

# **Economics**

# ECON3

# Unit 3 Business Economics and the Distribution of Income

Monday 23 January 2012 1.30 pm to 3.30 pm

## For this paper you must have:

- an AQA 12-page answer book
- a calculator.

#### Time allowed

• 2 hours

#### Instructions

- Use black ink or black ball-point pen. Pencil should only be used for drawing.
- Write the information required on the front of your answer book. The Examining Body for this
  paper is AQA. The Paper Reference is ECON3.
- In Section A, answer EITHER Context 1 OR Context 2.
- In **Section B**, answer **one** essay.

#### Information

- The marks for questions are shown in brackets.
- The maximum mark for this paper is 80.
- There are 40 marks for **Section A** and 40 marks for **Section B**.
- This paper is synoptic. It assesses your understanding of the relationship between the different aspects of Economics.
- You will be marked on your ability to:
  - use good English
  - organise information clearly
  - use specialist vocabulary where appropriate.

### **Advice**

• You are advised to spend 1 hour on Section A and 1 hour on Section B.

#### Section A

#### Answer EITHER Context 1 OR Context 2.

EITHER Total for this Context: 40 marks

#### Context 1

## THE GLOBAL CONTEXT

Study **Extracts A and B**, and then answer **all** parts of Context 1 which follow.

# Extract A: UK production and imports of natural gas

	2007	2008	2009	Year X (forecast)
UK production of natural gas (GWh)	840 000	810 000	700 000	560 000
Index of UK production of natural gas	120	116	100	?
UK imports of natural gas (GWh)	340 000	410 000	460 000	540 000
Index of UK imports of natural gas	74	89	100	117

Note: A gigawatt hour (GWh) is a measure of the energy content of gas.

Sources: industry information, 2010, and independent forecast

### Extract B: Supplying the energy market: the case of Milford Haven

For hundreds of years, the harbour of Milford Haven in West Wales has responded to 1 changes in the global economy. It has accommodated many global activities, including trade, defence, transport and tourism. These activities are often in potential conflict with the environment. Although it is surrounded by the Wales coastal footpath and the Pembrokeshire National Park, Milford Haven contains two massive oil refineries, several 5 leisure marinas, an international car ferry port and guays for what little remains of the West Wales fishing industry. Milford Haven Port Authority (MHPA) is a nationalised enterprise, accountable to the Department of Trade and Industry in London. Ports have often developed historically as 'public works' due to their strategic importance and because of the large amount of 10 investment needed to build port installations. Governments are trying to reduce the size of the public sector in order to improve efficiency and competition. However, given the activities with which it is involved, there are commercial and wider economic and social arguments against a body such as the MHPA being privatised. For example, the MHPA has argued that privatisation would reduce its ability to take part in infrastructure projects 15 in public-private partnerships. These partnerships involve a variety of companies and government bodies at local, regional, national and international levels.

A major strategy adopted by the MHPA involves anticipating and reacting to changes in the global energy market. The boom years of North Sea oil and gas, which created high wages in skilled jobs for northern ports such as Aberdeen, are drawing to a close. Global oil and gas markets are often concentrated markets. For this reason, as well as for reasons of ensuring security of supply, new sources such as biofuels and other diverse forms of energy are being sought.

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The MHPA, together with the UK government, has negotiated a long-term deal with the government of Qatar in the Arabian Gulf for the supply of liquefied natural gas (LNG). This is sent to Milford Haven in refrigerated container ships and then stored in huge tanks at the port. When the gas is warmed up, it expands to 600 times its liquefied volume. The gas is sent through a new pipeline to a pumping station 150 miles away in Gloucestershire. It is then distributed into the UK national grid for industrial and domestic use. This is an example of a public-private partnership in action.

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The distribution of fuels such as gas and oil involves some negative externalities. There was controversy when the new pipeline was laid through attractive Welsh countryside, including the Brecon Beacons National Park. Some 15 years ago, the oil tanker Sea Empress sank near the entrance to Milford Haven and it took the local economy several

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years to recover from the environmental impact of the resulting pollution. Given the recent environmental experiences of BP in the Gulf of Mexico, environmentalists are concerned about the possibility of some sort of disaster arising from the storage or movement of LNG.

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There are also concerns about the UK's possible over-reliance on a single product (LNG) from a monopoly source (the state of Qatar) and a single distribution channel (the Pembroke–Gloucester pipeline). Supporters of the MHPA strategy claim that the LNG business actually aids consumer choice and competition through diversification, adding gas installations to the existing oil and renewable energy installations in and around the port. The MHPA states that safety and the prevention of environmental incidents are the 'most important priorities' of their business.

