause the whole demand curve for product A to shift to the right **(increase).** Alternatively if the price of the complementary product increases, the whole demand curve for product A might shift to the left **(decrease)**. **(I) (W)** **(F)**  Ask learners to form pairs andrepeat this activity for an increase or decrease in the price of a substitute good and show how this might cause the whole curve to shift to the right **(increase)** or to the left **(decrease)**. **(P) (F)** |  | Bamford, ch 2 The price system  [www.tutor2u.net/economics/revision-notes/as-markets-crossprice-elasticity-of-demand.html](http://www.tutor2u.net/economics/revision-notes/as-markets-crossprice-elasticity-of-demand.html) |
| Joint supply | Ask learners to provide possible examples of joint supply  Note suggestions on the whiteboard and ask rest of class whether and why they would accept/reject chosen examples. **(W) (F)**  Ask learners to draw relevant diagrams to show the impact on the market equilibrium price of a change in the price of a good in joint supply. Learners can swap diagrams and mark according to teacher mark scheme. **(I) (F)** |  | Bamford, ch 2 The price system  [www.tutor2u.net/blog/index.php/economics/comments/joint-supply-the-by-products-of-pigs](http://www.tutor2u.net/blog/index.php/economics/comments/joint-supply-the-by-products-of-pigs) |
| The workings of the price mechanism; rationing, signalling and the transmission of preferences | Learners could work in pairs or small groups to consider examples of where the price mechanism is used as a rationing and signalling device. For example, the operation of an auction or an internet buy and sell site. This activity would require prior input by the teacher. | Teachers need to emphasise to learners that the price mechanism is not a static, but a dynamic, concept. The price mechanism involves rationing and signalling functions and learners need to appreciate that a price paid by a consumer is a way if indicating preferences.  **KEY CONCEPT 3: EQUILIBRIUM AND EFFICIENCY**  It is important that learners understand how prices are set by markets which are always moving in to, and out of, equilibrium. | Bamford, ch 2 The price system  Cook, Ch 2, p 35  Cook et al  Anderton, Ch 15, p 97  Gillespie, p 14  [www.bized.co.uk/learn/economics/markets/index.htm](http://www.bized.co.uk/learn/economics/markets/index.htm) |

| **Learning objectives** | **Suggested teaching activities** | **Teacher guidance notes and key concepts** | **Learning resources** |
| --- | --- | --- | --- |
| **Consumer and producer surplus** | | | |
| Meaning and significance | Use a question and answer session using examples (e.g. concert tickets) to produce a description of consumer surplus. **(W)**  Give each learner a worksheet with a diagram showing market equilibrium and ask them to identify, with a written explanation, the area on the diagram that would represent consumer surplus. **(I)**  Those learners who feel sufficiently confident draw and explain their results for the rest of the class. **(Challenging)**  Carry out the same exercise for producer surplus. **(I)** | The surplus is the difference between the price the consumer would be willing to pay and the actual price paid(market price) | Bamford, ch 2 The price system |
| How these are affected by changes in equilibrium price and quantity. | Give learners working individually a worksheet with four diagrams. Each diagram shows the effect on market equilibrium price, due to either a shift in supply or a shift in demand. Learners show how the consumer and producer surplus will change in each situation. **(I)**  Learners exchange completed worksheets, mark the answers and discuss each other’s response **(F)**  More able learners can attempt to explain in writing the link between the market in disequilibrium and an inefficient outcome (before the teacher’s key concept explanation). **(Challenging)**  Class discussion on any difficulties with the exercise. **(W)** | **KEY CONCEPT 3: EQUILIBRIUM AND EFFICIENCY**  Illustrate by explaining the situation when the market is not in equilibrium and then linking this to an inefficient outcome. | Bamford, ch 2 The price system  [www.tutor2u.net/blog/index.php/economics/comments/unit-1-micro-key-diagrams-and-glossary](http://www.tutor2u.net/blog/index.php/economics/comments/unit-1-micro-key-diagrams-and-glossary) |
| *Progress check – consumer and producer surplus* | To consolidate learning on this topic, set learners an end of topic quiz on consumer/producer surplus. Include multiple choice questions from Paper 1 past papers and make sure this gives the opportunity to revise all the material covered in this section. **(I) (F)**  Discuss the answers in class to help clarify any weak areas or misunderstandings. **(W)** | You should also take the opportunity to discuss good multiple choice question techniques as part of exam skills in general. | Cambridge past papers and accompanying mark schemes are available at [teachers.cie.org.uk](http://teachers.cie.org.uk) |

# [Government microeconomic intervention (AS Level)](#_Contents)

## Recommended prior knowledge

As well as an ability to handle data, including graphs and diagrams, it is essential that learners are familiar with supply and demand analysis introduced in section 2. Learners who have previously studied IGCSE or O level Economics may be able to progress more quickly through certain elements of the course

## Context

This topic builds upon the market analysis developed in section 2. The emphasis is on government intervention in the market and learners will be given opportunities to **apply** theory introduced in section 2

## Outline

The AS Level topics covered in this section are:

* maximum, and minimum prices
* taxes (direct and indirect)
* subsidies
* transfer payments
* direct provision of goods and services
* nationalisation and privatisation.

## Suggested teaching time

It is recommended that this unit should take approximately 10% of the AS course (5% of the whole AS and A Level programme).

| **Learning objectives** | **Suggested teaching activities** | **Teacher guidance notes and key concepts** | **Learning resources** |
| --- | --- | --- | --- |
| **Maximum and minimum prices** | | | |
| Meaning and effect on the market | Ask each learner to write down what they think economists mean by a maximum and minimum price, and provide an example of a situation where a maximum and a minimum price might be applied. **(I)**  Lead a class discussion to establish the meaning of each concept, and highlight good examples. **(W)** | Teachers should stress the importance of setting maximum prices below market equilibrium price and minimum prices above market equilibrium price | Bamford, ch 2 The price system  [www.tutor2u.net/economics/revision-notes/as-marketfailure-maximum-prices.html](http://www.tutor2u.net/economics/revision-notes/as-marketfailure-maximum-prices.html) |
| Meaning and effect on the market | Give each learner graph paper and ask them to show the effect of a maximum price on a market of their choice. On a separate piece of graph paper, they then produce a diagram showing the impact of a minimum price on a market of their choice. **(I)**  Learners exchange graphs with a partner and mark each other’s work. **(F)**  Demonstrate both maximum and minimum price effects by drawing appropriate graphs on the whiteboard. Ask learners to supply suggestions for labelling the diagrams. **(W)** | Work should be marked on the basis of clarity and accuracy.  Learners should clearly identify a situation which will cause an excess demand and compare this with a situation which will cause excess supply | Bamford, ch 2 The price system  [www.tutor2u.net/economics/revision-notes/as-marketfailure-maximum-prices.html](http://www.tutor2u.net/economics/revision-notes/as-marketfailure-maximum-prices.html)  [www.tutor2u.net/blog/index.php/economics/comments/unit-1-micro-key-diagrams-and-glossary](http://www.tutor2u.net/blog/index.php/economics/comments/unit-1-micro-key-diagrams-and-glossary) |
| Meaning and effect on the market | Learners go to the YouTube link. They make notes or construct a mind map on the video presentation in preparation for the next exercise. **(I) (F)**  Using the market supply and demand diagrams for coffeewhich they have already plotted, ask groups to explain how the imposition of a price set **above** their existing equilibrium price will affect their market for coffee. Now ask groups to explain the effect of a price fixed **below** their existing equilibrium price. Learners make notes on their explanations so that they can feed back to the whole class. **(G)**  Ask each group to explain in writing how they might address problems arising due to fixed prices. **(G) (F) (Challenging)**  Discuss and evaluate the problems and solutions as a class. **(W)**  Ask groups to consider why **excess demand** and **excess supply** might arise, and how these problems might be dealt with. Feedback and check answers as a class **(G) (W)(Challenging)** | Learners should be given additional guidance regarding approaches to note taking.  The main aim of this exercise is for learners to identify problems created by price fixing and, and more importantly, to suggest possible solutions in each case.  **KEY CONCEPT 3: EQUILIBRIUM AND EFFICIENCY**  Teachers can link this key concept to the application of minimum/maximum pricesand the effect on efficiency **(Challenging)** | Bamford, ch 2 The price system  Gillespie p.14-15  [www.youtube.com/economicsfun](http://www.youtube.com/economicsfun) |
| Meaning and effect on the market | Give each learner a worksheet with incomplete diagrams. Each diagram illustrates the effect of either a minimum price or a maximum price. Learners identify the consumer surplus and the producer surplus in each case and comment on the change that has taken place, after the imposition of the maximum/minimum price. **(I) (Challenging)** | This exercise will provide an opportunity to revise consumer surplus and producer surplus. These are often seen as a more demanding part of the course. | Bamford, ch 2 The price system |
| Meaning and effect on the market | Learners form groups and go to the Economics Online website. Each learner uses the material on this site to write down three questions on maximum and minimum prices. The rest of the group then has to answer the questions. **(G)** |  | [www.economicsonline.co.uk/Competitive\_markets/Non\_market\_price.html](http://www.economicsonline.co.uk/Competitive_markets/Non_market_price.html) |

| **Learning objectives** | **Suggested teaching activities** | **Teacher guidance notes and key concepts** | **Learning resources** |
| --- | --- | --- | --- |
| **Taxes (direct and indirect)** | | | |
| Impact and incidence of taxes | Give an example of a direct tax and an indirect tax and ask learners to write down what they think are the main differences between these two types of tax. **(I)**  Lead a class discussion based on individual feedback. Give an opportunity for more confident learners to list their differences on the whiteboard for the rest of the class. **(W)**  Class question and answer session on how an indirect tax might affect a supply curve. | The teacher can use this to revise a more demanding part of the syllabus | Bamford, ch 3 Government intervention in the price system  [www.economicsonline.co.uk/Competitive\_markets/Tax\_incidence.html](http://www.economicsonline.co.uk/Competitive_markets/Tax_incidence.html) |
| Impact and incidence of taxes | Provide a clear explanation of the difference between the **impact** of a tax and the **incidence** (or burden) of a tax. The simple way to explain incidence, is that it is the percentage/proportion of a tax paid by the consumer compared to the percentage/proportion of the tax paid by the producer.  Draw a diagram on the whiteboard showing the impact of a tax with numerical values shown relating to changes in price and amount sold.  Ask learners to calculate and explain the **incidence** of this particular tax. **(I) (F)** | Learners often find it difficult to understand what economists mean by the ‘incidence’ of a tax. | Bamford, ch 3 Government intervention in the price system  [www.economicsonline.co.uk/Competitive\_markets/Tax\_incidence.html](http://www.economicsonline.co.uk/Competitive_markets/Tax_incidence.html) |
| Specific and *ad valorem* taxes | Learners work in pairs and use the Business Economics internet site to identify a specific tax and an *ad valorem* tax and explain why they are different. Each pair presents their findings on a flip chart to the rest of the class. Encourage the rest of the class to ask questions. **(P) (W)**  Ask learners individually to find two examples of each type of tax from the national income statistics site and in writing, assess their importance. **(I) (Challenging)** | This activity provides an opportunity for peer mentoring.  This is a good time for the teacher to stress the importance of this particular site [www.businesseconomics.com](http://www.businesseconomics.com) This is a very comprehensive site which covers all the needs of an AS/A Level learner. All the key economics sites can be located under the ‘Education Center’ part of the site | Bamford, ch 2 The price system  Gillespie, p.15  [www.businesseconomics.com/national-statistics-offices.html](http://www.businesseconomics.com/national-statistics-offices.html) |
| Specific and *ad valorem* taxes | Invite individual learners to draw and label a diagram on the whiteboard which illustrates how a specific tax will affect the price and quantity supplied (i.e. the supply curve) of a good, using the nature of the tax to explain the effect. **(I) (Challenging)**  Invite learners from the rest of the class to make any changes to the diagram they think necessary. **(W)**  Draw and explain the correct diagram on the whiteboard.  Repeat this process for an *ad valorem* tax. Learners should be able to explain this different shift by referring to the different type of tax. **(I) (W)** | The new supply curve should be drawn parallel to the existing supply curve  In this case the new curve will not shift in parallel to the existing supply curve. | Bamford, ch 2 The price system  [www.tutor2u.net/blog/index.php/economics/comments/key-as-micro-terms-taxes-and-subsidies](http://www.tutor2u.net/blog/index.php/economics/comments/key-as-micro-terms-taxes-and-subsidies)  [www.tutor2u.net/blog/index.php/economics/comments/unit-1-micro-key-diagrams-and-glossary](http://www.tutor2u.net/blog/index.php/economics/comments/unit-1-micro-key-diagrams-and-glossary) |
| Specific and *ad valorem* taxes | Revise price elasticity of demand through a brief class question and answer session. **(W)**  Ask each learner to draw an inelastic demand curve and an elastic demand curve and then use their diagrams to show how the impact of a specific tax on price and units sold will vary significantly depending upon the elasticity of demand for the product. **(I)**  In pairs, learners think of reasons (for class discussion) for levying such taxes and what types of goods are suitable for taxation. **(P)**  Discuss the answers using diagrams and learners’ contributions. **(W) (Challenging)**  Learners then work individually on a worksheet with ten questions on the effect of an *ad valorem* tax on demand. **(I) (Challenging)** | This will test understanding of the nature and importance of a particular type of tax **and** an ability to analyse.  The diagram and questions can be taken from Anderton p. 75 | Bamford, ch 2 The price system  Anderton, p.75  [www.tutor2u.net/economics/revision-notes/as-markets-price-elasticity-of-demand.html](http://www.tutor2u.net/economics/revision-notes/as-markets-price-elasticity-of-demand.html)  [www.economicsonline.co.uk/Competitive\_markets/Tax\_incidence.html](http://www.economicsonline.co.uk/Competitive_markets/Tax_incidence.html)  [www.tutor2u.net/blog/index.php/economics/comments/unit-1-micro-key-diagrams-and-glossary](http://www.tutor2u.net/blog/index.php/economics/comments/unit-1-micro-key-diagrams-and-glossary) |
| Average and marginal rates of taxation | Elicit from learners what they think an average rate of taxation is. Compare this with the marginal rate of taxation. **(W)**  Each learner then writes down their own definition of marginal and average rates of taxation. **(I) (F)**  Give learners partially completed tables relating to average taxation and marginal taxation.Learners complete the table and plot a graph of each type of tax rate against individual income. **(I) (F)**  More able learners can see whether they can identify any particular relationship between the marginal tax graph and the average tax graph. **(I) (Challenging)**  In pairs, each learner checks and comments on their partner’s tables and diagram . Theythen review and discuss each other’s comments. **(P)**  Question and answer session relating to the relationship between the average and marginal tax rate **(W) (F) (Challenging)** | **KEY CONCEPT 2: THE MARGIN AND CHANGE**  Link this conceptto the teaching of marginal rates of taxation and why decisions made at the margin are such an important part of economic analysis.  This is an opportunity for peer mentoring. | Sloman, p.300-302  [www.bized.co.uk/virtual/economy/policy/tools/income/inctaxth3.htm](http://www.bized.co.uk/virtual/economy/policy/tools/income/inctaxth3.htm) |
| Proportional, progressive and regressive taxes | Divide learners into groups of three. Each learner in each group will choose one of the three types of tax to research.Learners can use the Business Economics education centre site to access relevant sites for their research.  Each group gives a presentation on the key differences between the different tax regimes. **(G)**  Give learners a standard pro-forma they use to assess each presentation e.g. the assessment should look at:   * relevance of material * effect on low/high income earners, * arguments for and against * use of examples * quality of power point slides * communication skills. **(W)**   The teacher will also assess each presentation and the combined peer group/teacher assessment established. | Some time should be spent highlighting the range of relevant material that can be found on this site such as a wide range of relevant macroeconomic statistics.  The teacher should use a standard pro-forma to assess each group presentation.  Introduce and discuss peer group assessment with learners | [www.bized.co.uk/virtual/economy/policy/tools/income/inctaxth2.htm](http://www.bized.co.uk/virtual/economy/policy/tools/income/inctaxth2.htm) |
| The Canons of Taxation | List the four Canons of Taxation on the whiteboard and hold a class question and answer session to establish understanding. **(W)**  Each learner completes a worksheet which lists different types of tax (at least one example of a direct tax and one example of an indirect tax should be included). Learners assess the effectiveness of each tax by assessing how well it meets the four Canons. **(I)**  Lead a class discussion based on learner feedback. **(W)** | *The 'Canons of taxation' were first developed by* [*Adam Smith*](http://www.bized.co.uk/virtual/economy/library/economists/smith.htm) *as a set of criteria by which to judge taxes. They are still widely accepted as providing a good basis by which to judge taxes. Smith's four canons were*   1. *The cost of collection must be low relative to the yield* 2. *The timing and amount to be paid must be certain to the payer* 3. *The means and timing of payment must be convenient to the payer* 4. *Taxes should be levied according to ability to pay* | [www.bized.co.uk/virtual/economy/policy/tools/income/inctaxth1.htm](http://www.bized.co.uk/virtual/economy/policy/tools/income/inctaxth1.htm) |

| **Learning objectives** | **Suggested teaching activities** | **Teacher guidance notes and key concepts** | **Learning resources** |
| --- | --- | --- | --- |
| **Subsidies** | | | |
| Impact and incidence of subsidies | Invite individual learners to draw and label a diagram on the whiteboard which illustrates how a subsidy will affect the price and quantity sold of a good. **(I)**  Invite learners from the rest of the class to make any changes to the diagram they think necessary. **(W)**  Draw and explain the correct diagram on the whiteboard. | Contrast the effect of a subsidy with that of a specific tax  Requiring learners to construct diagrams will reinforce the assessment for learning approach. | Bamford, ch 3 Government intervention in the price system  [www.tutor2u.net/economics/revision-notes/as-marketfailure-producer-subsidies.html](http://www.tutor2u.net/economics/revision-notes/as-marketfailure-producer-subsidies.html) |
| Impact and incidence of subsidies | Ask learners to draw an inelastic demand curve and an elastic demand curve and then use their diagrams to show how the impact of a specific subsidy on price and units sold will vary significantly depending upon the elasticity of demand for the product. **(I)**  Ask learners to draw diagrams on the whiteboard which illustrate the impact of a subsidy on perfectly elastic and perfectly inelastic goods **(W) (Challenging)**  Encourage learners to give examples of the type of goods/services which governments are likely to subsidise, and why**. (W) (Challenging)** |  | Bamford, ch 3 Government intervention in the price system  [www.tutor2u.net/economics/revision-notes/as-marketfailure-producer-subsidies.html](http://www.tutor2u.net/economics/revision-notes/as-marketfailure-producer-subsidies.html)  [www.tutor2u.net/blog/index.php/economics/comments/unit-1-micro-key-diagrams-and-glossary](http://www.tutor2u.net/blog/index.php/economics/comments/unit-1-micro-key-diagrams-and-glossary) |
| Impact and incidence of subsidies | Provide a clear explanation of the difference between the **impact** of a subsidy and the **incidence** of a subsidy.  Draw a diagram on the whiteboard showing the impact of a subsidy with numerical values shown relating to changes in price and amount sold.  Learners calculate and explain the **incidence** of this particular subsidy and the total cost to the government of applying the subsidy. **(I) (F) (W)** | Learners often find it difficult to understand what economists mean by the ‘incidence’ of a subsidy. The simple way to explain this is by stating that it is the percentage/proportion of a subsidy paid by the consumer compared to the percentage/proportion of the subsidy paid by the producer. | Bamford, ch 3 Government intervention in the price system  [www.economicsonline.co.uk/Competitive\_markets/Subsidies.html](http://www.economicsonline.co.uk/Competitive_markets/Subsidies.html) |

| **Learning objectives** | **Suggested teaching activities** | **Teacher guidance notes and key concepts** | **Learning resources** |
| --- | --- | --- | --- |
| **Transfer payments** | | | |
| Meaning and effect on the market | Learners briefly revise factors of production by completing a worksheet that requires identification of the type of income associated with each factor. **(I)**  Encourage learners to establish why each of the factors discussed will receive some type of payment. **(W)**  Provide a formal definition of the term ‘transfer payment’, referring to payments which do not relate to an increase in output.  Learners work in pairs and use the national income statistics to identify four examples of transfer payments. **(P) (F)**  Each pair gives an example of a transfer payment with an explanation to the rest of the class. Individual learners contribute to the class discussion through question and answer. Teacher will discuss with the class which are valid examples. **(W)** | The main point to emphasise is that factors of production receive payments based on their contribution to total output  It is expected that learners will identify: pensions, student grants; unemployment benefit; sickness benefit paid by government etc. | Bamford, ch 1 Basic economic ideas  [www.bized.co.uk/virtual/economy/policy/tools/government/gexpth1.htm](http://www.bized.co.uk/virtual/economy/policy/tools/government/gexpth1.htm)  [www.businesseconomics.com/national-statistics-offices.html](http://www.businesseconomics.com/national-statistics-offices.html) |

| **Learning objectives** | **Suggested teaching activities** | **Teacher guidance notes and key concepts** | **Learning resources** |
| --- | --- | --- | --- |
| **Direct provision of goods and services** | | | |
| Meaning and effect on the market | Ask learners to write down what they think is meant by the ‘direct provision of goods and services’. **(I)**  Ask learners to explain what they think this term means and compare to how goods are provided indirectly through the ‘price mechanism’. **(W)**  Ensure that learners understand the key difference between **direct** provision and **indirect** provision.  Learners make a list of goods which they think are more likely to be provided directly by governments rather than through the market mechanism. They can use the Education Center web link to locate the type of goods/services that would be provided by governments. **(I)**  Lead a class discussion which identifies some typical goods provided directly by governments. Focus on ‘Public’ and ‘Merit’ goods, which will revise material covered earlier. **(W)** | This will provide teachers with an opportunity to revise the ‘price mechanism’ a very important part of the introduction to economics.  This will provide more opportunities to revise a more demanding part of the syllabus and link theory to practice. | [www.businesseconomics.com/economics-education-center.html](http://www.businesseconomics.com/economics-education-center.html)  [www.tutor2u.net/economics/revision-notes/as-marketfailure-public-private-goods.html](http://www.tutor2u.net/economics/revision-notes/as-marketfailure-public-private-goods.html)  [www.bized.co.uk/virtual/economy/policy/tools/government/gexpth2.htm](http://www.bized.co.uk/virtual/economy/policy/tools/government/gexpth2.htm) |
| Meaning and effect on the market | Divide the class into two groups. The groups identify goods as follows:   * Group 1: identifies goods they think should be provided directly * Group 2: identifies goods they think should be provided through market forces.   Each group is given time to research and prepare their case. They will attempt to justify their choice to the rest of the class and answer questions from the rest of the class. **(G) (F)**  Give each learner a worksheet which asks them to give four reasons why some direct goods/services might be provided free or well below cost. **(I) (Challenging)** | This exercise will enable learners to familiarise themselves with some basic research practice and develop and improve some general communication skills. All learners should be encouraged to take part in the discussion. | [www.tutor2u.net/economics/revision-notes/as-marketfailure-government-intervention-2.html](http://www.tutor2u.net/economics/revision-notes/as-marketfailure-government-intervention-2.html)  [www.businesseconomics.com/economics-education-center.html](http://www.businesseconomics.com/economics-education-center.html) |

| **Learning objectives** | **Suggested teaching activities** | **Teacher guidance notes and key concepts** | **Learning resources** |
| --- | --- | --- | --- |
| **Nationalisation and privatisation** | | | |
| Meaning and effect on the market | Provide formal definitions of nationalisation and privatisation.  Learners individually list examples of nationalised and privatised industries which are currently operating in their country. **(I)**  Divide learners into four groups. Each group will be given time to research one of:   * advantages of nationalisation * disadvantages of nationalisation * advantages of privatisation * disadvantages of privatisation.   Each group gives a 15-minute Powerpoint presentation relating to their topic. **(G)** **(F)**  Assess each group’s presentation on a pro-forma. | Direct learners to relevant source material appropriate to the home country.  Each group will produce a list on a flip chart and deliver to the rest of the class. | Bamford, ch 3 Government intervention in the price system  [www.businesseconomics.com/economics-education-center.html](http://www.businesseconomics.com/economics-education-center.html) |
| Meaning and effect on the market | Organise a whole class debate. Divide learners into two groups:   * Group 1: will argue the case for the State provision of health care * Group 2: will argue the case for providing health care through the private sector   Direct each group to appropriate learning sites and give time to prepare their case. Remind each group to refer to the advantages/disadvantages of privatisation/nationalisation already determined, when they present their case. **(G) (W)**  The teacher will decide which group has produced the most convincing case and summarise each group’s performance.Learners take notes of the teacher’s summary. **(F)** | This exercise will provide a good opportunity to apply economic theory to a ‘real life’ situation.  **KEY CONCEPT 4: REGULATION AND EQUITY**  One of the key issues surrounding the debate on whether to privatise the provision of health care is the government desire to regulate to ensure an equitable provision for all of what is an important merit good. | Bamford, ch 3 Government intervention in the price system  [www.economicsonline.co.uk/Market\_failures/Healthcare.html](http://www.economicsonline.co.uk/Market_failures/Healthcare.html) |

# [The macro economy (AS Level)](#_Contents)

## Recommended prior knowledge

For this section, learners will need a good grasp of the interaction of demand and supply content from the earlier unit on *The price system and the micro economy*, and will need also need good basic literacy skills and an ability to handle data, including graphs and diagrams. For this AS section on macroeconomic theory, it is also important that learners have a built up a good understanding of the key economic concept of **equilibrium** from the previous sections of this scheme of work.

## Context

This section introduces learners to the study of the economy as a whole, rather than focusing upon the behaviour of particular markets. It develops knowledge and understanding of key macroeconomic indicators such as inflation, balance of payments and exchange rates and enables learners to apply this understanding to analyse and evaluate aggregate economic behaviour in a range of different economic settings.

## Outline

The AS Level topics covered in this section are:

* aggregate demand (AD) and aggregate supply (AS) analysis
* inflation
* balance of payments
* exchange rates
* the terms of trade
* principles of absolute and comparative advantage
* protectionism.

