



Rewarding Learning

ADVANCED
General Certificate of Education
2017

Economics

Assessment Unit A2 1

assessing

Business Economics

[AE211]

TUESDAY 13 JUNE, AFTERNOON

**MARK
SCHEME**

General Marking Instructions

This mark scheme is intended to ensure that the A2 examinations are marked consistently and fairly. The mark scheme provides examiners with an indication of the nature and range of candidate responses likely to be worthy of credit. It also sets out the criteria which they should apply in allocating marks to candidates' responses. The mark schemes should be read in conjunction with these general marking instructions which apply to all papers.

Quality of candidates' responses

In marking the examination paper, examiners will be looking for a quality of response reflecting the level of maturity which may reasonably be expected of 18-year-olds, which is the age at which the majority of candidates sit their A2 examinations.

Flexibility in marking

The mark scheme is not intended to be totally prescriptive. For many questions, there may be a number of equally legitimate responses and different methods by which the candidates may achieve good marks. No mark scheme can cover all the answers which candidates may produce. In the event of unanticipated answers, examiners are expected to use their professional judgement to assess the validity of answers. If an answer is particularly problematic, then examiners should seek the guidance of the Supervising Examiner for the paper concerned.

Positive marking

Examiners are encouraged to be positive in their marking, giving appropriate credit for valid responses rather than penalising candidates for errors or omissions. Examiners should make use of the whole of the available mark range for any particular question and be prepared to award full marks for a response which is as good as might reasonably be expected for 18-year-old candidates. Conversely, marks should only be awarded for valid responses and not given for an attempt which is completely incorrect and inappropriate.

Types of mark schemes

Mark schemes for questions which require candidates to respond in extended written form are marked on the basis of levels of response which take account of the quality of written communication. These questions are indicated on the cover of the examination paper. Other questions which require only short answers are marked on a point for point basis with marks awarded for each valid piece of information provided. Some material may be included in the mark scheme for the benefit of teachers and pupils preparing for future examinations. Candidates are not expected to have provided this information. Such material is printed in the mark scheme in italics.

Levels of response

Questions requiring candidates to respond in extended writing are marked in terms of levels of response. In deciding which level of response to award, examiners should look for the "best fit" bearing in mind that weakness in one area may be compensated for by strength in another. In deciding which mark within a particular level to award to any response, examiners are expected to use their professional judgement. The following guidance is provided to assist examiners.

Threshold performance: Response which just merits inclusion in the level and should be awarded a mark at or near the bottom of the range.

Intermediate performance: Response which clearly merits inclusion in the level and should be awarded a mark at or near the middle of the range.

High performance: Response which fully satisfies the level description and should be awarded a mark at or near the top of the range.

Marking calculations

In marking answers involving calculations, examiners should apply the “own figure rule” so that candidates are not penalised more than once for a computational error.

Quality of written communication

Quality of written communication is taken into account in assessing candidates’ responses to all questions that require them to respond in extended written form. These questions are marked on the basis of levels of response. The description for each level of response includes reference to the quality of written communication. Where the quality of candidates’ economics is not matched by the quality of written communication, marks awarded will not exceed the maximum for Level 2 in questions which have three levels of response or the maximum for Level 3 in those which have four levels of response.

For conciseness, quality of written communication is distinguished within levels of response as follows:

Level 1: Quality of written communication is limited.

Level 2: Quality of written communication is satisfactory.

Level 3: Quality of written communication is of a high standard.

Level 4: Quality of written communication is excellent.

In interpreting these level descriptions, examiners should refer to the more detailed guidance provided below:

Level 1 (Limited): The candidate makes only a limited attempt to select and use an appropriate form and style of writing. The organisation of material may lack clarity and coherence. There is little use of specialist vocabulary. Presentation, spelling, punctuation and grammar may be such that intended meaning is not clear.

