



General Certificate of Education

Economics 5141

ECN1 Markets and Market Failure

Mark Scheme

2005 examination - June series

Mark schemes are prepared by the Principal Examiner and considered, together with the relevant questions, by a panel of subject teachers. This mark scheme includes any amendments made at the standardisation meeting attended by all examiners and is the scheme which was used by them in this examination. The standardisation meeting ensures that the mark scheme covers the candidates' responses to questions and that every examiner understands and applies it in the same correct way. As preparation for the standardisation meeting each examiner analyses a number of candidates' scripts: alternative answers not already covered by the mark scheme are discussed at the meeting and legislated for. If, after this meeting, examiners encounter unusual answers which have not been discussed at the meeting they are required to refer these to the Principal Examiner.

It must be stressed that a mark scheme is a working document, in many cases further developed and expanded on the basis of candidates' reactions to a particular paper. Assumptions about future mark schemes on the basis of one year's document should be avoided; whilst the guiding principles of assessment remain constant, details will change, depending on the content of a particular examination paper.

AQA Advanced Subsidiary Economics

June 2005

ECN1/1

This component is an objective test for which the following list indicates the correct answers used in marking the candidates' responses.

KEY LIST

1.	B	9.	A
2.	C	10.	D
3.	B	11.	A
4.	C	12.	C
5.	D	13.	C
6.	A	14.	C
7.	B	15.	D
8.	A		

Advanced Subsidiary Economics**June 2005****ECN1/2****Mark Scheme****General Instructions**

Marks awarded to candidates should be in accordance with the following mark scheme and examiners should be prepared to use the full range of marks available. The mark scheme for most questions is flexible, permitting the candidate to score full marks in a variety of ways. Where the candidate's response to a question is such that the mark scheme permits full marks to be awarded, full marks **MUST** be given. A perfect answer is not necessarily required for full marks. But conversely, if the candidate's answer does not deserve credit, then no marks should be given.

Occasionally, a candidate may respond to a question in a reasonable way, but the answer may not have been anticipated when the mark scheme was devised. In this situation, **OR WHENEVER YOU HAVE ANY DOUBT ABOUT THE INTERPRETATION OF THE MARK SCHEME**, you must in the first instance telephone your team leader to discuss how to proceed.

Two approaches have been used in the construction of the mark scheme for the data response questions:

- (i) **An 'issue' based approach.** The mark scheme for parts (a) and (b) of the data response questions adopts this approach. The mark scheme lists the marks that can be awarded for particular issues (and associated development) that the candidate might include in the answer. Marks awarded for development should take into account the Quality of Written Communication used by candidates as indicated on page 5 of this mark scheme.
- (ii) **A 'levels' approach.** This approach is used for marking part (c) of the questions. The mark scheme summarises the information required to answer the question, but without attaching marks to particular issues. Marks should be awarded according to whether the answer displays the skills indicated by the five Mark Band Descriptors or "Levels of Skill" included in the mark scheme. The Mark Band Descriptors are set out on page 4. When using a 'levels' mark scheme the marker **must** identify where a particular skill is being demonstrated. The **key** to be used to identify the skill is also shown on page 5. The level chosen should be the one which **best fits** the answer provided by the candidate. It is **not** intended that the answer should satisfy every statement in the level description.

APPLYING THE 'LEVELS' MARK SCHEME

Levels of Response Mark Band Descriptors

In part (c) of the data response questions approximately half the marks are available to award to candidates who demonstrate that they can 'evaluate economic arguments and evidence, and make informed judgements'. It is not necessary that the candidate identifies a wide range of issues. As indicated below, the Quality of Written Communication used should be taken into account when awarding the marks.

Level 1

Few, if any, relevant issues are recognised. Economic concepts and principles are not adequately understood or applied to the question. No satisfactory analysis or evaluation. A poorly organised response which generally fails to answer the question. Descriptions and explanations lack clarity. Spelling, punctuation and grammar may be poor. There is little use of economic terminology.

0 to 3 marks

Mid-Point 2 marks

Level 2

One or more relevant issues are recognised. An attempt is made to use basic economic concepts to answer the question but the candidate's explanation may become confused. There may be some attempt to present alternative points of view but any attempt at evaluation is superficial. The answer is likely to be poorly organised and is unlikely to have a clear structure. The candidate demonstrates some ability to spell commonly used words and to follow the standard conventions of punctuation and grammar. Some use of economic terminology is made but this is not always applied appropriately.

4 to 6 marks

Mid-Point 5 marks

Level 3

Two or more relevant issues are recognised. The candidate has made a reasonable attempt to apply economic concepts and ideas. A satisfactory understanding of some basic economic concepts and theories is demonstrated. There will be some attempt to present alternative points of view and to evaluate the issues, arguments and/or data. There is some logic and coherence in the organisation of the answer. The candidate is generally able to spell commonly used words and usually follows the standard conventions of punctuation and grammar. Some descriptions and explanations are easy to understand, but the answer may not be expressed clearly throughout. There is some evidence of the correct use of relevant economic terminology.