## Suggested teaching time

It is recommended that this unit should take approximately 40% of the AS course (20% of the whole AS and A Level programme).

| **Learning objectives** | **Suggested teaching activities** | **Teacher guidance notes and key concepts** | **Learning resources** |
| --- | --- | --- | --- |
| **Aggregate Demand (AD) and Aggregate Supply (AS) analysis** | | | |
| The shape and determinants of AD and AS curves;  AD = C + I + G + (X – M) | Start by recapping learning on demand and supply and how they interact to determine an equilibrium price from the earlier AS unit on *The price system and the micro economy*. **(W)**  Ask learners to explain what is meant by equilibrium. **(W) (F)**  Graphically represent using a circular flow how an equilibrium level of national output can relate to an equilibrium national price level, then:   * define aggregate demand (AD) as the total spending on an economy’s goods and services in a given time * ask learners how AD may be different from an individual market demand. **(W)**   Put learners into groups and ask each group to use the internet to find examples in their own economy of the four main components of aggregate demand:   * consumer spending * investment * government spending * net exports (exports minus imports). **(G)**   Hold a class discussion on each group’s findings. **(W)**  To consolidate learning, give learners the required component data and ask them to plot an AD curve. **(I) (F)** | The concept of equilibrium is a constantly recurring theme in economics and care needs to be taken when explaining.  The Business Economics website link is one useful source for finding economic data on a wide range of different countries. | Bamford, ch 5 Theory and measurement in the macroeconomy  Gillespie, p.68  [www.bized.co.uk/learn/economics/adas/index.htm](http://www.bized.co.uk/learn/economics/adas/index.htm)  [www.economicsonline.co.uk/Managing\_the\_economy/Aggregate\_demand.html](http://www.economicsonline.co.uk/Managing_the_economy/Aggregate_demand.html)  [www.businesseconomics.com/national-statistics-offices.html](http://www.businesseconomics.com/national-statistics-offices.html) |
| The shape and determinants of AD and AS curves;  AD = C + I + G + (X – M) | Ask learners to define aggregate supply. Discuss the suggestions provided and establish an accurate definition on the board. **(W)**  Then draw a short-run aggregate supply curve and a long-run aggregate supply curve on the board. Use a class question and answer session to establish which is which and explain the difference in their shapes. **(W)**  Follow this by asking learners to:   * plot an AS curve and an AD curve on the same graph * use the resulting graph to explain the output gap. **(I or P)** **(F)** **(Challenging)** | Learners should be reminded to label each part of their graph accurately and to try to use all of the available space on the graph.  The final task in this activity could be delivered as a peer mentoring exercise where learning partners work together to work out and explain the output gap. | Bamford, ch 5 Theory and measurement in the macroeconomy  Anderton, units 34-35  Gillespie, p.69-70  [www.bized.co.uk/learn/economics/adas/index.htm](http://www.bized.co.uk/learn/economics/adas/index.htm)  [www.tutor2u.net/economics/content/topics/ad\_as/aggregate\_supply.htm](http://www.tutor2u.net/economics/content/topics/ad_as/aggregate_supply.htm)  [www.tutor2u.net/economics/revision-notes/as-macro-equilibrium.html](http://www.tutor2u.net/economics/revision-notes/as-macro-equilibrium.html) |
| The distinction between a movement along and a shift in AD and AS | Start by asking learners to explain how a change in price level may affect each component of aggregate demand. **(I)**  Then ask learners to watch the aggregate demand video on the Economics Online website, take notes and list those factors which may shift the AD curve. **(I or P) (F)**  Follow with a class discussion to check that the directions of each shift are clearly understood. Establish a final list on the board. **(W)**  Then ask learners to watch the aggregate supply video on the same site, take notes and explain in writing how a change in factors may cause shifts in the AS curve. **(I or P) (F)**  On completion, establish with the class a list of factors which:   * cause movements along the AS curve * shift the AS curve. **(W)** | Emphasise that changes in price level cause movements along an AD curve and an AS curve, ***not*** a shift in the curve. | Bamford, ch 5 Theory and measurement in the macroeconomy  [www.economicsonline.co.uk/Managing\_the\_economy/Aggregate\_demand.html](http://www.economicsonline.co.uk/Managing_the_economy/Aggregate_demand.html)  [www.economicsonline.co.uk/Managing\_the\_economy/Aggregate+supply.html](http://www.economicsonline.co.uk/Managing_the_economy/Aggregate+supply.html)  [www.tutor2u.net/economics/revision-notes/as-macro-aggregate-supply.html](http://www.tutor2u.net/economics/revision-notes/as-macro-aggregate-supply.html) |
| The interaction of AD and AS and the determination of the level of output, prices and employment | Using the graphs they developed in the earlier activity on AS/AD curves, ask learners to explain the concept of equilibrium. **(W)**  Then, using diagrams on the board and AD/AS analysis to justify their answers, ask learners to explain how a change in equilibrium may affect the price level, level of real output and level of employment. **(W)**  **C**onclude by putting learners into groups and asking them to:   * research a current macroeconomic problem in their own country * give a presentation to the class which uses AS/AD theory to explain this problem. **(G)** **(F)** | In the class work, emphasise that the vertical axis should be labelled ‘price level’ not ‘inflation’ and the horizontal axis should be labelled ‘real GDP/output’ not ‘income’.  Learners will need guidance when preparing their presentation and careful direction to find appropriate resources.  The Business Economics link is a good starting point for ideas for current macroeconomic problems. | Bamford, ch 5 Theory and measurement in the macroeconomy  Anderton, unit 35  Gillespie, p.69-70  [www.economicsonline.co.uk/Managing\_the\_economy/Aggregate\_demand.html](http://www.economicsonline.co.uk/Managing_the_economy/Aggregate_demand.html)  [www.tutor2u.net/economics/revision-notes/as-macro-aggregate-supply.html](http://www.tutor2u.net/economics/revision-notes/as-macro-aggregate-supply.html)  [www.businesseconomics.com/national-statistics-offices.html](http://www.businesseconomics.com/national-statistics-offices.html) |

| **Learning objectives** | **Suggested teaching activities** | **Teacher guidance notes and key concepts** | **Learning resources** |
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| **Inflation** | | | |
| The definition of inflation, degrees of inflation and the measurement of inflation, deflation and disinflation | Start by asking learners to write down what they think economists mean by inflation. **(I)**  Discuss the responses in class and then provide a formal definition on the board which includes the following three key elements: a *persistent*rise in the *general* price level in a *given time period*. **(W)**  Then ask learners to define deflation. Again, discuss the responses in class and provide a formal definition including the three key elements. **(I)** **(W)**  Move on to explain the different methods for calculating the rate of inflation. Build up each stage of constructing the price level index carefully on the board. **(W)**  Use graduated questions such as those in Bamford or Anderton to enable learners to build up their skills in calculating inflation. **(I)**  Go through afterwards and discuss the answers in class. **(W)**  Consolidate learning by setting data response questions from Cambridge past papers such as a class test or homework:   * Question 1A from Past Paper 21 May/June 2014 * Questions 1A and 1B from Past Paper 21 May/June 2012 * Question 1B from Past Paper 22 May/June 2010. **(I or H) (F)** | When describing inflation or deflation, it is important that learners refer to a persistent rise/fall in the average price level. | Bamford, ch 6 Macroeconomic problems  [www.tutor2u.net/economics/revision-notes/as-macro-inflation.html](http://www.tutor2u.net/economics/revision-notes/as-macro-inflation.html) (price level index)  [www.tutor2u.net/economics/presentations/aseconomics/macro/Inflation/](http://www.tutor2u.net/economics/presentations/aseconomics/macro/Inflation/) (presentation about inflation)  Cambridge past papers and accompanying mark schemes are available at [teachers.cie.org.uk](http://teachers.cie.org.uk) |
| The definition of inflation, degrees of inflation and the measurement of inflation; deflation and disinflation | Ask learners to:   * research current newspaper articles/economic periodicals to establish how governments measure inflation and deflation * present their findings in a poster or wall chart for display in the class. **(I)**   Follow with a whole class discussion where learners briefly present their work. Encourage the class to ask questions to consolidate learning. **(W)** | A selection of online newspapers and periodicals are provided in the *Overview* section of this scheme of work, but guide learners to find their own sources wherever practical. | Bamford, ch 6 Macroeconomic problems  Threadgould, ch 4  [www.tutor2u.net/economics/presentations/aseconomics/macro/Inflation/](http://www.tutor2u.net/economics/presentations/aseconomics/macro/Inflation/) |
| The distinction between money values and real data | Provide the class with worked examples to show the difference between money values and real data, and a list of other indices which might be used. **(W)**  Then direct learners to the Tutor2U website to start further reading on this topic. **(I)**  Hand out a pre-prepared worksheet requiring learners to:   * calculate national output from supplied figures * explain why some figures give the ‘real value’ of the output and some the ‘money value’ * explain the link between the GDP deflator and the distinction between real value and money value. **(I) (F) (Challenging)** | This is a useful opportunity to discuss other examples of the distinction between ‘real’ and ‘nominal’ values, e.g. money wages and real wages. | Bamford, ch 5 Theory and measurement in the macroeconomy  [www.tutor2u.net/blog/index.php/economics/comments/unit-2-macro-revision-on-real-economic-data](http://www.tutor2u.net/blog/index.php/economics/comments/unit-2-macro-revision-on-real-economic-data) |
| The causes of inflation (cost-push and demand-pull inflation) | Hand out a pre-prepared worksheet with the different types of inflation listed (monetary, cost-push, demand-pull) but with incomplete data on each. Ask learners to use the BizEd website links to research what constitutes the different types of inflation and thus complete the worksheet. **(I) (F)**  Follow this with a question and answer session to test learner understanding. **(W)**  Conclude by asking learners to research which types of inflation currently exist in their own country’s economy and provide supporting evidence for each. **(I or G) (F)** | The question and answer session could be done as peer work where learners ask each other questions and respond with the required answers.  The Business Economics link is one good starting point for economic data on a range of countries. | Bamford, ch 6 Macroeconomic problems  [www.bized.co.uk/virtual/economy/policy/outcomes/inflation/inflth2.htm](http://www.bized.co.uk/virtual/economy/policy/outcomes/inflation/inflth2.htm)  [www.bized.co.uk/virtual/economy/policy/outcomes/inflation/inflth3.htm](http://www.bized.co.uk/virtual/economy/policy/outcomes/inflation/inflth3.htm)  [www.bized.co.uk/virtual/economy/policy/outcomes/inflation/inflth5.htm](http://www.bized.co.uk/virtual/economy/policy/outcomes/inflation/inflth5.htm)  [www.businesseconomics.com/national-statistics-offices.html](http://www.businesseconomics.com/national-statistics-offices.html) |
| The causes of inflation (cost-push and demand-pull inflation) | Recap the main causes of inflation and the AD/AS analysis undertaken in the previous module of this unit. **(W)**  Hand out pre-prepared worksheets with missing data to complete to ensure familiarity with AD/AS analysis. **(I) (F)**  Then put learners into groups and ask them to:   * analyse the causes of inflation in an economy of their choice * present their findings to the rest of the class on a flip chart or as a mind map. **(G)**   Conclude with a class discussion to consolidate learning. **(W)** | It is important to check that learners are familiar with AS/AD analysis here so they can examine the theoretical underpinnings of the causes of inflation.  The Business Economics link is one good starting point for economic data on a range of countries. | Bamford, ch 6 Macroeconomic problems  Anderton, units 28 and 29  Threadgould, ch 3 and 4  [www.tutor2u.net/economics/presentations/aseconomics/macro/Inflation/](http://www.tutor2u.net/economics/presentations/aseconomics/macro/Inflation/)  <http://www.businesseconomics.com/country-data.html> |
| The consequences of inflation | Keeping learners in the same groups, ask them to:   * analyse the consequences of inflation in their chosen economy * identify and explain at least three different consequences * attempt to assess their order of importance. **(G) (Challenging)**   On completion, each group presents their findings to the class using a medium of their choice. Allow time for class questions. **(W)**  As a further extension, also ask groups to explain and then discuss in class the links between inflation and unemployment and the theory which underpins this. **(G) (Challenging)** | Guide learners in the group task by suggesting possible links between inflation and potentially negative effects on macroeconomic indicators such as:   * economic growth * unemployment * balance of international payments. | Bamford, ch 6 Macroeconomic problems  [www.economicsonline.co.uk/Global\_economics/Inflation.html](http://www.economicsonline.co.uk/Global_economics/Inflation.html) |
| *Progress check – inflation* | To help reinforce learning on inflation, set Question 4 from Cambridge Past Paper 22 May/June 2014 as a class test. **(I) (F)** | Do in timed conditions and mark as per the mark scheme to enable effective exam practice. | Cambridge past papers and accompanying mark schemes are available at [teachers.cie.org.uk](http://teachers.cie.org.uk) |

| **Learning objectives** | **Suggested teaching activities** | **Teacher guidance notes and key concepts** | **Learning resources** |
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| **Balance of payments** | | | |
| Components of the balance of payments accounts: current account, capital and financial account, balancing item | Start by defining balance of payments for the class. **(W)**  Then put learners into pairs and ask them to list all the examples they can of transactions that occur between countries. **(P)**  On completion, discuss the answers as a class, showing how they relate to the three main components of the balance of payments accounts. **(W)**  Follow this by handing out a pre-prepared worksheet on the main components of the balance of payment accounts with missing data/information which learners research and complete so they can clearly distinguish between:   * balance on goods * balance on services * current account * capital account * net financial flow. **(I) (F)**   When finished, go through and discuss the answers in class. **(W)**  Finally, put learners into pairs to identify which part of these accounts would be classified as trade and why. **(P)**  Each group shares its findings with the rest of the class. **(W)** | The three key components of the balance of payments accounts are as per the IMF/OECD definitions.  For the final pair work task, you could also encourage learners to research actual examples from their own country’s economy of the trade elements they identify. | Bamford, ch 4 International trade (The balance of payments)  [www.tutor2u.net/economics/presentations/aseconomics/macro/BalanceofPayments/default.html](http://www.tutor2u.net/economics/presentations/aseconomics/macro/BalanceofPayments/default.html)  [www.bized.co.uk/learn/economics/international/bop/index.htm](http://www.bized.co.uk/learn/economics/international/bop/index.htm) |
| Components of the balance of payments accounts: current account, capital and financial account, balancing item | Give learners a copy of their own country’s balance of payments accounts and a set of questions relating to these accounts. Ask learners individually or in groups to research and write down answers. The questions you ask should include:   * what constitutes goods? * what constitutes services trade? * how do these affect the balance on the current account? * how are balances on current accounts ultimately accounted for by flows recorded in the capital account? **(I or** **G) (F)**   On completion, go through the answers and lead a class discussion on the findings. Ensure learners understand that the balancing item is added when the current and capital accounts do not balance and the explain the reasons why this happens. Ask learners why the balancing item is often a very large figure. **(W)** | This activity, particularly the final class discussion, provides a good opportunity to encourage learners to think about and question the validity of the statistics used by economists. | Bamford, ch 4 International trade (The balance of payments)  [www.bized.co.uk/notes/2012/08/balance-payments](http://www.bized.co.uk/notes/2012/08/balance-payments)  [www.businesseconomics.com/country-data.html](http://www.businesseconomics.com/country-data.html) |
| Meaning of balance of payments equilibrium and disequilibrium | Start by recapping the activities on equilibrium from the earlier AS unit on the *Price system* and ensure learners can then give accurate definitions of both a balance of payments equilibrium and a balance of payments disequilibrium. **(W)**  Then hand out a worksheet showing a simplified set of balance of payments accounts with questions that require learners to identify equilibrium and disequilibrium positions correctly. **(I)**  Follow this by giving learners a copy of their country’s balance of payments accounts and ask them to explain in writing for each section of the accounts, whether the country is experiencing a balance of payments equilibrium or disequilibrium. **(I) (F)** | Stress here that international payments always have to balance in an accounting sense but economists and policy makers are primarily interested in the balance for official financing, i.e. the net payments that have to be made after all payments on current and capital account have been considered. | Bamford, ch 6 Macroeconomic problems  [www.economicshelp.org/blog/185/economics/balance-of-payments-disequilibrium](http://www.economicshelp.org/blog/185/economics/balance-of-payments-disequilibrium)  [www.tutor2u.net/economics/presentations/aseconomics/macro/BalanceofPayments/default.html](http://www.tutor2u.net/economics/presentations/aseconomics/macro/BalanceofPayments/default.html)  [www.businesseconomics.com/country-data.html](http://www.businesseconomics.com/country-data.html) |
| Causes of balance of payments disequilibrium in each component of the accounts | Ask learners to research the causes of disequilibria for each component in the balance of payments accounts using source material from textbooks and the web links provided, making notes on the explanations they find. **(I)**  Hold a whole class discussion to review learners’ findings, summarising the key factors on the board. The move the focus of the discussion to look specifically at the balance of payments situation in the learners’ own country and encourage them to discuss possible causes. **(W)**  Follow this by putting learners into pairs for the following task:   * one learner states a cause of a balance of payments disequilibrium * the other explains which part of the account would be affected and why * at the end of the exercise they discuss answers and review any that were incorrect. **(P)** | Remind learners that a disequilibrium can cause a surplus as well as a deficit. | Bamford, ch 6 Macroeconomic problems  [www.economicshelp.org/blog/185/economics/balance-of-payments-disequilibrium](http://www.economicshelp.org/blog/185/economics/balance-of-payments-disequilibrium)  [www.tutor2u.net/economics/presentations/aseconomics/macro/BalanceofPayments/default.html](http://www.tutor2u.net/economics/presentations/aseconomics/macro/BalanceofPayments/default.html)  [www.businesseconomics.com/country-data.html](http://www.businesseconomics.com/country-data.html)  [www.bized.co.uk/learn/economics/international/bop/index.htm](http://www.bized.co.uk/learn/economics/international/bop/index.htm) |
| Consequences of balance of payments disequilibrium on domestic and external economy | Put two partially-completed mind maps on the board:   * one linking a balance of payments disequilibrium to variables relating to the *domestic* economy, e.g. economic growth and unemployment * the other linking the disequilibrium to variables relating to the *external* economy, e.g. exchange rate and foreign reserves).   Then ask learners to work in pairs to complete the missing links on each mind map. **(P)**  Follow this by handing out an up-to-date newspaper article commenting on the consequences of a continuing balance of payments disequilibrium. Ask learners to:   * read the article individually * work in groups to produce a set of data response questions based on the article * exchange these with another group and attempt to answer each other’s questions. **(I and G)**   Summarise the key consequences with the class afterwards. **(W)**  Reinforce learning by setting Question 1 from Cambridge 2016 Specimen Paper 02. On completion, learners mark each other’s work. **(I, P) (F)** | Use this opportunity to remind learners of the benefits of mind maps, e.g.:   * a good revision tool * creative thinking and working * consolidating skills through ‘learning by doing’.   A selection of online newspapers and periodicals for the group task are listed in the *Overview* section of this scheme of work.  Encouraging learners to look at past papers and structure their own questions in the same way as the Cambridge data response questions is a useful way of developing exam skills and subject confidence.  For the final exam question, give learners a copy of the mark scheme on completion so they can mark each other’s work. | Bamford, ch 6 Macroeconomic problems  [www.economicsonline.co.uk/Global\_economics/The\_balance\_of\_payments.html](http://www.economicsonline.co.uk/Global_economics/The_balance_of_payments.html)  [www.economicshelp.org/blog/5776/trade/uk-balance-of-payments](http://www.economicshelp.org/blog/5776/trade/uk-balance-of-payments)  [www.businesseconomics.com/country-data.html](http://www.businesseconomics.com/country-data.html)  Cambridge 2016 specimen papers and accompanying mark schemes are available at [teachers.cie.org.uk](http://teachers.cie.org.uk) |
| *Progress check – balance of payments* | To consolidate learning on balance of payments, set learners a selection of questions about the balance of payments accounts from Cambridge past papers **(I) (F)** | Choose an appropriate range of multiple choice (Paper 1) and data response/essay (Paper 2) questions to help learners develop their exam skills. | Cambridge past papers and accompanying mark schemes are available at [teachers.cie.org.uk](http://teachers.cie.org.uk) |

| **Learning objectives** | **Suggested teaching activities** | **Teacher guidance notes and key concepts** | **Learning resources** |
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| **Exchange rates** | | | |
| Definitions and measurement of exchange rates – nominal, real, trade-weighted | Hand out a worksheet that defines the three different types of exchange rate (nominal, real, trade-weighted) without identifying which is which. Then ask learners to:   * research exchange rates using the provided textbook and website links * match the correct type of rate to each definition on the worksheet, explaining their choice in writing. * provide an example of how each type of exchange rate is measured. **(I)**   Follow with a whole class discussion based on individual task to ensure understanding of all the key points. **(W)** | – | Bamford, ch 6 Macroeconomic problems  Anderton, p.265-269  Threadgould, p.21-24  [www.bized.co.uk/learn/economics/international/exchange/index.htm](http://www.bized.co.uk/learn/economics/international/exchange/index.htm)  [www.tutor2u.net/economics/revision-notes/a2-macro-exchange-rate.html](http://www.tutor2u.net/economics/revision-notes/a2-macro-exchange-rate.html) |
| Determination of exchange rates – floating, fixed, managed float | Start by explaining that in a free market the exchange rate is determined by market forces. Therefore the equilibrium exchange rate is determined by supply and demand in the same way as a commodity, and occurs when demand and supply equate. **(W)**  Then hand out pre-prepared data tables showing amounts of a currency supplied/demanded at different prices. Ask learners to:   * plot graphs of supply and demand for the currency * identify the equilibrium price (exchange rate). **(I)**   Follow with a class discussion on the concept of a floating exchange rate. To ensure full understanding, ask learners to give examples of factors which might shift the supply/demand for currency in a floating rate system. **(W)**  Then use diagrams and questions and answers to explain to the class the concept of fixed exchange rates. **(W)**  Ask learners to find out which exchange rate system currently applies in their country. **(I)** | Stress that the exchange rate between two currencies will have a tendency not to change when there is equilibrium between them.  For the graph work, remind learners:   * a movement along the curve is caused by a change in the price of currency (exchange rate) * a movement of the whole curve is caused by changes in other factors, such as interest rates.   The Business Economics link is one good starting point for economic data on a range of countries. | Bamford, ch 6 Macroeconomic problems  Anderton, p.265-269  Gillespie, p.92-95  [www.tutor2u.net/economics/revision-notes/a2-macro-exchange-rate.html](http://www.tutor2u.net/economics/revision-notes/a2-macro-exchange-rate.html)  [www.bized.co.uk/virtual/dc/trade/theory/th9.htm](http://www.bized.co.uk/virtual/dc/trade/theory/th9.htm)  [www.bized.co.uk/virtual/dc/trade/theory/th10.htm](http://www.bized.co.uk/virtual/dc/trade/theory/th10.htm)  [www.businesseconomics.com/country-data.html](http://www.businesseconomics.com/country-data.html) |
| Determination of exchange rates – floating, fixed, managed float | Start by giving a definition of a ‘managed’ exchange rate.  Then hand out a pre-prepared worksheet with questions on managed exchange rates for learners to complete in pairs. **(P)**  Follow this by handing out a case study which illustrates the difficulties associated with attempting to manage exchange rates, together with a pre-prepared worksheet with related questions. Learners read the case study and carry out further research to provide written answers to the questions you set. **(I) (F)**  Consolidate learning on the determination of exchange rates with a brief class question and answer session on floating, fixed and managed systems. **(W)** | The UK’s decision to leave a managed exchange rate system in Europe in 1990 would be one good example for the case study exercise – the Libcom website link is one source for this. | Bamford, ch 6 Macroeconomic problems  Anderton, p.265-269  Gillespie, p.92-95  [www.tutor2u.net/economics/revision-notes/a2-macro-exchange-rate.html](http://www.tutor2u.net/economics/revision-notes/a2-macro-exchange-rate.html)  [www.tutor2u.net/economics/presentations/a2economics/macro/FixedFloatingExchangeRates/default.html](http://www.tutor2u.net/economics/presentations/a2economics/macro/FixedFloatingExchangeRates/default.html)  [www.libcom.org/library/britain-european-exchange-rate-mechanism](http://www.libcom.org/library/britain-european-exchange-rate-mechanism) |
| The factors underlying changes in exchange rates | Start by briefly recapping the key points of balance of payments from the previous topic. **(W)**  Then, using the demand and supply graphs and worksheets from the previous two activities, ask learners individually or in pairs to:   * identify in writing at least one factor relating to each part of the balance of payments account which may have an impact on a country’s exchange rate * investigate the factors currently having the most impact on their own country’s exchange rate. **(I or P) (F)**   Follow with a class discussion on the factors identified. Ask learners to consider which of these might lead a government to change fixed exchange rates. **(W) (F)** | For the research task, encourage learners to focus on their own country’s economy where practical.  For the final class discussion, help guide learners to an awareness of what might also be happening to other key macroeconomic indicators such as the rate of inflation or economic growth. | Bamford, ch 6 Macroeconomic problems  [www.tutor2u.net/economics/revision-notes/a2-macro-exchange-rate.html](http://www.tutor2u.net/economics/revision-notes/a2-macro-exchange-rate.html)  [www.tutor2u.net/blog/index.php/economics/comments/unit-4-macro-revision-on-balance-of-payments](http://www.tutor2u.net/blog/index.php/economics/comments/unit-4-macro-revision-on-balance-of-payments)  [www.bized.co.uk/learn/economics/international/exchange/index.htm](http://www.bized.co.uk/learn/economics/international/exchange/index.htm) |
| The effects of changing exchange rates on the domestic and external economy using AD, Marshall-Lerner and J curve analysis | Start by briefly recapping the key points on the macro economy covered so far in this topic. Then lead a class discussion to ensure learners understand what the key domestic macroeconomic indicators and key external macroeconomic indicators are. **(W)**  Follow this by explaining the Marshall-Lerner condition and J curve analysis and how they are linked. **(W)**  Then put learners into groups and give each one key domestic one key external macroeconomic indicator to look at. Ask them to:   * research the potential impact of a change (in both directions) of a country’s exchange rate on their key indicators * prepare a PowerPoint presentation on this information, covering changes in AD/AS, the Marshall-Lerner condition and a J curve analysis. **(G) (F) (Challenging)**   Learners present their findings to the rest of the class. Use this as to ensure all the key points have been covered. **(W)** | AD, Marshall-Lerner and J curve analysis are all key to the ability to analyse and evaluate the effects of exchange rate changes on the balance of payments. | Bamford, ch 6 Macroeconomic problems  [www.economicshelp.org/macroeconomics/bop/policies-to-reduce-deficit/](http://www.economicshelp.org/macroeconomics/bop/policies-to-reduce-deficit/)  [www.tutor2u.net/economics/revision-notes/a2-macro-exchange-rate-determination.html](http://www.tutor2u.net/economics/revision-notes/a2-macro-exchange-rate-determination.html)  [www.bized.co.uk/virtual/dc/trade/theory/th12.htm](http://www.bized.co.uk/virtual/dc/trade/theory/th12.htm) |
| Depreciation/ appreciation | Start by giving the class formal definitions of appreciation and depreciation. **(W)**  Then give learners a list of factors which might shift the supply/ demand curves for currency. In each case, the learner writes down:   * which curve will be affected by the change in the given factor * the direction in which the shift occurs * whether this will lead to appreciation or depreciation. **(F) (I)** | Stress here that the depreciation/ appreciation of a currency relates only to floating exchange rate regimens where changes are driven by market forces. | Bamford, ch 6 Macroeconomic problems  [www.economicsonline.co.uk/Global\_economics/Balance\_of\_payments\_problems\_and\_policies.html](http://www.economicsonline.co.uk/Global_economics/Balance_of_payments_problems_and_policies.html) |
| Devaluation/ revaluation | Start by giving the class formal definitions of devaluation and revaluation. **(W)**  Then, using the textbook and website resources provided here as a starting point, ask learners to:   * find an example of a devaluation that has taken place in a country of their choice * find an example of a revaluation in a country of their choice * prepare a short presentation outlining why the devaluation/ revaluation was introduced and whether the strategy was successful. **(I)** **(Challenging)**   Finish with a class discussion to share learning. **(W)** | Emphasise here that devaluation and revaluation relate only to fixed exchange rate systems and so are determined by governments and maintained through direct government intervention | Bamford, ch 7 Macroeconomic policies  [www.tutor2u.net/economics/revision-notes/a2-macro-exchange-rate-determination.html](http://www.tutor2u.net/economics/revision-notes/a2-macro-exchange-rate-determination.html)  [www.businesseconomics.com/country-data.html](http://www.businesseconomics.com/country-data.html) |

