

**GCE** 

# **Economics**

Advanced GCE A2 7812

Advanced Subsidiary GCE AS 3812

### **Mark Schemes for the Units**

**June 2008** 

3812/7812/MS/R/08

OCR (Oxford, Cambridge and RSA Examinations) is a unitary awarding body, established by the University of Cambridge Local Examinations Syndicate and the RSA Examinations Board in January 1998. OCR provides a full range of GCSE, A level, GNVQ, Key Skills and other qualifications for schools and colleges in the United Kingdom, including those previously provided by MEG and OCEAC. It is also responsible for developing new syllabuses to meet national requirements and the needs of students and teachers.

This mark scheme is published as an aid to teachers and students, to indicate the requirements of the examination. It shows the basis on which marks were awarded by Examiners. It does not indicate the details of the discussions which took place at an Examiners' meeting before marking commenced.

All Examiners are instructed that alternative correct answers and unexpected approaches in candidates' scripts must be given marks that fairly reflect the relevant knowledge and skills demonstrated.

Mark schemes should be read in conjunction with the published question papers and the Report on the Examination.

OCR will not enter into any discussion or correspondence in connection with this mark scheme.

#### © OCR 2008

Any enquiries about publications should be addressed to:

OCR Publications PO Box 5050 Annesley NOTTINGHAM NG15 0DL

Telephone: 0870 770 6622 Facsimile: 01223 552610

E-mail: publications@ocr.org.uk

#### **CONTENTS**

### **Advanced GCE Economics (7812)**

### Advanced Subsidiary GCE Economics (3812)

#### MARK SCHEMES FOR THE UNITS

Unit//Content	Page
2881 The Market System	1
2882 Market Failure & Government Intervention	6
2883 The National & International Economy	15
2884 Economics of Work and Leisure	18
2885 Transport Economics	22
2886 Economics of Development	28
2887 The UK Economy	32
2888 Economics in a European Context	41
Grade Thresholds	49

#### Subject-specific Instructions

- 1 The paper is to be marked to AS standard.
- 2 Marking should be positive: marks should not be subtracted for errors or inaccuracies.
- In assessing quantitative answers, the 'own figure rule' (OFR) must be applied, ie a candidate must be given credit for calculations which, though wrong, are consistent with an earlier error.
- The Mark Scheme refers to possible issues/content that candidates might use. These suggestions are neither exhaustive nor necessarily required.
- The quality of written communication will be assessed in the answer to the final part question.

A set number of marks for written communication is not a requirement. However, where a levels of response mark scheme is used, the following general criteria for assessing the quality of written communication will apply. These criteria are integrated within the more specific levels of response shown in the individual mark schemes for each appropriate question.

#### Level 4

Complex ideas have been expressed clearly and fluently using a style of writing appropriate to the complex subject matter. Sentences and paragraphs, consistently relevant, have been well structured, using specialist technical terminology where appropriate. There may be few, if any, errors of spelling, punctuation and grammar.

(3 marks representing the appropriate level of written communication are embedded in this level of response.)

#### Levels 2 and 3

Relatively straightforward ideas have been expressed clearly and quite fluently, using an appropriate style of writing. Arguments are generally relevant, though may occasionally stray from the point and are broadly logical and coherent. There will be some errors of spelling, punctuation and grammar, but these will not be intrusive or totally obscure the meaning.

(2 marks representing the appropriate level of written communication are embedded in these levels of response.)

#### Level 1

Simple ideas have been expressed, generally in a style lacking clarity and fluency. Arguments will have limited coherence and structure, often being of doubtful relevance to the main focus of the question. There are errors of spelling, punctuation and grammar, which will be noticeable and intrusive. Writing may lack legibility.

(1 mark representing the above level of written communication is embedded in this level of response.)

Exceptionally, answers which are assessed as L1, L2 or L3 from the individual unit mark scheme criteria may be awarded an additional mark for the quality of their written communication in any particular and appropriate question, if the standard attained falls outside the embedded criteria for the Quality of Written Communication stated above. This flexibility is available where the Quality of Written Communication is linked to a Levels of Response mark scheme only.

No additional QWC marks can be awarded if the initial mark is zero.

### 2881 The Market System

(a) Sony's manufacturing plant in China can produce Hard Disc Walkmans and Minidisc players. Assume that the productive capacity is currently divided equally between both products and that senior executives want to see this changed to 80% Hard Disc Walkmans and 20% Mini-disc players.

#### (i) Define the term 'opportunity cost'.

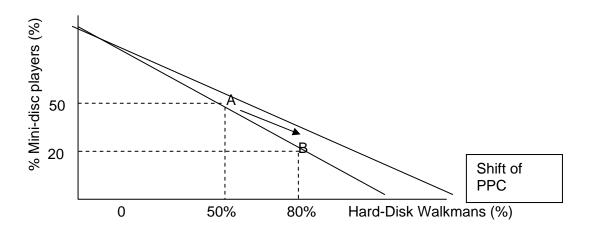
[2]

[4]

The amount or cost of any other good that could have been obtained instead of a particular good – 2 marks. Cost of the best next alternative foregone – 2 marks.

Award 1 mark for reference to amount or cost and 1 mark for reference to any other good/alternative.

- (ii) Using production possibility diagrams:
  - Show the opportunity cost involved in this proposed change in production;
  - Show how the production possibility curve might change if Sony were to increase the productive capacity for Hard Disc Walkmans leaving Minidisc productive capacity unchanged.



Up to 4 marks for a correctly drawn diagram which clearly shows the change in production and the opportunity cost involved using the data/information provided. 1 mark each for correctly labelled axes, PPC, old equilibrium, new equilibrium. Accept good X, good Y for axes.

Note: a curved PPC is also acceptable.

N.B. Old equilibrium – point on PPC acceptable

N.B. New equilibrium – must show change in relation to axis

The curve would pivot outwards from the maximum output of Mini-disk – 2 marks. Amended diagram also acceptable – 2 marks. P and Q on axes – 0 for this element.

### (b) Using supply and demand diagrams explain how the market for Sony Hard Disc Walkmans might have changed following:

#### (i) Increased output from its Chinese factory (line 2-3);

[4]

3 marks if correct

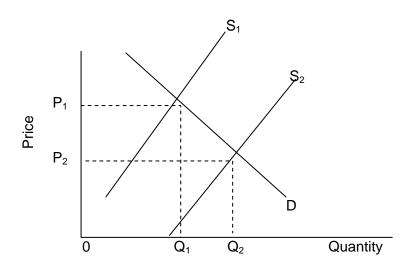


Diagram – 1 mark for each of shift of S, old equilibrium, new equilibrium. The increase in supply would lead to a shift to the right of S (1) leading to a fall in price (1) depending upon the slope of D/price elasticity of demand (1) extension of demand (1) increase in quantity traded (1) 3 mark max

#### (ii) The launch of Apple's new Nano iPod (line 9)

[4]

3 marks if correct

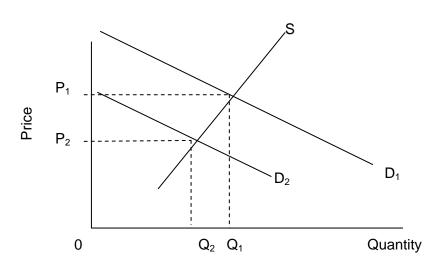


Diagram – 1 mark for each of shift of D, old equilibrium, new equilibrium. The fall in demand would lead to shift to the left of D (1) leading to a fall in price (1) depending upon the extent of the shift (1) contraction of supply (1) reduction in quantity traded (1) 3 marks max

#### (c) (i) State what is meant by the term 'cross elasticity of demand'.

[2]

A measure of responsiveness of demand for one good following a change in the price of another (related) good - 2 marks.

Relevant formula - 2 marks.

Award 1 mark for vague definition where change is not clearly identified.

(ii) After studying the market research data (lines 11 to 14), a UK retailer that is not a Sony stockist was convinced that it needed to reduce its prices of both types of iPod in order to compete. Comment on whether or not you agree with this policy.

[6]

IPods and Sony Walkmans are substitutes (1) Sales of walkman HD's are cross inelastic with respect to a change in the price of an iPod mini (1) Sales of Walkman HD's are cross elastic with respect to a change in the price of an iPod Nano (1) Numerical examples (2) If iPod Mini prices fall, sales of Hard Disc Walkmans will hardly be affected (1). Sales of Hard Disc Walkmans will be more affected if Nano iPod prices fall (1).

Comment – up to 2 marks could draw upon the growing market and fashion value of products. Strong case for not changing prices of both iPods especially Nano iPods. Comment on quality of data is also relevant e.g. no data on PED, non price competition can get these marks even if no marks awarded above.

#### (d) (i) Explain what is meant by the term 'barrier to entry'.

[2]

Something that stops <u>new</u> firms entering a particular new market (2). Award 1 mark if 'new' is not included,

(ii) State and explain <u>two</u> barriers to entry that might apply to a firm seeking to enter the music download device market as a <u>retailer</u>. [4]

Various possibilities:

#### Retailing

- priority to franchised retailers
- high set up costs
- predatory pricing by established retailers
- economics of scale can apply to established retailers through bulk buying
- sunk costs
- advertising
- customer loyalty/branding
- licensing/ legal barriers

1 mark for identification, 1 mark for explanation with respect to retailing (x2).

#### (e) (i) State three characteristics of an oligopolistic market.

[3]

Any three of the following:

- small number of <u>large</u> firms/ high concentration ratio
- branding/ high level of advertising
- <u>high</u> barriers to entry
- non-price competition
- price rigidity
- potential for collusion
- interdependence
- abnormal profits in long run
- market leadership
- differentiated product
- price maker/ price leader

1 mark for each.