Level 2 (Satisfactory): The candidate makes a reasonable attempt to select and use an appropriate form and style of writing, supported with appropriate use of diagrams as required. Relevant material is organised with some clarity and coherence. There is some use of appropriate specialist vocabulary. Presentation, spelling, punctuation and grammar are sufficiently competent to make meaning evident.

Level 3 (High Standard): The candidate successfully selects and uses an appropriate form and style of writing, supported with the effective use of diagrams where appropriate. Relevant material is organised with a high degree of clarity and coherence. There is widespread use of appropriate specialist vocabulary. Presentation, spelling, punctuation and grammar are of a sufficiently high standard to make meaning clear.

Level 4 (Excellent): The candidate successfully selects and uses the most appropriate form and style of writing, supported with precise and accurate use of diagrams where appropriate. Relevant material is extremely well organised with the highest degree of clarity and coherence. There is extensive and accurate use of appropriate specialist vocabulary. Presentation, spelling, punctuation and grammar are of the highest standard and ensure that meaning is absolutely clear.

- 1 (a) • It is clear from the chart that there are similarities in both the timing and size of the price changes announced by the big 6.
- At the end of 2012 all 6 companies implemented price changes within a 4 month period between October 2012 and January 2013. The price changes were of a very similar magnitude with the highest price hike being 10.5% and the smallest 6%. This represents a range of 4.5 percentage points.
 - At the end of 2013 another round of price changes occurred. These were even more closely timed together with all 6 implementing price changes within a two month period. They were also much closer together in terms of magnitude with a range of just 2.1 percentage points.
 - At the beginning of 2014 price cuts were announced by 5 of the big 6 which were very similar in size with only a 1.7 percentage points range. However EDF actually increased prices by 3.9% in this period.
 - The changes in 2015 were more spread out in terms of time ranging from February to June with a price change range of 3.8 percentage points.
 - However it should also be noted that over the period shown, the total change in prices differs significantly between companies. For example by June 2015 EDF had a net increase of between 22% and 24% (depending on how it is calculated). This is about 3 times more than British Gas who had a net increase of approximately 7% over the same period.

[3] For explanation of the similarities in both timing and magnitude of price changes

[2] For explanation of differences in price changes over the period [5]

- (b) Source 2 identifies a number of features in the UK retail energy market that makes it difficult for new firms to enter and compete with the existing big six.

- Significant capital is required to trade in the wholesale energy market. This level of capital may be beyond all but the very largest firms.
- All of the big six are vertically integrated – which means they can avail of significant cost savings compared to non-vertically integrated firms.
- The range and complexity of deals available makes it difficult for consumers to compare deals and therefore makes it difficult for new entrants to entice customers away from the big six incumbent firms.
- Energy is a homogeneous product so it is difficult for new firms to differentiate themselves significantly through non-price methods to attract customers.
- The intangible nature of energy leads to a lack of customer engagement and therefore leads to inertia and a reluctance to switch to unfamiliar firms.

Areas for analysis and development include:

- Definition/explanation of barriers to entry or exit
- Reference to capital cost required to trade in wholesale energy markets
- Reference to initial capital cost required to generate energy
- Reference to minimum efficient scale of production and economies of scale
- Reference to the cost advantages enjoyed by the 6 incumbent firms as a result of being vertically integrated

- Reference to customer inertia
- Reference to the range and complexity of tariffs that results in consumers being unable to effectively compare prices
- Reference to the fact that energy is homogenous and therefore new firms find it difficult to differentiate their product.

Level 1 ([1]–[3])

Candidate shows very limited understanding of why it is difficult for new firms to enter the UK energy retail market and compete with the big six. There is no significant analysis or application and quality of written communication is limited.

Level 2 ([4]–[7])

Candidate provides some understanding of why it is difficult for new firms to enter the UK energy retail market and compete with the big six. There is a degree of analysis and application and quality of written communication is satisfactory.