| **Learning objectives** | **Suggested teaching activities** | **Teacher guidance notes and key concepts** | **Learning resources** |
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| **The terms of trade** | | | |
| Measurement of the terms of trade | Start by giving the class a:   * definition of the terms of trade * formula to measure the terms of trade using price indices.   If necessary, recap here the meaning of index numbers and show how to use them to calculate percentage changes. **(W)**  Then hand out a pre-prepared worksheet with questions requiring learners to calculate the terms of trade over a particular time period. **(I)**  Conclude with a whole class question and answer session based on the worksheet answers to ensure full understanding. **(W)** | The terms of trade is one of the most commonly misunderstood parts of the AS syllabus and is frequently confused with the balance of trade.  Stress here that measuring the terms of trade focuses solely on the relative *price* of exports/imports while the balance of trade focuses on the *value* of imports compared to exports. | Bamford, ch 4 International trade  [www.economicsonline.co.uk/Global\_economics/Terms\_of\_trade.html](http://www.economicsonline.co.uk/Global_economics/Terms_of_trade.html) |
| Causes of changes in the terms of trade | Hand out a prepared worksheet containing a list of factors, some of which affect the value of the terms of trade, some of which don’t. Ask learners to:   * decide which factors will impact on the terms of trade and which factors will not * provide supporting explanations for their choices. **(I)**   Follow with a whole class question and answer session so learners can explain and discuss their choices. Summarise the discussion and produce a definitive list of relevant factors on the board. **(W)** | – | Bamford, ch 4 International trade  [www.economicsonline.co.uk/Global\_economics/Terms\_of\_trade.html](http://www.economicsonline.co.uk/Global_economics/Terms_of_trade.html) |
| Impact of changes in the terms of trade | Hand out a case study based on a country’s changing terms of trade, together with some questions for learners to answer. **(W)**  Learners research the required information to answer the worksheet questions. **(I) (F)**  Follow with a class discussion to correct any errors. **(W)**  Then put learners into groups and ask them to:   * research their own or another allocated country’s changes in the terms of trade over the last twenty years * determine whether they have improved or deteriorated over this period and whether they have been volatile or stable * assess the implications for the future development of their given economy * give a presentation to the class on their findings. **(G) (F)** | It would be useful here to develop a pro-forma which you can use to give structured feedback to each group on their research and presentation. | Bamford, ch 4 International trade  [www.economicsonline.co.uk/Global\_economics/Policies\_to\_promote\_development.html](http://www.economicsonline.co.uk/Global_economics/Policies_to_promote_development.html)  [www.businesseconomics.com/country-data.html](http://www.businesseconomics.com/country-data.html) |

| **Learning objectives** | **Suggested teaching activities** | **Teacher guidance notes and key concepts** | **Learning resources** |
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| **Principles of absolute and comparative advantage** | | | |
| The distinction between absolute and comparative advantage | Start by recapping the principle of opportunity cost from the first AS unit. Then ask learners why they think international trade takes place and list the main reasons on the board. **(W)**  Explain the theories of absolute and comparative advantage and provide supporting numerical examples. Clearly explain the link between the concept of opportunity cost and establishing comparative advantage. **(W)**  Then hand out a pre-prepared worksheet with numerical questions on absolute and comparative advantage that require learners to:   * determine which country should specialise in which product * explain the effect on total output after specialisation * show how relative opportunity costs can be used to determine an exchange rate that will acceptable to both countries * show that there will be a net increase in world output after specialisation and exchange. **(I) (F) (Challenging)**   Conclude with a class discussion to consolidate learning. Ask learners to identify goods from their country that might have a comparative advantage, and explain why. **(W)** | This is a good place to show learners how to use production possibility curves to show the gains from trade. | Bamford, ch 4 International trade  [www.tutor2u.net/economics/revision-notes/a2-macro-pattern-international-trade.html](http://www.tutor2u.net/economics/revision-notes/a2-macro-pattern-international-trade.html)  [www.bized.co.uk/learn/economics/international/advantage/index.htm](http://www.bized.co.uk/learn/economics/international/advantage/index.htm)  [www.economicsonline.co.uk/Global\_economics/Why\_do\_countries\_trade.html](http://www.economicsonline.co.uk/Global_economics/Why_do_countries_trade.html) |
| Free trade area, customs union, monetary union, full economic union | Ask learners to:   * research and provide a definition of economic integration * produce a diagram showing the different varieties and stages. **(I)**   Learners go through their work with a partner, and then discuss with the whole class. **(P) (W)**  Follow this by asking learners to:   * watch the Economics Online video on economic integration * research and make notes about the features of integration * prepare questions about the features and varieties of economic integration for the rest of the class to answer. **(I)**   Then lead a class question and answer session on economic integration, using the questions learners have developed as a framework. Support this with a set of pre-prepared questions of your own for learners to complete if required.**(W)**  Finish by recapping the stages of economic integration, inviting learners to draw relevant diagrams on the board. **(W)**  If time permits, undertake a more detailed class activity on this based on a case study of the European Union. **(W)** **(Challenging)**. | The Economics Online website link is one useful resource for the initial research task, and the BizEd site is one useful source for the EU case study activity.  **KEY CONCEPT 5: PROGRESS AND DEVELOPMENT**  This is a good point to remind learners of the key concept of progress and development – much of the material in this topic relates to the monetary and other benefits of economic co-operation between countries, emphasising how societies can progress. | Bamford, ch 4 International trade  Gillespie, p.99  [www.economicsonline.co.uk/Global\_ economics/Economic\_integration.html](http://www.economicsonline.co.uk/Global_economics/Economic_integration.html)  [www.economicsonline.co.uk/Global\_economics/Trade\_liberalisation.html](http://www.economicsonline.co.uk/Global_economics/Trade_liberalisation.html)  [www.economicsonline.co.uk/Global\_economics/Trading\_blocs.html](http://www.economicsonline.co.uk/Global_economics/Trading_blocs.html)  [www.bized.co.uk/current/mind/2003\_4/260404.htm](http://www.bized.co.uk/current/mind/2003_4/260404.htm) |
| Trade creation and trade diversion | Ask learners to use research and produce definitions of:   * trade creation * trade diversion. **(I)**   Then put learners into pairs to exchange and discuss the definitions they have come up with. **(P)**  Follow with a whole class discussion to share learning and establish final definitions. **(W)** | – | Bamford, ch 4 International trade  [www.businesseconomics.com/economics-education-center.html](http://www.businesseconomics.com/economics-education-center.html)  [www.economicsonline.co.uk/Global\_economics/Trade\_creation.html](http://www.economicsonline.co.uk/Global_economics/Trade_creation.html) |
| Benefits of free trade, including the trading possibility curve | Ask learners to suggest why they think free trade takes place. **(W)**  Follow this by asking learners to:   * produce a written list of what they consider to be the main advantages of free trade * identify any goods that their country might claim to have a comparative advantage in producing, explaining why.**(I)**   Then lead a class discussion where learners share and consolidate findings. Focus on how free trade between two countries offers more benefits than producing everything themselves and how this can be expressed graphically in a trading possibility curve. **(W)**  Finish by setting questions on free trade such as those in Sloman to consolidate learning. **(I) (Challenging) (F)** | This activity consolidates elements of learning present from across this topic in the context of the benefits of free trade and encourages learners to use possibility curves to demonstrate these benefits with real economic data.  The final task in this activity could be undertaken as a peer mentoring exercise where learners assess and mark each other’s answers. | Bamford, ch 4 International trade  Sloman, p.713-714  [www.economicsonline.co.uk/Global\_economics/Comparative\_advantage.html](http://www.economicsonline.co.uk/Global_economics/Comparative_advantage.html) |

| **Learning objectives** | **Suggested teaching activities** | **Teacher guidance notes and key concepts** | **Learning resources** |
| --- | --- | --- | --- |
| **Protectionism** | | | |
| The meaning of protectionism in the context of international trade | Start by asking learners why governments might intervene in international trade. Encourage learners to volunteer suggestions and write responses on the board. Refine these into a final list. **(W)**  Using this list, ask learners to research one example and provide a brief explanation where protectionism has been used to:   * safeguard employment * address a balance of payments deficit * prevent exploitation of cheap labour * prevent ‘dumping’ of cheap goods to destabilise competition * safeguard fledgling industries. **(I or P)**   Conclude with a class discussion in which learners share and discuss the examples they have found. **(W)** | Ensure learners can clearly define the term ‘protectionism’. | Bamford, ch 4 International trade  [www.tutor2u.net/economics/revision-notes/as-macro-international-trade.html](http://www.tutor2u.net/economics/revision-notes/as-macro-international-trade.html)  [www.economicsonline.co.uk/Global\_economics/Trade\_protectionism.html](http://www.economicsonline.co.uk/Global_economics/Trade_protectionism.html) |
| Different methods of protection and their impact | Start by explaining the key methods of protectionism. **(W)**  Then put learners into pairs or groups and ask them to:   * watch the presentation on trade and protectionism on the Tutor2U website, and take notes * use this and the other textbook/website links to research the six key types of protectionism identified in the class discussion * assess in writing the impact of each method in solving (e.g.) a balance of payments deficit in their own country * prepare a short presentation on their findings. **(P or G) (F)**   Each group delivers its presentation and answers questions. **(W)**  Set questions such as those in Bamford to reinforce learning. **(I) (F)** | The key methods of protectionism to cover are:   * tariffs * import duties and quotas * export subsidies * embargoes * voluntary export restraints (VERs) * excessive administrative red tape.   For the group task you could allocate each group a different protectionist aim from the list they developed in the previous activity. | Bamford, ch 4 International trade  [www.tutor2u.net/economics/presentations/a2economics/macro/TradeandProtectionism/default.html](http://www.tutor2u.net/economics/presentations/a2economics/macro/TradeandProtectionism/default.html)  [www.tutor2u.net/economics/revision-notes/as-macro-international-trade.html](http://www.tutor2u.net/economics/revision-notes/as-macro-international-trade.html)  [www.economicsonline.co.uk/Global\_economics/Trade\_protectionism.html](http://www.economicsonline.co.uk/Global_economics/Trade_protectionism.html) |
| The arguments in favour of protectionism | Start with a class debate in which groups use the information prepared in the previous activity to argue the case for and against protectionism. **(W)**  Follow with a class discussion to ensure the key points for and against protectionism have been covered. **(W)**  Then ask learners to write a report on the relative importance of the identified arguments for protectionism in relation to their own country’s economy. **(I or P) (F)**  On completion, learners briefly present the key points of their report to the class for wider discussion and questions. **(W)** | For the debate, allocate the groups a different side to argue for.  Give learners headings and a word limit to write their report to and make sure they focus on each of the reasons and methods covered in the previous two activities. Also emphasise that the reports should be concisely written and supported with evidence. | Bamford, ch 4 International trade  [www.tutor2u.net/economics/revision-notes/a2-macro-protectionism.html](http://www.tutor2u.net/economics/revision-notes/a2-macro-protectionism.html)  [www.economicsonline.co.uk/Global\_economics/Trade\_protectionism.html](http://www.economicsonline.co.uk/Global_economics/Trade_protectionism.html) |
| *Progress check – protectionism* | Consolidate learning of this topic by setting Question 4 from Cambridge Specimen Paper 02 as a timed class test. **(I)** **(F)** | You could precede this with a short pre-prepared class quiz on protectionism to ensure learners grasp the key points. | Cambridge 2016 specimen papers and accompanying mark schemes are available at [teachers.cie.org.uk](http://teachers.cie.org.uk) |

# [Government macro intervention (AS Level)](#_Contents)

## Recommended prior knowledge

Before starting, learners need to have covered the activities on supply and demand analysis, market equilibrium, macroeconomic theory and government microeconomic intervention from the previous four AS units – it is therefore advisable to leave this unit until last in your AS teaching programme. Learners will also need basic literacy skills and an ability to handle data, including graphs and diagrams for the topics covered in this section.

## Context

This section builds on the learning undertaken in the previous AS units to link together macroeconomic theory and government macroeconomic policy. In particular, learners will have the opportunity to focus on the key fiscal, monetary and supply side policy instruments and look at how effective these are in correcting balance of payment deficits, inflation and deflation. Learners will also have plenty of opportunity to look at different approaches and assess and evaluate how effective governments are in achieving their macro-economic aims.

## Outline

The AS Level topics covered in this section are:

* types of policy: fiscal, monetary and supply side policy
* policies to correct balance of payments disequilibrium
* policies to correct inflation and deflation.

## Suggested teaching time

It is recommended that this unit should take approximately 10% of the AS course (5% of the whole AS and A Level programme).

| **Learning objectives** | **Suggested teaching activities** | **Teacher guidance notes and key concepts** | **Learning resources** |
| --- | --- | --- | --- |
| **Types of policy: fiscal policy, monetary policy, and supply side policy** | | | |
| Instruments of each policy | Start by describing each type of policy (fiscal, monetary and supply side) and give an example for each. **(W)**  Then write up a range of different policy instruments on the board. Put learners into pairs to decide which of the three policy types each instrument belongs to. **(P)**  Go through afterwards with the class to consolidate learning and correct mistakes. **(W)**  For each of the three policy types, ask learners to give an example of how it has been implemented in their own country over the last 20 years. **(I) (F)**  Then hand out a pre-prepared worksheet which lists the five main macroeconomic indicators. Put learners into groups and ask them to identify at least one instrument a government might use to address each indicator and add this information alongside. **(G)**  Now allocate high unemployment to half the groups and high inflation to the other half. For their indicator, ask each group to:   * research the use of a particular policy instrument in their own country’s economy to address that indictor * assess and evaluate the success of that instrument in achieving its intended goals * produce a poster or wall chart summarising the findings and conclusions. **(G)**   Conclude with a class discussion based on each group’s work. **(W)** | In the initial discussion, establish a clear link between the three key policies and the macro-economic indicators that underlie them:   * inflation * balance of payments * exchange rates * unemployment * growth and development (GDP).   The Business Economics link is one good starting point for finding economic data on a range of countries.  The ability analyse and evaluate data is an important skill for learners to develop. Ensure the final class discussion focuses on this and you give each group feedback on this aspect of their task. | Bamford, ch 7 Macroeconomic policies  [www.tutor2u.net/economics/revision-notes/as-macro-fiscal-policy.html](http://www.tutor2u.net/economics/revision-notes/as-macro-fiscal-policy.html)  [www.tutor2u.net/economics/revision-notes/as-macro-monetary-policy.html](http://www.tutor2u.net/economics/revision-notes/as-macro-monetary-policy.html)  [www.tutor2u.net/economics/revision-notes/as-macro-supply-side-policies.html](http://www.tutor2u.net/economics/revision-notes/as-macro-supply-side-policies.html)  [www.bized.co.uk/educators/16-19/econ omics/macro/presentation/policies\_map.htm](http://www.bized.co.uk/educators/16-19/economics/macro/presentation/policies_map.htm)  [www.businesseconomics.com/country-data.html](http://www.businesseconomics.com/country-data.html) |

| **Learning objectives** | **Suggested teaching activities** | **Teacher guidance notes and key concepts** | **Learning resources** |
| --- | --- | --- | --- |
| **Policies to correct balance of payments disequilibrium** | | | |
| Assessment of the effectiveness of fiscal, monetary and supply side policies to correct a balance of payments disequilibrium | Divide the class into six groups as follows:   * the first three groups are allocated one of the three policies (fiscal, supply side, monetary) each and work out how it could be used to solve a balance of payments disequilibrium * the remaining groups are also allocated one of the three policies each, and they evaluate the proposed policy developed by their partner group. **(G)**   On completion, the whole class votes to decide which policy should be adopted. **(W)**  Finish by summarising the results, and show how the work of the two sets of groups (analysis and evaluation) links together as the two key components of policy development and improvement. **(W)** | For the group task, give each group the same balance of payments disequilibrium background information to make the end comparison easier.  Stress in the final discussion that the first set of groups *analysed* the issue (looked at how variables can be used to predict different outcomes and so develop a policy) and the second set *evaluated* that policy (reached a conclusion or judgement on its effectiveness based on supporting evidence). | Bamford, ch 7 Macroeconomic policies  [www.tutor2u.net/economics/revision-notes/as-macro-balance-of-payments.html](http://www.tutor2u.net/economics/revision-notes/as-macro-balance-of-payments.html) |
| Expenditure-reducing and expenditure-switching | Start by defining the terms ‘expenditure switching policy’ and ‘expenditure reducing policy’. **(W)**  Then ask learners to use the textbook and website links to:   * check and refine the definitions you have given them * provide at least one example of each policy in practice, with a brief summary of the problem they were used to address and whether or not it was successful. **(I)**   On completion, lead a class discussion in which learners report back on their findings to share and consolidate understanding. **(W)**  Follow this by handing out a list of the full range of policy instruments used to solve different macroeconomic problems. Using the examples they developed earlier in this activity, ask learners to note down which of the instruments from the list would be appropriate to solve a balance of payments disequilibrium for:   1. an expenditure-switching approach 2. an expenditure-reducing approach. **(I)** **(F)** | An expenditure-switching approach relies on changing the market price of imports/exports. Choosing devaluation as a policy instrument in this context would therefore affect both the price of imports and the price of exports and not achieve the desired goal. | Bamford, ch 7 Macroeconomic policies  [www.s-cool.co.uk/a-level/economics/ the-balance-of-payments/revise-it/how-does-a-government-reduce-a-current-account-d](http://www.s-cool.co.uk/a-level/economics/the-balance-of-payments/revise-it/how-does-a-government-reduce-a-current-account-d) |
| Expenditure-reducing and expenditure-switching | Start by handing out a case study outlining a scenario in which a given economy has to deal with a persistent balance of payments deficit. Then put learners into two groups to prepare a presentation on how to resolve this issue as follows:   * group 1 justifies the use of ‘expenditure switching’ policies * group 2 justifies the use of ‘expenditure reducing’ policies.   Allocate each group a set amount of time to prepare and deliver its presentation. **(G) (Challenging)**  Each group then presents their case and answers questions from the opposing group. Encourage learners here to question each presentation and compare to their own findings. **(W)**  Conclude by recapping the key points to consolidate learning. **(W)** | This activity tests a wide range of learning and communication skills as well as subject knowledge and application – allow sufficient time for learners to research, prepare and deliver this.  This also provides an excellent opportunity to differentiate between confident and less confident learners before starting revision plans – develop a pro-forma which you can use to give structured feedback to each group on their research and presentation skills. | Bamford, ch 7 Macroeconomic policies  [www.s-cool.co.uk/a-level/economics/ the-balance-of-payments/revise-it/how-does-a-government-reduce-a-current-account-d](http://www.s-cool.co.uk/a-level/economics/the-balance-of-payments/revise-it/how-does-a-government-reduce-a-current-account-d)  [www.tutor2u.net/economics/revision-notes/a2-macro-balance-of-payments-deficits.html](http://www.tutor2u.net/economics/revision-notes/a2-macro-balance-of-payments-deficits.html)  [www.bized.co.uk/virtual/dc/trade/theory/th6.htm](http://www.bized.co.uk/virtual/dc/trade/theory/th6.htm) |

| **Learning objectives** | **Suggested teaching activities** | **Teacher guidance notes and key concepts** | **Learning resources** |
| --- | --- | --- | --- |
| **Policies to correct inflation and deflation** | | | |
| Assessment of the effectiveness of fiscal, monetary and supply side policies to correct inflation and deflation | Start by recapping the causes of inflation from the previous unit on the macro economy, using diagrams, AS/AD analysis and a question and answer session to refresh understanding. **(W)**  Then give each learner a worksheet which lists the three main causes of inflation. Ask learners to select and state the appropriate policy instruments to correct each type of inflation. **(I)**  Put learners into pairs and ask each pair to choose a policy instrument to correct inflation caused by each of the following:   * increasing costs (cost push) * too much spending (demand pull) * too much money in circulation (monetary).   One learner analyses how each policy instrument might work in practice, and the other evaluates their effectiveness. **(P)**  On completion, each pair presents their findings to the rest of the class in a format of their choice for discussion and feedback. **(W)** | The three main causes of inflation are:   * monetary * cost-push * demand pull.   The pair task in this activity provides a further opportunity to explain the role of *analysis* (look at how variables can be used to predict different outcomes and so develop a policy) and *evaluation* (reach a conclusion or judgement on the effectiveness of a policy based on supporting evidence). | [www.tutor2u.net/economics/content/topics/inflation/controlling\_inflation.htm](http://www.tutor2u.net/economics/content/topics/inflation/controlling_inflation.htm)  [www.s-cool.co.uk/a-level/economics/ inflation-and-monetary-policy/revise-it/how-does-a-government-cure-inflation](http://www.s-cool.co.uk/a-level/economics/inflation-and-monetary-policy/revise-it/how-does-a-government-cure-inflation)  [www.bized.co.uk/virtual/economy/policy/outcomes/inflation/inflws1.htm](http://www.bized.co.uk/virtual/economy/policy/outcomes/inflation/inflws1.htm) |
| Assessment of the effectiveness of fiscal, monetary and supply side policies to correct inflation and deflation | Start by recapping the causes of deflation from the previous unit on the macro economy. **(W)**  To help refresh understanding on inflation and deflation at this point, set Question 3 from Cambridge 2016 Specimen Paper. **(I) (F)**  Then hand out a case study based on a deflationary situation which occurred in a given economy in the last ten years. Tell learners they are the Chancellor of the Exchequer and responsible for solving this problem. Ask them to write a report that:   * explains the three alternative policy options available * evaluates the effectiveness of each policy option * makes a recommendation as to which policy to adopt. **(I)**   On completion, learners present their findings to the rest of the class for discussion, questions and feedback. **(W)**  Finish by handing out information on what actually was done in relation to the case study and what degree of success or otherwise it had. Invite learners to ask questions and ask them to compare the approach with what might be adopted by their own country. **(W)** | Ensure here that learners can clearly distinguish between:   * deflation, where the average price level is consistently falling * disinflation, where the *rate of increase* of the average price level is falling.   As learners are now completing the AS curriculum it would be useful to do the specimen paper question in timed conditions to help them with their exam preparation.  The tasks in this activity provide a good opportunity to revise macroeconomic theory and analysis as a whole. | [www.bized.co.uk/virtual/economy/policy/outcomes/inflation/inflws1.htm](http://www.bized.co.uk/virtual/economy/policy/outcomes/inflation/inflws1.htm)  [www.dineshbakshi.com/printable-worksh eets/business-economics-worksheets/ 1641-case-study-risk-of-deflation](http://www.dineshbakshi.com/printable-worksheets/business-economics-worksheets/1641-case-study-risk-of-deflation)  [www.businesseconomics.com/country-data.html](http://www.businesseconomics.com/country-data.html)  Cambridge 2016 specimen papers and accompanying mark schemes are available at [teachers.cie.org.uk](http://teachers.cie.org.uk) |
| *Progress check – government macro intervention* | As learners have now completed the AS units within the syllabus, set the whole Past Paper 21, 22 or 23 from May/June 2014 under timed conditions to give learners practise in taking a whole Cambridge Data Response and Essay paper exam. **(I) (F)** | Ensure that the paper you choose does not contain questions learners have already answered – a wide range of past papers are available to help ensure it will be a fresh test. | Cambridge past papers and accompanying mark scheme are available at [teachers.cie.org.uk](http://teachers.cie.org.uk) |

# [Basic economic ideas and resource allocation (A Level)](#_Contents)

## Recommended prior knowledge

This section of the A Level course builds on AS Level Basic Economic Ideas to look at efficient resource allocation, externalities and market failure, social costs and benefits, and cost-benefit analysis. Learners need to retain their AS knowledge of this topic as well, and as this section starts the A Level year, the initial activities also focus on recapping and reviewing previous learning via questions/tests to provide useful opportunities for formative assessment and differentiation.

## Context

The rationale of the section is that learners should develop their understanding of the efficiency of resource allocation and the reasons for the existence of externalities in an economy (both positive and negative), market failure and inefficient resource allocation. This section then goes on to look at the distinction between social costs and social benefits and finally on how to use cost-benefit analysis in the overall decision-making process. As the title of this section indicates, these basic economic ideas are crucial and it is important that learners understand that this is core knowledge that they will need to retain and use throughout year. These ‘basic’ ideas will contribute enormously not only to learners’ knowledge, but also to their appreciation and understanding of real-world practice.

## Outline

The A Level topics covered in this section are:

* efficient resource allocation
* externalities and market failure
* social costs and benefits; cost-benefit analysis.

## Suggested teaching time

It is recommended that this section should take approximately 10% of the A Level course (5% of the whole AS and A Level programme).

| **Learning objectives** | **Suggested teaching activities** | **Teacher guidance notes and key concepts** | **Learning resources** |
| --- | --- | --- | --- |
| **Efficient resource allocation** | | | |
| Productive and allocative efficiency | Introduce the concepts of productive and allocative efficiency using the supplied website link. **(W)**  Consolidate understanding by setting questions such as those in Bamford ch 1 to encourage learners to think about the different types of efficiency and help them understand the key concept of equilibrium and efficiency. **(I) (Basic)**  Reinforce learning by putting learners into pairs to peer assess each other’s responses. On completion, ask them to work together to propose ideas on how to show the distinction between productive and allocative efficiency. **(P)** **(F)**  On completion, each pair shares its ideas with the class. **(W)**  To ensure learners have a good understanding of productive and allocative efficiency, set further questions such as those in Anderton ch 16 and 61:   * Question 1 p.102 focuses on productive efficiency, and Question 2 p.103 on allocative efficiency. Question 3 p.104 focuses on both productive and allocative efficiency. **(Basic)** * Question 1 p.107 requires learners to distinguish between productive and allocative efficiency using examples from the information given, and Question 1 p.394 focuses on allocative efficiency. **(Challenging) (I)** | Allocative efficiency occurs where price is equivalent to marginal cost (P=MC).  Productive efficiency can be shown through a firm’s average cost curves or through a production possibility curve.  Learners should be able to use production possibility curves. Stress the distinction between a position *within* the curve and a position *on* the curve – any position *on* the curve will show a situation of productive efficiency.  **KEY CONCEPT 3: EQUILIBRIUM AND EFFICIENCY**  Productive and allocative efficiency are both elements of economic efficiency and essential to this part of the syllabus. | Bamford, ch 1 Basic economic ideas  Cook, ch 8  Anderton, ch 16 and 61  Stanlake, ch 19  Sloman, ch 7  Gillespie, p.38  [www.tutor2u.net/economics/revision-notes/as-marketfailure-economic-efficiency.html](http://www.tutor2u.net/economics/revision-notes/as-marketfailure-economic-efficiency.html) |
| Productive and allocative efficiency | To ensure learners make the link between productive possibility curves and productive efficiency, set questions such as Question 1 in Stanlake ch 19 which requires learners to explain how production possibility curves can be used to illustrate the concept of productive efficiency. **(I)** **(F)** **(Basic)** | Answering this question will enable learners to fully grasp the link between a production possibility curve and the concept of productive efficiency. | Bamford, ch 1 Basic economic ideas  Cook, ch 8  Anderton, ch 16 and 61  Stanlake, ch 19  Sloman, ch 7  Gillespie, p.38 |
| *Progress check – productive and allocative efficiency* | To help reinforce learning, set one or more of the following past paper questions as class or homework tasks:   * Question 2a from Past Paper 41 November 2010 enables learners to demonstrate their understanding of the meaning of efficiency and practise producing accurate and correctly labelled diagrams (the ‘challenging’ element) * Question 2b from Past Paper 42 November 2011 not only requires analysis of economic efficiency but also whether it is always achieved in a market – thus linking economic efficiency and market failure * Question 7 from Past Paper 43 November will also stretch learners through the requirement to contrast theory and practice. **(I or H)** **(F)** **(Challenging)**. | This progress check also provides a value opportunity to formatively assess learner progress at the start of the A Level year. | Cambridge past papers and accompanying mark schemes are available at [teachers.cie.org.uk](http://teachers.cie.org.uk) |
| Pareto optimality | Introduce the theory of Pareto optimality and stress that it is related to both productive efficiency and allocative efficiency and, more broadly, to both production and consumption. Emphasise that the Pareto optimum situation requires both an optimum allocation of resources to production and an optimum allocation of products to consumers. **(W)**  To develop learners’ understanding of how this idea relates to the concept of economic efficiency, put them into groups and give them a real context together with the relevant background. The groups discuss Pareto optimality in this context and on conclusion share their ideas with the rest of the class. **(G)** **(Challenging)** | Also known as Pareto efficiency, this idea was first put forward by Vilfredo Pareto in 1909. It is based on the existence of a situation when it is not possible to reallocate resources to make someone better off without making someone else worse off.  One possible source context for the group discussion is Anderton ch 61 which provides background information on the Brazilian rainforests and a question on whether a ban on felling trees would lead to Pareto efficiency.  **KEY CONCEPT 3: EQUILIBRIUM AND EFFICIENCY**  As the name indicates, Pareto efficiency/optimality is another example of efficiency. | Cook, ch 8  Anderton, ch 61  Stanlake, ch 19  Gillespie, p.38  [www.tutor2u.net/economics/revision-notes/as-marketfailure-economic-efficiency.html](http://www.tutor2u.net/economics/revision-notes/as-marketfailure-economic-efficiency.html) |
| Dynamic efficiency | Explain that while productive and allocative efficiency are static concepts concerned with efficiency at a given point in time, dynamic efficiency is concerned with improving the efficient allocation of resources over a period of time. **(W)**  Then put learners into groups and ask them to come up with ideas on how efficiency could be improved over a period of time in various aspects of production. Give each group a different example to focus on, such as:   * new/improved methods of production * invention/innovation, research and development and new/improved products * new/improved methods of management * investment in human capital to improve productivity levels. **(G)**   On completion, each group reports their findings to the class. **(W)**  To consolidate learning, set Question 2 from Cambridge Past Paper 41 May/June 2014 as class or homework. **(I or H) (F)** | The consideration of possible sources of dynamic efficiency could be a good opportunity for mentoring where learning partners work together in the activity.  **KEY CONCEPT 3: EQUILIBRIUM AND EFFICIENCY**  Dynamic efficiency is an important part of the concept of efficiency. By focusing on the efficiency of the allocation of resources over a period of time, it contrasts to the static efficiency measures of productive efficiency and allocative efficiency. | Anderton, ch 61  Gillespie, p.38  [www.tutor2u.net/economics/revision-notes/as-marketfailure-economic-efficiency.html](http://www.tutor2u.net/economics/revision-notes/as-marketfailure-economic-efficiency.html)  Cambridge past papers and accompanying mark schemes are available at [teachers.cie.org.uk](http://teachers.cie.org.uk) |