7 to 10 marks

Mid-Point 9 marks

Level 4

Two or more relevant issues are identified. Good understanding of some basic economic concepts and models is demonstrated. The candidate is able to apply these concepts and models to help answer the question. An appreciation of alternative points of view is shown. Satisfactory use is made of evidence and/or theoretical analysis to evaluate the issues/arguments identified and to support conclusions. Spelling is generally accurate and the standard conventions of punctuation and grammar are usually followed. The answer is well organised. Descriptions and explanations are usually clearly expressed. Appropriate use is made of relevant economic terminology.

11 to 13 marks

Mid-Point 12 marks

Level 5

Three or more relevant issues are identified. Good understanding of basic economic concepts and models is demonstrated throughout. The candidate is able to apply these concepts and models to help answer the question. Clear understanding of alternative points of view is shown. Good use is made of evidence and/or theoretical analysis to evaluate the issues/arguments identified and to support conclusions. Spelling is generally accurate and the standard conventions of punctuation and grammar are usually followed. The answer is well organised. Descriptions and explanations are clearly expressed. Appropriate use is made of relevant economic terminology.

14 to 15 marks

Mid-Point 15 marks

THE KEY TO BE USED WHEN USING THE ‘LEVELS’ MARKING SCHEME

- D** Where a particular economic term is correctly **DEFINED** in order to help the candidate to answer the question properly.
- I** Where a relevant **ISSUE** is raised by the candidate.
- K** Where the candidate demonstrates **KNOWLEDGE** of recent developments of features of the economy which help enhance the candidate’s response to the question. This should also be used where the candidate quotes relevant examples.
- Ap** Where the candidate demonstrates the ability to **APPLY** knowledge and **CRITICAL UNDERSTANDING** to problems and issues.
- A** Where the candidate demonstrates the ability to **ANALYSE** the problem using appropriate economic ideas.
- E** Where the candidate **EVALUATES** and makes judgements about the significance of various issues and arguments.

QUALITY OF WRITTEN COMMUNICATION

The Mark Band Descriptors, which are used for assessing part (c) of the questions, incorporate statements which relate to the Quality of Written Communication used by the candidates.

However, it is also important to assess Quality of Written Communication **whenever** candidates produce answers using continuous prose. When applying an issue based mark scheme, examiners must take into account the following when deciding how many marks to award for development:

- (i) use of an appropriate form and style of writing to organise relevant information clearly and coherently;
- (ii) use of specialist vocabulary, where appropriate;
- (iii) legibility of handwriting;
- (iv) accuracy of spelling, punctuation and grammar.

EITHER

1

Total for this question: 25 marks

- 1 (a) (i) Define price elasticity of supply. (2 marks)
- (ii) Compare the price elasticities of supply for new housing in the countries shown in **Extract A**. (2 marks)

(i)

For candidates who:

state that price elasticity of supply measures the proportionate or percentage change in the supply of a good, following an initial change in the good's price: **2 marks**

or who provide an accurate formula for price elasticity of supply: **2 marks**

Formula: Price elasticity of supply = $\frac{\% \text{ (or proportionate) change in quantity supplied of a good}}{\% \text{ (or proportionate) change in the good's price}}$

Do not award marks for definitions that confuse absolute with proportionate responsiveness, or which confuse supply with demand.

Allow 1 mark for defining price elasticity of supply as the responsiveness of supply to a change in price.

Maximum of 2 marks for (a) (i)

(ii)

For candidates who:

compare the elasticities of one country where supply is elastic and one country where supply is inelastic: **1 mark**

or who:

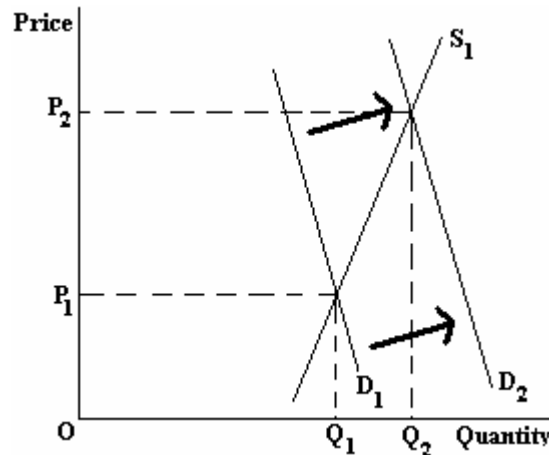
compare the elasticities of all three countries where supply is elastic and all three countries where supply is inelastic: **2 marks**

make any other relevant point of comparison, eg comparison of the highest and the lowest elasticities; a numerical illustration of the effects of price changes in different countries; note that all the elasticities are positive: **1 mark each point**