Level 3 ([8]–[10])

Candidate provides a clear and comprehensive understanding of why it is difficult for new firms to enter the UK energy retail market and compete with the big six. There is significant analysis and application and quality of written communication is of a high standard. [10]

- (c) Determining whether the big 6 are earning supernormal profits from their retail divisions in the UK is a difficult task not least because of the problems in accurately defining supernormal profits with many arguing that the theoretical definition is of little use in reality.

To determine if profits are excessive an economist might:

- Compare the profits of the firm in question with other firms in the industry – however this will tell you very little if all firms are earning excessive profits. In the UK energy market all 6 of the big firms have been accused of earning excessive profits.
- Compare the profits of the firm or industry with others in the same industry in other countries – however if the firms in other countries are also earning super normal profits this will tell you very little. The natural barriers to entry to this industry mean that in most countries the industry is oligopolistic and hence there is the potential for super normal profits. In addition, it is difficult to make accurate comparisons because different countries have different regulations.
- Compare the profits of the industry with the profits of firms in similar sized industries in the UK. According to Laurence Sandler the average net profit ratio for the UK energy sector is 3.9% compared to 5% in the UK grocery market.

In addition to the problems highlighted above, economists face a number of additional obstacles when trying to determine if the big six energy firms are earning supernormal profits from their retail divisions in the UK:

- Difficulty in getting accurate up to date information – Laurence Sandler argues that the data used by Ofgem is outdated, statistically biased and inaccurate.
- Difficulty in separating the profits earned from the retail sector from the profits earned in energy generation or trading. All of the big six are

vertically integrated and earn profits in these areas. Vertically integrated firms can also use transfer pricing to reduce or inflate the profits reported by one section of the business.

- Difficulty in separating UK profits from profits earned elsewhere – 5 of the big 6 operate in other countries but report their profits in the UK.
- Difficulty in choosing an index or ratio which accurately reflects profitability. The source refers a number of different indicators which all give very different impressions of relative profitability – ROCE, Net Profit Ratio, pre-tax profit per household etc.

Level 1 ([1]–[3])

Candidate shows very limited understanding of why it might be difficult for economists to determine if the big six energy firms are earning supernormal profits from their retail divisions in the UK. There is no significant analysis, application or evaluation of the issues and quality of written communication is limited.

Level 2 ([4]–[7])

Candidate provides some understanding of why it might be difficult for economists to determine if the big six energy firms are earning supernormal profits from their retail divisions in the UK. There is a degree of analysis and application and quality of written communication is satisfactory.

Level 3 ([8]–[10])

Candidate provides a clear and comprehensive understanding of why it might be difficult for economists to determine if the big six energy firms are earning supernormal profits from their retail divisions in the UK. There is significant analysis and application with some degree of evaluation and quality of written communication is of a high standard. [10]

- (d) Those who support nationalisation argue that the market does not function well as it stands and that nationalisation would lead to lower prices, greater efficiency and better customer service while also allowing the government to plan strategically for the long term and for the whole country.

Opponents however argue that nationalisation will remove the profit motive and ultimately result in reduced efficiency, less innovation, poorer quality service and higher prices. They also argue that nationalisation will cost billions at a time when the country is already struggling to cut the national debt.

Areas for analysis and discussion include:

- Impact of nationalisation on efficiency
- Impact of nationalisation on the quality of service provided
- Impact of nationalisation on price and long term investment
- Competing objectives of energy firms and governments
- Cost of nationalisation – *initial analysis puts the cost to the tax payer at £185bn*
- Opportunity cost of nationalisation
- Reference to the fact that nationalisation would contravene a number of EU laws
- Reference to alternative policies
- Reference to the belief that the UK energy market actually functions quite well and therefore does not require any further intervention

- Appropriate examples
- Appropriate diagrams.

AVAILABLE
MARKS

Level 1 ([1]–[5])

Candidate displays little understanding of the case for and against the full nationalisation of the UK energy market. There is no significant evaluation of the issues and quality of written communication is limited.