| **Learning objectives** | **Suggested teaching activities** | **Teacher guidance notes and key concepts** | **Learning resources** |
| --- | --- | --- | --- |
| **Externalities and market failure** | | | |
| Reasons for market failure | There are many possible reasons for the existence of market failure in an economy. Encourage learners to think about this in a variety of examples and contexts such as merit and demerit goods, public goods, information failure, government failure, imperfect competition and unequal distribution of income. **(W)**  One useful context for looking at market failure in more detail is road congestion. Hand out suitable background information and set a question for learners to explain why traffic congestion is an example of market failure. **(I) (Basic)**  On completion, use this as the focus for a class discussion on this example of market failure. **(W)** **(Basic)**  Follow this up by asking learners individually or in pairs to prepare and deliver a presentation on transportation problems to the rest of the class. Give learners a specified time limit, and include in this time to answer questions from the class. **(I or P) (Challenging)** | Some aspects of market failure will have been covered at AS Level, so this provides a useful recap opportunity.  Externalities, both positive and negative, are covered in the next section of this topic.  One source of useful information for the road congestion task is Bamford, which covers road congestion in Singapore.  Bamford ch 3 is also one useful source of titles for the presentation task.  Giving learners the opportunity to do a presentation on a particular economic topic will also help to develop their wider communication skills. | Bamford, ch 3 Government intervention in the price system  Cook, ch 10  Anderton, ch 16  Stanlake, ch 21  Sloman, ch 7  Gillespie, p.26-29  [www.tutor2u.net/economics/revision-notes/as-marketfailure-market-failure.html](http://www.tutor2u.net/economics/revision-notes/as-marketfailure-market-failure.html)  [www.s-cool.co.uk/a-level/economics/ market-failure/revise-it/what-is-market-failure](http://www.s-cool.co.uk/a-level/economics/market-failure/revise-it/what-is-market-failure)  [www.s-cool.co.uk/a-level/economics/ market-failure/revise-it/other-reasons-why-markets-fail](http://www.s-cool.co.uk/a-level/economics/market-failure/revise-it/other-reasons-why-markets-fail)  [www.bized.co.uk/learn/economics/marketfail/characteristics/index.htm](http://www.bized.co.uk/learn/economics/marketfail/characteristics/index.htm) |
| Reasons for market failure | Lead a whole class discussion to refresh understanding of the different types of market failure and the reasons for such failure in an economy. The reasons for such failure include:   * under-consumption of merit goods * over-consumption of demerit goods * non-provision of public goods * possible abuse of its power by a monopoly. **(W)**   On completion, ask learners to look for articles about examples of market failure and use this as the basis for group work in which they prepare summary information and conclusions on the information found. This will extend learners by requiring them to apply their theoretical knowledge of market failure to real world examples. **(G)** **(Challenging)** | Some aspects of market failure will have already been covered as part of the AS course, so this provides a useful recap opportunity.  For the research task, ask learners to focus on examples from their own country. | Bamford, ch 3 Government intervention in the price system  Cook, ch 10  Anderton, ch 16  Stanlake, ch 21  Sloman, ch 7  Gillespie, p.26-29  [www.tutor2u.net/economics/revision-notes/as-marketfailure-market-failure.html](http://www.tutor2u.net/economics/revision-notes/as-marketfailure-market-failure.html)  [www.s-cool.co.uk/a-level/economics/ market-failure/revise-it/what-is-market-failure](http://www.s-cool.co.uk/a-level/economics/market-failure/revise-it/what-is-market-failure)  [www.s-cool.co.uk/a-level/economics/ market-failure/revise-it/other-reasons-why-markets-fail](http://www.s-cool.co.uk/a-level/economics/market-failure/revise-it/other-reasons-why-markets-fail)  [www.bized.co.uk/learn/economics/marketfail/characteristics/index.htm](http://www.bized.co.uk/learn/economics/marketfail/characteristics/index.htm) |
| *Progress check – reasons for market failure* | To consolidate learning, set Question 2 from Cambridge Past Paper 42 May/June 2011 as a class or homework assignment. **(I or H) (F)**  As some learners can find market failure quite a dry topic, consider the two revision quizzes on the Tutor2U website as a useful additional way of recapping this topic. **(G or W) (F)** | Give learners as much opportunity as possible to answer exam-style questions and past questions as the A Level year progresses.  The two quizzes provide a more informal way for learners to test their understanding of this topic. | Cambridge past papers and accompanying mark schemes are available at [teachers.cie.org.uk](http://teachers.cie.org.uk)  [www.tutor2u.net/economics/quizzes/as/marketfailure1/quiz.html](http://www.tutor2u.net/economics/quizzes/as/marketfailure1/quiz.html)  [www.tutor2u.net/economics/quizzes/as/marketfailure2/quiz.html](http://www.tutor2u.net/economics/quizzes/as/marketfailure2/quiz.html) |
| Positive and negative externalities for both consumers and firms | Hold a class discussion and use the textbook and website references to help ensure that learners are able to clearly distinguish between positive and negative externalities. **(W)**  Then set questions for individual, pair or group work on different types of externalities, such as those in Bamford ch 3 or Anderton ch 19. Include questions on both positive and negative externalities to give learners the opportunity to develop their skills. **(I, P or** **G)**  On completion, take some of the examples of externalities from the questions you set (such as why the smoking of cigarettes causes externalities) and use them as a basis for a wider class discussion. This will extend learners by requiring them to apply economic theory to real-world practice. **(W)** **(Challenging)** | An externality arises if a third party is affected by the actions and behaviour of others, giving rise to a spill-over effect.  Stress that positive and negative externalities can exist both in relation to production (i.e. firms) and consumption (i.e. consumers). | Bamford, ch 3 Government intervention in the price system  Cook, ch 3  Anderton, ch 19 and 62  Stanlake, ch 20  Sloman, ch 7  Gillespie, p.27-28  [www.tutor2u.net/economics/revision-notes/as-marketfailure-positive-externalities.html](http://www.tutor2u.net/economics/revision-notes/as-marketfailure-positive-externalities.html)  [www.tutor2u.net/economics/revision-notes/as-marketfailure-negative-externalities.html](http://www.tutor2u.net/economics/revision-notes/as-marketfailure-negative-externalities.html)  [www.jusbiz.org/realcotton.html](http://www.jusbiz.org/realcotton.html)  [www.s-cool.co.uk/a-level/economics/ market-failure/revise-it/externalities](http://www.s-cool.co.uk/a-level/economics/market-failure/revise-it/externalities)  [www.bized.co.uk/educators/16-19/econ omics/marketfail/activity/externalities.htm](http://www.bized.co.uk/educators/16-19/economics/marketfail/activity/externalities.htm) |
| Positive externalities for both consumers and firms | Put learners into groups and ask them to suggest examples of positive externalities and negative externalities in relation to both consumption and production.  Each group then analyses its findings, contrasts the impact of positive and negative externalities for both consumption and production, and presents its findings to the rest of the class. **(G)** **(Challenging)**.  Then develop learners’ understanding by using a real-world context to apply this concept, such as the case study on the positive externalities of vaccination by the World Bank on the Tutor2u website. Use this as the basis for a whole class discussion or a homework assignment. **(W or H)** | Examples of positive and negative externalities for the first task include:   * views of beautiful private gardens (positive consumption externality) * purification of waste water (positive production externality) * disturbance by loud music (negative consumption externality) * air and noise pollution from a factory (negative production externality).   You could also structure this first task as a peer mentoring exercise where learning partners work together to suggest appropriate examples of both positive and negative externalities.  For the second task, possible examples of positive externalities include:   * development of renewable energy sources such as wind power * new production technologies * provision of milk to young children * maintenance of post office network. | Bamford, ch 3 Government intervention in the price system  Cook, ch 3  Anderton, ch 19 and 62  Stanlake, ch 20  Sloman, ch 7  Gillespie, p.27-28  [www.tutor2u.net/economics/revision-notes/as-marketfailure-positive-externalities.html](http://www.tutor2u.net/economics/revision-notes/as-marketfailure-positive-externalities.html)  [www.jusbiz.org/realcotton.html](http://www.jusbiz.org/realcotton.html)  [www.s-cool.co.uk/a-level/economics/ market-failure/revise-it/externalities](http://www.s-cool.co.uk/a-level/economics/market-failure/revise-it/externalities)  [www.bized.co.uk/educators/16-19/econ omics/marketfail/activity/externalities.htm](http://www.bized.co.uk/educators/16-19/economics/marketfail/activity/externalities.htm) |
| Negative externalities for both consumers and firms | To cover the concept of negative externalities, again use a real-world context as the basis for a group or whole class discussion so the learners can apply their understanding. **(G or W)** **(Challenging)**  On completion, summarise the key findings with the class. **(W)** | The Tutor2u website has links to some useful examples of negative externalities, including:   * the effect of passive smoking on non-smokers * air pollution from traffic congestion and the impact of road fumes on lungs * scraping the seabed for supplies of gravel * cleaning up from litter and the dropping of chewing gum * food waste * the journey of food from the producer to the final consumer * an oil sands project in the Canadian wilderness. | Bamford, ch 3 Government intervention in the price system  Cook, ch 3  Anderton, ch 19 and 62  Stanlake, ch 20  Sloman, ch 7  Gillespie, p.27-28  [www.tutor2u.net/economics/revision-notes/as-marketfailure-positive-externalities.html](http://www.tutor2u.net/economics/revision-notes/as-marketfailure-positive-externalities.html)  [www.tutor2u.net/economics/revision-notes/as-marketfailure-negative-externalities.html](http://www.tutor2u.net/economics/revision-notes/as-marketfailure-negative-externalities.html)  [www.jusbiz.org/realcotton.html](http://www.jusbiz.org/realcotton.html)  [www.s-cool.co.uk/a-level/economics/ market-failure/revise-it/externalities](http://www.s-cool.co.uk/a-level/economics/market-failure/revise-it/externalities)  [www.bized.co.uk/educators/16-19/econ omics/marketfail/activity/externalities.htm](http://www.bized.co.uk/educators/16-19/economics/marketfail/activity/externalities.htm) |
| *Progress check – positive and negative externalities* | To consolidate learning of positive and negative externalities, set a question for class or homework such as Question 1d from Cambridge Past Paper 23 May/June 2010. **(I or H) (F)** | This question enables learners to discuss externalities in relation to two different forms of transport. | Cambridge past papers and accompanying mark schemes are available at [teachers.cie.org.uk](http://teachers.cie.org.uk) |
| Inefficient resource allocation | Start by recapping and refreshing learning on public goods, merit goods and demerit goods from AS Level, and link this to consideration of monopolies and other forms of imperfect competition (which are covered in more detail in the next topic on the Price System). The key concept of Equilibrium and Efficiency offers an excellent opportunity to pull these elements together into a broader and more holistic view. **(W)**  Then put learners into pairs to work on the following question: “Explain why, despite economists stressing the importance of economic efficiency, there are real-world examples of inefficient resource allocation in many economies.” **(P)**  On completion, to consolidate learning, lead a whole class discussion in which each pair inputs their findings and views. **(W)** | Inefficient resource allocation in an economy comes about as a result of imperfections in many sectors of the economy. These add up to prevent the efficient allocation of resources through the market mechanism, leading to market failure. Causes can range from imperfect competition (e.g. monopoly), to externalities and missing markets, such as in relation to public goods.  **KEY CONCEPT 3: EQUILIBRIUM AND EFFICIENCY**  The existence of different forms of market failure, including externalities, reduces the efficiency of an economy. | Anderton, ch 61  Sloman, ch 7 |

| **Learning objectives** | **Suggested teaching activities** | **Teacher guidance notes and key concepts** | **Learning resources** |
| --- | --- | --- | --- |
| **Social costs and benefits; cost-benefit analysis** | | | |
| Social costs as the sum of private costs and external costs | Give learners the opportunity to think about the concept of social costs in a variety of different contexts so they understand how to apply it to real-world situations. **(W)**  To develop this further, put learners into groups to focus on a specific context, such as the Bamford ch 3 article and questions on the social costs generated by e-waste. Learners work together to look at the market failure, private costs, external costs and alternative ways to deal with the e-waste. **(G)**  Keeping learners in their groups, then allocate them a particular project in their country, such as the building of a road or bridge, the construction of an additional runway at an airport or the construction of a new railway line. Ask them to list the private costs and the external costs of that project and use this to consider the resulting social costs. **(G)** **(Challenging)** | Stress here that social costs are the sum of private costs and external costs, and that external costs are therefore only one part of social costs.  You could also structure the first group task as a peer mentoring exercise where learning partners work together to discuss appropriate examples.  The second group task enables learners to appreciate the significance of social costs in relation to real-world examples in their own country. | Bamford, ch 3 Government intervention in the price system  Cook, ch 3  Anderton, ch 19, and 62  Stanlake, ch 20  Sloman, ch 7  Gillespie, p.27  [www.tutor2u.net/economics/revision-notes/as-marketfailure-negative-externalities.html](http://www.tutor2u.net/economics/revision-notes/as-marketfailure-negative-externalities.html)  [www.s-cool.co.uk/a-level/economics/ market-failure/revise-it/externalities](http://www.s-cool.co.uk/a-level/economics/market-failure/revise-it/externalities) |
| Social benefits as the sum of private benefits and external benefits | As a follow-on from the previous activity, ask each group to list the private and external benefits of the project they have been looking at and use this to consider the resulting social benefits. **(G)** **(Challenging)**  On completion, each group feeds back its findings to the whole class as the basis for wider discussion and consolidation. **(W)** | Stress that social benefits are the sum of private benefits and external benefits, and that external benefits are therefore only one part of social benefits.  As with the previous activity, this task enables learners to appreciate the significance of social benefits in relation to real-world examples from their own country. | Bamford, ch 3 Government intervention in the price system  Cook, ch 3  Anderton, ch 19 and 62  Stanlake ch 20  Sloman, ch 7  Gillespie, p.27  [www.tutor2u.net/economics/revision-notes/as-marketfailure-positive-externalities.html](http://www.tutor2u.net/economics/revision-notes/as-marketfailure-positive-externalities.html)  [www.s-cool.co.uk/a-level/economics/ market-failure/revise-it/externalities](http://www.s-cool.co.uk/a-level/economics/market-failure/revise-it/externalities) |
| Use of cost-benefit analysis in decision-making | Real project contexts are a highly effective way for learners to develop their knowledge and understanding of how cost-benefit analysis can be applied to economic decision-making. Road congestion is one good context for this. Bamford ch 3 contains an article and information on traffic problems in Bangkok – learners produce a cost-benefit analysis for a new rapid transit system. The BizEd site offers a similar activity on introducing congestion charging in London. **(I or P) (Challenging)**  Follow this by putting learners in pairs or groups to focus on a suitable project in their own country such as:   * subsidies on biofuels * greater competition in markets, such as the postal service * the reduction of income and wealth inequality, such as through a minimum wage or an increase in the top rate of income tax * the introduction of carbon trading to reduce CO2 emissions * a major infrastructure project, such as building a new motorway * relaxing planning controls on the building of new houses * building a flood-relief scheme * constructing a new power station * producing genetically modified food.   Each group then researches the necessary information for their project on the internet and write a report on the extent to which cost-benefit analysis can be applied and what it implies. On completion, learners report back to the class as the basis for wider discussion and consolidation. **(P or G) (Challenging)**  Conclude by setting questions relating to cost-benefit analysis such as those in Anderton, which also introduces broader aspects such as shadow prices. **(I)**  Learners then peer-assess each other’s responses in pairs or small groups to share and consolidate learning. **(P or G)** | Stress that cost-benefit analysis examines all the costs and benefits of a project, including private costs and benefits, and external costs and benefits. This enables the true cost to the society of a project to be estimated, even though it may be difficult to give a precise monetary value to all the costs and benefits involved in the project.  **KEY CONCEPT 1: SCARCITY AND CHOICE**  It is important to stress the concept of scarcity at regular points throughout the course so learners appreciate that as a result, choice needs to be made between the possible alternative uses of scarce resources. Cost-benefit analysis is then a useful tool to inform decision-making, helping to make such choices as fully informed as possible. | Bamford, ch 3 Government intervention in the price system  Cook, ch 3  Anderton, ch 22  Stanlake, ch 20  Sloman, ch 7  Gillespie, p.65  [www.bized.co.uk/current/mind/2003\_4/230204.htm](http://www.bized.co.uk/current/mind/2003_4/230204.htm)  [www.tutor2u.net/economics/revision-notes/a2-micro-cost-benefit-analysis.html](http://www.tutor2u.net/economics/revision-notes/a2-micro-cost-benefit-analysis.html) |
| *Progress check – cost-benefit analysis* | To consolidate learning of this topic, set either or both the following questions as a class test or homework:   * Question 2a from Cambridge Past Paper 23 November 2010 * Question 2a from Cambridge Past Paper 21 November 2013 **(I or H) (F)** | The first question enables learners to demonstrate their understanding of the difficulties of carrying out a cost-benefit analysis. The second enables them to consider its potential effectiveness in economic decision-making.  Note that the question specifically requires examples, hence the case study approach provided in the previous activities in this topic. | Cambridge past papers and accompanying mark schemes are available at [teachers.cie.org.uk](http://teachers.cie.org.uk) |

# [The price system and the micro economy (A Level)](#_Contents)

## Recommended prior knowledge

This section builds on the AS price system and micro economy topics to include material on the law of diminishing marginal utility, indifference curves, budget lines, types of cost, revenue and profit, short-run and long-run production, market structures, and the growth, survival and objectives of firms. Learners need to retain their AS knowledge as well and it is important that they appreciate the importance of this topic in the wider syllabus, focusing as it does on key elements of microeconomics.

## Context

The rationale of the section is that learners should develop their understanding of the law of diminishing marginal utility, indifference curves and budget lines, cost revenue and profit, different market structures, the growth of firms, continued survival of small firms and the differing possible objectives of a firm. This material covers a number of important microeconomic concepts, contributing enormously not only to learners’ knowledge, but also to their appreciation and understanding of real-world practice.

## Outline

The A Level topics covered in this section are:

* law of diminishing marginal utility
* indifference curves and budget lines
* types of cost, revenue and profit, short-run and long-run production
* different market structures
* growth and survival of firms
* differing objectives of a firm.

## Suggested teaching time

It is recommended that this section should take approximately 30% of the A Level course (15% of the whole AS and A Level programme).

| **Learning objectives** | **Suggested teaching activities** | **Teacher guidance notes and key concepts** | **Learning resources** |
| --- | --- | --- | --- |
| **Law of diminishing marginal utility** | | | |
| Its relationship to derivation of an individual demand schedule | Put learners in pairs or groups to identify and discuss different examples of where marginal utility or satisfaction may decline as more units of a good are consumed – ice-cream, hamburgers or bars of chocolate are good starting examples. **(P or G)** **(Basic)**  To ensure learners understand the link between marginal utility and the derivation of a market demand curve, set the following as a class test or homework:   * a written task requiring learners to distinguish between total utility and marginal utility **(Basic)** * Question 2a from Cambridge Past Paper 42 November 2013. **(Challenging) (I or H)**   On completion, learners self- or peer-assess their answers to further strengthen learning. **(I or P)** | The shape of a normal demand curve can be explained by the law of diminishing marginal utility because the marginal utility curve for a product is the same as its demand curve, measured in money terms.  For the written task, Bamford ch 2 provides questions and data relating to the consumption of lemonade, while the past paper question requires learners to focus on a market – not an individual – demand curve.  **KEY CONCEPT 2: THE MARGIN AND CHANGE**  The law of diminishing marginal utility is a good example of the importance of the margin – it is not so much the total utility or satisfaction from consumption of a product that is important, but the marginal or additional utility gained from the last unit purchased. Stress the importance of the margin in as many aspects of your teaching as possible. | Bamford, ch 2 The price system  Cook, ch 9  Stanlake, ch 8  Sloman, ch 1, 2  Gillespie, p.8  [www.tutor2u.net/economics/revision-notes/as-markets-demand.html](http://www.tutor2u.net/economics/revision-notes/as-markets-demand.html)  [www.bized.co.uk/educators/16-19/economics/firms/activity/costs.htm](http://www.bized.co.uk/educators/16-19/economics/firms/activity/costs.htm)  Cambridge past papers and accompanying mark schemes are available at [teachers.cie.org.uk](http://teachers.cie.org.uk) |
| Equi-marginal principle | Ask learners individually or in pairs to research and produce a short report or on what is meant by the equi-marginal principle and how it is linked to the derivation of a market demand curve. **(I or P)**  On completion, go through with the whole class. **(W)**  Consolidate learning by setting Question 2a from Cambridge Past Paper 42 May/June 2013 as a class test or homework. **(I or H) (F)** | Stress here that the aim of rational consumers is to maximise their utility or satisfaction, given a limited income, a given set of prices and constant tastes and preferences. The equi-marginal principle shows the relationship between marginal utility and price for a number of different products, and learners need to understand the implications of any changes in the prices of the products and the significance of the MU/P formula | Bamford, ch 2  Cook, ch 9  Stanlake, ch 8  Gillespie, p 8  Cambridge past papers and accompanying mark schemes are available at [teachers.cie.org.uk](http://teachers.cie.org.uk) |
| Limitations of marginal utility theory; rational behaviour versus behavioural economic models | Put learners into pairs or groups to look at how realistic the idea of rational consumer behaviour is. Ask them to think of potential limitations to marginal utility theory and to identify alternative behavioural reasons behind buying decisions – e.g. peer group pressure in the purchase of branded products –developing their ideas into a short presentation. **(P or G) (Challenging)**  On completion, each group gives their presentation to the whole class and answers questions to share and consolidate learning. **(W)** | This is a new topic, and it recognises that advertising and marketing can help bring about significant changes in consumer tastes and preferences.  Emphasise that the law of diminishing marginal utility does have a number of limitations, such as the assumption that satisfaction can be easily measured or consumers always act in a rational way. Explain this is why the idea of rational behaviour by consumers is challenged by behavioural economic models. | Bamford, ch 2 The price system  Cook, ch 9 |

| **Learning objectives** | **Suggested teaching activities** | **Teacher guidance notes and key concepts** | **Learning resources** |
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| **Indifference curves and budget lines** | | | |
| Income, substitution and price effects for various types of goods | Use diagrams such as those in Gillespie or the Tutor2u website as a visual way of introducing indifference curves and budget lines and to help learners understand the overall effect of changes in the price of different kinds of product. **(W)**  Consolidate understanding by setting the following as a class test or homework:   * short questions requiring learners to redraw budget curves and describe the income substitution and price effects resulting from given changes * an exam-style question to apply this knowledge, such as “Explain whether demand schedules and budget lines are similar in the way that they represent the effect of (i) a rise in the price of a good and (ii) a rise in a consumer’s income”. **(I or H)** **(Basic)**   On completion, learners self- or peer-assess their answers to further strengthen learning. **(I or P)** | Emphasise that whereas the substitution effect is always negative for all goods, the income effect can be either positive or negative – and it is this which determines whether a good is a normal good or an inferior good.  For the written task Bamford, ch 2 and Anderton, ch 10 are useful sources for short questions, while the suggested ‘exam-style’ question requires learners to clearly distinguish between demand schedules and budget lines. | Bamford, ch 2 The price system  Cook, ch 9  Anderton, ch 10  Stanlake, ch 8  Gillespie, p.7  [www.tutor2u.net/economics/revision-notes/as-markets-demand.html](http://www.tutor2u.net/economics/revision-notes/as-markets-demand.html) |
| *Progress check – law of diminishing marginal utility, indifference curves and budget lines* | To consolidate learning of this topic, set Question 2a from Cambridge 2016 Specimen Paper 04 as a class test or homework. **(I or H)** **(F)** **(Challenging)** | This gives learners the opportunity to demonstrate their understanding of marginal utility and equi-marginal utility, as well as indifference curves. The rise in income would relate to either a shift of the demand curve or a move of the budget line outwards. | Cambridge 2016 specimen papers and accompanying mark schemes are available at [teachers.cie.org.uk](http://teachers.cie.org.uk) |