### (ii) With the help of the information provided, discuss the extent to which the manufacture of music download devices is an oligopolistic market. [12]

Level 4: for a discussion of the extent to which the market for manufacturing music download devices is oligopolistic. (7-12)

Level 3: for an analysis of the oligopolistic nature of the market for manufacturing music download devices. (5-6)

Level 2: for application and critical understanding of the market for the manufacture of music download devices. (3-4)

Level 1: for a description/understanding of an oligopolistic market. (1-2)

#### Possible subject examples for Levels 1-4.

**(1-2)** Level 1 examples: elaboration of some of the characteristics stated above for e (i).

(3-4) Level 2 examples: (Taken from the material provided)

- market dominated by two corporations, Apple and Sony
- Apple had a huge market share prior to Sony's entry
- strong brand of product
- evidence of preferential treatment for Sony Centres

**(5-6)** Level 3 examples: As above but applied points made require further development through analysis.

- market dominance enables firms to become price makers
- Apple was clearly the market leader and continues to be so. Decisions on price changes would normally be taken by Apple
- a strong brand of product produces consumer loyalty and keeps sales up despite heavy competition
- collusion, although illegal, is a way in which firms might try to keep out competitors – they could agree prices, output and so on.
- barriers to entry explanation applied to manufacturing.

#### (7-12) Level 4 examples:

- there is no evidence of collusion (Apple's immediate reaction was to do nothing)
- the 'fashion value' of the product might indicate that although the product brands are strong, consumer brand loyalty is not
- market changes will lead to price fluctuations not evidence of price rigidity
- no information on whether abnormal profits are being made
- strong barriers to entry are implied although not explicitly stated.
- could be monopoly or duopoly

Quality of written communication applies to this question.

### 2882 Market Failure & Government Intervention

#### (a) (i) Explain what is meant by the term 'social cost'.

[2]

Accept a more technical answer, for example:

Private cost plus external cost (2 marks)

Private cost plus negative externalities (2 marks)

The cost to decision makers plus cost to third parties (2 marks)

The cost to decision makers plus the costs to those outside the decision making process (2 marks)

Alternatively it can be seen that there are 2 elements to the answer:

The total cost to society / the public (1 mark) of a particular decision / action / activity (1 mark).

Therefore accept:

The total cost associated with a particular action (2 marks)

The total cost to society of a particular decision (2 marks)

All of the costs associated with a particular action (2 marks)

Answers which only develop one element of these statements can receive only 1 mark. For example:

The total cost to society (1 mark)

The total damage to society (1 mark)

The total cost to the public (1 mark)

# (a) (ii) Identify one example of a private cost arising from smoking. Explain why this is a private cost.

[3]

[3]

1 mark for identifying any relevant private cost. For example, the cost of buying the cigarettes, the impact on the individual decision maker's health.

Up to 2 marks are available for an explanation which makes clear use of economics. For example:

It is the cost paid directly by the individual decision maker / first party

it does not impact upon third parties

it is a cost to someone within the decision making process

valid reference to Private Cost = Social Cost - External Cost

1 mark for a vague explanation which lacks clear economics e.g. a cost paid by the individual him/herself OR a cost paid by the consumer OR a cost to the individual smoker OR a cost which does not effect society OR a cost which is not an externality.

### (b) (i) Identify one example of a negative externality arising from smoking. Explain why this is a negative externality

1 mark for identifying a relevant negative externality, such as:

- the cost of funding NHS treatment for smoking related diseases (possible increased taxes)
- the health impact upon <u>non-smokers</u> (e.g. passive smoking).

Up to 2 marks for an explanation of this:

2 marks for a clear explanation using relevant economics e.g:

- o it is a cost which is imposed upon third parties
- it results in social costs exceeding private costs
- o impacts upon those outside decision making process

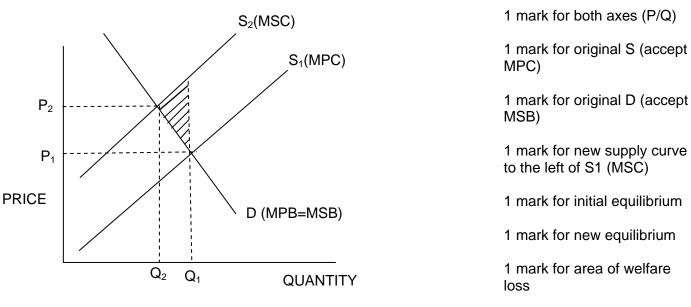
1 mark for a general idea lacking clear use of terminology e.g. "it is a cost to others"

Therefore for 2 explanation marks, clear economics must be used.

### (ii) Using a diagram, explain why negative externalities give rise to the problem of market failure.

Either Supply and Demand or MPC/MSC approach is acceptable as long as it is based on the following approach. (Note: a simplistic diagram which shows SC>PC in a very basic manner, which is not based upon the diagram shown, can gain 2 marks maximum)

A maximum of 6 marks are available for the diagram from the following points:



A max of 6 marks are available for the diagram

Up to 6 marks are available for the explanation:

In a free market, consumers/producers only take in to account their private costs (1 mark) and do not take into account the full social costs of production (1 mark) as they ignore their external costs (1 mark) OR SC>PC (1 mark)

This means that price is lower than it should be (1 mark) and that there is over consumption/production (1 mark).

This results in too many scarce resources being used up in production (1 mark). Hence there is a misallocation of resources (1 mark) and allocative inefficiency arises (1 mark).

A maximum of 6 marks are available for the explanation

Maximum [10 marks]

[10]

### (c) "Governments around the world accept that cigarettes are a demerit good" (Line 1)

#### (i) Explain what is meant by the term 'demerit good'.

[2]

Candidates can either take the negative externality or information failure approach:

#### Negative externality approach:

2 marks for a statement which makes clear use of economics such as:

goods for which social cost exceeds private cost
goods which generate costs to third parties / external costs
goods which have negative externalities associated with them

1 mark for a basic understanding. For example:

goods which are bad for individuals / society / the community goods which have an impact upon a third party

#### Information failure approach:

2 marks for a statement which makes clear use of economics e.g.:

demerit goods exist when people fail to see the full (social) cost of their actions when consuming the good

people fail to realise how harmful these goods are

goods which are worse for consumers than they realise

1 mark for a basic understanding. For example:

they are goods which are associated with information failure (but lacking any development of this).

they are goods which are over-consumed / over-produced in a free market (but fails to explain why).

(ii) Using an example, explain how the provision of greater information can correct the market failure arising from demerit goods.

[3]

1 mark for the basic identification of information provision e.g.:

- · advertising on cigarette packets
- improved labelling on products (eg more detailed nutritional information)
- government health warnings
- advertising campaigns to promote greater understanding and awareness of certain issues
- better education within schools of certain issues (eg drugs awareness)

A further 2 marks are available for explaining how such provision overcomes market failure:

In brief, 1 mark is available for some idea that consumers will be better informed / more aware / have better knowledge and 1 mark is available for stating that it will reduce (over - ) consumption

- 2 marks for a clear statement that information provision makes people more aware of the true private costs of their actions (and also possibly their external costs too) and therefore they will be better informed when taking consumption decisions and will avoid (over ) consumption
- 1 mark for a basic statement that it will lead to people being more aware of the damage which demerit goods can cause but without any reference to reducing (over - ) consumption

1 mark for a vague idea of reducing consumption (e.g. "people will be put off smoking")

As an alternative approach, accept explanations which develop the use of advertising as a way of shifting the demand curve to the left.

- (d) Regulation and minimum price controls are possible solutions to the market failure arising from negative externalities.
  - (i) State and explain two advantages of using regulation to correct [4] market failure.

1 mark is available for identifying each advantage with a further mark available for a basic explanation/elaboration of each.

- It has the power of law behind it (ie it is enforced by the state). Such laws can lead to a change in behaviour.
- Fines provide an incentive to change behaviour / a deterrent against bad behaviour.
- Simple to understand/easy to implement.
- Regulation provides a quick solution / immediate impact.
- Regulation backed up by fines will raise government revenue. This
  could be used to correct the negative externality or to compensate
  those suffering from the negative externality.

Do not reward the basic idea that regulation can reduce negative externalities or reduce problems caused by market dominance. Likewise do not reward basic examples of regulation.

Maximum of 2 marks for each advantage developed.

# (ii) Comment on the effectiveness of introducing a minimum price control as a solution to the negative externalities resulting from smoking.

[6]

Up to 2 marks for analysis of how minimum price controls could be effective:

They would raise cigarette prices / accept reference to minimum price being set above equilibrium (1 mark) and reduce demand / accept that less will be bought / consumption falls (1 mark).

Note: a valid diagram accurately showing the impact of a minimum price can gain both analysis marks.

A further 4 marks are available for discussing why minimum price controls may not be effective. Possible points could include:

- There is a clear difficulty in deciding what the minimum price should be (ie what level to set it at). If this is set incorrectly then negative externalities will remain.
- If the minimum price is set at the correct level then market disequilibrium will result and there will be excess supply.
- however high the price of cigarettes is set, the demand is unlikely to change by much due to the highly inelastic nature of demand for the product.
- to be effective, minimum price controls require policing and enforcement which will be very expensive. This, in turn, implies that there will be a significant opportunity cost.
- the introduction of a minimum price may well create a demand for illegal cigarettes from overseas (i.e. the shadow economy). In this sense, consumers will still be able to buy cheap (non minimum price) cigarettes and market failure remains.
- increased prices may well contribute to higher inflation (possible macro-economic effects).
- to be effective such a minimum price needs to introduced in other countries too (eg from the UK's point of view in Ireland and France).
   Without such international agreement then resale would occur between markets.
- Possible regressive nature of minimum prices.

A point of discussion which is well made can gain up to 3 marks.

Maximum of 6 marks available for this question

(e) Another solution to negative externalities is that of taxation. Discuss the effectiveness of taxation in correcting the market failure arising from negative externalities.

[12]

Level 4	For a discussion of the effectiveness of taxation in correcting market failure.	7-12 marks
Level 3	For an analysis of how taxation can correct market failure.	5-6 marks
Level 2	For an application of knowledge and critical understanding of how taxation may be used to correct market failure.	3-4 marks
Level 1	For knowledge and understanding of what taxation is / description only.	1-2 marks

Level 1 answers will include basic/simplistic knowledge of what taxation is only.