Level 2 ([6]–[10])

Candidate provides some understanding of the case for and against the full nationalisation of the UK energy market. There is a degree of evaluation though this may lack depth or be one sided. Quality of written communication is satisfactory.

Level 3 ([11]–[15])

Candidate provides a clear and comprehensive understanding of the case for and against the full nationalisation of the UK energy market. There is significant evaluation and judgement and quality of written communication is of a high standard. [15]

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2 Social costs of economic activity are difficult to measure

AVAILABLE
MARKS

- (a)
- The social cost of an economic activity is equal to the sum of all the private costs plus all external costs.
 - The private costs of production include the cost of machinery, raw materials and labour costs.
 - The external costs include the cost to society of the visual and noise pollution associated with production and the cost to the environment and local economy of any pollution or congestion.

It is relatively easy to estimate the private costs, since many of them are published in the company's accounts, but it is much more difficult to calculate the external costs. For example how do we put a value on noise pollution or on the death of wildlife or the destruction of natural habitat? Calculating the external cost to the local economy is also fraught with difficulty. For example when trying to calculate the social cost of the Shell oil spill in the North sea on local fishermen, estimates could be made of how much fish each fisherman is likely to have caught in the period the waters were polluted and the likely market price of these fish at that time. When calculating the impact on the local tourist industry estimates need to be made of the likely number and spending patterns of lost tourists. These estimates are clearly open to interpretation and it is for this reason that estimates of the social cost of any activity can vary significantly.

Issues for analysis and discussion include:

- Definition or explanation of social costs
- Definition or explanation of external costs
- Distinction between private and external costs
- Discussion of the difficulty in getting accurate data on all private costs
- Discussion of the difficulty in estimating external costs for example trying to place a monetary value on non-traded entities such as wildlife and natural habitats
- Appropriate examples
- Appropriate diagrams.

Level 1 ([1]–[5])

Candidate shows very limited understanding of how it might be difficult for an economist to measure the social cost of production. There is no significant analysis or application and quality of written communication is limited.

Level 2 ([6]–[10])

Candidate provides some understanding of how it might be difficult for an economist to measure the social cost of production. There is a degree of analysis and application and quality of written communication is satisfactory.

Level 3 ([11]–[15])

Candidate provides a clear and comprehensive understanding of how it might be difficult for an economist to measure the social cost of production. There is significant analysis and application and quality of written communication is of a high standard.

[15]

(b) There is a range of policies open to government to reduce the negative impact of production on society. Each of these policies has their own benefits and drawbacks. These policies include:

- Subsidizing environmentally friendly forms of production
- Environmental legislation
- Environmental taxation
- Tradable pollution permits
- Extension of property rights.

Areas for analysis and discussion include:

- Effectiveness of legislation
- Cost of enforcement
- Impact on price
- Impact on efficiency
- Impact on and use of tax revenues
- Administration costs
- Government failure
- Opportunity cost of subsidy
- Appropriate examples
- Appropriate diagrams

Level 1 ([1]–[7])

Candidate shows little understanding of the range of policies the UK government could use to reduce the negative impact of production on society. There is no significant analysis or evaluation and quality of written communication is limited.

Level 2 ([8]–[13])

Candidate shows some understanding of the range of policies the UK government could use to reduce the negative impact of production on society. There is some attempt at analysis and evaluation and quality of written communication is satisfactory.

Level 3 ([14]–[19])

Candidate shows in-depth understanding of the range of policies the UK government could use to reduce the negative impact of production on society. There is significant analysis and evaluation of the arguments and quality of written communication is of a high standard.

Level 4 ([20]–[25])

Candidate shows clear and comprehensive understanding of the range of policies the UK government could use to reduce the negative impact of production on society. There is significant evaluation and judgment of the arguments and quality of written communication is excellent. [25]

AVAILABLE
MARKS

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3 Concentration is the key to efficiency

AVAILABLE
MARKS

- (a) A market is said to be perfectly competitive when individually buyers and sellers believe that their own actions will have no influence on the market price.

