

# **EXAM-STYLE QUESTIONS**

# Paper 1 Markets and market failure

# **Section A Data response questions**

#### **Source A**

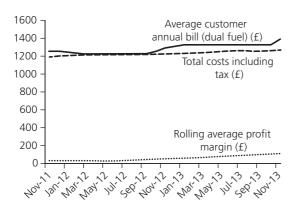
Market share of the 'big six' UK energy companies in 2009 Q4 and 2018 Q4

Energy company	Market share (%) 2009 Q4	Market share (%) 2018 Q4
British Gas	23	19
nPower	14	8
EDF	13	11
Scottish Power	12	10
E.ON	17	13
SSE	20	13

Source: OFGEM

Note: Numbers may not total 100% due to rounding.

#### **Source B**



Annual revenue, costs and profit per household for UK gas and electricity suppliers

Source: OFGEM

#### **Source C**

The domestic energy market (for gas and electricity used within homes) was privatised and deregulated to introduce a more competitive market in the UK. This should have benefited households. The production part of the gas and electricity industry was separated from the supply of gas and electricity and this is where competition should be appearing – within the domestic supply of power to households across the UK.

Allowing competition within the industry should have created a more contestable market yet in some ways the industry still appears as though it is controlled by a single giant firm or a collusive oligopoly, though not necessarily engaging in formal collusion. The market for gas and electricity is dominated by a group of firms known as the 'big six' which still control a large percentage of the market share.

Politicians have called for an investigation by the competition authorities into allegations of anti-competitive behaviour by these 'big six' firms which are alleged to be maintaining barriers to entry, such as making it hard to switch between suppliers and using unclear pricing tariffs, all of which prevent newer firms from getting established in the market.

In theory anyone can set up as a gas and electricity supplier. The energy licence needed to operate costs is only £500, but newer entrants to the market have complained that the true cost of entry is closer to £500,000 in terms of meeting industry requirements and fulfilling other regulations. There is the potential for newer entrants to earn profits as the savings on offer for households that switch are often quoted as being at least £200 per household per year – the money saved just by switching supplier. Although switching suppliers can take only a few minutes to organise, many households still stick with their more expensive original supplier.

1	Using the data in Source A, calculate the five-firm concentration ratio for the UK energy market in 2009 Q4. (2 marks)
(IVI	ark scheme and example responses on p. 49)
2	Explain how the data used in Source A show that the UK energy market has become more contestable. (4 marks)
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Ma 3	Source C refers to 'barriers to entry, such as making it hard to switch between suppliers'. With the help of a diagram, analyse the barriers to entry that might prevent more competition in th UK domestic energy industry.  (9 mark
	ark scheme and example responses on pp. 50–52)

# MARK SCHEMES AND EXAMPLE RESPONSES

# Paper 1 Markets and market failure

# **Section A Data response questions**

## **Question 1 mark scheme**

- ➤ For the correct answer (87%) 2 marks.
- For the correct calculation based on incorrect data selection (e.g. a three-firm ratio or a six-firm ratio) 1 mark.
- ➤ For an incorrect calculation but evidence of five firms being totalled in workings 1 mark.

### **Question 1 example responses**

#### Student A

87% = 23% + 20% + 17% + 14% + 13%

Correct – 2 marks awarded.

#### Student B

87%

② 2 marks are awarded, but it is always a good idea to show your working.

#### **Question 2 mark scheme**

- ➤ For good explanation with clear evidence 4 marks.
- ➤ For partial explanation with good evidence 3 marks.
- ➤ For weak explanation with good evidence 2 marks.
- For weak explanation with basic evidence 1 mark.

### **Question 2 example responses**

#### Student A

Source A shows that in 2009 Q4 the 'big six' energy firms had a 99% share of the UK energy market, while they had only 74% of the market share in 2018 Q4, a fall of 25%, showing a significant fall in market share, suggesting that other firms had been able to enter the market. Furthermore, every one of the 'big six' firms has lost individual market share, e.g. SSE has lost nearly half of its market share (falling from 20% to 13%) over the same time period. This shows that the 'big six' haven't simply maintained overall market share between themselves. Therefore the data in Source A do show that the UK energy market has become more contestable.

Clear use of data and thorough explanation. An effective structure is used – (data + explanation × 2). Care is taken not just to present data and leave the reader to make inferences. Note that both the data and units (%) are used correctly. The concluding sentence helps to emphasise the student's points. 4 marks.

#### Student B

The share of British Gas fell from 23% to 19% and the share of nPower fell from 14% to 8%. This shows that there is a loss of market power meaning a rise in contestability.

② marks awarded. Two pieces of evidence are correctly presented but the explanation is not clear enough.

#### **Question 3 mark scheme**

Use the levels of response mark scheme as follows:

**Level 3 (7–9 marks)**: A well-organised response with one or more key issues developed well. Sound knowledge of relevant economic terms and principles is present and good application will be included. Analysis is focused and will contain a clear, logical chain of reasoning. A diagram should be present.

**Level 2 (4–6 marks)**: One or more issues relevant to the question are included and are expanded upon with reasoning, knowledge and understanding of economic terms and principles. However, some weaknesses may also be present. Analysis is reasonable but is not always adequately developed and may be confused. A diagram should be present.

**Level 1 (1–3 marks)**: Response is brief and/or lacks coherence. Some limited knowledge is present but errors in understanding are likely. Analysis is likely to lack focus and to be confused. Any diagrams included are likely to be inaccurate or irrelevant.

Relevant issues include:

- definitions of barriers to entry
- > a relevant diagram
- > natural barriers, economies of scale, indivisibilities
- > artificial barriers, patents, predatory pricing
- > sunk costs
- advertising and branding

### **Question 3 example responses**

#### Student A

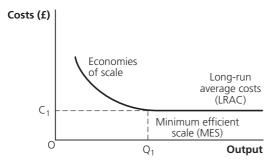
A barrier to entry is any form of obstacle which stops or makes it difficult for new firms wishing to enter a market.

This is a clear definition – a good start.

One barrier to entry that is mentioned in the extract is the sunk costs that are present. These are costs that cannot be recovered once paid — even if a firm decides to quickly exit an industry. In the extract it mentions £500,000 was spent on meeting industry requirements. This is a high amount which will put smaller firms off entering the industry and might make the industry exclusive to large firms with large financial resources.

A logical explanation and good use of the extract.

Another type of barrier to entry is the innocent barriers to entry that exist when a new firm lacks the experience or efficiency that a larger incumbent firm has already developed. This makes it very difficult for a new firm to enter the market and price competitively. Energy suppliers will have knowledge of the market and will have established customer bases and techniques on how to perform their duties efficiently. A new entrant will not necessarily have any experience in running this sort of firm and will therefore not be able to compete with the incumbent firms. In addition, a larger established firm is likely to benefit from economies of scale, as shown in the diagram below:



Larger firms, such as British Gas, may be operating at output  $Q_1$ , which brings their long run average costs down to  $C_1$ , which smaller firms may not be able to compete with. This allows larger firms to offer lower prices to customers than smaller firms attempting to enter the energy market.

Another valid barrier is logically developed, and supported by a relevant diagram.

One final barrier to entry would be if a firm used predatory pricing to keep out a new entrant. This is where an incumbent firm exploits economies of scale and can afford to set prices so low that a new entrant cannot match these low prices and therefore cannot survive in that industry. The incumbent firm would raise prices once the new entrant has been driven out of the market. This form of pricing is known as limit pricing and is actually illegal but it is difficult to prove when it is taking place.

Another logically developed point. Three barriers explained well, with a diagram used to support the response and effective use made of the source. 9 marks awarded.