Level 2 answers will include reference to relevant examples. For example, the tax on petrol, Vehicle Excise Duty, Land Fill Tax and tax on cigarettes. Any relevant explanation/elaboration of one example will receive up to 4 marks (the key point is that there is some explanation of this one example). Alternatively, answers which identify two relevant examples or more will also receive 4 marks.

Level 3 answers will include relevant analysis of taxation. Taxation raises the costs of production and shifts the supply curve to the left. This results in higher price and reduced quantity / output. This, in theory, results in a social optimum level of output. In summary, the tax should be set equal to the external cost and therefore the negative externality will be internalised.

An accurate diagram which correctly shows the supply curve shifting to the left can receive 6 marks.

Note: simple reference just to higher price and reduced demand is insufficient without further development

Level 4 answers will include relevant discussion, with some elaboration needed of each evaluative statement.

Relevant evaluation/discussion could include the following points:

- what size should the tax be? Ideally the tax should be equal to the external
  cost but this is often very difficult to measure. Setting the tax at the wrong
  level could lead to government failure. If this does happen then underconsumption or over-consumption could exist.
- if the good has inelastic demand (as is the case with cigarettes) then the tax
  will not be successful in correcting the market failure as over-consumption
  will remain. In such cases, firms may be encouraged to simply pass the tax
  on to consumers in the form of increased prices and there will be very little
  change in equilibrium output.
- taxation may be inflationary (higher costs of production may result in costpush inflation) which will reduce the international competitiveness of UK goods. This could, in turn, raise unemployment.
- to be effective, such taxation needs to be introduced on an international basis to avoid resale from markets which have much lower taxes (and therefore lower priced goods).
- Possible costs of enforcing and collecting taxation? Opportunity cost issues?
- If firms decide to absorb the tax and accept lower profits then it will not result in consumers being charged higher prices and there will be no resulting fall in consumption and hence market failure remains
- Flat rate taxes are regressive and may therefore worsen income inequality
- Possible growth of tax evasion with illegal supplies of products bought in the shadow economy. Hence consumption of these goods continues despite the use of taxes and market failure remains.

### 2883 The National & International Economy

(a)	(i)	Define the term 'fiscal policy'.	[2]
		<ul><li>2 marks for changes in/ decisions on government spending and taxation.</li><li>1 mark for changes in government spending or changes in taxation.</li><li>1 mark for demand side policy/ link to macroeconomic objective or performance</li></ul>	
		Define the term 'unemployment rate'.	[2]
		2 marks for the percentage of the labour force who are out of work but willing and able to work.  1 mark for those who are out of work but willing and able to work.  1 mark for percentage of labour force/ equation.  Maximum of two marks.	
	(ii)	Identify the <u>two</u> components of aggregate demand mentioned in the extract.	[2]
		1 mark for exports (X-M). 1 mark for consumer expenditure/consumption.	
(b)		e and explain <u>two</u> possible economic reasons why Germany is so cessful at exporting.	[4]
	price grow 1 ma Inno hom Low price	ark for an identification of each of two possible reasons eg innovation, low e non-price competitiveness, low exchange rate, good marketing, income with in major export markets.  ark for an explanation of each reason eg: vation will increase the quality of German products and make people, both at e and abroad, more willing to buy them.  prices will make them competitive and low exchange rate will reduce export es.  many's exchange rate (the euro) may be low making Germany's export prices	
	(Max	kimum 4 marks)	
(c)	Usir	ng Fig 1, compare the changes in the unemployment rate which urred in the three countries shown.	[4]
		ark for unemployment fell in France. ark for unemployment fell in Spain.	

- 1 mark for unemployment rose in Germany.
- 1 mark for unemployment fell/changed the most in Spain.
- 1 mark for unemployment changed the least in Germany.
- 1 mark for Spain initially had the highest rate of unemployment but now has the second highest rate.
- 1 mark for France initially had the second highest rate but now has the highest rate.
- 1 mark for Germany continued to have the lowest unemployment rate.
- 1 mark for less variation in 2005/ more variation in 1996 Maximum of 4 marks.

### (d) Explain the likely relationship between economic growth and unemployment.

[3]

[3]

- 1 mark for recognising an inverse relationship.
- 1 mark for rise in real GDP is likely to increase demand for products.
- 1 mark for higher demand will increase demand for labour.
- 1 mark for a fall in unemployment will move an economy closer to its production possibility curve.
- 1 mark for possibilities of a time lag.
- 1 mark for output could rise with no change in unemployment if productivity rises.
- 1 mark for production possibility curve could move out without a fall in unemployment.

Maximum of 3 marks.

#### (e) Identify three factors that could cause an increase in aggregate supply.

1 mark for each of three causes identified eg advances in technology, net investment, improved training, education, rise in retirement age, rise in size of the labour force, falls in costs of production, supply-side policies.

#### (f) (i) State and explain two reasons why consumer expenditure may fall. [6]

1 mark for each influence identified eg: income level, confidence, interest rate, income tax, inflation, fall in employment, redistribution of income. Up to 2 marks for each explanation of how influence may affect consumption.

(Maximum 6 marks)

# (ii) Comment on the effectiveness of a cut in the rate of income tax as a [7] way of increasing aggregate demand.

Up to 4 marks for explaining how a cut in the rate of income tax may rise aggregate demand. An increase in disposable income which enables consumers to spend more.

Higher consumer expenditure may cause a rise in investment, further increasing aggregate demand.

Up to 4 marks for evaluating the effect eg how much aggregate demand rises depends on the size of the cut, some of the extra income may be saved rather than spent. If confidence is low consumption and investment may not rise, cut in lower rate of income tax is likely to be more effective, households and firms may expect that the cut will be reversed in the future, there may be a time lag before households and firms react.

Maximum of 7 marks.

### (g) Discuss the extent to which an increase in exports will improve an economy's macroeconomic performance.

[12]

- **L4** For a discussion of the extent to which an increase in exports would improve an economy's macroeconomic performance **(7-12)**.
  - The impact that an increase in exports will have on the economy will depend on whether it lasts. A small increase of a short duration will have less of an impact than a large increase which lasts for some time. A rise in exports resulting from, for example, an increase in quality of products produced may be longer lasting than one resulting from a fall in the exchange rate.
  - If the economy was initially operating well below full capacity, the
    effect of an increase in exports is likely to be more beneficial than if it
    was initially at or close to full capacity. In the former case, a rise in
    aggregate demand is likely to have more impact on employment and
    growth than on the price level. In the latter case, the impact is more
    likely to be inflationary.
  - A rise in exports may be accompanied by a rise in imports or may be exceeded by a rise in imports. Exports raise income and some of the extra income will be spent on imports. If an increase is matched by an increase in imports, the effect on aggregate demand may be neutral.
  - An increase in exports may result in a current account surplus. If the country is exporting more than it is importing, the country's citizens are enjoying a lower than possible living standard.
- **L3** For an analysis of how an increase in exports will affect an economy's macroeconomic performance **(5-6)**.
  - Exports are a component of aggregate demand. Analysis may make use of an AD/AS diagram. An increase in exports will, other things being equal, increase aggregate demand. Higher aggregate demand may increase real GDP and result in economic growth. To produce more products, firms may take on more workers.
  - A rise in exports may improve the trade in goods and services balance of the current account. Such an improvement may reduce any deficit or increase any surplus. There is a risk that an increase in exports may cause demand-pull inflation. Higher aggregate demand may push up the price level.
- **L2** For an application of knowledge and critical understanding of how an increase in exports will affect an economy's macroeconomic performance (3-4).
  - An increase in exports may improve the current account position/balance in trade. It may also increase economic growth and reduce unemployment but may add to inflationary pressure.
- **L1** For knowledge and understanding of exports and/or macroeconomic performance (1-2).
  - Exports are products sold abroad.
  - Macroeconomic performance covers, for example, the unemployment rate, economic growth rate, inflation rate and current account balance.

### 2884 Economics of Work and Leisure

#### Section A

 (a) Using the information in Extract 1, identify two possible economic advantages and two possible economic disadvantages to the UK of immigration by Polish workers.

1 mark for each of 2 possible advantages – eg boost to growth, tax revenues, filling job vacancies.

1 mark for each of 2 possible disadvantages – eg extra pressure on local services, burden on benefit system, displacing domestic workers.

n.b. An item is ok if taken from outside text, providing it is justified.

(b) (i) Explain what is meant by the term 'labour market failure'. [2]

Labour market failure as non-achievement of optimal allocation of labour resources in an economy. 1 mark for the idea (maybe just an example), 2 marks for a precise statement.

(ii) Using the extracts, explain <u>one</u> way in which labour market failure in the UK may be reduced by immigration. [4]

1 mark for an identification of a valid/relevant type of labour market failure – eg geographical or occupational immobility – plus 1 mark for linking it to the Extracts re immigration.

2 marks for explanation of how the labour market failure is reduced.

(c) Comment on the suggestion (line 20-21) that the current generation of east European migrant workers "haven't really displaced British workers directly".

[4]

Up to 2 marks for an explanation of why the British workers have not really been directly displaced – ie because the foreign workers have gone to work in different areas and/or occupations where there are job vacancies. Up to 2 marks for a relevant comment. This could be to the effect that longer run consequences may be different, for example; or that there may be other disadvantageous results for UK workers, for example in terms of pay rates; or that

(d) Discuss the economic consequences for countries such as Poland or the Philippines which have experienced substantial emigration of labour. [6]

expanded growth may generate other jobs elsewhere.

Up to 2 marks for a one sided explanation, probably of the economic disadvantages; plus up to 4 marks for evaluation. An answer which provides explanation of two sides can gain up to 4 marks. To gain more than 4 marks there must be evaluation within either side, or a weighing up of the overall net impact.

#### Section B

# 2 (a) Explain why firms which operate in an oligopolistic market structure tend to use non-price methods of competition. [10]

Identification of the characteristics of an oligopoly, with particular stress on few firms and interdependence. Explanation of implications for the behaviour of firms – in particular, the benefits of price stability in normal circumstances, and so the need for non-price competition. Need to recognise, too, however, that there may be other instances when firms may opt for price competition.