Maximum of 2 marks for (a) (ii)

MAXIMUM FOR PART (a) 4 MARKS

- 1 (b) With the help of a supply and demand diagram and the information on elasticities in **Extract B**, explain how an increase in household income affects the price of housing in the United Kingdom. (6 marks)



For the diagram, award 1 mark for each of the following:

- drawing a supply and demand diagram, accurately labelled, showing an initial equilibrium price and quantity for housing
- showing inelastic demand and supply curves on the diagrams
- drawing a new demand curve to the right of the original demand curve
- labelling excess demand at the initial equilibrium price
- showing the new equilibrium price which is above the initial equilibrium price

Maximum of 4 marks for the diagram

For the written explanation, award 1 mark for each of the following:

- explaining that the equilibrium price of housing is determined where demand equals supply
- explaining that excess demand is created at the initial equilibrium price
- explaining that the price rises to eliminate the excess demand
- any other relevant point, eg rising consumer confidence increasing demand

Award up to 2 marks each for:

- relevant application of the information on **each** of the elasticities in Extract B, eg for explaining that when incomes rise, with a positive income elasticity of demand (or when the good is a normal good) the demand curve shifts rightward and/or the quantity demanded increases

Maximum of 4 marks for a written explanation

Maximum of 3 marks for a diagram with no written explanation, or for a written explanation without a relevant diagram

Maximum of 4 marks in total if there is no accurate application of elasticities in the written answer

MAXIMUM FOR PART (b) 6 MARKS

- | |
|--|
| 1 (c) In the light of the possible effects on the environment and on leisure activities, evaluate the view that all government controls on new housebuilding should be removed. (15 marks) |
|--|

Although this question is on the housing market, it also covers aspects of the environment and the use of land for sport and leisure. Extract C provides the following prompts relating to effects unleashed when new houses are built: (implied) cheaper housing, particularly for younger households; production of negative externalities; infrastructure costs; loss of leisure facilities; and the loss of external benefits such as the visual amenity of a more natural landscape. Good answers should discuss how government controls may affect the private and the external benefits and costs of house building. Benefits and costs other than those in Extract B may be discussed, such as the benefits to construction firms and to industries allowed to locate on what was previously green belt land, a possible acceleration of urban decline in inner-city low cost housing areas, and the effect on neighbouring communities. However, full marks can be earned by an answer based solely on the prompts provided by Extract C, providing there is sufficient analysis and evaluation.

To achieve more than 7 marks, candidates will need to make plausible judgements about the issues posed by the question. Good answers may display candidates' knowledge of, and ability to analyse and evaluate the consequences of the difference between external and private costs and benefits.

The issues identified below are intended to provide an indication of some of the areas which might be discussed. Candidates can only be expected to consider a few of these issues in the time available.

Issues and areas for discussion include:

- Identification of private costs and benefits in the context of the question;
- Understanding of the difference between social and private costs and benefits;
- Identification of external costs and benefits in the context of the question;
- Explanation of how unregulated markets may generate market failure(s);
- The possibility of government failure resulting from controls on house building;
- Explanation and analysis of the prompts in Extract C;
- Consideration of costs and benefits not directly indicated by the data;
- Discussion of different types of government control.

Also give credit for:

- Relevant use of data and/or candidate's knowledge;
- Relevant use of prompts;
- Relevant use of evidence;
- Overall assessment.

USE THE LEVELS MARK SCHEME ON PAGES 4 & 5

MAXIMUM FOR PART (c) 15 MARKS

OR

2

Total for this question: 25 marks

2 (a) Using **Extract D**, calculate the percentage change in the price of metals:

(i) from 1995 to December 2003; (2 marks)

(ii) from February 2003 to December 2003. (2 marks)

(i)

For candidates who:

state that the price **fell**:

1 mark

provide the percentage size of the fall, namely 8.7 (allow from 8.0 to 9.0):

1 mark

Maximum of 2 marks for (i)

(ii)

For candidates who:

state that the price **rose**:

1 mark

provide the percentage size of the rise, namely 22.5 (allow from 22.0 to 23.0):