| **Learning objectives** | **Suggested teaching activities** | **Teacher guidance notes and key concepts** | **Learning resources** |
| --- | --- | --- | --- |
| **Types of cost, revenue and profit, short-run and long-run production** | | | |
| Short-run production function: fixed and variable factors of production | Hold a class discussion and use the textbook and website references to help ensure that learners understand the difference between fixed and variable factors of production. **(W)**  Follow this by putting learners in pairs or small groups to answer questions you set on the distinction between fixed and variable factors of production. **(P or G)** **(Basic)**  On completion, learners self- or peer-assess their answers to further strengthen learning. **(I or P)** | Make sure learners can clearly distinguish between fixed and variable factors of production – this is a key feature of the short-run production function, and understanding this will help learners understand the difference with the long-run production function.  Stanlake ch 37 is one useful source of questions for the group task. | Bamford, ch 2 The price system  Cook, ch 9  Anderton, ch 46 and 48  Stanlake, ch 37  Sloman, ch 4  Gillespie, p.31-34  [www.tutor2u.net/economics/revision-notes/as-marketfailure-productioncosts.html](http://www.tutor2u.net/economics/revision-notes/as-marketfailure-productioncosts.html) |
| Short-run production function: total product, average product and marginal product | Hold a class discussion and use the textbook and website references to help ensure that learners understand the difference between total product, average product and marginal product. **(W)**  Consolidate learning by setting questions requiring learners to understand the differences between total product, average product and marginal product and express them diagrammatically such as those in Anderton. **(I or P)** **(F)** **(Challenging)** | Make sure learners clearly understand the distinction between these different types of data, and that the marginal product curve cuts the average product curve at its highest point.  The marginal product refers to the additional output produced by employing another unit of a variable factor, such as an additional worker.  **KEY CONCEPT 2: THE MARGIN AND CHANGE** | Bamford, ch 2 The price system  Cook, ch 9  Anderton, ch 46 and 48  Stanlake, ch 37  Sloman, ch 4  Gillespie, p.31-34  [www.tutor2u.net/economics/revision-notes/as-marketfailure-productioncosts.html](http://www.tutor2u.net/economics/revision-notes/as-marketfailure-productioncosts.html) |
| Short-run production function – law of diminishing returns | Hold a class discussion and use the textbook and website references to help ensure that learners understand the law of diminishing returns. **(W)**  To consolidate learning, set class or homework questions such as those in Anderton that require learners to:   * use and apply the law of diminishing returns **(Basic)** * demonstrate the difference between diminishing marginal returns and diminishing average returns **(Challenging)**. **(I, P or H)**   On completion, go through with the whole class. **(W)** | The law of diminishing returns is an important topic. Also known as the law of variable proportions or the law of diminishing marginal returns, it states that when additional units of a variable factor of production are added to a fixed factor of production, the additions to total output will begin to diminish.  **KEY CONCEPT 2: THE MARGIN AND CHANGE**  This topic provides another example of the importance of the margin in Economics. Stress this concept wherever possible in your teaching. | Bamford, ch 2 The price system  Cook, ch 9  Anderton, ch 46 and 48  Stanlake, ch 37  Sloman, ch 4  Gillespie, p.31-34  [www.s-cool.co.uk/a-level/economics/ costs-and-revenues/revise-it/the-law-of-diminishing-marginal-returns](http://www.s-cool.co.uk/a-level/economics/costs-and-revenues/revise-it/the-law-of-diminishing-marginal-returns)  [www.bized.co.uk/educators/16-19/econ omics/firms/activity/dimreturns.htm](http://www.bized.co.uk/educators/16-19/economics/firms/activity/dimreturns.htm) |
| Short-run production function – marginal cost and average cost, fixed costs versus variable costs, shape of Short-Run Average Cost (SRAC) curve | Start with a whole class discussion to ensure that learners fully understand the distinction between marginal cost and average cost and between fixed costs and variable costs. **(W)**  Develop this so learners understand the short-run cost function and can explain the shape of the Short-Run Average Cost (SRAC) curve. **(W)**  Consolidate understanding by setting questions relating to the different costs of production in the short run such as those in Stanlake. **(I or P)** **(F)** **(Basic)**  Conclude by setting further questions such as those in Gillespie to ensure that learners can also draw the diagrams accurately and label them correctly. **(I)** | Stress that the shape of the average cost and marginal cost curves is determined by the law of diminishing returns.  Encourage learners to practise drawing and labelling diagrams in this topic as much as possible, as it is an important exam skill. | Bamford, ch 2 The price system  Cook, ch 9  Anderton, ch 46 and 48  Stanlake, ch 37  Sloman, ch 4  Gillespie, p.33-34 |
| Long-run production function – the long-run cost function, the shape of the Long-Run Average Cost (LRAC) curve | Lead a class discussion and use the textbook and website references to ensure that learners understand the meaning of the long-run cost function and can explain the shape of the Long-Run Average Cost (LRAC) curve. **(W)**  Consolidate learning on the LRAC curve and the difference between this and the SRAC curve by setting questions such as those in Anderton for learners to answer individually or in pairs. **(I, P or H)** **(Basic)** | The long-run average cost curve is described as an ‘envelope curve’ because it is made up of the points of tangency of a number of short-run average cost curves along its length. | Bamford, ch 2 The price system  Cook, ch 9  Anderton, ch 49  Stanlake, ch 13  Sloman, ch 4  Gillespie, p.35-36  [www.tutor2u.net/economics/revision-notes/as-marketfailure-productioncosts.html](http://www.tutor2u.net/economics/revision-notes/as-marketfailure-productioncosts.html) |
| Long-run production function – returns to scale, relationship between economies of scale and decreasing costs | Hold a class discussion and use the textbook and website references to help ensure that learners understand the concept of returns to scale and of the relationship between economies of scale and decreasing costs. Ensure that they also appreciate the distinctions between increasing returns to scale, constant returns to scale and decreasing returns to scale. **(W)**  Consolidate learning by setting questions such as those in Anderton for learners to answer individually or in pairs. **(I, P or H)** **(Challenging)** | Returns to scale indicates the relationship between the level of output by a firm and the quantity of inputs required to produce that output. Where the output can be increased using proportionately fewer inputs, as with increasing returns to scale, this will lead to decreasing costs of production.  Learners sometimes confuse returns to scale with economies of scale. The first refers to changes in output, whereas the second refers to changes in the average cost of production – i.e. one measures output and the other measures costs. | Bamford, ch 2 The price system  Cook, ch 9  Anderton, ch 46  Stanlake, ch 37  Sloman, ch 4  Gillespie, p.36  [www.tutor2u.net/economics/revision-notes/a2-micro-economies-diseconomies-of-scale.html](http://www.tutor2u.net/economics/revision-notes/a2-micro-economies-diseconomies-of-scale.html)  [www.bized.co.uk/learn/economics/firms/economies/index.htm](http://www.bized.co.uk/learn/economics/firms/economies/index.htm) |
| Long-run production function – internal and external economies of scale and diseconomies of scale | Put learners into pairs or small groups and ask them to use the supplied website links to research the difference between:   * internal and external economies of scale * internal and external diseconomies of scale. **(P or G)**   On completion learners feed back to the rest of the class. Follow with a class discussion to ensure that learners understand the distinction between internal and external economies and diseconomies. **(W)**  Consolidate by setting questions requiring learners in pairs or individually to demonstrate their understanding of:   * internal and external economies of scale **(Basic)** * economies of scale in relation to a merger between two companies **(Challenging)** * internal and external diseconomies of scale. **(Basic) (I or P)** | Internal economies of scale are the cost advantages gained when a firm grows in size. External economies of scale are the cost advantages gained to all firms as a result of developments in an industry as a whole, outside of any one particular firm. Diseconomies are the cost disadvantages to all firms resulting from both these scenarios.  Stanlake and Anderton are two useful sources of case studies and questions for the written task. | Bamford, ch 2 The price system  Cook, ch 9  Anderton, ch 49  Stanlake, ch 39  Sloman, ch 4  Gillespie, p.35-36  [www.tutor2u.net/economics/revision-notes/a2-micro-economies-diseconomies-of-scale.html](http://www.tutor2u.net/economics/revision-notes/a2-micro-economies-diseconomies-of-scale.html)  [www.s-cool.co.uk/a-level/economics/ costs-and-revenues/revise-it/economies-of-scale](http://www.s-cool.co.uk/a-level/economics/costs-and-revenues/revise-it/economies-of-scale)  [www.bized.co.uk/learn/economics/firms/economies/index.htm](http://www.bized.co.uk/learn/economics/firms/economies/index.htm) |
| *Progress check – short-run and long-run production function* | To consolidate learning of this topic, set Question 3a from Cambridge Past Paper 41 May/June 2011 as a class test or homework. **(I or H)** **(F)** **(Challenging)** | This will reinforce understanding of the key short- and long-run components and their distinctions, and develop learners’ skills in presenting diagrams. | Cambridge past papers and accompanying mark scheme are available at [teachers.cie.org.uk](http://teachers.cie.org.uk) |
| Revenue: total, average and marginal | Lead a class discussion and use the textbook and website references to ensure that learners can distinguish clearly between the total revenue, average revenue and marginal revenue. **(W)**  As these three concepts are commonly confused, consolidate learning by setting questions requiring learners to distinguish between these three types of revenue such as those in Bamford or Anderton. **(I)** **(F)** **(Basic)** | Total revenue is the total amount of money received from the sales of a product. Average revenue is the total revenue obtained from the sales divided by the number of units of the product sold. Marginal revenue is the extra revenue obtained from the sale of an additional unit of a product.  **KEY CONCEPT 2: THE MARGIN AND CHANGE**  The importance of the concept of the margin is again brought into focus here – stress the importance of the margin wherever possible in your teaching. | Bamford, ch 2 The price system  Cook, ch 9  Anderton, ch 47  Stanlake, ch 38  Sloman, ch 4,  Gillespie, p.37  [www.tutor2u.net/economics/revision-notes/a2-micro-business-revenues.html](http://www.tutor2u.net/economics/revision-notes/a2-micro-business-revenues.html) |
| Profit – normal and abnormal (supernormal) | Put learners into pairs or small groups and ask them to use the supplied website links to research the different forms of profit that exist. On completion learners feed back to the rest of the class. **(P or G)**  Consolidate learning by setting questions such as those in Anderton, Bamford or Stanlake requiring learners to:   * apply their understanding of profit to a particular industry * demonstrate their understanding of the difference between normal and abnormal (supernormal) profit. **(I)** **(F)** **(Basic)** | Stress the distinction here between normal profit and abnormal profit:   * profit is the difference between total revenue and total costs * normal profit refers to that level of profit that a firm requires to keep operating in a particular industry * abnormal or supernormal profit is the level of profit that is over and above normal profit. | Bamford, ch 2 The price system  Cook, ch 9  Anderton, ch 17  Stanlake, ch 14  Sloman, ch 4  Gillespie, p.37  [www.tutor2u.net/economics/revision-notes/a2-micro-profits.html](http://www.tutor2u.net/economics/revision-notes/a2-micro-profits.html)  [www.s-cool.co.uk/a-level/economics/ costs-and-revenues/revise-it/profit](http://www.s-cool.co.uk/a-level/economics/costs-and-revenues/revise-it/profit) |

| **Learning objectives** | **Suggested teaching activities** | **Teacher guidance notes and key concepts** | **Learning resources** |
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| **Different market structures** | | | |
| Perfect competition | Hold a class discussion and use the textbook and website references to ensure that learners understand the key features and characteristics of perfect competition. It is particularly important that you give them opportunities to grasp the distinction between the short-run and long-run situation. **(W)**  Follow this by setting questions such as those in Anderton to help learners develop their understanding of this important distinction. **(I)** **(F)** **(Challenging)**  Learners also need to develop good skills in drawing and labelling diagrams that show the different equilibrium positions for firms in perfect competition in the short-run. Using a resource such as Gillespie, set questions which require learners to practice drawing and labelling these diagrams accurately. **(I)**  On completion go through with the class and conclude by focusing on the long-run position of a firm in perfect competition. **(W)** | It is very important that learners know how to draw accurate and clearly labelled diagrams for this topic. | Bamford, ch 2 The price system  Cook, ch 9  Anderton, ch 53  Stanlake, ch 41  Sloman, ch 5  Gillespie, p.39-40  [www.tutor2u.net/economics/revision-notes/a2-micro-perfect-competition.html](http://www.tutor2u.net/economics/revision-notes/a2-micro-perfect-competition.html)  [www.s-cool.co.uk/a-level/economics/ market-structure-1/revise-it/perfect-competition](http://www.s-cool.co.uk/a-level/economics/market-structure-1/revise-it/perfect-competition)  [www.bized.co.uk/learn/economics/firms/structure/index.htm](http://www.bized.co.uk/learn/economics/firms/structure/index.htm) |
| Imperfect competition – monopoly | Ask learners individually or in pairs to use the internet to research some examples of monopoly in their own country. On completion, they share their findings with the rest of the class. **(I or P)**  Consolidate learning by setting questions on monopolies and the contrast between perfect competition and monopoly such as those in Bamford or Stanlake. **(I)** **(F)**  To add further challenge and stretch learners, include questions such as those in Bamford or Stanlake requiring learners to contrast perfect competition and monopoly. **(I)** **(F)** **(Challenging)** | Stress here how monopoly is distinct and differs from perfect competition. These are at the two opposite extremes of possible market structures and it is important that learners understand the key differences.  The website links provided are a useful starting point for the initial research task. | Bamford, ch 2 The price system  Cook, ch 9  Anderton, ch 54  Stanlake, ch 44  Sloman, ch 5  Gillespie, p.41-43  [www.tutor2u.net/economics/revision-notes/a2-micro-monopoly.html](http://www.tutor2u.net/economics/revision-notes/a2-micro-monopoly.html)  [www.s-cool.co.uk/a-level/economics/ market-structure-1/revise-it/monopoly](http://www.s-cool.co.uk/a-level/economics/market-structure-1/revise-it/monopoly)  [www.s-cool.co.uk/a-level/economics/ market-structure-1/revise-it/the-costs-and-benefits-of-monopoly](http://www.s-cool.co.uk/a-level/economics/market-structure-1/revise-it/the-costs-and-benefits-of-monopoly)  [www.bized.co.uk/learn/economics/firms/structure/index.htm](http://www.bized.co.uk/learn/economics/firms/structure/index.htm) |
| Imperfect competition – monopolistic competition | Put learners into pairs or small groups. Using the suggested internet links, ask them to identify and discuss examples of monopolistic competition in their own country. **(P or G)**  On completion, each group feeds back to the class, Ensure in this discussion that learners can identify which elements of monopolistic competition are similar to the situation in perfect competition and which more closely resemble the situation in a monopoly. **(W)**  Consolidate learning by setting questions such as those in Bamford or Stanlake to ensure learners understand the key features of monopolistic competition and appreciate how it is distinguishable from other types of market structure. **(I)** **(Challenging)**  On completion, learners self- or peer-assess their answers to further strengthen learning. **(I or P)** | Monopolistic competition combines elements of both perfect competition and monopoly.  Ensure that learners know how to use the terms ‘monopoly’ and ‘monopolistic competition’ correctly and how to make it clear which type of market structure they are referring to with each. | Bamford, ch 2 The price system  Cook, ch 9  Anderton, ch 55  Stanlake, ch 42  Sloman, ch 5  Gillespie, p.44  [www.s-cool.co.uk/a-level/economics/ market-structure-2/revise-it/monopolistic-competition](http://www.s-cool.co.uk/a-level/economics/market-structure-2/revise-it/monopolistic-competition)  [www.bized.co.uk/learn/economics/firms/structure/index.htm](http://www.bized.co.uk/learn/economics/firms/structure/index.htm) |
| Imperfect competition – oligopoly | Ask learners individually or in groups to use the internet to research examples of oligopolies in their own or another specified country and identify what the key features of the market structure are. **(I or G)**  On completion, discuss findings as a class. **(W)**  Consolidate learning by setting questions such as those in Anderton or Bamford requiring learners to demonstrate their understanding of oligopoly in relation to a number of firms, such as newspaper publishers. **(I)** **(F)** **(Challenging)** | An oligopoly can be defined as an imperfect market consisting of a few large firms. It has a number of features that make it distinctive from other market structures, such as the concept of the kinked demand curve (see the *Other Objectives of a Firm* below for more teaching content on this).  Ensure here that learners fully understand the interconnections of firms operating in an oligopolistic market structure, such as when there is a cartel arrangement. | Bamford, ch 2 The price system  Cook, ch 9  Anderton, ch 56  Stanlake, ch 43  Sloman, ch 5  Gillespie, p.46-47  [www.tutor2u.net/economics/revision-notes/a2-micro-oligopoly-overview.html](http://www.tutor2u.net/economics/revision-notes/a2-micro-oligopoly-overview.html)  [www.s-cool.co.uk/a-level/economics/ market-structure-2/revise-it/oligopoly](http://www.s-cool.co.uk/a-level/economics/market-structure-2/revise-it/oligopoly)  [www.bized.co.uk/learn/economics/firms/structure/index.htm](http://www.bized.co.uk/learn/economics/firms/structure/index.htm) |
| Imperfect competition – natural monopoly | Put learners into groups and give each group an industry that operates through natural monopoly (e.g. water supply companies). Ask them to use the internet to research their allocated industry and identify the potential advantages of the natural monopoly that operates. **(G)**  On completion, each group reports its findings to the class. Use this as the basis for a wider class discussion on natural monopolies to ensure learners understand that they exist when the advantages of such a monopoly are likely to be greater than the disadvantages, such the reduction in costs by not duplicating expensive infrastructure. **(W)**  As a follow-up, put learners back into their groups to find out if there are any examples of a natural monopoly in their own country, and what the underlying advantages and disadvantages are. **(G)** | A natural monopoly will occur where there are potentially large economies of scale to be gained by having just one firm in an industry. A wasteful duplication of resources can be avoided, leading to cost reductions.  This activity provides a good opportunity for peer mentoring where learners share, feedback and improve each other’s work.  **KEY CONCEPT 3: EQUILIBRIUM AND EFFICIENCY** | Bamford, ch 2 The price system  Cook, ch 9  Anderton, ch 18  Stanlake, ch 44  Sloman, ch 5  Gillespie, p.43 |
| The structure of markets as explained by number of buyers and sellers, nature of product, degree of freedom of entry and the nature of information | Start by explaining to the class that markets can structured by a number of different factors, e.g. the:   * number of buyers and sellers in the market * nature of the product * degree of freedom of entry into, and exit from, the market * nature of information. **(W)**   Then put learners into groups and allocate each group one of these factors. The groups then research these more thoroughly and give a presentation to the whole class on their findings **(G)**.  Keeping learners in groups or pairs, then ask them to construct a competition road map which clearly shows the differences between the different types of market structure that can exist in an economy. On completion, each group produces a poster of their road map for display and wider class discussion. **(P or G)** **(Basic)**  Consolidate learning by setting Question 3b from Cambridge Past Paper 41 May/June 2011 as a class test or homework. **(I or H)** **(F)** **(Challenging)**. | In the whole class discussion, it is important that learners understand how different market structures can be distinguished through a range of different features.  For the final task in this activity. Bamford is one source that provides an excellent example of how to produce a road map. | Bamford, ch 2 The price system  Cook, ch 9  Anderton, ch 51  Stanlake, ch 45  Sloman, ch 5  [www.tutor2u.net/economics/revision-notes/a2-micro-market-structures-summary.html](http://www.tutor2u.net/economics/revision-notes/a2-micro-market-structures-summary.html)  Cambridge past papers and accompanying mark schemes are available at [teachers.cie.org.uk](http://teachers.cie.org.uk) |
| Contestable markets and their implications | Hold a class discussion and use the textbook and website references to help ensure that learners understand contestable markets. In particular, ensure learners focus on:   * what is likely to influence entry into, and exit from, an industry * the factors that make a market more or less contestable. **(W)**   To consolidate learning, set class or homework questions on contestable markets such as those in Anderton. **(I** **or** **P)** **(F)** **(Challenging)** | Stress here that the key aspect of contestable markets is not the entry of firms into an industry, but the threat of such an entry. | Bamford, ch 2 The price system  Cook, ch 9  Anderton, ch 58  Stanlake, ch 45  Sloman, ch 5  Gillespie, p.44  [www.tutor2u.net/economics/revision-notes/a2-micro-contestable-markets.html](http://www.tutor2u.net/economics/revision-notes/a2-micro-contestable-markets.html)  [www.s-cool.co.uk/a-level/economics/market-structure-2/revise-it/contestable-markets](http://www.s-cool.co.uk/a-level/economics/market-structure-2/revise-it/contestable-markets) |
| Concentration ratio | Put learners into pairs or groups and give each group a different industry. Ask them to use the internet to research the concentration ratios for their particular industry and prepare a presentation for the rest of the class on what they discover. **P or G) (Basic)**  After the presentations, develop the whole class discussion and feedback to compare and contrast the findings of each industry looked at. Follow this up with a more detailed look at a suitable case study on a particular industry. **(W) (Basic)** | Ensure here that learners understand:   * what is meant by the concentration ratio of a certain number of firms in one industry compared to another * this concentration ratio will be a good indication of the degree to which the industry is close to the oligopoly or monopoly market structure.   Anderton is one useful resource for the class discussion, containing a study on how the concentration ratio in the food retail industry in a number of countries varies depending on how many firms are used to measure the ratio. | Bamford, ch 2 The price system  Cook, ch 9  Anderton, ch 51  Gillespie, p.1 |

| **Learning objectives** | **Suggested teaching activities** | **Teacher guidance notes and key concepts** | **Learning resources** |
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| **Growth and survival of firms** | | | |
| The reasons for small firms | Put learners into pairs or groups and ask them to research and draw up a list of reasons why small firms continue to exist in an economy, focusing on examples from their own country. **(P or G)**  On completion, each group shares its ideas with the class. **(W)**  Follow this up by inviting someone who owns or works for a small firm to give the class a talk on why it continues to exist despite the possible advantages of large firms. **(W)**  Then return learners to their original pairs or groups and allocate each a specific industry. Ask them to research the extent to which small firms operate in that industry and feed back their findings to the rest of the class. **(P or G)**  Set questions such as those in Bamford or Anderton to consolidate learning on small businesses and then set Question 4b from Cambridge Past Paper 43 November 2013 as a class test or homework. **(I or H)** **(F)** **(Challenging)** | Ensure that learners understand why small firms continue to exist in an economy despite the potential advantages of large firms and can identify the possible reasons for this.  This second group work task in this activity provides a good opportunity for peer mentoring where learners share and improve each other’s work.  Anderton is one useful resource for questions as it looks at the reasons why small firms might survive in the hotel industry. The past paper question is useful here as it requires learners to focus on the relative merits of firms of different sizes. | Bamford, ch 2 The price system  Cook, ch 9  Anderton, ch 64  Stanlake, ch 40  Sloman, ch 12  Cambridge past papers and accompanying mark schemes are available at [teachers.cie.org.uk](http://teachers.cie.org.uk) |
| Introduction to integration, diversification, mergers and cartels | Start this introductory topic by putting learners into pairs. Give each pair a particular firm and ask them to research how they have grown in size over a given number of years. **(P) (Basic)**  Each pair feeds back its findings to the class. Ensure during this discussion that learners are clearly aware of the distinction between internal and external growth. **(W)** | The distinction between internal and external growth is important:   * internal growth is where a particular firm grows in size * external growth is the result of a merger, takeover or acquisition involving at least two firms. | Bamford, ch 2 The price system  Cook, ch 9  Anderton, ch 64  Stanlake, ch 40  Gillespie, p.49  [www.tutor2u.net/economics/revision-notes/a2-micro-growth-of-firms.html](http://www.tutor2u.net/economics/revision-notes/a2-micro-growth-of-firms.html) |
| Integration | Put learners in groups and ask each group to find examples of external growth by integration, including:   * horizontal * vertical (both forward and backward) * conglomerate. **(G)**   On completion, each group presents their findings to the class. **(W)** | Ensure here that learners understand the differences between horizontal, vertical and conglomerate integration. The group task will help learners draw on real-world examples to aid recall of these differences. | Bamford, ch 2 The price system  Cook, ch 9  Anderton, ch 64  Stanlake, ch 40  Gillespie, p.48-49  [www.tutor2u.net/economics/revision-notes/a2-micro-growth-of-firms.html](http://www.tutor2u.net/economics/revision-notes/a2-micro-growth-of-firms.html) |
| Diversification | Put learners into pairs or groups and ask them to use the internet to find examples of different firms that have diversified their product range as a way of spreading risk in different markets. **(P or G)**  On completion, each group presents their findings to the class. Use this as a basis for a wider discussion so that learners are aware of the reasons for diversification. **(W)** | Diversification is an important aspect of a firm spreading risk across a range of different products in order to exploit additional opportunities to make a profit. It is most likely to be found in conglomerate integration.  The group activity is a good opportunity for peer mentoring where learners share and improve each other’s work. | Bamford, ch 2 The price system  Cook, ch 9  Anderton, ch 64  Stanlake, ch 40 |
| Mergers | Using the same groups as the previous activity, ask learners to research examples of significant mergers in recent years, both in their own country and in other countries. **(P or G)**  On completion, each group presents their findings to the class. Use this as a basis for a wider discussion so that learners understand what is meant by a merger as a form of acquisition and how a merger differs from a takeover. **(W)** | Ensure here that learners understand the distinction between a merger and a takeover. | Bamford, ch 2 The price system  Cook, ch 9  Anderton, ch 64  Stanlake, ch 40  Gillespie, p.49 |
| Cartels | Using the same groups as the previous activity, ask learners to use the internet to research OPEC (the Organisation of Petroleum Exporting Countries) or a similarly well-known cartel and find out as much as possible about how it operates. In contrast the groups should also research an example of an illegal cartel. **(I or G)**  On completion, each group shares its findings with the rest of the class. Ensure in this discussion that learners develop a clear understanding of what is meant by a cartel. **(W)**  Consolidate learning of cartels by setting questions such as those in Bamford and/or Sloman, encouraging learners to peer-assess each other’s responses. **(I)** **(F)** **(Basic)** | Ensure that learners understand that a cartel is a group of firms which work together to limit output to keep prices higher than they would otherwise be.  The focus should be on both legal and illegal cartels.  As well as the internet, Bamford and Sloman provide some useful information on OPEC. | Bamford, ch 2 The price system  Cook, ch 9  Anderton, ch 65  Stanlake, ch 43  Sloman, ch 5  Gillespie, p.46 and p.48 |
| *Progress check – growth and survival of firms* | To consolidate learning of this whole topic, set Question 4a from Cambridge Past Paper 42 May/June 2011 as a class test or homework. **(I or H)** **(F)** **(Challenging)** |  | Cambridge past papers and accompanying mark schemes are available at [teachers.cie.org.uk](http://teachers.cie.org.uk) |