Level 3	For an explanation, focusing on the issue of price- or non-	(7-10)
	price competition.	
Level 2	For an application of knowledge and critical understanding only, perhaps relating to firms' behaviour in general, or	(4-6)
Level 1	specifically non price competition.  For knowledge and understanding of the market structure only.	(1-3)

### (b) With reference to a leisure market of your choice, discuss the circumstances under which firms may choose to compete on price. [15]

Choice of leisure market (which may be, but does not need to be, one of the four named in the specification). Explanation of the structure of the particular market, with links to a theoretical model – which need not be oligopoly – and of the typical behaviour of the firms. Discussion of the issue of pricing in the chosen market, and of the circumstances in which price competition is or is not likely.

Level 4	For discussion, focusing on the circumstances in which price competition is or is not likely.	(9-15)
	•	(0.0)
Level 3	For analysis of the behaviour of firms in the chosen	(6-8)
	market.	
Level 2	For application of knowledge and critical understanding of	(3-5)
	the chosen market linked to price decisions.	(0 0)
	· ·	
Level 1	For knowledge and understanding only, either of the	(1-2)
	chosen leisure market or of a theoretical market structure.	` ,

# 3 (a) Explain how a trade union may be able to increase the relative pay of its members. [10]

Explanation of what might be considered typical trade union behaviour – for example, control of entry, or action to enforce collective bargaining power. Explanation of market equilibrium pay determination, and of the impact of a trade union on it – perhaps through effect on supply; consideration of different possible outcomes, in terms of relative pay and number employed.

Level 3	For an explanation of different possible effects, in different	(7-10)
Level 2	circumstances.  For application of knowledge and critical understanding of	(4-6)
LCVCI Z	the basic impact only.	(4-0)
Level 1	For knowledge and understanding of trade unions only.	(1-3)

# (b) Discuss the view that unit labour costs matter much more than actual levels of pay. [15]

Explanation of unit labour costs, including the relationship between the concept and that of labour productivity. Consideration of the relationship between unit labour costs and levels of pay. Discussion of why levels of pay and/or unit labour costs "matter" – particularly in terms of competitiveness. (This could be considered on either micro – or macro – economic contexts.)

Level 4	For discussion, focusing particularly on which matters most.	(9-15)
Level 3 Level 2	For analysis of the impact of unit labour costs. For application of knowledge and critical understanding of the relationship between unit labour costs and labour	(6-8) (3-5)
Level 1	productivity.  For knowledge and understanding only of the concept of unit labour cost.	(1-2)

# 4 (a) Explain why, when their hourly wage rate increases, some workers may prefer to increase the amount of leisure time available to them, even if this means less income. [10]

Identification of the leisure-income trade off for a worker. Explanation of the impact of a rise in hourly wage on hours worked and on income, with reference to the ideas of income and substitution effects (n.b indifference curve analysis is NOT expected). Explanation of the case when a worker may choose more leisure and less income, probably as a special case.

Level 3	For an explanation which clearly understands both income and substitution effects. n.b. Must refer explicitly to the less income issue for more than 8 marks	(7-10)
Level 2	For an application of knowledge and critical understanding of the income/substitution effects of a wage rise, without considering their combined effect.	(4-6)
Level 1	For knowledge and understanding only of the income/leisure trade-off.	(1-3)

### (b) Discuss the impact on the operation of the UK labour market of an increase in the taxation of personal income. [15]

Explanation of personal income taxation as direct taxation – and possibly of other, alternative forms of taxation (eg wealth, or indirect taxation on expenditure): Taxation as a method of financing government expenditure. Discussion of the effects of increasing personal income taxes; advantages are likely to focus mainly on equity issues; whereas disadvantages could include incentive effects – with a possible, though not required, link to part (a).n.b Answers may also consider the effects/benefits of different income tax rates within the overall tax system. This is entirely acceptable, but certainly not necessary.

n.b. There are a wide range of possible approaches which a candidate could use to answer this question. What matters is that answers should focus on impact(s) on the operation of the UK labour market.

Level 4	For discussion which focuses on the evaluation of the effects of raising personal income taxation.	(9-15)
Level 3	For analysis of the effects of raising personal income	(6-8)
	taxes.	,
Level 2	For application of knowledge and critical understanding of	(3-5)
	raising personal income tax in the UK.	
Level 1	For knowledge and understanding only of taxation of	(1-2)
	personal income.	

### **2885 Transport Economics**

1 (a) Rail transports coal that produces over 25% of our electricity. It moves 30% of metal products in Britain and 80% of the stone used for construction in London.

#### Explain why these products are mainly transported by rail.

[2]

[4]

1 mark for application of knowledge regarding nature of product e.g. Bulky; low cost relative to weight (either point 1 mark)

1 mark for explanation of why such products are mainly transported by rail. e.g. Rail capable of transporting greater weight with each load at lower cost per unit or similar development to explain relative advantage of rail (1)

No marks for general advantages of rail compared to other modes; must be specific to products listed.

Maximum [2 marks]

(b) Identify and explain two problems likely to be encountered by the rail freight industry if the rail system is not upgraded in the near future. [4]

Overuse of capacity (1) resulting in congestion on rail network (1)

Market share lost to other modes (1) due to increased costs (1)

Low cost solutions as longer trains and route changes will only be short-term (1) as demand continues to increase (1)

Overall 2 marks for identification and 2 marks for explanation. A good explanation of one problem can earn 3 marks in total.

(c) (i) Explain two differences between a perfectly competitive and a contestable market.

1 mark for each difference stated, plus up to 2 marks for application of knowledge and critical understanding, eg

In a perfectly competitive market actual competition exists, whereas in a contestable market it is the threat of competition (1) which makes the incumbent firm(s) behave as though it is in a more competitive market (1) and earn normal profits to deter potential competition from entering the market (1).

A large number of firms required in a perfectly competitive market, whereas the number of firms irrelevant in a contestable market (1); in the latter it is the threat of competition rather than actual competition which determines the behaviour of the firm (1)

Product not necessarily homogenous in a contestable market (1) with critical understanding (1).

Application need not be from a transport market.

Lists with no comparison – 2 marks max.

Maximum [4 marks]

#### (ii) Comment on the extent to which the rail freight industry in contestable.

[4]

Commentary could include the following:

'Open access' means, in theory, the UK rail freight industry is competitive (1). In reality there are regulatory requirements which may act as a barrier to entry (1). Sunk costs may also be a deterrent to entry (1). If rolling stock can be hired or has a second hand value the market is more contestable (1). Incumbent firms may also have economies of scale, better bargaining positions, brand loyalty, etc, (1) which makes the industry less contestable (1).

Level 2 Commentary on the extent to which the UK rail freight industry is contestable, ie argues both ways.

4 marks for answer which either makes judgment on extent, or brings another extra comment

(3-4)

Level 1 Explanation of why UK rail freight is or is not contestable (1-2)

### (d) Discuss the effects of increasing competition in rail freight on the economic efficiency of the freight transport industry. [6]

Explanation of why increasing competition should lead to greater productive and allocative efficiency, as well as reducing X-inefficiency within the freight industry.

Consideration of impact on other freight modes, eg road freight will have to be more efficient in order to compete.

Discussion in terms of impact on freight transport industry overall – rail needs to be more efficient/flexible in comparison to road which still has many other advantages, ie low XED for many products. Greater competition may reduce economies of scale/innovation if existing firms reduce in size. More road freight companies may enter rail freight market increasing efficiency through greater integration.

- Level 3 Discussion of the effects of increasing competition in rail freight on the economic efficiency of the freight transport industry. (5-6)
- Level 2 Consideration of wider efficiency gains or losses on the freight industry due to increasing competition in rail freight. (3-4
- Level 1 Explanation of effect of increasing competition in rail freight on economic efficiency. (1-2)

#### Section B

### 2 (a) Explain how economists make forecasts of air passenger transport demand. [10]

Explanation in terms of extrapolation of past trends. Use of estimates of GDP, YED again using figures from past. Use of primary data from market research. Delphi method. Link to air passenger transport required,

- Level 3 For an explanation of how the economists make forecasts of air passenger transport demand. (7–10)
- Level 2 For an application of knowledge and critical understanding of how forecasts can be made to predict future air passenger transport demand.

  (4–6)
- Level 1 For knowledge and understanding of forecasting. (1–3)

### (b) Discuss the implications for government policy of the projected increase in demand for air passenger transport. [15]

More passengers' means existing capacity overstretched. Therefore, decisions about infrastructure are required – possible involvement of government, as even though companies are in private sector planning is required; use of CBA and its inherent problems. Also implications for environmental concerns in terms of negative externalities and, therefore, the possible use of carbon/green taxes to control passenger growth and make passengers pay the full social costs of their travel (requires international co-operation). Government policy requires balance in order to consider the benefits of increased trade/tourism of increase in passenger numbers.

- Level 4 For a discussion of the implications for government policy of increased air passenger transport. (9–15)
- Level 3 For analysis of the implications of increased air passenger transport and/or government policy aimed at managing the number of air passengers. (6–8)
- Level 2 For an application of knowledge and critical understanding of the implications of increased air passenger transport. (3–5)
- Level 1 For knowledge and understanding of government policy regarding air passenger transport. (1–2)

### 3 (a) Explain the factors that have influenced the growth in demand for private car use. [10]

Relative price of car use fallen; increase in the price of substitutes such as bus, train, etc. Impact of increasing income (high YED for private car use). Tastes and preferences including speed, convenience and lifestyle choice particularly in comparison to other modes. Possible use of concept of derived demand.

- Level 3 For an explanation of the factors influencing growth in demand for private car use. (7–10)
- Level 2 For application of knowledge and critical understanding of the factors influencing growth in demand for private car use. (4–6)
- Level 1 For some knowledge and understanding of the factors influencing the demand for private car use (1–3)

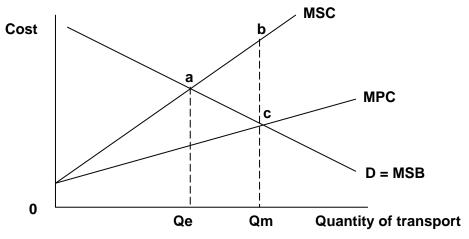
# (b) Discuss the extent to which a national road user charging scheme could reverse the growth in demand for private car use. [15]

Explanation of national road user charging scheme; increasing cost of using congested roads; possible use of diagram. Internalising external costs – correcting market failure, flexible charges. But may have little impact on demand for car use due to low PED. Reliable alternatives needed to increase PED and XED. Convenience of private car may prove difficult in deterring its use. Also problems with implementation and policing of scheme. Would need to be used as part of a combination of measures.