Perfectly competitive markets rarely exist in the real world however agriculture, market gardening and the foreign exchange markets are the best examples.

The assumptions of perfect competition

1. There are a large number of buyers and sellers who buy and sell such a small amount that they cannot affect market demand or supply.
2. The firms produce homogeneous products.
3. There is perfect knowledge of market conditions for both buyers and sellers.
4. There are no barriers to entry. Firms are free to enter and leave the industry.

These characteristics mean that the perfectly competitive firm is a price-taker.

As a result of these characteristics perfectly competitive firms will only make normal profits in the long run. In long run equilibrium both allocative and productive efficiency is achieved. The competitive pressures in the industry mean that all firms in the industry must produce at the point where AC are minimised and where $P=MC$ - If they were not efficient other efficient firms would enter the industry and undercut them.

Areas for analysis and discussion include:

- Appropriate diagram
- Appropriate examples
- Assumption of model
- Discussion of allocative and productive efficiency.

Level 1 ([1]–[5])

Candidate shows little understanding of a perfectly competitive market. Quality of written communication is limited.

Level 2 ([6]–[10])

Candidate shows some understanding of a perfectly competitive market but this may be incomplete or contain errors. The answer may be supported by a diagram. Quality of written communication is satisfactory.

Level 3 ([11]–[15])

Candidate shows detailed understanding of a perfectly competitive market. The answer may be supported by an accurately drawn diagram. Quality of written communication is of a high standard. [15]

- (b) Traditional economic theory suggests that highly competitive industries are more likely to be economically efficient than those where there is less competition. Intense competition will force firms to charge a price which is equal to their marginal cost of production and hence allocative efficiency will occur. This pressure on price will in turn force firms to minimise the average cost of each unit produced and so productive efficiency will occur.

However it could be argued that firms which operate in less competitive markets are more likely to invest in research and development and therefore these industries are more likely to achieve dynamic efficiency. It could also be argued that firms which face little competition can grow large enough to avail of economies of scale which would reduce average costs and so lead to greater productive efficiency.

Finally it has been suggested that it is not the actual level of competition a firm faces which forces it to be efficient but the level of potential competition.

Issues for discussion and evaluation include:

- Comparison of monopoly/oligopoly with perfect competition/monopolistic competition
- Reference to minimum efficient scale of production
- Reference to economies of scale
- Reference to contestability
- Different measures of efficiency
- Reference to measures of concentration
- Appropriate examples
- Appropriate diagrams.

Level 1 ([1]–[7])

Candidate shows little understanding of the view that economic efficiency is more likely to be achieved in a highly concentrated industry rather than a highly competitive industry. There is no significant analysis or evaluation and quality of written communication is limited.

Level 2 ([8]–[13])

Candidate shows some understanding of the view that economic efficiency is more likely to be achieved in a highly concentrated industry rather than a highly competitive industry. There is some attempt at analysis and evaluation and quality of written communication is satisfactory.

Level 3 ([14]–[19])

Candidate shows in-depth understanding of the view that economic efficiency is more likely to be achieved in a highly concentrated industry rather than a highly competitive industry. There is significant analysis and evaluation of the arguments and quality of written communication is of a high standard.

Level 4 ([20]–[25])

Candidate shows clear and comprehensive understanding of the view that economic efficiency is more likely to be achieved in a highly concentrated industry rather than a highly competitive industry. There is significant evaluation and judgment of the arguments and quality of written communication is excellent.

[25]

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4 Foreign takeovers are bad for all UK stakeholders

- (a) Organic growth occurs whenever a firm increases its production and sales internally through methods such as geographical expansion, product diversification or increased advertising and promotion of its current product range.

A merger occurs whenever two firms agree to join together to form one larger company. Mergers can be classified as horizontal, vertical (vertical forward and vertical backward) lateral and conglomerate.

An acquisition occurs when one firm takes over another firm or buys a part of another firm. Acquisitions can be friendly or hostile.