| **Learning objectives** | **Suggested teaching activities** | **Teacher guidance notes and key concepts** | **Learning resources** |
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| **Differing objectives of a firm** | | | |
| The traditional profit maximising objective of a firm – normal and abnormal profit | To ensure learners appreciate that profit maximisation has traditionally been regarded as the main objective of a firm, divide the class into pairs or groups and ask each group to develop a poster listing the main reasons why this is the case. **(P or G)**  On completion, use the displayed posters as the basis for a class discussion on profit maximisation. **(W)**  Consolidate learning of this topic by setting Question 4b from Cambridge Past Paper 42 May/June 2011. **(I or H)** **(F)** **(Challenging)** | You might also find it useful here to recap the teaching activities on normal and abnormal profit in the *Types of cost, revenue and profit,* section above.  The Tutor2U internet link provides one useful starting point for the initial group activity. | Bamford, ch 2 The price system  Cook, ch 9  Anderton, ch 50  Stanlake, ch 36  Sloman, ch 4  Gillespie, p.50  [www.tutor2u.net/economics/revision-notes/a2-micro-business-objectives.html](http://www.tutor2u.net/economics/revision-notes/a2-micro-business-objectives.html)  Cambridge past papers and accompanying mark schemes are available at [teachers.cie.org.uk](http://teachers.cie.org.uk) |
| The traditional profit maximising objective of a firm – relation between elasticity and revenue | Hold a class discussion on the relationship between elasticity and revenue to ensure learners fully understand the importance of this link. **(W)**  Consolidate understanding by setting questions in relevant business contexts such as those in Bamford or Stanlake that require learners to link price, cross- and income elasticity of demand to possible increases in revenue. **(I)** **(F)** **(Basic)** | Ensure here that learners fully understand the relationship between elasticity and revenue. | Bamford, ch 2 The price system  Cook, ch 2,  Anderton, ch 9  Stanlake, ch 9  Gillespie, p.10 |
| Other objectives of a firm – survival, strategic, satisficing, sales maximisation | Put learners into pairs or groups and ask them to consider other possible reasons why firms might exist, apart from the goal of maximising profits. Each group discusses its ideas and develops them into a poster or wall chart. **(P or G)**  Use the posters/charts developed by each group as the basis for a whole class discussion on the possible objectives of a firm, apart from profit maximisation. **(W)**  Consolidate learning by setting questions such as those in Bamford or Stanlake that require learners on the different possible objectives of firms and the extent to which they are compatible with each other and profit maximisation. **(I or P)** **(F)** **(Challenging)** | Other objectives that a firm can have include:   * survival * strategic * satisficing * sales maximisation. | Bamford, ch 2 The price system  Cook, ch 9  Anderton, ch 50  Stanlake, ch 36  Sloman, ch 4  Gillespie, p.50  [www.tutor2u.net/economics/revision-notes/a2-micro-business-objectives.html](http://www.tutor2u.net/economics/revision-notes/a2-micro-business-objectives.html) |
| Other objectives of a firm – principal agent problem | Put learners into groups to focus on the implications that arise when ownership of a firm is divorced from control of the firm. Using the supplied internet links, ask each group to identify with examples the types of situations that could arise when there is a difference between what the principal might wish to see happen and what the agent actually does. **(G)**  On completion, each group feeds back its findings to the class. Use this as the basis for a wider discussion on this topic. **(W)** | The principal agent problem is an important area for learners to focus on in relation to other objectives of a firm.  When ownership and control of a firm are divorced, the owners (the principal) can never be certain that the people managing the firm for them (the agent) are taking decisions (e.g. to maximise profits) the principal would have taken.  The group activity is a good opportunity for peer mentoring. | Sloman, ch 7  [www.tutor2u.net/economics/content/topics/buseconomics/principal\_agent.htm](http://www.tutor2u.net/economics/content/topics/buseconomics/principal_agent.htm)  [www.tutor2u.net/economics/revision-notes/a2-micro-divorce-ownership-control.html](http://www.tutor2u.net/economics/revision-notes/a2-micro-divorce-ownership-control.html)  [www.bized.co.uk/educators/16-19/econ omics/marketfail/activity/principal11.htm](http://www.bized.co.uk/educators/16-19/economics/marketfail/activity/principal11.htm)  [www.bized.co.uk/educators/16-19/econ omics/marketfail/lesson/principal1.htm](http://www.bized.co.uk/educators/16-19/economics/marketfail/lesson/principal1.htm)  [www.bized.co.uk/educators/16-19/econ omics/marketfail/activity/principal13.htm](http://www.bized.co.uk/educators/16-19/economics/marketfail/activity/principal13.htm)  [www.bized.co.uk/educators/16-19/econ omics/marketfail/activity/principal12.htm](http://www.bized.co.uk/educators/16-19/economics/marketfail/activity/principal12.htm)  [www.bized.co.uk/educators/16-19/economics/marketfail/presentation/principal1\_map.htm](http://www.bized.co.uk/educators/16-19/economics/marketfail/presentation/principal1_map.htm) |
| Other objectives of a firm – behavioural analysis approach to decision-making | Begin with a whole class session on the variety of behavioural analysis approaches to decision-making in a firm. Then to enable learners to apply this understanding, introduce the following tasks one at a time. **(W)**  Start with the Prisoner’s Dilemma approach:   * give each learner appropriate background information on a different business and ask them to individually take decisions about what would be best for their business without knowing what anybody else’s business is planning **(I)** * then ask learners to share their individual strategies and work in pairs or groups to rethink now they know the plans of other businesses and decide whether to change their plans in coordination with others. **(P or G)** * follow this with a class discussion to consolidate learning. **(W)**   Then move on to look at the Two-player Pay-off Matrix approach:   * put learners into pairs and tell them each person is representing one firm in a given industry (i.e. the industry is a duopoly) * tell each learner that the firm they represent has two strategies: it can either raise the price of a product or leave it unchanged * ask learners to then construct a matrix which shows the pay-offs that result from the interaction of strategies by the two firms. **(P)**   Finally, look at the kinked demand curve in an oligopoly:   * hold a whole class discussion to ensure learners understand the nature of the kinked demand curve and the interdependence between firms that underlies it * consolidate learning on kinked demand curves by setting questions such as those on Anderton **(I)** **(F)** **(Challenging)**   Conclude with a whole class discussion on behavioural approaches to decision making and set further questions on the different aspects from a source such as Anderton as required **(W)**. | The Prisoner’s Dilemma approach refers to a game where neither player knows the strategy of the other player. This is worse than if they had known the strategy of the other player as it means they cannot coordinate their strategies.  A Two-player Pay-off Matrix shows the outcomes of a game for the players given different possible strategies.  The kinked demand curve in oligopoly is an example of the interdependence between firms in an industry. The kink is caused by two assumptions:   * if a firm decides to increase its price, the other firms in the industry will not follow * if a firm decides to decrease its price, the other firms will follow.   This means the first assumption leads to price elastic demand, while the second leads to price inelastic demand.  **KEY CONCEPT 2: THE MARGIN AND CHANGE**  One interesting aspect of the kinked demand theory, in terms of the margin, is that the marginal revenue curve is discontinuous. Stress this in your teaching of the kinked demand curve so learners understand why. | Bamford, ch 2 The price system  Cook, ch 9  Anderton, ch 56-57  Stanlake, ch 43  Sloman, ch 5  Gillespie, p.46-7  [www.tutor2u.net/economics/revision-notes/a2-micro-oligopoly-game-theory.html](http://www.tutor2u.net/economics/revision-notes/a2-micro-oligopoly-game-theory.html)  [www.bized.co.uk/educators/16-19/econ omics/macrocont/activity/gametheory2.htm](http://www.bized.co.uk/educators/16-19/economics/macrocont/activity/gametheory2.htm)  [www.bized.co.uk/educators/16-19/econ omics/macrocont/activity/gametheory3.htm](http://www.bized.co.uk/educators/16-19/economics/macrocont/activity/gametheory3.htm)  [www.bized.co.uk/educators/16-19/econ omics/macrocont/activity/gametheory4.htm](http://www.bized.co.uk/educators/16-19/economics/macrocont/activity/gametheory4.htm)  [www.tutor2u.net/economics/revision-notes/a2-micro-oligopoly-overview.html](http://www.tutor2u.net/economics/revision-notes/a2-micro-oligopoly-overview.html)  [www.s-cool.co.uk/a-level/economics/ market-structure-2/revise-it/the-kinked-demand-curve-model](http://www.s-cool.co.uk/a-level/economics/market-structure-2/revise-it/the-kinked-demand-curve-model) |
| Pricing policy – price discrimination | To help develop understanding of price discrimination, put learners into pairs or groups and ask them ask to think of examples from their own experience, e.g. mobile phone free texts, train/bus ticket prices at different times of the day or cinema tickets where adults and children are charged differently for the same seats. **(P or G)**  On completion, each group shares its examples with the class and how they work as a form of price discrimination. Ensure learners focus here on the conditions that are required to allow for the existence of price discrimination in a market. (**W)**  To consolidate learning, set questions on price discrimination such as those in Anderton. **(I)** **(F)** **(Basic)** | Price discrimination is where identical goods or services from the same provider are priced differently for different markets. It can be a particular feature of monopolistic or oligopolistic markets where firms are less vulnerable to competitive pricing.  The group activity provides a good opportunity for peer mentoring.  Anderton has a useful piece on price discrimination in the telephone industry. | Bamford, ch 2 The price system  Cook, ch 9  Anderton, ch 54  Stanlake, ch 44  Sloman, ch 5  [www.tutor2u.net/economics/revision-notes/a2-micro-price-discrimination.html](http://www.tutor2u.net/economics/revision-notes/a2-micro-price-discrimination.html)  [www.s-cool.co.uk/a-level/economics/ market-structure-1/revise-it/price-discrimination](http://www.s-cool.co.uk/a-level/economics/market-structure-1/revise-it/price-discrimination) |
| Pricing policy – limit pricing | To develop understanding of limit pricing, put learners into pairs or groups and ask them to use the internet to research examples from their own or another specified country where a firm has deliberately set a low price as a barrier to entry into the market. **(G)**  On completion each group collaborates to produce a written report on the examples found and gives a verbal presentation of this to the class. Use the discussion to ensure all aspects of limit pricing have been covered. **(W)** | Limit pricing is where a firm deliberately sets a price that is low enough to deter new entrants from coming into a market. | Anderton, ch 59  Stanlake, ch 36, 44, and 45  Gillespie, p.47 |
| Pricing policy – price leadership | To develop understanding of price leadership, put learners into pairs or groups and ask them to use the internet to research examples from their own country where a dominant firm in an industry has set a high price and other firms in the industry have tended to follow this lead. **(G)**  On completion each group collaborates to produce a written report on the examples found and gives a verbal presentation of this to the class. Use the discussion to ensure all aspects of limit pricing have been covered. **(W)** | Price leadership is where a price is set by a dominant firm in an industry and the other firms in the industry tend to follow this lead. | Bamford, ch 2 The price system  Cook, ch 9  Anderton, ch 59  Sloman, ch 5  Gillespie, p.47 |
| Pricing policy – mutual inter-dependence | Hold a class discussion on mutual interdependence pricing to ensure learners fully understand this and the underlying link to oligopolic market behaviour. **(W)**  Follow this by recapping the activity on the kinked demand curve in *Behavioural Analysis Approach to Decision Making* earlier in this topic and setting further questions on this. **(I)** **(F)** | Mutual interdependence refers to the situation when firms in an oligopoly take into account the expected behaviour of other firms in the industry. | Cook, ch 9  Sloman, ch 5  Gillespie, p.46 |
| Comparisons of performance of firms | To help learners understand how to compare the performance of different firms, put them into pairs or groups and ask them to briefly research the following nine methods:   * revenue * output * profits * efficiency * x-inefficiency * barriers to entry and exit * price competition * non-price competition * collusion.   On completion, each group produces a wall chart which shows how the performance of firms can be compared by these methods. **(G)**  Use this as the basis for a class discussion on these methods to consolidate learning. **(W)** | X-inefficiency occurs when a firm has little incentive to control costs due to a lack of competitive pressure. | Bamford, ch 2 The price system  Cook, ch 9  Stanlake, ch 45  Sloman, ch 5 |

# [Government microeconomic intervention (A Level)](#_Contents)

## Recommended prior knowledge

This section of the A Level course builds on the AS topics to look at policies for efficient resource allocation, correcting market failure, distributing income and wealth and intervening in the labour market, and then concludes by looking at the overall effectiveness of government microeconomic intervention. Learners need to retain their AS knowledge and it is important that they appreciate the importance of this topic, focusing as it does on many of the key elements of microeconomics.

## Context

In this section, learners develop their understanding of government policies to achieve efficient resource allocation and correct market failure, the concept of equity and the policies towards income and wealth redistribution that result, the need for and types of labour market intervention and why failure in microeconomic intervention occurs. This material covers a number of very important concepts in microeconomics, contributing enormously not only to learners’ knowledge, but also to their appreciation and understanding of real-world practice.

## Outline

The A Level topics covered in this section are:

* policies to achieve efficient resource allocation and correct market failure
* equity and policies towards income and wealth distribution
* labour market forces and government intervention
* government failure in microeconomic intervention.

## Suggested teaching time

It is recommended that this section should take approximately 20% of the A Level course (10% of the whole AS and A Level programme).

| **Learning objectives** | **Suggested teaching activities** | **Teacher guidance notes and key concepts** | **Learning resources** |
| --- | --- | --- | --- |
| **Policies to achieve efficient resource allocation and correct market failure** | | | |
| Application of indirect taxes and subsidies | Put learners into pairs or groups and ask them to use the provided textbook and website links to:   * find examples of indirect taxes and subsidies in their country * discuss the effect of such intervention on prices, producing a brief collaborative report on their findings * use this to produce a wall chart setting out the key points and conclusions for the rest of the class to see. **(P or G**)   Follow this with a whole class discussion in which each group presents its wall chart. Ensure all the key points are covered. **(W)** | Learners need to appreciate that:   * indirect taxes and subsidies are policies to achieve efficient resource allocation and correct market failure * indirect taxes can discourage the consumption of certain products * the provision of subsidies can encourage the consumption of certain products. | Bamford, ch 3 Government intervention in the price system  Cook, ch 3  Anderton ch 11  Stanlake, ch 24  Sloman, ch 7  Gillespie, p.15 and 74  [www.tutor2u.net/economics/revision-notes/as-marketfailure-indirect-taxation.html](http://www.tutor2u.net/economics/revision-notes/as-marketfailure-indirect-taxation.html)  [www.tutor2u.net/economics/revision-notes/as-marketfailure-producer-subsidies.html](http://www.tutor2u.net/economics/revision-notes/as-marketfailure-producer-subsidies.html) |
| Price and output decisions under nationalisation and privatisation | Put learners into pairs or groups and ask them to:   * find examples of firms that have either been nationalised or privatised, in their own country if possible * investigate how both types of change affect price and output decisions. **(P or G)**   On completion, each group reports back to the class as the basis for a wider discussion on how such changes in ownership affect price and output decisions. **(W)** | To help learners get the most from this activity, give them guidance on where to obtain the information they need for the country and firms they are looking at.  The group activity provides a good opportunity for peer mentoring. | Bamford, ch 3 Government intervention in the price system  Cook, ch 3  Anderton, ch 18 and 67  Stanlake, ch 46  Sloman, ch 7, and 12  Gillespie, p.67 |
| Prohibitions and licences | Put learners into pairs or groups and ask them to use the internet to:   * find out information about examples of prohibitions and licences in their own country * consider the potential advantages and disadvantages of these types of government intervention in the economy * produce a collaborative report on the relative merits of this sort of government intervention. **(P or G)**   On completion, each group gives a brief presentation to the class as the basis for a wider discussion on the general impact on consumption. **(W)** | To help learners get the most from this activity, give them guidance on where to obtain the information they need for the country and policies they are looking at. | Bamford, ch 3 Government intervention in the price system |
| Property rights | Put learners into groups and allocate each group a different type of property rights where the ownership and ability to earn income from that property improves the general good, such as:   * fishing rights * forestry or other land rights * national parks * intellectual property rights.   Each group then selects a case study example for their type of property right, preferably from their own country, and produces a written report on the benefits and disbenefits property rights confer on the owner and the users compared to common ownership. **G)**  On completion, each group develops a wall chart on their key findings and displays this as the basis for a wider discussion on property rights. **(W)** | Owners of assets have a right to charge people who wish to make use of those assets. The examples suggested in the activity relate to private property rights, but remember there are also common property rights, e.g. in relation to air. | Anderton, ch 19, 42, 44 and 62  Stanlake, ch 24  Sloman, ch 7  Gillespie, p.27 and p.30 |
| Information | Put learners into groups and give each group a different topic of interest to consumers, such as:   * healthy eating/safe medicines * pensions * cars * booking a holiday * choosing a school/university * internet/mobile phone/TV services.   Ask each group to find out:   * what sources of information are available in their own country (including but not limited to government and NGO websites) * how easy it was to find the information (e.g. how many steps, how much has the government had to intervene itself) * how the quality/impartiality of this information varies among the different sources * how much the information they found might increase both direct and indirect consumer activity. **(G)**   On completion each group prepares a short presentation as the basis for a wider class discussion on the impact that information has on consumer behaviour and activity in the economy, and when and why the government needs to intervene. **(W)** | Information is important to achieving efficient resource allocation in an economy – a better-informed consumer is likely to be able to exercise more influence in an economy.  The Tutor2U website link is a good starting place for this activity. The other two links website links provided are for the UK, but each country is likely to have its own equivalent sites showing areas where the government has intervened in the provision of information to consumers. | Bamford, ch 3 Government intervention in the price system  Anderton, ch 16 and 20  Stanlake, ch 21, and 24  Sloman, ch 7  Gillespie, p.28-29  [www.tutor2u.net/economics/revision-notes/as-marketfailure-imperfect-information.html](http://www.tutor2u.net/economics/revision-notes/as-marketfailure-imperfect-information.html)  [www.ons.gov.uk](http://www.ons.gov.uk)  [www.statistics.gov.uk](http://www.statistics.gov.uk) |
| Regulatory bodies, deregulation and direct provision of goods and services | Put learners into pairs or groups and ask them to:   * find examples in their own country of regulation, deregulation and direct provision of goods and services by the government * show how these have been designed to achieve an efficient resource allocation and correct market failure * consider the extent to which such intervention has corrected the identified market failure * prepare a presentation on their findings. **(P or G)**   On completion, hold a whole class discussion in which each group gives their presentation. Ensure that learners fully understand the mechanisms governments can use to intervene to correct market failure in an economy. **(W)** | To help learners get the most from this activity, give them guidance on where to obtain the information they need for the government interventions they are looking at.  The group activity provides a good opportunity for peer mentoring.  **KEY CONCEPT 4: REGULATION AND EQUITY**  This key concept highlights the importance of government intervention to achieve a certain purpose. Ensure you refer to appropriate examples of this wherever possible in your teaching. | Bamford, ch 3 Government intervention in the price system  Cook, ch 3,  Anderton, ch 18, 19, 62 and 67  Stanlake, ch 24, 25, 35 and 63  Sloman, ch 7  Gillespie, p.29, 67 |
| Pollution permits | Start by explaining that a pollution permit refers to a licence given by a government which allows a firm to cause pollution, but only to a certain level. By allowing less than the current pollution levels, this can contribute to reducing pollution in an economy. **(W)**  Then put learners into groups and ask them to:   * research examples of the use of pollution permits in their own country * investigate how well or otherwise the idea works in practice * report back their findings to the class. **(G)**   Consolidate learning by setting written questions such as those in Anderton on the Kyoto Protocol and carbon trading so learners practice looking at government microeconomic intervention in relation to pollution and climate change issues. **(I)** **(Basic)** | Pollution permits can also be known as tradable permits, carbon taxes or carbon credits.  For the group activity, give learners guidance on where to look for the information, along with an example pollution permit if possible. | Anderton, ch 19 and 62  Stanlake, ch 25  Gillespie, p.27 and p.30  Example pollution permit |
| Behavioural insights and ‘nudge’ theory | Put learners into pairs or groups and ask them to:   * consider to what extent people act in the rational way traditional economic theory suggests when making purchasing decisions, or whether they actually act in less rational ways, such as being influenced by brands, peer groups, celebrity endorsement, etc. * look at ways governments use ‘nudge’ theory to influence consumer behaviour (e.g. to consume fewer demerit goods such as cigarettes or alcohol) * assess how effective this is and the extent to which success is affected by underlying addiction to the products concerned * produce a collaborative report on their findings. **(P or G)**   Each group then feeds back to the class as the basis for a wider discussion to consolidate learning on behavioural insights. **(W)** | Behavioural insights into achieving efficient resource allocation emphasise the importance of the actual behaviour of people, rather than relying on the traditional assumption that they always act rationally.  Nudge theory suggests that the economic behaviour of people can be changed by ‘nudging’ rather than forcing them in a certain direction.  The group activity provides a good opportunity for peer mentoring.  Build in:  -incentives  -individual and crowd psychology | Anderton, ch 50 and 59  Stanlake, ch 36  Sloman, ch 2  Tutor2U: Organic food |
| *Progress check – policies to achieve efficient resource allocation and correct market failure* | To consolidate learning of this topic, set Question 7 from Cambridge 2016 specimen paper 04 as a class test or homework. **(I or H)** **(F)** **(Challenging)** | This question will give learners the opportunity to consider some of the problems of resource allocation in a market. Appreciating ‘to what extent’ governments might be able to achieve a better resource allocation than the market is the key element. | Cambridge 2016 specimen papers and accompanying mark schemes are available at [teachers.cie.org.uk](http://teachers.cie.org.uk) |

| **Learning objectives** | **Suggested teaching activities** | **Teacher guidance notes and key concepts** | **Learning resources** |
| --- | --- | --- | --- |
| **Equity and policies towards income and wealth redistribution** | | | |
| Equity versus efficiency | Put learners into groups and ask them to think of examples of where there may be a clash between equity and efficiency in an economy. One such example is the uneven distribution of income in an economy – this could be addressed by placing higher taxes on the rich and giving subsidies to the poor, but this interfere with the market mechanism, creating inefficiency. **(G)**  Each group then prepares a presentation on their examples to give to the rest of the class. **(W)** | The contrast between efficiency and equity is interesting, and learners need to appreciate that what is fair in an economy may not be efficient.  **KEY CONCEPT 4: REGULATION AND EQUITY**  Governments can intervene in an economy to attempt to bring about greater social equality and equity. This is one of several topics in this unit that provide a good opportunity to discuss the concept of equity with the learners. | Bamford, ch 3 Government intervention in the price system  Cook, ch 10  Anderton, ch 61 and 68  Sloman, ch 7  Gillespie, p.55 |
| Price stabilisation | Put learners into groups with sufficient guidance to get started and ask them to research examples in their own country’s economy of the following price stabilisation mechanisms:   * maximum prices * minimum prices * buffer stocks.   On completion each group summarises their findings on a wall chart to enable comparison. **(G)**  Finish with a whole class discussion to consolidate learning. **(W)** | * Maximum price is where a price is established below what it would be under normal conditions of demand and supply. * Minimum price is where a price is established above what it would be under normal conditions of demand and supply. * Buffer stock is where reserves of a commodity are held back during an abundance to stop prices going too low, and released during a shortage to stop prices going too high. | Bamford, ch 3 Government intervention in the price system  Cook, ch 3  Anderton, ch 21  Stanlake, ch 24  Sloman, ch 3  Gillespie, p.14-15 and p.17 |
| Means-tested benefits  Transfer payments | Put learners in pairs and ask them to use the internet to:   * research examples of means-tested benefits (e.g. unemployment benefit) and transfer payments (e.g. welfare payments, state pension ) in their own and other countries * assess the advantages and disadvantages of the different mechanisms identified * summarise their findings on a wall chart to enable comparison and discussion with other groups. **(P)**   Use the resulting class discussion to ensure that learners fully understand the role means-tested benefits and transfer payments can play in bringing about a more even distribution of income in an economy and the resulting risks of both (disincentive to work, absence of a link to productive effort. **(W)** | To help learners get the most from this activity, give them guidance on where to obtain the information they need.  Means-tested benefits are targeted at those perceived to me in most need.  Transfer payments are usually paid to individuals by a government, and the key feature is that no productive effort is required to receive it.  Ensure learners do not confuse transfer payments with ‘transfer earnings’ (see the *Labour Market Forces* below). | Bamford, ch 3 Government intervention in the price system  Cook, ch 10  Anderton, ch 25  Sloman, ch 6 and ch 8 |
| Progressive income taxes, inheritance and capital taxes  Negative income tax | Put learners in pairs and ask them to:   * study the income tax, inheritance tax and capital tax systems in a number of different countries * compare and rank them in terms of how progressive they are * find out which countries use negative income tax and assess the advantages and disadvantages of this mechanism * present their findings in the form of a wall chart or a poster to enable comparison and discussion with other groups. **(P)**   Follow this with a class discussion on the role income taxes, inheritance taxes, capital taxes and negative income tax can play in the redistribution of income and wealth in an economy. **(W)** | Negative income tax is a payment of money to those people on low incomes instead of taking money out of their income through income tax. Canada is one country which operates this system.  **KEY CONCEPT 4: REGULATION AND EQUITY**  A country’s system of taxation can play a key role in the redistribution of income and wealth in that country’s economy. Stress here that the redistribution of income and wealth is a key aim of many governments. | Bamford, ch 3 Government intervention in the price system  Cook, ch 10  Anderton, ch 69  Sloman, ch 6  Gillespie, p.55 |
| Poverty trap analysis | Put learners into groups and give them examples of how the poverty trap operates and how to determine it. Then ask them to use this information to:   * find examples of poverty traps in their own or another country * conduct a more detailed analysis on the causes, potential solutions and consequences for one of the examples they find * present their findings to the rest of the class. **(G)**   Conclude with a whole class discussion to ensure learners understand the key points of this topic. **(W)** | The poverty trap refers to a situation where a person receives benefits, increasing their income, but this higher income then results in that person no longer being entitled to benefits they were originally allowed to claim.  This is one useful example that can be included in the concluding activity in this topic on *Government failure in microeconomic intervention* below. | Bamford, ch 3 Government intervention in the price system  Cook, ch 10  Anderton, ch 38  Stanlake, ch 23  Sloman, ch 6  Gillespie, p.74 and p.89 |
| Gini co-efficient and the Lorenz curve | Hand out appropriate data on the distribution of income in various given countries and for each one ask learners to:   * draw a Lorenz curve for that data * use the information this provided to come to a judgement as to whether the distribution of income in that country has become more or less equal over time. **(I)** **(Challenging)**   Consolidate learning by setting questions requiring learners to use the Gini co-efficient, draw a Lorenz curve and interpret the results, such as those in Anderton. **(I)** | A Gini coefficient measures inequality in the distribution of income in a country. A Lorenz curve is a graphical representation of this measure.  Give learners plenty of opportunity to practice their skills in presenting data accurately. | Anderton, ch 68  Gillespie, p.55, p.57 and p.75 |
| Inter-generational equity | Put learners into pairs and ask them to:   * research how income and wealth distribution in their own or another given country has changed over a given period of time * assess whether the principle that successive generations should not be worse off than the last is being achieved * present their findings in the form of a wall chart or poster to enable comparison and discussion with other groups. **(P)**   Follow this with a class discussion to consolidate learning. **(W)** | Inter-generational equity refers to achieving an equitable distribution of economic well-being between generations over time. It is based on the idea of economic sustainability –‘development that meets the needs of the present without compromising the ability of future generations to meet their own needs’. | Bamford, ch 3 Government intervention in the price system  [www.tutor2u.net/blog/index.php/economics/tagged/tag/intergenerational+equity](http://www.tutor2u.net/blog/index.php/economics/tagged/tag/intergenerational+equity) |
| *Progress check – equity and policies towards income and wealth redistribution* | To consolidate learning of this topic, set Question 2b from Cambridge 2016 specimen paper 04 as a class test or homework. **(I or H)** **(F)** **(Challenging)** | This will give learners the opportunity to look at how a government might achieve a more equal distribution of income. The key elements are the command word ‘discuss’ and recognising that the question is only concerned with income, not wealth.  **KEY CONCEPT 4: REGULATION AND EQUITY** | Cambridge 2016 specimen papers and accompanying mark schemes are available at [teachers.cie.org.uk](http://teachers.cie.org.uk) |