- Level 4 For a discussion of the extent to which a national road charging scheme can reverse the growth in demand for private car use. (9–15)
- Level 3 For an analysis of how a national road charging scheme can reverse the growth in demand for private car use. (6–8)
- Level 2 For an application of knowledge and critical understanding of how a national road charging scheme could or could not work. (3–5)
- Level 1 For some knowledge and understanding of road charging. (1-2)

[15]

4 (a) With the aid of a diagram explain how atmospheric pollution associated with increased transport use causes a misallocation of resources. [10]



Divergence of private and social costs due to negative externalities. Explanation of negative externalities in terms of costs imposed on third parties applied to atmospheric pollution associated with increased transport use. Allocative inefficiency in terms of overconsumption; transport use at Qm rather than socially efficient level of Qe as external costs of increased transport use are not taken into account by those causing them.

- Level 3 For an explanation (using diagram) of how atmospheric pollution associated with increased transport use causes a misallocation. (7–10)
- Level 2 For application of knowledge and critical understanding of how atmospheric pollution represents a misallocation of resources lacks technical explanation or sophistication in diagram. (4–6)
- Level 1 For knowledge and understanding of impact of atmospheric pollution. (1–3)

n.b. No diagram maximum 3 marks

(b) Discuss the extent to which increased indirect taxes on transport users might correct the market failure caused by atmospheric pollution associated with increased transport use. [15]

Explanation of impact of taxes on transport users in reducing market failure (reward use of a diagram but not a requirement). Increased cost of using transport leads to falls in demand – polluter pays principle. Discussion in terms of identifying those causing pollution and assigning monetary values to negative externalities. Should result in more efficient resource allocation if decisions are based on full information about resource use. Examples could cover a variety of transport modes but particularly private car and air transport and carbon taxes.

- Level 4 For a discussion of the extent to which increased indirect taxes on transport users might correct the market failure caused by atmospheric pollution associated with increased transport use. (9–15)
- Level 3 For an analysis of how increased indirect taxes on transport users might correct market failure. (6–8)
- Level 2 For an application of knowledge and critical understanding of how (increased) indirect taxes on transport users might correct market failure.

  (3–5)
- Level 1 For knowledge and understanding of environmental taxation paid by transport users. (1-2)

### 2886 Economics of Development

#### 1 (a) Using Fig 1;

(i) Compare Sub-Saharan Africa's pattern of financial inflows with those of the Middle East and North Africa. [3]

**2 marks from:** SSA has the higher level of aid, SSA has the lower level of remittances, SSA has a slightly lower or similar level of FDI.

**1 mark from:** SSA has lower total inflow, recognition of per capita in \$ values, a calculated comparison (e.g. SSA aid 1/8 of MENA).

(ii) How might these differences in the pattern of financial inflows be explained?

3 differences to be explained, 1 mark for each. SSA high poverty or least developed of regions needs more aid. African workers less mobile or lower earners reduce remittances. SSA limited profit or unstable environment gives less FDI or both offer investment opportunities so similar FDI.

(b) Comment on the advantages that FDI may have over remittances as a source of finance for developing economies. [4]

FDI funds steadier (1) as MNCs are financially strong (1).

FDI may provide extra benefits (1) such as skills, marketing links and technology (1).

FDI for L/R investment (1) remittances more likely for S/R consumption (1).

FDI bigger multiplier effect (1) bigger impact per \$ on income and employment (1).

FDI creates workforce (1), remittances result of lower workforce (1).

2 marks for identification and 2 marks for comment.

(c) State and explain two reasons why Sub-Saharan Africa might also suffer from high levels of financial outflows. [4]

Debt service resulting from high levels of past borrowing (1) for non productive use (1), capital flight of local savings (1) to find more secure or more profitable home for funds (1), import expenditure (1) arising from lack of domestic production or cheaper/better imports (1), MNCs may repatriate a large amount of their earnings (1), as profit to shareholders (1).

1 mark for identification and 1 mark for explanation (x2). Maximum 4 marks.

(d) Discuss whether a developing economy can ever have too much foreign aid.

[6]

[3]

Foreign aid is help supplied on concessionary terms for development purposes (1). Large amounts of foreign aid may give benefit by meeting emergencies, promoting investment, improving health and education, relieving poverty etc (up to 4 marks) but may have diminishing returns, may be beyond capacity to absorb, may increase dependency, may encourage misspending, may place excessive power with the government, may create debt etc (up to 4 marks).

Reward the idea that some countries will be able to absorb far greater quantities than others, depending on size, stage of development and need.

Up to 2 marks for analysis of the nature of foreign aid and up to 4 marks for evaluation of the impact of foreign aid.

### 2 (a) Explain what distinguishes a developed economy from a developing economy. [10]

A developed economy has higher GDP per capita, higher HDI score, lower levels of poverty, better living standards, stronger infrastructure, more effective government activity, less reliance on primary production, more productive workforce, greater use of capital intensive production methods, higher health and education indicators. These differences can be viewed in terms of sustenance, self esteem, opportunity and choice. However, they are not necessarily stronger in terms of balance of payments and economic growth. The differences may be based on relative efficiency, factor endowment, attitudes, history, openness to trade, institutions etc.

- **L3** For an explanation of the underlying factors which influence the varying levels of development. (7-10)
- **L2** For an application of knowledge and critical understanding of the distinction between developed and developing economies. (4-6)
- L1 For knowledge and understanding of the measures used to judge development. (1-3)

### (b) Discuss, with the help of examples, whether there is such a thing as a typical developing economy. [15]

Developing countries have some common features such as low living standards, low productivity, imperfect markets, inequality etc but may also vary considerably. Incomes vary from Saudi Arabia and South Africa to Bangladesh and Chad. Some are resource rich (Brazil, Venezuela), while others suffer from poor natural conditions (Somalia, Afghanistan). They have different colonial backgrounds (British, French, Portuguese) and have adopted different forms of government (democratic, authoritarian). Some are progressing rapidly, (Asian tigers and China), while some are considered 'failed' states, (some Sub-Saharan African). Economic structures vary, many rely on primary industry, others are industrialised, while some are moving into the tertiary industry. Debt levels and attractiveness to foreign investors differ, as do levels of government competence and corruption.

While developing economies are classified as one group, this is often sub divided according to narrower criteria, e.g. LDCs, HIPCs, which still contain disparate economies. There might be typical groups of developing economies, if not a typical individual economy. Higher level four answers will make extensive use of examples.

- L4 For a discussion of the extent of diversity among developing economies with reference to examples to illustrate the contrast and (9-15) contrasting characteristics of developing economies.
- **L3** For an analysis of the diversity and contrasting characteristics of developing economies. (6-8)
- **L2** For the application of knowledge and critical understanding of what is a typical (stereotypical) developing economy. (3-5)
- L1 For knowledge and understanding of the concept of developing economies. (1-2)

#### 3 (a) Explain why government failure may occur in developing economies. [10]

In trying to improve economic problems, actions by government may make the position worse and reduce welfare and efficiency. Actions may be correcting market failure or planning on a larger scale. Factors contributing to government failure are insufficient and unreliable information, the introduction of additional costs, institutional weaknesses for implementation, rigidity in the face of changing circumstances, lack of the necessary expertise, conflicts of interest, lack of political will and corruption. Most of these can be found in the developing economy context and are the result of the nature and conditions of underdevelopment.

- L3 For an explanation of the causes of government failure in the context of developing economies. (7-10)
- For an application of knowledge and critical understanding of how government action may result in less efficiency and welfare. (4-6)
- L1 For knowledge and understanding of government action in influencing the operation of an economy. (1-3)

### (b) Discuss whether natural or international factors are the main cause of the problems of developing economies. [15]

The problems include poor living standards, inequality and the inability to break out of underdevelopment. National factors include poor economic management, poor factor endowment, lack of finance, population problems and inadequate infrastructure. In the international case, barriers to trade, disadvantage in terms of trade, past dependency, trade instability, exchange rate instability and exploitive organisations cause problems. Other factors may also be considered. For individual economies either set may be more significant and generalisation is not easy. Both types will be at work in all developing economies to some extent, however, some may be less open and less dependant or may have more beneficial relationships or a greater degree of national proficiency. A higher level four answer will show the individual nature of the issues.

- **L4** For a discussion of the balance of national and international factors with an evaluation of their relative importance. (9-15)
- For an analysis of the impact national or international factors have on the prospects of developing economies. (6-8)
- **L2** For the application of knowledge and critical understanding of national and international influences on the economies of developing countries. (3-5)
- L1 For knowledge and understanding of the problems faced by developing countries. (1-2)

#### 4 (a) Explain the features of a policy of import substituting industrialisation. [10]

Industrialisation involves moving from primary dependence to manufacturing production. Import substitution means replacing imported manufactured consumer goods with domestically produced substitutes. Tariffs or quotas are used as barriers to imports and local industries are established, sometimes with help from foreign companies, to supply the domestic market. This involves government expenditure and intends to encourage linkages with other producers. It involves operating on a small scale at first, but then expanding to gain economies. Shoes, bicycles and household appliances are typical products. Later production may extend to machinery and capital goods. The impact on price, output and growth encourages the shift to manufacturing.