Areas for analysis and discussion include:

- Definition and explanation of organic growth
- Examples of organic growth
- Explanation of different types of merger
- Explanation of acquisition
- Distinction between friendly and hostile takeovers
- Examples of different types of merger.

Level 1 ([1]–[5])

Candidate shows little understanding of the difference between organic growth and growth by acquisition or merger. Quality of written communication is limited.

Level 2 ([6]–[10])

Candidate shows some understanding of the difference between organic growth and growth by acquisition or merger but this may be incomplete or contain errors. Quality of written communication is satisfactory.

Level 3 ([11]–[15])

Candidate shows detailed and comprehensive understanding of the difference between organic growth and growth by acquisition or merger. Quality of written communication is of a high standard. [15]

- (b) Those who are opposed to the foreign takeover of UK firms argue that since foreign firms feel no allegiance to the UK they can be bad for the UK economy in a number of ways:
- Foreign takeovers often lead to plant closures and job losses in the UK as the new company seeks cost savings
 - Foreign takeovers can lead to lower tax revenues for the UK government as foreign firms are more likely to move their headquarters to a low tax centre
 - Some argue that foreign firms are less likely to invest in physical and human capital than indigenous firms
 - When economic conditions become unfavourable foreign firms are more likely to retreat to their home nation
 - Foreign firms have little understanding or respect for UK traditions and systems and as a result foreign takeovers can undermine UK business culture

- Trade unions argue that pay and conditions often deteriorate in the aftermath of foreign takeovers and this ultimately harms the UK economy
- Foreign firms often buy UK companies to strip their assets and sell them on at a profit.

Opponents of foreign takeovers argue that other Western European governments such as France have national interest tests for foreign takeovers which allow them to prevent important national companies falling under foreign ownership. They believe the UK should adopt a similar test to limit foreign takeovers of UK firms.

There are others however who argue that foreign takeovers may actually benefit the UK economy. Specifically they argue that:

- Foreign firms bring much needed investment to the UK which has a positive impact on the balance of payments and economic growth
- Foreign firms bring experience and expertise to the UK which benefits not only the target company but also other companies who can learn from foreign firms
- In some cases the pay and conditions in foreign firms is better than that of UK firms
- Foreign takeovers are simply an endorsement of the UK's reputation as an open economy which is a good place to do business – a complete ban would send out a poor message about the UK economy
- Foreign takeovers can lead to higher tax revenues if the combined firm bases itself in the UK.

Areas for analysis and discussion include:

- Reference to possible impact on jobs in UK
- Discussion of possible impact on working conditions
- Reference to possible impact on tax revenues to Exchequer
- Impact of foreign takeovers on macro economy – balance of payments, economic growth etc.
- Reference to cultural differences between UK firms and foreign firms
- Reference to knowledge transfers between UK firms and foreign firms
- Discussion of impact of different motives for takeover – asset stripping, economies of scale, synergies, tax advantages, market power
- Discussion of difficulty in banning all foreign takeovers and potential for retaliation
- Appropriate examples
- Appropriate diagrams.

Level 1 ([1]–[7])

Candidate displays little understanding of the arguments for or against the view that the UK government should ban foreign takeovers of UK firms. There is no significant evaluation of the issues and quality of written communication is limited.

Level 2 ([8]–[13])

Candidate provides some understanding of the arguments for and against the view that the UK government should ban foreign takeovers of UK firms. There is a degree of evaluation though this may lack depth or be one sided. Quality of written communication is satisfactory.

Level 3 ([14]–[19])

Candidate provides in depth understanding of the arguments for and against the view that the UK government should ban foreign takeovers of UK firms. There is significant analysis and evaluation of the arguments and quality of written communication is of a high standard.

Level 4 ([20]–[25])

Candidate provides a clear and comprehensive understanding of the arguments for and against the view that the UK government should ban foreign takeovers of UK firms. There is significant evaluation and judgement and quality of written communication is excellent. [25]

Total

AVAILABLE MARKS
40
80