| **Learning objectives** | **Suggested teaching activities** | **Teacher guidance notes and key concepts** | **Learning resources** |
| --- | --- | --- | --- |
| **Labour market forces and government intervention** | | | |
| Demand for and supply of labour – factors affecting the demand for labour | Start by explaining that wages are determined in the same way as any other price in a market, i.e. by the interaction of demand and supply. Include here the concept of derived demand – e.g. if the demand for a good increases, then the productivity for that good increases, which in turn leads to an increase in labour. **(W)**  Then put learners into groups and ask them to:   * consider the factors that might affect the demand for labour in a given economy * present their findings to whole class in the form of a report. **(G**)   Consolidate learning with a whole class discussion on the factors that affect the demand for labour. **(W)** | To help learners get the most from this activity, give them guidance on where to obtain the information they need.  The group activity provides a good opportunity for peer mentoring. | Bamford, ch 2 The price system  Cook, ch 9  Anderton, ch 71  Stanlake, ch 17  Sloman, ch 6  Gillespie, p.51  [www.tutor2u.net/economics/revision-notes/a2-micro-demand-for-labour.html](http://www.tutor2u.net/economics/revision-notes/a2-micro-demand-for-labour.html)  [www.s-cool.co.uk/a-level/economics/ labour-markets/revise-it/the-demand-for-labour](http://www.s-cool.co.uk/a-level/economics/labour-markets/revise-it/the-demand-for-labour) |
| Demand for and supply of labour – the derivation of an individual firm’s demand for using marginal revenue product theory | Start by explaining the importance of marginal revenue product theory in terms of the demand curve for labour. **(W)**  Then set questions requiring learners to do calculations of marginal revenue product such as those in Anderton to help them gain a better understanding of the concept. **(I)** **(F)** **(Challenging)**  Consolidate learning of marginal revenue productivity by setting Question 3b from Cambridge Past Paper 42 November 2013 as a class test or homework. **(I or H)** **(F)** **(Challenging)** | The past paper question is challenging as it asks learners to discuss the marginal revenue productivity theory of wages in the context of an imperfect market. While imperfect markets have not been covered yet, they are later on in this section, offering the opportunity to recap or reschedule this activity.  **KEY CONCEPT 2: THE MARGIN AND CHANGE**  The marginal revenue product theory is another example of the importance of decisions taken at the margin. Stress the importance of the margin throughout your teaching. | Bamford, ch 2 The price system  Cook, ch 9  Anderton, ch 71  Stanlake, ch 63  Sloman, ch 6  Gillespie, p.51  Cambridge past papers and accompanying mark schemes are available at [teachers.cie.org.uk](http://teachers.cie.org.uk) |
| Demand for and supply of labour –factors affecting the supply of labour | Put learners into pairs or groups to undertake a research study of the labour force in their country and how the size and composition of that labour force has changed over, say, the last thirty years. Each group presents its findings in the form of a wall chart to enable comparison and discussion with other groups. **(P or G)**  Follow this with a class discussion to consolidate learning. **(W)** | To help learners get the most from this activity, give them guidance on where to obtain the information they need.  A thirty-year period is recommended as the minimum time for the underlying trends to become easily apparent.  As previously stated, a wage is effectively a price and, just like any other price in an economy, it will be determined by demand and supply. | Bamford, ch 2 The price system  Cook, ch 9  Anderton, ch 72  Stanlake, ch 17  Sloman, ch 6  Gillespie, p.51  [www.tutor2u.net/economics/revision-notes/a2-micro-supply-of-labour.html](http://www.tutor2u.net/economics/revision-notes/a2-micro-supply-of-labour.html)  [www.s-cool.co.uk/a-level/economics/ labour-markets/revise-it/the-supply-of-labour](http://www.s-cool.co.uk/a-level/economics/labour-markets/revise-it/the-supply-of-labour)  [www.s-cool.co.uk/a-level/economics/ labour-markets/revise-it/the-changing-uk-labour-market](http://www.s-cool.co.uk/a-level/economics/labour-markets/revise-it/the-changing-uk-labour-market) |
| Demand for and supply of labour – net advantages and the long-run supply of labour | Put learners into groups and ask them to:   * identify as many forms of pecuniary and non-pecuniary advantages as they can arising from paid employment * develop a short presentation on their findings to give to the rest of the class. **(G)**   Follow the presentations with a whole class discussion on the ideas that were identified to consolidate learning. **(W)** | Net advantages includes both pecuniary and non-pecuniary advantages of a job, i.e. both wage and non-wage factors. | Bamford, ch 2 The price system  Cook, ch 9  Anderton, ch 72  Stanlake, ch 17  Sloman, ch 6  Gillespie, p.51 |
| Wage determination in perfect markets – the competitive product and factor market forces determining wage differentials, transfer earnings and economic rent | Start by explaining that:   * transfer earnings refer to the wages which could be earned in the next best alternative employment * economic rent refers to the amount which a person can earn that is in excess of their transfer earnings. **(W)**   The set a question such as those in Bamford or in Anderton (on economic rent in the context of North Sea oil) to ensure that learners can apply these concepts. **(I)** **(Challenging)**  Follow this by asking learners to:   * find out the earnings of, for example, members of their family * distinguish the related transfer earnings and economic rent * summarising their findings in a brief report. **(I)**   Consolidate learning of wage determination in perfect markets by setting Question 3a from Cambridge Past Paper 41 May/June 2013 as a class test or homework. **(I or H)** **(F)** **(Challenging)** | It is important to instruct learners here to respect and maintain the confidentiality of the information they gather for the research and report task. | Bamford, ch 2 The price system  Cook, ch 9  Anderton, ch 77  Stanlake, ch 15  Sloman, ch 6  Gillespie, p.54  [www.tutor2u.net/economics/revision-notes/a2-micro-wage-determination-competitive-markets.html](http://www.tutor2u.net/economics/revision-notes/a2-micro-wage-determination-competitive-markets.html)  [www.s-cool.co.uk/a-level/economics/ labour-markets/revise-it/the-equilibrium-wage](http://www.s-cool.co.uk/a-level/economics/labour-markets/revise-it/the-equilibrium-wage)  Cambridge past papers and accompanying mark schemes are available at [teachers.cie.org.uk](http://teachers.cie.org.uk) |
| Wage determination in imperfect markets – the influence of trade unions, governments and monopsonies | Start by explaining the potential influence in the determination of wages in imperfect markets of:   * trade unions * governments (e.g. national minimum wage) * monopsonies and bilateral monopolies. **(W)**   Follow this by issuing learners with case studies and questions such as those in Anderton on the role of trade unions in teachers’ remuneration. **(I)** **(Challenging)**  Then put learners into pairs or groups and ask them to research whether the government intervenes in wage determination in their country or not (if not, they then look at a country where this does occur). On completion, they summarise their finding in a report or wall chart and share them with the rest of the class. **(P or G)**  To help learners develop and apply their knowledge of the third area of wage determination in imperfect markets – monopsonies – set questions such as those in Sloman, which looks at the situation that arises when an monopsony employer is hiring labour in a market which has a monopoly trade union. **(I)** **(F)** **(Challenging)**  Consolidate learning of wage determination in imperfect markets by setting Question 3 from Cambridge 2016 Specimen Paper 04 as a class test or homework. **(I)** **(F)** **(Challenging)** | Sloman is one resource that provides extensive information on the national minimum wage (in a UK context).  A monopsony refers to a single buyer of a factor of production, such as labour.  The final past paper question task gives learners the opportunity to compare and contrast theories of wage determination in perfect and imperfect markets. This is also a useful point to practise answering a 25-mark question. | Bamford, ch 2 The price system  Cook, ch 9  Anderton, ch 72, 73 and 74  Stanlake, ch 18 and 22  Sloman, ch 6  Gillespie, p.52-54  [www.s-cool.co.uk/a-level/economics/ labour-markets/revise-it/trade-unions](http://www.s-cool.co.uk/a-level/economics/labour-markets/revise-it/trade-unions)  [www.s-cool.co.uk/a-level/economics/ labour-markets/revise-it/the-minimum-wage](http://www.s-cool.co.uk/a-level/economics/labour-markets/revise-it/the-minimum-wage)  [www.tutor2u.net/economics/revision-notes/a2-micro-trade-unions-and-monopsony-employers.html](http://www.tutor2u.net/economics/revision-notes/a2-micro-trade-unions-and-monopsony-employers.html)  [www.s-cool.co.uk/a-level/economics/ labour-markets/revise-it/the-equilibrium-wage](http://www.s-cool.co.uk/a-level/economics/labour-markets/revise-it/the-equilibrium-wage)  Cambridge 2016 specimen papers and accompanying mark schemes are available at [teachers.cie.org.uk](http://teachers.cie.org.uk) |
| *Progress check – wage determination in perfect and imperfect markets* | Consolidate learning of this topic by setting Question 3b from Cambridge Past Paper 41 May/June 2013 as a class test or homework. **(I or H)** **(F)** **(Challenging)** | By focusing on the distinction between the two, this question helps learners understand the difference between perfect and imperfect labour markets. | Cambridge past papers and accompanying mark schemes are available at [teachers.cie.org.uk](http://teachers.cie.org.uk) |

| **Learning objectives** | **Suggested teaching activities** | **Teacher guidance notes and key concepts** | **Learning resources** |
| --- | --- | --- | --- |
| **Government failure in microeconomic intervention** | | | |
| Effectiveness of government policies | It is important that learners are able to critically reflect on all the examples of government microeconomic intervention covered in this topic and are also able to offer a reasoned assessment for each policy as to what extent the benefits outweigh the limitations.  To help deliver this, arrange a whole class debate with two learners speaking for and two against the key themes of:   * achieving efficient resource allocation and correcting market failure * redistribution of income and wealth * labour market forces in perfect and imperfect markets.   Focus the debate on one economy that you have studied in detail, preferably that of the learners’ own country, and explain that all comments and contributions from the class must be supported by real-world examples to help consolidate learning. **(W)** | It is vital that learners are able to look at both sides of the argument, particularly in longer questions with the command word ‘discuss’. Running a debate on this topic will help learners assess both the benefits and limitations of the various methods of government intervention as well as developing their understanding of the types of intervention that can be made. | Bamford, ch 3 Government intervention in the price system  Cook, ch 10  Anderton, ch 20  Stanlake, ch 25  Sloman, ch 7  Gillespie, p.29 |

# [The macro economy (A Level)](#_Contents)

## Recommended prior knowledge

This section builds on the AS macro economy topics to look at economic growth, development and sustainability, statistics and classification, employment and unemployment, the flow of income and theories of money supply, interest rate determination, trade development and aid. Learners need to retain their AS knowledge as well and it is important that they appreciate the importance of this topic in the wider syllabus, focusing as it does on the key elements of macroeconomics.

## Context

Here learners develop their understanding of economic growth, development and sustainability, the use of National Income statistics, the classification of countries according to certain criteria, employment and unemployment, the circular flow of income, the theory of money supply, the distinction between Keynesian and monetarist schools of thought, the demand for money and interest rate determination, and policies towards developing economies, policies of trade and aid. This covers a number of important concepts in macroeconomics, contributing enormously not only to learners’ knowledge, but also to their appreciation and understanding of real-world practice.

## Outline

The A Level topics covered in this section are:

* economic growth, economic development and sustainability
* national income statistics
* classification of countries
* employment/unemployment
* the circular flow of income
* money supply (theory)
* Keynesian and Monetarist schools
* the demand for money and interest rate determination
* policies towards developing economies; policies of trade and aid.

## Suggested teaching time

It is recommended that this unit should take approximately 30% of the A Level course (15% of the whole AS and A Level programme).

| **Learning objectives** | **Suggested teaching activities** | **Teacher guidance notes and key concepts** | **Learning resources** |
| --- | --- | --- | --- |
| **Economic growth, economic development and sustainability** | | | |
| Definition of economic growth, economic development and sustainability | To ensure learners understand the distinction between economic growth and economic development, put them in pairs or groups to research the differences and give a presentation to the class. Sustainability needs to be a key feature of this work. **(P or G)**  Follow the presentations with a whole class discussion on sustainability. **(W)**  To consolidate learning, put learners back into their groups to:   * research the meaning of sustainability in more detail * produce a poster or wall chart for classroom display. **(P or G)** | Sustainability refers to the idea that the interests of future generations need to be taken into account without compromising the interests of the present generation.  **KEY CONCEPT 5: PROGRESS AND DEVELOPMENT**  With a focus on economic growth and development, this topic provides plenty of scope to apply this key concept. | Bamford, ch 6 Macroeconomic problems  Cook, ch 12  Anderton, ch 26 and 100  Stanlake, ch 53 and 65  Sloman, ch 9  Gillespie, p.5, p.66, p.102-6 and p.110  [www.tutor2u.net/economics/revision-notes/a2-macro-theories-of-economic-growth.html](http://www.tutor2u.net/economics/revision-notes/a2-macro-theories-of-economic-growth.html)  [www.bized.co.uk/virtual/economy/policy/outcomes/gdp/growws.htm](http://www.bized.co.uk/virtual/economy/policy/outcomes/gdp/growws.htm) |
| Actual versus potential growth in national output, output gap, and the business (trade) cycle | Set questions such as those in Stanlake to ensure learners understand what is meant by and the importance of business or trade cycles. **(I)** **(F)** **(Challenging)**  The difference between actual and potential growth is critical in this context. To develop this understanding, put learners into pairs or groups and ask them to:   * draw two production possibility curve diagrams, one showing a movement from within the curve to a point on the curve and one showing a shift outwards of the curve * display these as a poster. **(P or G)**   Finish with a whole class discussion based on the posters to consolidate learning on actual and potential growth, output gaps and business/trade cycles. **(W)** | Learners need to understand the distinction between actual and potential growth in terms of the difference between a movement from within a production possibility curve to a position on the curve and an actual shift outwards of the curve.  It is also important they understand the concept of an output gap in terms of the level of expenditure in an economy being less than the capacity of an economy to produce. | Bamford, ch 6 Macroeconomic problems  Cook, ch 12  Anderton, ch 26 and 78  Stanlake, ch 53 and 54  Sloman, ch 9  Gillespie, p.110-111 |
| Factors contributing to economic growth | Put learners into groups and ask them to:   * find out the different factors that can contribute to economic growth in a country * show their findings in a wall chart for display in the classroom * give a short presentation to the rest of the class indicating what they consider to be the most important factors. **(G)**   Use the whole class discussion to ensure that learners fully understand the most significant factors likely to bring about economic growth in a country. **(W)**  Consolidate learning of this topic by setting questions such as those in Anderton p.180 **(I)** **(F)** **(Challenging)** | Anderton is one useful resource for the final consolidation questions, containing information on economic growth in the Republic of Ireland and questions relating to this data. | Bamford, ch 6 Macroeconomic problems  Cook, ch 12  Anderton, ch 26 and 91  Stanlake, ch 53  Sloman, ch 9  Gillespie, p110 |
| Costs and benefits of growth, including using and conserving resources | Explain that economic growth can bring both benefits and costs, and with this focus, put learners into groups and ask them to:   * identify the various costs and benefits of growth * contrast the two and consider whether there should be limits * present their results in the form of a wall chart or poster. **(G)**   Using this group work as the basis for a wider class discussion on this topic, and ensure this includes consideration of the use of resources for growth compared to their conservation. **(W)**  Consolidate learning of this topic by setting questions such as those in Bamford p.180 **(I)** **(F)** | Cook is one useful resource for the initial group activity, containing a useful tabular summary of the costs and benefits of growth. | Bamford, ch 6 Macroeconomic problems  Cook, ch 12  Anderton, ch 26 and 91  Stanlake, ch 53  Sloman, ch 9  Gillespie, p.110  [www.tutor2u.net/economics/revision-notes/a2-macro-economic-growth-costs-benefits.html](http://www.tutor2u.net/economics/revision-notes/a2-macro-economic-growth-costs-benefits.html)  [www.bized.co.uk/educators/16-19/econ omics/development/activity/costben.htm](http://www.bized.co.uk/educators/16-19/economics/development/activity/costben.htm) |

| **Learning objectives** | **Suggested teaching activities** | **Teacher guidance notes and key concepts** | **Learning resources** |
| --- | --- | --- | --- |
| **National Income statistics** | | | |
| Use of National Income statistics as measures of economic growth and living standards | So learners understand how national income statistics can be used to measure economic growth and living standards, ask them to:   * use the internet to access and download national income statistics for their own country and five other selected countries * compare the data for the six countries you have allocated them * present their findings on a wall chart for display in the class. **(I, P or G)**   Follow this up with a whole class discussion with examples to ensure learners can understand and interpret national income statistics effectively. **(W)** | The link to the World Factbook on the CIA website is one good starting place for finding data for this activity. | Bamford, ch 5 Theory and measurement in the macroeconomy  Cook, ch 11  Anderton, ch 25  Stanlake, ch 26  Sloman, ch 8  Gillespie, p.56  [www.cia.gov/library/publications/the-world-factbook/index.html](http://www.cia.gov/library/publications/the-world-factbook/index.html)  [www.tutor2u.net/economics/revision-notes/as-macro-national-income.html](http://www.tutor2u.net/economics/revision-notes/as-macro-national-income.html) |
| Gross Domestic Product (GDP), Gross National Product (GNP) and Gross National Income (GNI) | Ask learners individually or in pairs to look up and define the following three terms:   * Gross Domestic Product (GDP) * Gross National Product (GNP) * Gross National Income (GNI).   On completion, learners produce a poster for display in the class on these terms and the differences between them. **(P or G)**  Follow this with a whole class discussion to ensure learners can distinguish these terms clearly. **(W)**  Consolidate learning by setting Question 4 from Cambridge Past Paper 41 May/June 2013 as a class test or homework. **(I or H)** **(F)** **(Challenging)** | The first task in this activity provides a good opportunity for peer mentoring.  The past paper question encourages learners to think critically of the role of GDP as an indicator of the standard of living in a country. It also gives an important opportunity to practise answering a 25 mark question. | Bamford, ch 5 Theory and measurement in the macroeconomy  Cook, ch 11  Anderton, ch 25  Stanlake, ch 26  Sloman, ch 8  Gillespie, p.56  [www.cia.gov/library/publications/the-world-factbook/](http://www.cia.gov/library/publications/the-world-factbook/)  [www.tutor2u.net/economics/revision-notes/as-macro-national-income.html](http://www.tutor2u.net/economics/revision-notes/as-macro-national-income.html)  Cambridge past papers and accompanying mark schemes are available at [teachers.cie.org.uk](http://teachers.cie.org.uk) |
| National debt (government or public sector debt) | Give them some starting guidance on where to search for this information, and then ask learners individually or in groups to:   * research the size of their country’s national debt * compare this with selected other countries * display the results of their research in a wall chart. **(I or G)**   Follow this with a whole class discussion to ensure learners understand national debt and the difference between this and a budget deficit. **(W)** | National debt is the accumulated debt of a country over a period of time. Ensure that learners do not confuse this with budget deficit (which relates to a given financial year and is part of fiscal policy) and also understand that a fall in the size of a budget deficit in one financial year will still lead to an increase in the size of national debt. | Anderton, ch 36  Stanlake, ch 33 and 34  Gillespie, p.76 |

| **Learning objectives** | **Suggested teaching activities** | **Teacher guidance notes and key concepts** | **Learning resources** |
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| **Classification of countries** | | | |
| Indicators of living standards and economic development | Start by introducing and explaining the following indicators of living standards in different countries:   * Human Development Index (HDI) * Measure of Economic Welfare (MEW) * Human Poverty Index (HPI) * Multidimensional Poverty Index (MPI) * Kuznets curve. **(W)**   Then put learners into pairs or groups and allocate each group one of the above indicators. Ask them to:   * research the living standards in their own country * compare this with selected other countries * present the results in a table or wall chart for sharing with the rest of the class. **(P or G)**   Follow this with a whole class discussion to compare the different indicators, how the results differ from each and which are most useful in which contexts. **(W)**  Consolidate learning on measuring living standards by setting Question 5 from Cambridge Past Paper 41 November 2013 as a class test or homework. **(I or H)** **(F)** **(Challenging)**. | **Note:** The HDI methodology changed in 2010. For example, it used to show GDP, but figures since 2010 show GNI.  Bamford is one useful resource for the group task, as it provides a useful comparison of a range of different countries using HDI. The CIA World Factbook is another useful source.  The past paper question requires learners to think critically about how living standards are measured in different countries, and gives further practise in doing 25-mark questions.  **KEY CONCEPT 5: PROGRESS AND DEVELOPMENT**  Looking at indicators of living standards and economic development gives a good opportunity to apply the key concept of progress and development and demonstrate the role Economics can play in improving the lives of people throughout the world. | Bamford, ch 5 Theory and measurement in the macroeconomy  Cook, ch 11  Anderton, ch 100  Stanlake, ch 26 and 65  Gillespie, p.103  [www.cia.gov/library/publications/the-world-factbook/](http://www.cia.gov/library/publications/the-world-factbook/)  Cambridge past papers and accompanying mark schemes are available at [teachers.cie.org.uk](http://teachers.cie.org.uk) |
| Characteristics of developed, developing and emerging (BRICS) economies | Put learners into pairs or groups and ask them to produce a poster or wall chart summarising the main characteristics of developing economies compared to developed and emerging economies, using the following criteria:   * population growth and structure * income distribution * economic structure * employment composition * external trade * urbanisation. **(P or G)**   Follow with a class discussion on these criteria and how they can be used to compare economic growth rates and living standards both in one country over time and also between countries. **(W)**  Then put learners back in their groups and give each group developing (e.g. BRIC) or emerging (e.g. MINT) economic status. Ask them to:   * carry out a more detailed investigation on the economy of one country within their allocated economy group * present their findings in the form of a leaflet or poster for distribution to the rest of the class. **(P or G)**   Follow with a whole class discussion to share the key points. **(W)**  Consolidate learning by setting Questions 5a and 5b from Cambridge 2016 Specimen Paper 04 and/or Question 5a from Cambridge Past Paper 41 May/June 2013 as a class test or homework. **(I or H)** **(F)** **(Challenging)** | Developing and emerging economies are often grouped into types with related characteristics such as:   * BRICS: Brazil, Russia, India, China * MINTS: Mexico, Indonesia, Nigeria and Turkey   A good class discussion could be around how helpful this grouping is.  Cook is one useful resource for this activity, as it contains a table summarising the characteristics of developing economies.  **KEY CONCEPT 5: PROGRESS AND DEVELOPMENT**  This activity provides a good opportunity to apply the key concept of progress and development. This is an important concept which should play a key part in your teaching. | Bamford, ch 6 Macroeconomic problems  Cook, ch 11 and 12  Anderton, ch 100  Stanlake, ch 65  Sloman, ch 14  Gillespie, p.102-106  Cambridge past papers, 2016 specimen papers and accompanying mark schemes are available at [teachers.cie.org.uk](http://teachers.cie.org.uk) |

| **Learning objectives** | **Suggested teaching activities** | **Teacher guidance notes and key concepts** | **Learning resources** |
| --- | --- | --- | --- |
| **Employment/unemployment** | | | |
| Size and components of the labour force | Put learners into pairs or groups to:   * research the size and the components of the labour force in their own country * summarise their findings in a leaflet or wall chart for distribution to the rest of the class. **(P or G)**   Follow this with a whole class discussion to consolidate learning and ensure that learners appreciate how the labour force in different countries can vary, both in terms of its size and its composition. **(W)** | Anderton is one useful starting resource for this activity as it contains data and a summary of the labour force in the UK. | Bamford, ch 5 Theory and measurement in the macroeconomy  Cook, ch 5  Anderton, ch 72  Stanlake, ch 17  Sloman, ch 11 |
| Labour productivity | Keeping learners in their original pairs or groups from the previous activity, ask them to:   * identify the various factors that can influence labour productivity * present their findings in a poster for display in the class. **(P or G)** **(Basic)**   Follow this with a whole class discussion to consolidate learning and ensure that learners understand the difference between labour output and labour productivity. **(W)** | Bamford is one useful resource for this activity, containing a case study and questions to answer on labour productivity in Pakistan.  Ensure throughout that learners can clearly distinguish between labour productivity and labour output and use each term accurately. | Bamford, ch 5 Theory and measurement in the macroeconomy  Cook, ch 5  Anderton, ch 2 and 97  Stanlake, ch 5 |
| Full employment and the natural rate of unemployment | Start by explaining that:   * *full employment* is the agreed percentage of those available to work who are in work (definitions vary depending on whether factors such as changing jobs are taken into account) * *natural rate of unemployment* is the level of unemployment in an economy when the rate of inflation is stable (i.e. if production costs increase, production reduces and unemployment increases ‘unnaturally’). **(W)**   Then ask learners to:   * find out the current rate of unemployment in their own country or another country you specify * research that economy further and come to an informed judgement as to what might be regarded as full employment * assess what amount of the unemployment rate is ‘natural’ * display their findings in a wall chart in the class. **(I or G)**   Follow with a class discussion on this to consolidate learning. **(W)** | Extend more able learners by also asking them to look at the non-accelerating inflation rate of unemployment (NAIRU).  Teaching activities on Keynesian and monetarist approaches to economics are provided later on in this topic. | Bamford, ch 5 Theory and measurement in the macroeconomy, ch 6 Macroeconomic problems and ch 7 Macroeconomic policies  Cook, ch 12  Anderton, ch 86  Stanlake, ch 30, 56 and 57  Sloman, ch 11  Gillespie, p.86  [www.s-cool.co.uk/a-level/economics/un employment-and-the-phillips-curve/revise-it/links-with-aggregate-demand-and-supp](http://www.s-cool.co.uk/a-level/economics/unemployment-and-the-phillips-curve/revise-it/links-with-aggregate-demand-and-supp) |
| Causes of unemployment | Put learners into pairs or groups to research and identify as many possible different causes of unemployment in their own country. **(P or G)**  Follow this with a class discussion at which each group shares its ideas and contributes to develop a more definitive list. **(W)**  Then focus the class discussion on assessing the differing impact on the economy of the different causes identified. **(W)**  Consolidate learning by setting Question 7a from Cambridge Past Paper 41 May/June 2013 and/or Question 6a from Cambridge 2016 Specimen Paper 04 as a class test or homework. **(I or H)** **(F)** **(Challenging)** | Learners should understand that there are many different causes of unemployment in any economy, and that the reason why one person is unemployed may be different from why another person is.  The past paper question focuses on the possible causes of a rise in unemployment in an economy over a period of time. The specimen paper question focuses on what might cause an increase in unemployment. | Bamford, ch 6 Macroeconomic problems  Cook, ch 12  Anderton, ch 86  Stanlake, ch 56  Sloman, ch 11  Gillespie, p.86-90  Cambridge past papers, 2016 specimen papers and accompanying mark schemes are available at [teachers.cie.org.uk](http://teachers.cie.org.uk) |
| Consequences of unemployment | Start by explaining that unemployment has a wide range of consequences both for the unemployed and for wider society. **(W)**  Then put learners into pairs or groups and ask them to:   * try to measure the costs of unemployment in terms of both individuals and the wider society * develop a short report on their findings and their rationale for sharing with the rest of the class. **(P or G) (Challenging)**   Follow with a class discussion to share work and develop understanding of how to measure the consequences. **(W)**  Consolidate learning by setting Question 6b from Cambridge 2016 Specimen Paper 04 as a class test or homework. **(I or H)** **(F)** **(Challenging)** | Learners are just as likely to face an exam question on the consequences of unemployment as they are on the causes.  Sloman is one useful resource for this activity, containing the case study *Is it just the unemployed who suffer?*  The specimen paper question highlights the importance of reading the question carefully – here it is critical to understand whether a question is asking about the *causes* or *consequences* of unemployment. | Cook, ch 12  Anderton, ch 29  Stanlake, ch 56  Sloman, ch 11  Gillespie, p.88  [www.tutor2u.net/economics/revision-notes/a2-macro-unemployment.html](http://www.tutor2u.net/economics/revision-notes/a2-macro-unemployment.html)  [www.s-cool.co.uk/a-level/economics/ unemployment-and-the-phillips-curve/revise-it/unemployment-the-details](http://www.s-cool.co.uk/a-level/economics/unemployment-and-the-phillips-curve/revise-it/unemployment-the-details)  Cambridge specimen papers and accompanying mark schemes are available at [teachers.cie.org.uk](http://teachers.cie.org.uk) |
| Types of unemployment | Explain that unemployment can be classified into different types and some are more serious to an economy than others. **(W)**  Then put learners into pairs or groups and ask them to rank the different types of unemployment identified in order of importance. **(P or G)**  Follow this with a class discussion to share these results and consolidate understanding of which are the most serious types of unemployment to an economy. **(W)** | It is important that learners understand the differences between the various types of unemployment and recognise that certain types might be more serious than others. | Bamford, ch 6 Macroeconomic problems  Cook, ch 12  Anderton, ch 86  Stanlake, ch 56  Sloman, ch 11  Gillespie, p.86-90  [www.s-cool.co.uk/a-level/economics/ labour-markets/revise-it/the-equilibrium-wage](http://www.s-cool.co.uk/a-level/economics/labour-markets/revise-it/the-equilibrium-wage) |
| Unemployment rate, patterns and trends in (un)-employment | Put learners into pairs or groups and ask them to:   * research employment and unemployment rates, patterns and trends in their own country over (for example) the past 30 years * present their findings as a poster or a wall chart. **(P or G)**   Consolidate learning with a whole class discussion on the work undertaken. Ensure here that learners are able to recognise patterns over time and can accurately determine whether the overall trend is up or down. **(W)** | To help learners get the most from this activity, give them guidance on where to obtain the data they need.  Recognising trends is an important skill throughout the syllabus, particularly for the AS and A Level data response questions. | Bamford, ch 5 Theory and measurement in the macroeconomy  Cook, ch 5  Stanlake, ch 56  Sloman, ch 11  Gillespie, p.86  [www.s-cool.co.uk/a-level/economics/ unemployment-and-the-phillips-curve/revise-it/unemployment-the-basics](http://www.s-cool.co.uk/a-level/economics/unemployment-and-the-phillips-curve/revise-it/unemployment-the-basics) |
| The difficulties involved in measuring unemployment | Start by explaining that there are a number of difficulties involved in arriving at an accurate unemployment figure and as a result, a number of different approaches are used. **(W)**  Then put learners into pairs or groups and ask them to:   * consider the practical issues involved in measuring the number of people unemployed in an economy at any one moment * suggest ways in which these issues can be taken into account * present their findings as a wall chart. **(P or G)**   Conclude with a whole class discussion on each group’s findings and what approaches can be used to estimate reliably. **(W)** | This activity provides a good opportunity for peer mentoring and assessment. | Bamford, ch 5 Theory and measurement in the macroeconomy  Cook, ch 5  Anderton, ch 29  Stanlake, ch 56  Sloman, ch 11  Gillespie, p.86 |
| Policies to correct unemployment | Start by outlining the range of policies which can be used to control unemployment, such as:   * fiscal policies * monetary policies * supply-side policies * exchange rate policies.   Stress that there are number of different approaches, and emphasise that policies to correct unemployment could conflict with other economic objectives. **(W)**  Then put learners into pairs or groups to compare the advantages and disadvantages of the different policies to control unemployment in an economy. **(P or G)**  Use this work as the basis for a class discussion or debate on the relative merits of the various approaches, taking into account their impact on other economic objectives. **(W)**.  Consolidate learning of this topic by setting Question 7b from Cambridge Past Paper 41 May/June 2013 as a class test or homework. **(I or H)** **(F)** **(Challenging)** | The past paper question requires learners to focus on whether it is justifiable for any one economic policy (in this case reducing the level of unemployment) to be the main macroeconomic aim of a government at the expense of other economic aims. | Bamford, ch 7 Macroeconomic policies  Anderton, ch 88  Gillespie, p.88  Cambridge past papers and accompanying mark schemes are available at [teachers.cie.org.uk](http://teachers.cie.org.uk) |