- **L3** For an explanation of the rationale underlying the features of ISI. (7-10)
- For an application of knowledge and critical understanding of the features of ISI. (4-6)
- L1 For knowledge and understanding of the meaning of import substitution and/or industrialisation. (1-3)

# (b) Discuss whether import substituting industrialisation is an appropriate policy to help long term development. [15]

The long term requires that the effects of Import Substituting Industrialisation can be maintained and produce a sustainable benefit. Experience, particularly in Latin America, was disappointing. The protected markets led to the creation of a high cost, uncompetitive domestic industry. It tended to benefit urban areas to the disadvantage of rural areas. The policy suffered from the need for foreign technology and capital goods (worsening the balance of payments) and the inability to overcome the structural disadvantages faced by developing economies. Consumers were affected by higher prices and quality issues. Exchange rate policy and use of government funds has sometimes been at the expense of primary producers and exporters. If the first stage is achieved, a change of strategy (more advanced production or exporting) is needed to continue to promote development. Success might be achieved in the case of infant industries, reflecting comparative advantage, which achieve economies of scale and become internationally competitive. Brazil, Mexico and South Korea enjoyed success here. Success would create jobs and help the balance of payments. A higher level four answer will show awareness of actual experience of the policy.

- L4 For a discussion of the overall impact of ISI on long-term development with reference to examples of different degrees of success. (9-15)
- L3 For an analysis of the benefits or drawbacks of ISI in promoting long-term development with examples of actual cases. (6-8)
- **L2** For the application of knowledge and critical understanding of the intended effects of ISI on long-term development. (3-5)
- L1 For knowledge and understanding of the term long term development. (1-2)

# 2887 The UK Economy

1	(a)	(i)	State how unemployment is defined by the Labour force Survey.	[2]
•	(α)	(')	otate now unemployment is defined by the Labour force our vey.	[~]

Those who are actively looking for work, but are out of work at the time of the survey.

The unemployed are those who are **economically active** but **without a job** at the time of the survey.

2 marks

Are willing to work – available to start work in the two weeks following their LFS interview

1 mark

Are actively seeking employment – had either looked for work in the four weeks prior to interview or were waiting to start a job they had already obtained (within the next two weeks)

1 mark

# (ii) Explain how the UK economy can, at the same time, experience 'more people out of work' and 'more people in work' (line 12-13). [2]

An increase in the size of the labour force greater than the increase in available jobs 2 marks

An increase in the size of the working population/workforce/labour force 1 mark

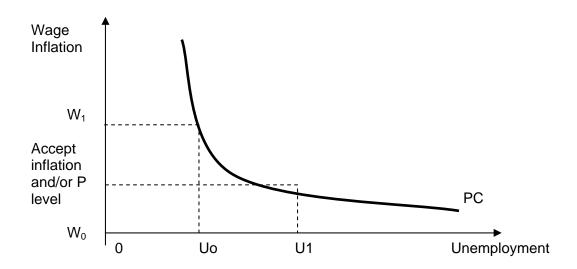
An **increase** in the number of people classified as **economically active**.

Expect reference to migrant workers

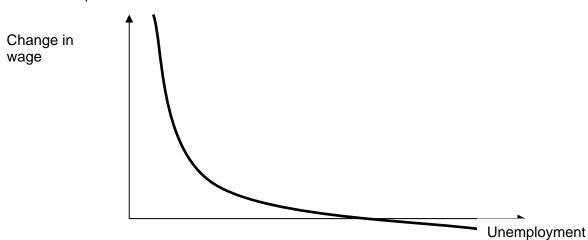
# (b) Explain how the trend in job vacancies from January 2005 (Fig 3) was consistent with 'weak domestic demand' in 2004/05 (line 7). [2]

Trend – vacancies shown – i.e. falling number of vacancies 1 mark
Weak AD reduces the derived demand for labour 1 mark
A falling number of vacancies as weak demand for output reduces the demand for labour 2 marks

(c) (i) Using the Philips Curve, explain why, during periods of rising unemployment, it was unsurprising that 'pay pressures remained subdued' (line 10).



Also acceptable



The Phillips curve relates the % change of money wage rates to the level of unemployment.

1 mark for accurate statement of Phillips curve relationship Up to 2 marks for explained diagram.

Explanation up to 2 marks per additional explanatory point, for example:

- higher employment reduces bargaining power of workforce, prepared to accept lower wage increases.
- slowdown in demand reduces willingness and ability of companies to pay higher wages.

Maximum of 4 marks.

No reference to Phillips Curve

1 mark max

[4]

# (ii) Comment on the extent to which lower earnings growth alone will reduce cost-push inflationary pressures in the UK economy. [4]

Wage cost push is one source of inflationary pressure on the supply side of the economy but not the only one. E.g. import cost push, supply side policies, commodity price increases etc

2 marks for explaining reduced wage cost push pressures 2 marks for added commentary

Explain how lower earnings (growth) may affect SRAS

directly

via reduced inflationary expectations

2 marks

**BUT** 

other factors
 including falling labour productivity

non-wage labour costs including energy prices
 2 marks

Maximum 4 marks.

(d) Discuss whether the UK government should be concerned about being 'the only country in the Group of Seven (G7) major economies which saw its unemployment total rise over the previous 12 months' (line 3-5). [6]

Concern - costs of rising unemployment

- uneven spread - manufacturing employment - structural

issues.

No concern - still relatively low, no mention of level in other G7 countries,

cyclical factors, impact on inflation.

Level 1 (1-2 marks) For explanation/analysis of the problems of rising

unemployment

Level 2 (3-4 marks) Level 1 plus some qualification of concern e.g. it is still

relatively low, benefits of increased unemployment.

Level 3 (5-6 marks) For a summary of the discussion evaluating clearly when a

rise in unemployment should be a matter of concern for the

UK government.

- In international terms, the UK has long suffered from relatively low rates of capital investment. As such the UK's capital/stock/GDP ratio is also lower than in many other countries. This affects the performance of the economy.
  - (a) Explain the factors that influence the level of capital investment in an economy. [10]

Candidates should focus on the conventional determinants of investment as expressed in the investment function I=f(r) ceteris paribus. They should explain, rather than assert, how interest rate changes affect investment and then consider a range of possible alternative influences; including expected profitability, availability of finance (rather than simply the price), spare capacity, ease of factor substitution (including labour market issues, such as the power of TU and employment legislation more generally).

Some candidates may also consider the rate of technological advance, FDI – some may formalise analysis in terms of the accelerator and/or draw a distinction between net and gross investment, but these are not required.

- **L3** For an explanation of the factors that influence capital investment. At least 2 factors clearly analysed. (7-10)
- **L2** For application of knowledge and critical understanding of factors that influence capital investment in an economy to include interest rates. One (4-6) factor done well max 6 marks
- L1 For a knowledge and understanding of what is meant by capital investment in a micro or macro context. (1-3)

(b) Discuss the extent to which an increase in the rate of capital investment alone will improve the performance of the UK economy. [15]

Candidates should identify the main features of economic performance and then relate increases in capital investment to this. Improvement may come from the impact of gross investment on AD, the impact of net investment on international competitiveness and the productive capacity of the economy (LRAS). Discussion could focus on a range of issues, including time lags, the potential inflationary impact of higher AD (at least initially), the effectiveness with which this investment is utilised, the role and importance of other forms of capital (including human), the importance of increasing the rate of investment (in international terms) rather than just the level.

- L4 For a discussion of the extent to which an increase in the rate of capital investment **alone** will improve the performance of the UK economy; answers should include a discussion of other competitiveness factors such as unit labour costs, labour issues and so on. (9-15)
  - 9-12 For a clear discussion built on at least some underlying analysis. 13+ for a discussion plus some kind of summary relating to the extent to which an increase in the rate of capital investment alone will improve economic performance.
- L3 For an analysis of the effects of an increase in capital investment on the performance of the economy that may likely include use of the AS/AD model. (6-8)
- **L2** For an application of knowledge and critical understanding of the effects of an increase in the rate of capital investment on an economy. (3-5)
- **L1** For knowledge and understanding of the link between a change in investment and UK economic performance. (1-2)

- International comparisons of multiplier values reveal significant variations between countries. One estimate suggested that the multiplier values were 1.42 for the UK, 1.13 for Germany and 1.76 for Japan.
  - (a) Explain why multiplier values vary between countries. [10]

Candidates should explain how the value of the multiplier is determined in an open economy with a government sector. They should then look to explain how variations could occur by changing the marginal propensity to withdraw. This should be supported by an explanation of why the mpc might change; for example, because of changes in any of the marginal rates of leakage from an economy. Reward those who try to apply their answers to the specific values given in the question. In particular those who calculate MPW as 0.7, 0.89 and 0.57 respectively.

- L3 For an explanation of why multiplier values vary between countries to include reference to variations in the marginal propensity to withdraw. (7-10)
- **L2** For an application of knowledge and critical understanding of the factors such as the extent of leakages that influence the value of the multiplier in an economy. (4-6)
- L1 For a knowledge and understanding of the multiplier process but (1-3) with no reference to the factors that determine its value/size.

(b) Discuss the usefulness of the estimated multiplier value in predicting the effects of an increase in government spending on the UK economy. [15]

Candidates should explain that the estimated multiplier value of 1.42 for the UK can be used to predict the impact on Gross Domestic Product. They should then discuss the limitations of extending this to other Key Performance Indicators, eg unemployment, the Balance of Payment and inflation. Comments here could include, for example, changes in behaviour over time, the role of the supply side of the economy, the monetary effects of any budgetary changes and the importance of the ceteris paribus assumption.

- L4 For a discussion of the usefulness of estimated multiplier in predicting the effects of an increase in government spending answers should include reference to statistical limitations as well as forecasting problems. (9-15)
  - 9-12 For clear discussion built on at least some relevant analysis 13+ For a summary following discussion that offers evaluation of the usefulness of multiplier estimates.
- For an analysis of the multiplier effect of an increase in government spending on the economy to include some elaboration of the multiplier process in context. This may be in the form of arithmetic example(s) and/or diagrammatic presentation.
- **L2** For an application of knowledge and critical understanding of the multiplier process. (3-5)
- **L1** For a knowledge and understanding of how the multiplier **process** (1-2) works in general terms.