1 mark

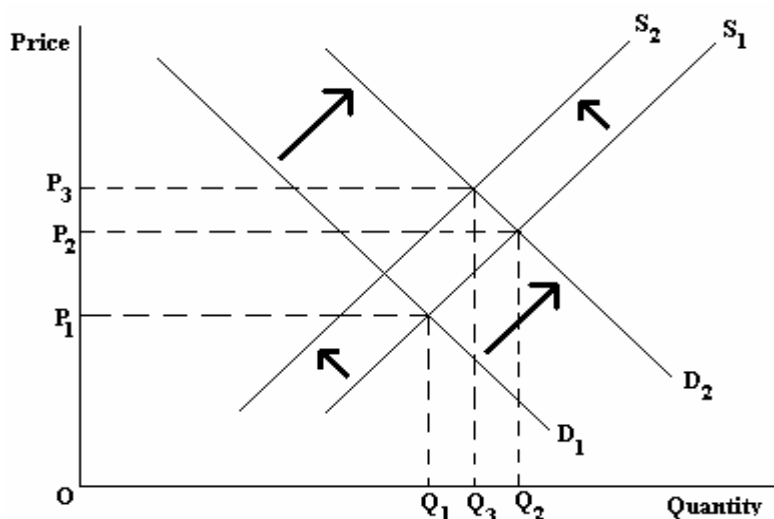
Do not award a mark for a candidate whose answer is restricted to $91.3 - 74.5 = 16.8$. To earn the mark, this has to be converted into a percentage change.

Maximum of 2 marks for (ii)

MAXIMUM FOR PART (a) 4 MARKS

2 (b) With the help of a supply and demand diagram and the information in **Extract E**, explain **two** factors that caused the price of nickel to rise in 2003. (6 marks)

Three factors can be identified from Extract E, but candidates only need to identify and explain two of these. One is a supply factor, namely the effect of a strike reducing supply and shifting the supply curve leftwards. The other two factors shift the demand curve rightward, namely growing demand by industries that use nickel as a raw material, and speculative demand for nickel.



An answer based on a shift of the demand curve from D_1 to D_2 can earn full marks, provided the two causes of the shift of demand are explained, even if no mention is made of the leftward shift of supply. Equally, an answer which explains one reason for the rightward shift of demand and the effect of the strike shifting supply leftward to S_2 , can also earn full marks. No marks should be awarded for explaining destocking by Russian producers (which shifted supply rightward and reduced the price), unless it is used as a cause of speculative demand, given the possibility of stocks running out.

For the diagram, award 1 mark for each of the following:

- drawing a supply and demand diagram, accurately labelled, showing an initial equilibrium price for nickel
- drawing a new demand curve to the right of the original demand curve
- drawing a new supply curve to the left of the original supply curve
- labelling excess demand at the initial equilibrium price
- showing the new equilibrium price above the initial equilibrium price

Maximum of 4 marks for the diagram

For the written explanation, award up to 2 marks for:

explaining a reason (or factor) for the demand curve shifting rightward or the supply curve shifting leftward.

One mark for very basic explanation, the second mark for development. The factors are bullet-pointed in Extract E. No marks for identifying a factor without explaining it.

Maximum of 4 marks for the written explanation

Maximum of 4 marks for an answer which investigates only one factor

Maximum of 3 marks for a diagram with no written explanation, or for a written explanation without a relevant diagram

MAXIMUM FOR PART (b) 6 MARKS

- 2 (c) It is often argued that buffer stock schemes should be used to control the prices of industrial raw materials such as nickel and tin.

Assess the possible **advantages** and **disadvantages** of using a buffer stock scheme to control the price of an industrial raw material. *(15 marks)*

The data in the extracts makes no mention of buffer stock policies, but support buying (and selling) is one of the methods of government intervention in markets, which is mentioned explicitly in the specification. The data provides information about price fluctuations in the nickel market that might, in principle, be reduced by buffer stock intervention. Tin is not mentioned in the data, but is mentioned in the question, as a prompt for candidates who have been taught about the reasons for, and the eventual collapse of, an international buffer stock scheme for tin, which occurred a few years ago. Candidates are not required to mention nickel or tin in their answers, though, given the amount of information about nickel in the data, it is expected that many will base their answers around nickel.

To achieve more than 7 marks, candidates will need to show that they can use an example, such as that provided by the information on nickel in the data, to make plausible judgements about the issues posed by the question. Good answers will explain the main features of buffer stock intervention, and analyse and evaluate the problems of maintaining successfully this form of intervention in a market.

The issues identified below are intended to provide an indication of some of the areas which might be discussed. Candidates can only be expected to consider a few of these issues in the time available.

Issues and areas for discussion include:

- Why prices of industrial raw materials such a nickel and tin fluctuate;
- Whether such fluctuations are acceptable;
- Explanation of buffer stock intervention;
- The use of diagrams to illustrate buffer stock intervention;
- The conditions necessary for successful intervention;
- Problems arising as a result of buffer stock intervention;
- Problems resulting from the international nature of required intervention;
- How such problems might be addressed;
- Resource allocation and efficiency issues.

Also give credit for:

- Relevant use of data and/or candidate's knowledge;
- Relevant use of prompts;
- Relevant use of evidence;
- Overall assessment.

USE THE LEVELS MARK SCHEME ON PAGES 4 & 5

MAXIMUM FOR PART (c) 15 MARKS