| **Learning objectives** | **Suggested teaching activities** | **Teacher guidance notes and key concepts** | **Learning resources** |
| --- | --- | --- | --- |
| **The circular flow of income** | | | |
| The circular flow of income between households, firms, government and the international economy; closed and open economies | Start by explaining that at the simplest level, income flows by households providing services to firms and then using the pay they receive to purchase goods and services from firms. This simple system is then affected by ‘leakages’ or ‘withdrawals’ from and ‘injections’ into the circular flow as follows:   * savings, taxation and imports are the three types of leakage or withdrawal from the circular flow of income * investment, government expenditure and exports are the three types of injection into the circular flow of income.   Build on this to set out the following models:   * two-sector economy (households and firms – closed economy) * three-sector economy (household, firms and government – closed economy) * four-sector economy (household, firms, government and international trade – an open economy). **(W)**   Using this information, ask learners to:   * construct a diagram of the circular flow of income between firms and households for both types of closed economy * then construct an equivalent diagram for an open economy * think of actual examples from their own or another given economy of all six injections/ leakages * add these to the diagram * display the finished work as a poster or wall chart. **(P or G)**   Conclude with a class discussion to consolidate learning. **(W)** | A closed economy does not trade with the rest of the world; an open economy does.  Ensure that learners fully understand the four-sector circular flow of income model of an open economy.  This activity provides a good opportunity for peer mentoring. | Bamford, ch 5 Theory and measurement in the macroeconomy  Cook, ch 11  Anderton, ch 25  Stanlake, ch 26  Sloman, ch 8  Gillespie, p.58  [www.s-cool.co.uk/a-level/economics/ aggregate-demand-and-aggregate-supply/revise-it/the-circular-flow-of-income](http://www.s-cool.co.uk/a-level/economics/aggregate-demand-and-aggregate-supply/revise-it/the-circular-flow-of-income) |
| The circular flow of income – average and marginal propensities to save and consume | Start by emphasising that the proportion of a household’s disposable income spent on consumption reduces as income increases because more is put aside as savings:   * average propensity to save is the proportion of disposable income saved * marginal propensity to save is the additional proportion of the extra income used for savings when wages increase.   Then, to ensure they understand the difference, put learners into pairs and give them the appropriate data and guidance to:   * work out to what extent the marginal propensities to save and consume change as incomes rise * calculate figures for both the average and marginal propensities to save and consume * consider the major effects on these figures (e.g. price inflation, savings rates, age, etc.). **(P or G)**   Conclude with a class discussion to consolidate learning. **(W)** | Remind learners that consumption is part of the circular flow of income, while saving is a leakage.  **KEY CONCEPT 2: THE MARGIN AND CHANGE**  This topic is another good example of the importance of decisions taken at the margin. In the case of the marginal propensities to save and consume, it is the proportion of an increase in income saved or consumed that’s important. | Bamford, ch 5 Theory and measurement in the macroeconomy  Cook, ch 11  Anderton, ch 33  Stanlake, ch 52  Sloman, ch 8  Gillespie, p.66  [www.s-cool.co.uk/a-level/economics/ aggregate-demand-and-aggregate-supply/revise-it/the-45-degree-diagram](http://www.s-cool.co.uk/a-level/economics/aggregate-demand-and-aggregate-supply/revise-it/the-45-degree-diagram) |
| The circular flow of income – the multiplier | Start by explaining the multiplier effect – a rise in expenditure can create a rise in income, which increases spending and so creates more income – and ensure learners appreciate its significance in an economy. **(W)**  Embed understanding by setting questions such as those in Bamford or in Anderton. **(I)** **(Challenging)**  Then put learners into pairs or groups and ask them to build on the circular flow of income diagrams developed in the last activity but one and show how to calculate the multiplier for a two-sector, three-sector and four-sector economy. **(P or G)**  Consolidate learning of this topic by setting Question 5a from Cambridge Past Paper 42 November 2013 as a class test or homework. **(I or H)** **(F)** **(Challenging)** | The multiplier process is a key part of the syllabus and learners need a good understanding of how it works to answer questions on this topic fully.  **KEY CONCEPT 2: THE MARGIN AND CHANGE**  The size of the marginal propensity to consume is significant in determining the size of the multiplier – the higher the marginal propensity to consume, the larger the size of the multiplier.  The past paper question requires learners to use the multiplier to explain the link between interest rates and national income. | Bamford, ch 5 Theory and measurement in the macroeconomy  Cook, ch 11  Anderton, ch 33  Stanlake, ch 52  Sloman, ch 8  Gillespie, p.66  [www.tutor2u.net/economics/revision-notes/as-macro-multiplier-accelerator.html](http://www.tutor2u.net/economics/revision-notes/as-macro-multiplier-accelerator.html)  [www.s-cool.co.uk/a-level/economics/ aggregate-demand-and-aggregate-supply/revise-it/the-45-degree-diagram](http://www.s-cool.co.uk/a-level/economics/aggregate-demand-and-aggregate-supply/revise-it/the-45-degree-diagram)  Cambridge past papers and accompanying mark schemes are available at [teachers.cie.org.uk](http://teachers.cie.org.uk) |
| Aggregate Expenditure (AE) function –meaning and components, income determination using AE and withdrawal/ leakage approach | Start by explaining that the aggregate expenditure approach focuses on consumption, investment, government spending and net exports (exports minus inputs) and offers an alternative approach to withdrawal/injection (covered earlier in this section). **(W)**  To ensure that learners can accurately draw diagrams to show income determination using both approaches, put the class into pairs and give them a resource such as Gillespie from which they can work from. Each pair displays their finished diagrams. **(P)**  On completion hold a whole class discussion to go through the diagrams and correct any errors in approach. **(W)** | It is important that learners understand the process of income determination using both the Aggregate Expenditure and withdrawal/injection approaches. | Bamford, ch 5 Theory and measurement in the macroeconomy  Cook, ch 11  Stanlake, ch 29  Sloman, ch 8  Gillespie, p.58-59  [www.s-cool.co.uk/a-level/economics/ aggregate-demand-and-aggregate-supply/revise-it/the-45-degree-diagram](http://www.s-cool.co.uk/a-level/economics/aggregate-demand-and-aggregate-supply/revise-it/the-45-degree-diagram) |
| Aggregate Expenditure (AE) function –inflationary and deflationary gaps, full employment level of income and equilibrium level of income | Start by showing how it is possible for an economy to experience either an inflationary gap or a deflationary gap. Then go on to explain that an equilibrium level of income may not occur at a full employment level of income. **(W)**  To ensure learners can demonstrate a clear understanding of the different types of inflationary/deflationary gap and the different kinds of equilibrium income, set questions such as those in Sloman. **(I)** **(Challenging)** | **KEY CONCEPT 3: EQUILIBRIUM AND EFFICIENCY**  The concept of the equilibrium level of income provides an excellent opportunity to apply the key concept of equilibrium. The idea of equilibrium plays an important part in Economics and should be stressed as much as possible in your teaching. | Bamford, ch 5 Theory and measurement in the macroeconomy  Cook, ch 11  Sloman, ch 11  Gillespie, p.71  [www.tutor2u.net/economics/revision-notes/as-macro-equilibrium.html](http://www.tutor2u.net/economics/revision-notes/as-macro-equilibrium.html) |
| Aggregate Expenditure (AE) function – autonomous and induced investment, the accelerator | Put learners into pairs and ask them to:   * research the meanings of the terms ‘autonomous investment’ and ‘induced investment’ * develop a wall chart or poster on investment that clearly demonstrates the difference between the two terms * research the concept of the accelerator and add this to the chart. **(P)**   To consolidate learning, set questions on the accelerator such as those in Anderton or Bamford. **(I)** **(F)** **(Challenging)** | Autonomous investment is not related to changes in the level of national income in an economy, while induced investment is.  Ensure here that learners understand the accelerator is concerned with the relationship between investment and the rate of change of output, not the level of output. | Bamford, ch 5 Theory and measurement in the macroeconomy  Cook, ch 11  Anderton, ch 32  Stanlake, ch 27  Sloman, ch 9  Gillespie, p.64 and p.111  [www.tutor2u.net/economics/revision-notes/as-macro-multiplier-accelerator.html](http://www.tutor2u.net/economics/revision-notes/as-macro-multiplier-accelerator.html) |

| **Learning objectives** | **Suggested teaching activities** | **Teacher guidance notes and key concepts** | **Learning resources** |
| --- | --- | --- | --- |
| **Money supply (theory)** | | | |
| Quantity theory of money (MV=PT) | Ask learners to research the meaning of the quantity theory of money and how the equation is applied. **(I)**  Follow with a class discussion to ensure that learners understand the context, key points and application of this theory. **(W)**  Consolidate learning by setting questions such as those in Anderton so that learners apply their knowledge and understanding of the quantity theory of money to particular situations. **(I)** **(Basic)** | The quantity theory of money (MV=PT) is a key component of monetarist explanations of inflation, and learners should understand it in these terms. | Bamford, ch 6 Macroeconomic problems  Cook, ch 11  Anderton, ch 84  Stanlake, ch 34  Sloman, ch 11  Gillespie, p.85  [www.tutor2u.net/economics/revision-notes/a2-macro-monetarism.html](http://www.tutor2u.net/economics/revision-notes/a2-macro-monetarism.html) |
| Broad and narrow money supply | Put learners into pairs or small groups and ask them to:   * research the distinction between broad and narrow money in their own economy * display the information in a wall chart for the class. **(P or G)**   Consolidate with a whole class discussion to ensure learners can clearly differentiate between what is termed a broad money supply and what is regarded as a narrow money supply. **(W)** | You may need to give learners some guidance on where to source the information they need for this activity, The website of the country’s central bank is one useful source, and there is also information on this in Anderton. | Bamford, ch 5 Theory and measurement in the macroeconomy  Cook, ch 11  Anderton, ch 82  Gillespie, p.78  [www.tutor2u.net/economics/revision-notes/a2-macro-monetarism.html](http://www.tutor2u.net/economics/revision-notes/a2-macro-monetarism.html) |
| Sources of money supply in an open economy | Put learners into pairs or groups and ask them to:   * research the role of the central bank in their own country or another given economy * develop a leaflet including information about the central bank’s role in quantitative easing and total currency flow. **(P or G)**   Then ask each group to research the website of the government economic affairs department for the economy they are looking at, adding information about its role as a source of money supply and deficit financing to the leaflet started in the previous step. **(P or G)**  Finally, ask each group to look at the websites of some of their economy’s main commercial banks to find out information about their role, especially in relation to the process of credit creation, again adding this information to the leaflet. **(P or G)**  Conclude with a whole class discussion to share findings and consolidate learning. **(W)** | Ensure that learners understand the role of the commercial banks in the financial and monetary system, especially in relation to credit creation.  It is also important that learners have an awareness of the role of a country’s central bank and understand why some countries have introduced a system of quantitative easing.  If time is short for this activity, different groups can focus on each of the three tasks and share their findings in the final discussion. | Bamford, ch 5 Theory and measurement in the macroeconomy  Cook, ch 11  Anderton, ch 85  Stanlake, ch 66  Sloman, ch 10  Gillespie, p.77-78  [www.tutor2u.net/economics/revision-notes/a2-macro-monetarism.html](http://www.tutor2u.net/economics/revision-notes/a2-macro-monetarism.html)  [www.tutor2u.net/economics/revision-notes/as-macro-government-borrowing.html](http://www.tutor2u.net/economics/revision-notes/as-macro-government-borrowing.html) |
| Transmission mechanism of monetary policy | Start by explaining the transmission mechanism of monetary policy, i.e. how changes in monetary policy can influence the level of national income of an economy. **(W)**  Then ask learners to develop a poster for display which visually summarises the main elements of the transmission mechanism. **(I or P)**  Conclude with a whole class discussion to share findings and consolidate learning. **(W)** | Gillespie is one resource that provided a useful summary of this process. | Anderton, ch 89  Gillespie, p.81-82 |

| **Learning objectives** | **Suggested teaching activities** | **Teacher guidance notes and key concepts** | **Learning resources** |
| --- | --- | --- | --- |
| **Keynesian and Monetarist schools** | | | |
| Different theoretical approaches to how the macro economy functions | This is a good point to introduce learners to the different theoretical approaches to how the macro economy functions. Show the video clips “Fear the Boom and Bust” and “Fight of the Century”, which show the key differences between Keynes and Hayek, and broaden out into a whole class discussion. **(W)**  Then put learners into pairs or groups and ask them to summarise the key features of the two schools of thoughts in a poster or wall chart for use by the class. **(P or G)**  Use this for a whole class debate on the merits and drawbacks of each approach, with learners speaking for each side. **(W)** | It is important that learners understand that economists do not always agree and that there are clear different theoretical approaches to how the macro economy functions. | Bamford, ch 5 Theory and measurement in the macroeconomy  Cook, ch 11  Gillespie, p.91  [econstories.tv/fear-the-boom-and-bust/](http://econstories.tv/fear-the-boom-and-bust/)  [econstories.tv/fight-of-the-century/](http://econstories.tv/fight-of-the-century/) |

| **Learning objectives** | **Suggested teaching activities** | **Teacher guidance notes and key concepts** | **Learning resources** |
| --- | --- | --- | --- |
| **The demand for money and interest rate determination** | | | |
| Liquidity Preference theory | Start by explaining why Liquidity Preference theory is one of the main theories of interest rate determination. **(W)**  To ensure learners understand and apply this theory, set questions such as those in Bamford or Anderton. **(I)** **(F)** **(Basic)**  Consolidate learning of liquidity theory by setting Question 6b from Cambridge Past Paper 41 May/June 20913 as a class test or homework. **(I or H)** **(F)** **(Challenging)** | The past paper question provides good practice as it requires learners to focus on the role of interest rates as a factor in determining the demand for money in an economy. | Bamford, ch 5 Theory and measurement in the macroeconomy  Cook, ch 11  Anderton, ch 83  Stanlake, ch 16  Gillespie, p.80  Cambridge past papers and accompanying mark schemes are available at [teachers.cie.org.uk](http://teachers.cie.org.uk) |

| **Learning objectives** | **Suggested teaching activities** | **Teacher guidance notes and key concepts** | **Learning resources** |
| --- | --- | --- | --- |
| **Policies towards developing economies; policies of trade and aid** | | | |
| Types of aid, the nature of dependency | Put learners into pairs or groups and ask them to:   * research the different types of aid that exist, such as bilateral aid and multilateral aid * display their findings in a poster or wall chart. **(P or G)**   Hold a brief class discussion to consolidate learning. **(W)**  Giving aid to developing countries is a topic that causes much debate, so ask learners in their pairs or groups to prepare arguments for and against the different types of aid identified and where they are targeted, especially in the context of creating economic dependency. Allocate each group the point of view of either the country giving aid or the country receiving aid. **(P or G)**  After suitable preparation time, hold a whole class debate on the different motives for aid, the potential benefits and drawbacks. **(W)** | The first activity provides a good opportunity for peer mentoring.  For both tasks, guide and direct learners as appropriate to the resources they need to complete their work. | Cook, ch 13  Anderton, ch 104  Stanlake, ch 65  Sloman, ch 14  Gillespie, p.105 |
| Trade and investment, the role of multinationals and Foreign Direct Investment (FDI) | Put learners into pairs or groups and ask them to:   * research the role multinationals and foreign direct investment plays in their own country or another specified economy * research the role that the government department for trade and investment plays in that economy in managing trade and investment generally, including both FDI and multinationals * present their findings in a wall chart or poster. **(P or G)**   Follow this with a whole class discussion on whether multinationals are on balance good or bad for an economy, ensuring that the arguments both for and against can be substantiated. **(W)** | It is important that learners are able to give a balanced response to questions on multinational and foreign investment.  You may need to direct learners to the resources they need for the first task.  **KEY CONCEPT 5: PROGRESS AND DEVELOPMENT**  Trade and investment, and the effect they can have on standards of living in countries, provides excellent scope to apply this key concept. | Bamford, ch 6 Macroeconomic problems  Cook, ch 13  Anderton, ch 104  Gillespie, p.49 |
| External debt, the role of the IMF and the World Bank | Put learners into pairs or groups and ask them to:   * research the advantages and disadvantages of the IMF and the World Bank in assisting developing economies * present their findings in a wall chart or poster. **(P or G)**   Follow this with a class discussion on external debt and some of the issues arising from the group task to help embed learning. **(W)** | Learners need to understand that there are both advantages and disadvantages when developing countries seek support from international organisations such as the International Monetary Fund and the World Bank. | Bamford, ch 7 Macroeconomic policies  Anderton, ch 104  Stanlake, ch 65  Gillespie, p.101  [www.imf.org](http://www.imf.org)  [www.worldbank.org](http://www.worldbank.org) |
| The impact of corruption and the importance of the legal framework in an economy | Put learners into pairs or groups and ask them to:   * research the legal framework that exists for their own country’s economy * assess whether that framework supports an effective economic system or whether there are areas where the situation could be improved, particularly in relation to corruption * give a presentation on their findings to the class. **(P or G)**   Conclude with a class discussion to consolidate learning. **(W)** | Learners need to be aware of any deficiencies in a country, such as in relation to the legal framework or the existence of corruption, that could prevent its economy working as efficiently as possible. | Sloman, ch 7 |

# [Government macro intervention (A Level)](#_Contents)

## Recommended prior knowledge

This section builds on the AS government macro intervention topics to look more broadly at government macroeconomic policy aims, the inter-connectedness of the problems they are intended to address and the effectiveness of the resulting policy options to meet all the original objectives. Learners need to retain their AS knowledge as well and it is important that they appreciate the importance of this topic in the wider syllabus, focusing as it does on key elements of macroeconomics.

## Context

Here learners develop their understanding of government macro policy aims in relation to inflation, the balance of payments, exchange rates, unemployment and growth and development. They also learn to appreciate their inter-connectedness, such as the trade-off between inflation and unemployment demonstrated by the Phillips curve. Through this, learners develop their awareness of the effectiveness of various policy options to meet all macroeconomic objectives, including problems arising from conflicts between these policy objectives. This material covers a number of important concepts in macroeconomics, contributing enormously not only to learners’ knowledge, but also to their appreciation and understanding of real-world practice.

## Outline

The A Level topics covered in this section are:

* government macro policy aims
* inter-connectedness of problems
* effectiveness of policy options to meet all macroeconomic objectives.

## Suggested teaching time

It is recommended that this unit should take approximately 10% of the A Level course (5% of the whole AS and A Level programme).

| **Learning objectives** | **Suggested teaching activities** | **Teacher guidance notes and key concepts** | **Learning resources** |
| --- | --- | --- | --- |
| **Government macro policy aims** | | | |
| Inflation, balance of payments, exchange rates, unemployment, growth and development | Put learners into pairs or groups and give them access to suitable websites and resources so they can:   * research the macro policy aims the government in their country currently has for inflation, balance of payments, exchange rates, unemployment, and growth and development * investigate how the balance of trying to achieve these has changed in recent years * identify where change has occurred as a result of one macro policy negatively impacting on others * indicate which macro policy or policies is prioritised over others * display their findings in a wall chart or poster. **(P or G)**   Follow this with a class discussion on each group’s findings and then hold a debate on the different macro policy aims, how they are being implemented and prioritised and how the overall balance can be most effectively maintained across the policy areas affected. **(W)** | Ensure learners are aware of the different macro policy aims that governments have and of the need to link together objectives in different policy areas to achieve these goals.  **KEY CONCEPT 5: PROGRESS AND DEVELOPMENT**  Growth and development are key government macro policy aims and so provide an excellent opportunity to apply this key concept. | Bamford, ch 7 Macroeconomic policies  Cook, ch 13  Stanlake, ch 30  Sloman, ch 8  Gillespie, p.83-97  [www.tutor2u.net/economics/revision-notes/a2-macro-macroeconomic-policy.html](http://www.tutor2u.net/economics/revision-notes/a2-macro-macroeconomic-policy.html)  [www.s-cool.co.uk/a-level/economics/ macroeconomic-objectives/revise-it/the-main-macroeconomic-objectives](http://www.s-cool.co.uk/a-level/economics/macroeconomic-objectives/revise-it/the-main-macroeconomic-objectives)  [www.s-cool.co.uk/a-level/economics/ macroeconomic-objectives/revise-it/the-importance-of-macroeconomic-objectives](http://www.s-cool.co.uk/a-level/economics/macroeconomic-objectives/revise-it/the-importance-of-macroeconomic-objectives)  [www.s-cool.co.uk/a-level/economics/ macroeconomic-objectives/revise-it/which-macroeconomic-objective-is-the-most-impor](http://www.s-cool.co.uk/a-level/economics/macroeconomic-objectives/revise-it/which-macroeconomic-objective-is-the-most-impor)  [www.bized.co.uk/educators/16-19/econ omics/macro/presentation/policies\_map.htm](http://www.bized.co.uk/educators/16-19/economics/macro/presentation/policies_map.htm) |

| **Learning objectives** | **Suggested teaching activities** | **Teacher guidance notes and key concepts** | **Learning resources** |
| --- | --- | --- | --- |
| **Inter-connectedness of problems** | | | |
| Links between macroeconomic problems and their inter-relatedness | Ask learners individually or in pairs to:   * research the rate of inflation and the rate of unemployment in their own country over (for example) the last 30 years * plot these two sets of data on a graph to see the possible trade-off between the two * develop the finished graph into a wall chart or poster showing the inter-connectedness of the two policy aims and the difficulty of achieving success in both of these objectives, thus ending up with an example Phillips curve. **(I or G)**   Then ask learners to repeat this exercise to show the relationship between:   * inflation and the balance of payments * the internal and external value of money. **(I or G) (F)**   On completion, look at the resulting graphs with the whole class to consolidate the key points and correct any errors. **(W)** | It is important that learners understand the inter-relatedness of macroeconomic problems. One good example is the trade-off between unemployment and inflation shown by the Phillips curve.  This shows the relationship between inflation (shown by the percentage rate of change of wages) and unemployment (percentage rate over the same period). The inflation rate is shown on the vertical axis and the unemployment rate on the horizontal.  As a whole, these three tasks give a good indication of how learners are progressing towards the end of the course and can help you plan where to target revision. | Bamford, ch 6 Macroeconomic problems  Cook, ch 12  Anderton, ch 87  Stanlake, ch 59  Sloman, ch 11  Gillespie, p.90  [www.tutor2u.net/economics/revision-notes/a2-macro-phillips-curve.html](http://www.tutor2u.net/economics/revision-notes/a2-macro-phillips-curve.html)  [www.s-cool.co.uk/a-level/economics/ unemployment-and-the-phillips-curve/revise-it/the-phillips-curve](http://www.s-cool.co.uk/a-level/economics/unemployment-and-the-phillips-curve/revise-it/the-phillips-curve)  [www.bized.co.uk/virtual/economy/policy/outcomes/inflation/inflws2.htm](http://www.bized.co.uk/virtual/economy/policy/outcomes/inflation/inflws2.htm)  [www.bized.co.uk/learn/economics/macrocont/phillips/worksheet.htm](http://www.bized.co.uk/learn/economics/macrocont/phillips/worksheet.htm) |

| **Learning objectives** | **Suggested teaching activities** | **Teacher guidance notes and key concepts** | **Learning resources** |
| --- | --- | --- | --- |
| **Effectiveness of policy options to meet all macroeconomic objectives** | | | |
| Problems arising from conflicts between policy objectives on inflation, unemployment, economic growth, the balance of payments, exchange rates and the redistribution of income and wealth | Put learners into pairs or groups and ask them to research the conflicts that can arise between policy objectives in their own or another specified economy on inflation, unemployment, economic growth, the balance of payments, exchange rates and the redistribution of income and wealth. Give each group one of the following areas of potential conflict to focus on:   * inflation and unemployment * inflation and economic growth * inflation and the balance of payments * inflation and exchange rates * inflation and the redistribution of income and wealth * unemployment and economic growth * unemployment and the balance of payments * unemployment and exchange rates * unemployment and redistribution of income and wealth. **(P or G**   On completion, each group gives a presentation on their findings to the rest of the class. Conclude with a whole class discussion to ensure understanding of the key points and issues. **(W)**  Consolidate learning of this topic by setting both parts of Question 4 from Cambridge 2016 Specimen Paper 04 as a class test or homework **(I or H)** **(F)** **(Challenging)** | Learners need to understand that there are likely to be conflicts between the different macro policy objectives, and it is unlikely that any government will be successful in achieving all of its objectives simultaneously.  The specimen paper question enables learners to demonstrate their understanding of conflicting macro policy objectives in the context a government needing to control inflation without harming economic growth. The second part of the question also requires learners to consider what impact the possibility of such conflicts might have on the selection of appropriate policies.  **KEY CONCEPT 4: REGULATION AND EQUITY**  The macro policy aim of redistributing income and wealth gives an excellent opportunity to apply this key concept. | Bamford, ch 7 Macroeconomic policies  Cook, ch 7  [www.tutor2u.net/economics/revision-notes/as-macro-objectives-trade-offs.html](http://www.tutor2u.net/economics/revision-notes/as-macro-objectives-trade-offs.html)  [www.s-cool.co.uk/a-level/economics/ macroeconomic-objectives/revise-it/conflicts-between-macroeconomic-objectives](http://www.s-cool.co.uk/a-level/economics/macroeconomic-objectives/revise-it/conflicts-between-macroeconomic-objectives)  [www.bized.co.uk/educators/16-19/econ omics/macro/activity/policies.htm](http://www.bized.co.uk/educators/16-19/economics/macro/activity/policies.htm)  [www.bized.co.uk/educators/16-19/econ omics/govpol/activity/conflicts1.htm](http://www.bized.co.uk/educators/16-19/economics/govpol/activity/conflicts1.htm)  Cambridge 2016 specimen papers and accompanying mark schemes are available at [teachers.cie.org.uk](http://teachers.cie.org.uk) |
| Existence of government failure in macro-economic policies | Put learners into pairs or groups and give them access to suitable websites and resources so they can:   * research examples of government failure in macroeconomic policies in their own or another country’s economy * investigate what role inadequate or incorrect information played in contributing to this failure * display their findings in a poster or wall chart. **(P or G)**   Follow with a discussion on each group’s findings so learners can apply their understanding to a wide range of examples. **(W)**  Consolidate learning by setting questions on government failure such as those in Anderton. **(I)** **(F)** **(Challenging)** | Learners need to understand there can always be a degree of government failure in terms of the macroeconomic policies it adopts, and that this can arise from complexity or unreliability of information as well as policy conflicts. | Bamford, ch 3 Government intervention in the price system  Anderton, ch 20  Stanlake, ch 25  [www.tutor2u.net/economics/revision-notes/as-marketfailure-government-failure.html](http://www.tutor2u.net/economics/revision-notes/as-marketfailure-government-failure.html) |
| Laffer curve analysis | Ask learners individually or in pairs to research what is meant by a Laffer curve and how to present a Laffer curve analysis. **(I or P)**  Follow with a class discussion to ensure learners understand that higher tax rates will eventually lead to a decline in taxation revenue because of the disincentive effect of the Laffer curve.  To consolidate learning, set questions requiring learners to apply a Laffer curve analysis such as those in Anderton. **(I)** **(Challenging)** | The Laffer Curve shows tax revenue on the vertical axis and tax rate on the horizontal axis. Higher tax rates initially increase tax revenue, but this acts as a disincentive and so eventually higher tax rates actually decrease tax revenue. | Anderton, ch 38  Stanlake, ch 33  Gillespie, p.69 |

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