- The Scottish Economic Report suggested that Scotland has enjoyed significant welfare gains from its comparative advantage in high value-added products such as financial services, electrical and instrument engineering as well as niche products such as whisky.
  - (a) Explain how specialisation and free trade according to comparative advantage can lead to welfare gains for a country. [10]

Candidates should explain the principle of comparative advantage and apply this to show the welfare gains from trade. This could be through a numerical example and Product Possibility Curve diagrams showing how post-trade consumption possibilities would exceed pre-trade production possibilities. It could, however, also be through supply and demand diagrams showing a net increase in consumer surplus.

- For an explanation of how free trade can lead to welfare gains for a country in terms of cheap local products and have a net welfare gain for a consumers. A clear comparative advantage example using one country with an absolute advantage in the production of both products. Diagrams and or arithmetic examples are likely to be included.
- **L2** For application of knowledge and critical understanding of comparative advantage. Some diagrams or 2 x 2 tables should be (4-6) included. Level 1 plus idea that trade leads to gains for a country.
- L1 For knowledge and understanding of why countries trade. (1-3)
  Or knowledge and understanding of terms used in the question.

Discuss the extent to which globalisation may benefit countries such as Scotland which currently have a comparative advantage in high value added products. [15]

Globalisation is generally referred to as the increased integration of world markets for goods, services, financial capital and other factor inputs including labour. In general, candidates are likely to focus on the benefits of increased trade, both exports and imports. Analysis and discussion should focus on the costs and benefits in terms of economic welfare and KPI for a country such as Scotland which has a comparative advantage in high value added products. Candidates are not required to have specific knowledge of the Scottish economy.

The benefits are that as a consequence of increasing trade flows, globalisation has the potential to increase average real income in all countries but the gains may be shared unequally and some groups may lose out, especially if the basis of comparative advantage changes over time. Such groups include those who derive their incomes from industries which contract due to foreign competition if they are unable to change their location, skill or industry of employment.

Also credit candidates, who, in the context of the specific question set, offer relevant analysis and discussion of the broader economic aspects of globalisation. Examples of these broader issues might include the consequences of greater and, possibly more volatile, international capital flows; the environment effects of increased trade; the consequences for national economic policy sovereignty; the tensions between globalisation and regionalisation; competitive advantage; free and 'fair' trade candidates are, of course, **not** required to formalise their analysis/discussion by using terminology unless specifically incorporated in the 2887 specification.

L4 For a discussion of the extent to which globalisation may benefit countries that have a comparative advantage in high value added (9-15)products.

9-12 For discussion built on at least some relevant analysis. 13+ For a discussion and summary that directly offers evaluation as to the extent to which globalisation may benefit countries that have a comparative advantage in high value added products.

L3 For an analysis of how globalisation may benefit countries with a comparative advantage in a product or products. (6-8)

(3-5)

L2 For application of knowledge and critical understanding of the benefits of globalisation.

L1 For knowledge and understanding of globalisation. (1-2)

n.b Failure to specifically address the question set re high value added good products should be limited to a maximum mark of 9, bottom of level 4.

# 2888 Economics in a European Context

### 1 (a) Using the Extract 1, compare:

- the trend in vehicle production in Western Europe with that in Central and Eastern Europe from 2001 to 2011 (projected);
- new car sales in Romania with that in Bulgaria in 2005.

#### [6]

# Synoptic knowledge

Module 2881 – Section 5.1.2 Demand, supply and the nature of competitive markets.

#### **Outline of content**

#### Vehicle production

Trend in Western Europe is small fall in production, whereas in CEE there is an increase over the whole period (1). The trend in Western Europe first shows a fall in production, followed by a rise, whereas in CEE the trend is a <u>consistent</u> increase (1) Fall in production in Western Europe is less than the rise in production in CEE (1). Additional marks for quantification of changes over the period – Western Europe = -2.7% (1), CEE = +111% (1).

Result is that Western Europe's share of world production declines markedly, whereas that of CEE rises (1); plus additional mark for explicit quantification of the changes (Western Europe from 31% to 21%, CEE from 5% to 8%) (1).

#### New car sales

Market share of top three brands is higher in Romania than in Bulgaria (1), being almost double (1).

However, the market share of the leading brand in Romania is higher than that in Bulgaria (1), being almost three times higher (1).

Leading brand in Romania is produced domestically (though foreign owned – Renault), whereas it is likely that the leading brand in Bulgaria is imported (1).

Candidates are not expected to have the knowledge implied in the last comparison, although it can be credited.

1 mark each for valid description of comparison, with an additional mark for quantification.

Allow up to 4 marks for comparisons of vehicle production or new car sales.

# (b) Analyse the possible reasons why there are high levels of market concentration in the European automotive industry.

[9]

#### Synoptic knowledge

Module 2881 – Sections 5.1.2 and 5.1.3, Module 2882 – Section 5.2.2, Module 2888 – Sections 5.8.1, 5.8.2 and 5.8.3.

Demand. The costs of firms. Nature and sources of economies of scale. Main forms of market structure: monopoly, monopolistic competition and oligopoly. Relevance of barriers to entry in explaining differences in market structures. The causes of market dominance. Development of economic integration since 1990. The single European Market – the removal of non-tariff barriers. Integration of former command economies with the EU.

#### **Outline of content**

Demand for new cars has been declining since 2001 resulting in over-capacity in the European automatic sector. The result has been that some car manufacturers have gone out of business as a result of falling revenue and profit – most notably, Rover in the UK; have merged with other manufacturers or been taken over by competitors. Mergers and takeovers are a typical response to declining demand in the industry as production is characterised by large economies of scale. Without mergers and takeovers, unit costs are likely to rise as sales fall as there is a need to ensure that capacity utilisation is high. However, this trend towards mergers and takeovers precedes the recent decline in demand. Increasingly, manufacturers have recognised that there are economies to be derived from large scale production. These economies of scale are likely to be found in purchasing of components, in assembly and in research and development. The large capital outlay in production and assembly requires high capacity utilisation in order to reduce unit costs. Expenditure on research and development (design of new models, new engines and new technology) needs to be spread over a large volume of car sales. Smaller manufacturers, therefore, are at a cost disadvantage unless they operate in niche markets. Mergers and takeovers might allow manufacturers to maximise the scope for economies of scale through integration of the difference stages in vehicle design and production. Capital costs, then, tend to explain increased concentration over time. In addition, the industry has become more concentrated as Western manufacturers have taken over production facilities in CEE in order to enter new markets and use low production costs as a basis for location in the New Europe. Equally acceptable are responses which analyse the benefits to firms of increasing market share in terms of monopoly power, prices and profits.

- **Level 3** For analysis of possible reasons why there are high levels of market concentration in the European automotive industry. [7-9]
- Level 2 For application of knowledge and critical understanding of possible reason(s) why there are high levels of market concentration in the European automotive industry. E.g. EoS explained but not linked to market concentration. [4-6]
- **Level 1** For knowledge and understanding only. E.g. knowledge of market concentration or trends in the European automotive industry. [1-3]

# 2 Comment on the extent to which economic integration tends to lead to the convergence of the prices of consumer goods such as cars.

[10]

#### Synoptic knowledge

Module 2888 -

Sections 5.8.1, 5.8.2, Module 2881 – Sections 5.1.2, 5.1.3, Module 2882 – Section 5.2.2, Module 2883 – Section 5.3.4.

The meaning and nature of economic integration. Levels of integration. An economic analysis of trade and intergration. The Single European Market – the removal of non-tariff barriers. Economic and Monetary Union: The microeconomic pros and cons of the euro. The nature of a competitive market. Demand, supply and market equilibrium. Market operations of firms. The spectrum of competition – main forms of market structure. The causes and consequences of market dominance. The nature of the benefits from trade.

## **Outline of content**

# Reasons why integration leads to price convergence

Economic integration refers to the process of blurring the boundaries which separate economic activity in one nation state from another. This involves the removal of tariffs and non-tariff barriers to trade, the free movement of goods, services and the factors of production, the harmonisation of product standards, fiscal harmonisation and monetary union depending on the level of integration. Integration should result in the creation of a single market raising the level of trade and competition. Price differences should be eroded by trade, competition, greater price transparency and the elimination of transactions costs. In an economically integrated area, prices should reflect demand and supply across the whole area as a result of consumers buying across borders and producers entering nations where prices are higher than average. The forces of demand and supply should lead, over time, to the convergence of prices – the "law of one price".

#### Reasons why integration may not lead to price convergence

The extent to which economic integration tends to lead to the convergence of prices of consumer goods depends on a range of factors. The level of economic integration determines the extent to which a single market exists. Where product standards are not harmonised, producers are able to engage in market segmentation across national borders and will limit the extent to which consumers engage in cross border shopping. A lack of fiscal harmonisation will result in price differences remaining as a result of differences in expenditure taxes. Different product specifications allow price discrimination to continue. There may be differences in regulation resulting in differences in costs in different parts of an economically integrated area. Prices will always reflect transport costs and will limit price convergence. Prices will also reflect the degree of competition within each national market and may be higher in countries where there is less competition. Branding, product diversification, consumer loyalty may all play a part in the extent to which prices converge.

Candidates should attempt to relate the above arguments to the case of consumer goods such as cars. Expect to see some reference to the behaviour of car manufacturers, although credit should be given to other appropriate examples. There may be some reference to the case of prices of consumer goods in the UK relative to other EU member states.

- **Level 4** For a commentary on extent to which economic integration tends to lead to the convergence of the prices of consumer goods such as cars. Candidates should cover reasons why integration leads to price convergence and why it may not, to be awarded Level 4 marks. [8-10]
- **Level 3** For an analysis of reason(s) why economic integration tends to lead to the convergence of the prices of consumer goods such as cars, **or** why it does not. [5-7]
- **Level 2** For application of knowledge and critical understanding of reason(s) why economic integration tends to lead to the convergence of the prices of consumer goods such as cars. [3-4]
- **Level 1** For knowledge and understanding of economic integration and/or reason(s) for price convergence but inability to link the two. [1-2]

The EU wants car manufacturers to produce cars that are more energy efficient.

Comment on the case for tougher pollution standards rather than taxation as a means of achieving this objective. [15]

### Synoptic knowledge

Module 2882 – Sections 5.2.1, 5.2.2, 5.2.3.

The conditions for efficient allocation of resources including the concept of allocative, productive and Pareto efficiency. The causes and consequences of externalities. The way governments intervene in markets to correct market failure, through taxation and regulation. The impact of these forms of intervention on markets. The ways in which governments may create rather than remove distortions.

#### **Outline of content**

#### General approach to marking responses

The case for tougher pollution standards rather than taxation as a means of ensuring that car manufacturers produce cars which are more energy efficient is based on the advantages of pollution standards and the disadvantages of taxation. Candidates are expected to clearly state, explain and analyse the case for tougher pollution standards. If this is not done, then responses will be one-sided and cannot be awarded a mark in Level 4 of the mark scheme. Within Levels 3 and 4 of the mark scheme the mid-point should be viewed as the default mark – weak and strong responses being awarded marks below and above this mid-point.

## Application and analysis of the case for tougher pollution standards

Existing pollution standards take the form of voluntary targets and/or commitments.. Tougher pollution standards are likely to be compulsory and so will have the backing of law. As a result, they are likely to be more effective since car manufacturers will face penalties/fines should they not meet the tougher standards. Tougher pollution standards are in principle easy and quick to administer and are clearly understood. Unlike taxation, they do not depend for their effectiveness on the response of consumers to changes in the price of vehicle. Where the demand for energy inefficient vehicles is price inelastic, then there may be little change in the type of vehicles bought as a result of a taxation approach. Without a change in consumer demand, vehicle production is unlikely to change to more energy efficient cars.

#### Commentary

Extracts 3 (a) and (b) show that voluntary standards have not been wholly effective. If they are not backed by the force of law, standards which are merely tougher in terms of the expected target, are unlikely to be anymore successful than current standards. Tougher pollution standards, though, have their disadvantages relative to the taxation approach. They are not a market based approach to the problem and may not, therefore, be optimal. There are issues related to the way in which the standard is expressed which might limit its effectiveness – especially if the standard is expressed as average CO<sub>2</sub> emissions over the range of car models produced by a manufacturer. This could result in additional costs on car manufacturers. Pollution standards are a form of regulation and, therefore, there are costs associated with regulating rather than benefits from the revenue raised from the taxation approach. There is also a danger of regulatory capture – the authorities are dependant on the manufacturers for the information necessary to enforce regulation. The result is that the standards are not tough enough. This might be especially the case where car manufacturers convince the EC that the result of tougher standards would be lost jobs, production and GDP in the EU. There are efficiency arguments too – are the costs of tougher pollution standards less than the benefits from more efficient cars and will there be a stifling of innovation within the industry? The taxation approach may give better and sharper incentives and may be more effective.

- **Level 4** For a commentary on the case for tougher pollution standards rather than taxation as a means of achieving this objective. A Level 4 mark cannot be awarded unless there is some explanation of the benefits of tougher pollution standards or taxation. For responses which make no reference to the other side, maximum 12 marks. [10-15]
- **Level 3** For an analysis of the case for **or** against tougher pollution standards rather than taxation as a means of achieving this objective. Alternatively for an analysis of the case for or against taxation only. [5-9]
- **Level 2** For an application of knowledge and critical understanding of the case for and/or against tougher pollution standards rather than taxation as a means of achieving this objective. [3-4]
- **Level 1** For knowledge and understanding of pollution standards and/or taxation, energy efficiency and the environmental issues. [1-2]

For responses which make <u>no reference</u> to taxation, maximum 12 marks For responses which make no reference to pollution standards, maximum 9 marks 4 Discuss the extent to which rising foreign direct investment (FDI), such as that experienced by the Czech Republic in the automotive industry, is of benefit to the recipient economies in Central and Eastern Europe. [20]

#### Synoptic knowledge

Module 2883 - Sections 5.3.1, 5.3.2, 5.3.4

A broad overview of government policy objectives for the macro-economy with respect to employment and unemployment, inflation, the balance of payments account and economic growth. The costs, benefits and sustainability of economic growth. Possible conflicts between policy objectives. The constituents of, and influences upon, aggregate demand. The factors which influence aggregate supply. How aggregate demand and supply analysis can be used to illustrate macro-economic issues. The nature of the benefits from trade.

## Outline of content Application and analysis

Rising foreign direct investment has an impact of AD and AS. Higher investment raises the level of aggregate demand in the short term and may lead to higher levels of exports in the long term. AD increases. There may also be an impact on AS since investment is direct rather than portfolio. There should be an increase in the productive capacity of the economy and there could be an increase in efficiency and productivity. Rising AD and AS will result in higher levels of GDP and employment. Where FDI raises the efficiency of industry and may bring greater capital, the increased GDP and economic growth should not involve a policy conflict with inflation. Where there is an increase in exports of cars from the CEE, there may be an improvement in net trade. Where production is for the domestic market this may reduce the value of imports, also improving net trade. There are likely to be multiplier effects of rising FDI by one company, such as VW in Skoda, which may attract other manufacturers further enhancing the benefits to the recipient economies in CEE. Candidates should relate these benefits to the characteristics of the recipient economies – this may lead them into evaluative comment on the significance of the benefits.

#### **Discussion**

As stated above, a discussion of the benefits can seek to establish their significance to the economies in CEE, as well as examining the costs of rising FDI; although it is more likely that candidates will offer the approach of the two-handed economist. Where the two sides have limited analytical support, a mark at the bottom of Level 4 should be awarded. Where two sides are presented but there is a total lack of analytical support, a Level 2 mark should be awarded. One-sided analysis should be awarded with a Level 3 mark.

The extent of the benefits is dependent on a range of factors. Candidates are not expected to show some degree of breadth in their discussion of these; although differentiation is likely to be achieved on the quality and depth of discussion. The size of the increase in FDI will determine the size of the benefit, as will FDI as a % of GDP. Extract 5 (b) allows candidates to discuss the impacts on selected CEE economies. The extent of the multiplier effects are also relevant. These may be affected by the nature of employment, the capital/labour intensity of the FDI, the nature of the investment (assembly, local sourcing of supplies vs import of components; benefits of FDI in the Czech Republic have been high, for example, because of the location of R&D activities as well as assembly in the country). There are issues too related to the geographical and occupational mobility of labour there are skill shortages in the Czech Republic for new investors. This may limit the domestic employment effects or create wage pressure with a potential inflation trade-off. The benefits for the balance of payments may be limited by imports of components. The ability to regulate environmental consequences is a valid point of discussion. The creation of a narrow industrial/manufacturing base may create dependencies and susceptibility to external shocks. There is also the question of the extent to which the investment is short or long term – rising GDP per capita arising from rising FDI may limit the period in which CEE economies are attractive as locations for FDI. Discussion of impact on GDP and GNP and profit repatriation is relevant.

Level 4 For a discussion of the extent to which rising foreign direct investment (FDI), such as that experienced by the Czech Republic in the automotive industry, is of benefit to the recipient economies in Central and Eastern Europe. [12-20]

Band 1 (12-16 marks) Benefits and costs of FDI with supporting analysis. Band 2 (17-20 marks) Benefits and costs of FDI and discussion of extent, scale significance of determinants.

- **Level 3** For an analysis of the benefit **or** cost to the recipient economies in Central and Eastern Europe of rising foreign direct investment (FDI), such as that experienced by the Czech Republic in the automotive industry. [5-11]
- Level 2 For application of knowledge and critical understanding of the benefit and/or cost to the recipient economies in Central and Eastern Europe of rising foreign direct investment (FDI), such as that experienced by the Czech Republic in the automotive industry. [3-4]
- **Level 1** For knowledge and understanding of FDI or CEE economies only. [1-2]

# **Grade Thresholds**

# Advanced GCE Economics (3812/7812)) June 2008 Examination Series

## **Unit Threshold Marks**

U	nit	Maximum Mark	Α	В	С	D	E	U
2881	Raw	45	34	30	26	23	20	0
	UMS	90	72	63	54	45	36	0
2882	Raw	45	33	29	25	22	19	0
	UMS	90	72	63	54	45	36	0
2883	Raw	45	35	31	27	24	21	0
	UMS	120	96	84	72	60	48	0
2884	Raw	45	32	29	26	23	20	0
	UMS	90	72	63	54	45	36	0
2885	Raw	45	33	30	27	24	21	0
	UMS	90	72	63	54	45	36	0
2886	Raw	45	33	29	26	23	20	0
	UMS	90	72	63	54	45	36	0
	Raw	45	30	26	23	20	17	0
2887	UMS	90	72	63	54	45	36	0
	Raw	60	46	40	35	30	25	0
2888	UMS	120	96	84	72	60	48	0

# **Specification Aggregation Results**

Overall threshold marks in UMS (i.e. after conversion of raw marks to uniform marks)

	Maximum Mark	Α	В	С	D	E	U
3812	300	240	210	180	150	120	0
7812	600	480	420	360	300	240	0

The cumulative percentage of candidates awarded each grade was as follows:

	Α	В	С	D	E	U	Total Number of Candidates
3812	23.4	44.7	64.8	79.8	89.2	100	7219
7812	33.8	61.9	82.5	94.3	98.8	100	5201

# 12420 candidates aggregated this series

For a description of how UMS marks are calculated see: <a href="http://www.ocr.org.uk/learners/ums">http://www.ocr.org.uk/learners/ums</a> results.html

Statistics are correct at the time of publication.

**OCR (Oxford Cambridge and RSA Examinations)** 1 Hills Road Cambridge **CB1 2EU** 

## **OCR Customer Contact Centre**

# 14 – 19 Qualifications (General)

Telephone: 01223 553998 Facsimile: 01223 552627

Email: general.qualifications@ocr.org.uk

## www.ocr.org.uk

For staff training purposes and as part of our quality assurance programme your call may be recorded or monitored

Oxford Cambridge and RSA Examinations is a Company Limited by Guarantee Registered in England Registered Office; 1 Hills Road, Cambridge, CB1 2EU Registered Company Number: 3484466 **OCR** is an exempt Charity

**OCR (Oxford Cambridge and RSA Examinations)** Head office

Telephone: 01223 552552 Facsimile: 01223 552553