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Sources: news reports and industry information, 2010

- 1 Using Extract A, calculate the index of UK production of natural gas for Year X and identify **one** significant feature of the data for the years 2007 to 2009. (5 marks)
- 0 2 Explain what is meant by 'concentrated markets' (Extract B, line 21) and analyse two possible consequences of energy being supplied through concentrated markets. (10 marks)
- "...given the activities with which it is involved, there are commercial and wider economic 3 0 and social arguments against a body such as the MHPA being privatised' (**Extract B**, lines 12-14).

Using the data and your economic knowledge, do you agree with the view that enterprises such as the MHPA should be privatised? Justify your answer. (25 marks) Do not answer Context 2 if you have answered Context 1.

# OR Total for this Context: 40 marks

## Context 2

#### THE EUROPEAN UNION CONTEXT

Study **Extracts C and D**, and then answer **all** parts of Context 2 which follow.

Extract C: Quantity and value of fish landed in UK ports, all species

	2003	2006	2009	Year Y (forecast)
Quantity of fish (tonnes)	700 000	530 000	500 000	400 000
Index of quantity of fish	140	106	100	?
Value (£ million)	475	590	611	620
Index of value of fish	78	97	100	101

Sources: official statistics and industry information, 2010

# Extract D: Changing markets and EU policy: the case of Grimsby

Deep sea fishermen have been called the last of the hunter-gatherers. They chase a 1 scarce natural resource which is not farmed or domesticated. While there is pressure to achieve economies of scale, large super-efficient factory ships are in danger of eradicating the very raw material upon which they rely. The market for fish operates efficiently in many ways, with buyers and sellers who have good knowledge of the product and of 5 prices. However, at the European Union level, a great deal of time and money is spent on trying to reduce failures in this market for fish. Marine scientists have said that, without government intervention, fish stocks will collapse completely by 2050 and that intervention is necessary to prevent various market failures. Sea fish are not a public good, although they tend to be treated as one largely due to 10 a lack of property rights. For the past 30 years, the national fisheries of EU member states within Community waters have been governed by the Common Fisheries Policy (CFP). The CFP includes measures which are aimed at conservation by regulating the amount of fish taken from the sea, controlling the fishing methods that are used, and policies for matching supply and demand. Policies include quotas and restrictions on the 15 times that boats can spend at sea. Trawler captains usually operate as small business entrepreneurs, often with expensive loans, and have costs to pay even when a boat is laid up in harbour. New boats cost about £25 million and EU licences can insist that, when taken out of service, the boats are destroyed. Ultimately, these boats have to be efficient enough to catch sufficient fish to earn a profit during the equivalent of only two months at 20 sea each year.

The CFP has been widely criticised. For example, critics claim that quotas are wasteful since, if too many fish are caught, perfectly edible fish have to be dumped at sea rather than brought ashore. On the other hand, supporters of the CFP would argue that it gives hope of avoiding the collapse of stocks or even the complete extinction of some species.

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In the 1950s, deep sea fishing was a multi-million pound business and Grimsby in North Lincolnshire was the largest fishing port in the world. Generations of families found employment in fishing and its related industries, such as food manufacture. The UK's first frozen 'fish finger' was produced in Grimsby in 1955. Demand in product markets leads directly to a derived demand in labour markets and the CFP has had a massive impact on towns such as Grimsby.

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Nationally, fisheries represent well under one per cent of the UK economy. However, their effects on local and regional labour markets are much greater than this figure would suggest. Workers in the fishing industry tend to be immobile occupationally, in terms of their experience and skills, and geographically, in terms of where they are prepared to live and work.

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In 1964, 22 000 fishermen were employed in the UK. This fell slowly to 21 000 in 1994 and then more rapidly to 12 000 by 2009. While fishing has been in decline for many years, Grimsby retains several major companies which produce some of the best known brands of fish and other frozen food products in the UK. Also, Grimsby still has the largest fish market in the UK, although most of what is sold is now transported to Grimsby by road from other ports or imported in container ships. New industries such as light engineering, chemicals and plastics have become important employers. Grimsby, like many other towns, relies heavily on retailing as a source of employment, together with tourism in the nearby resort of Cleethorpes.

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Sources: news reports and industry information, 2010

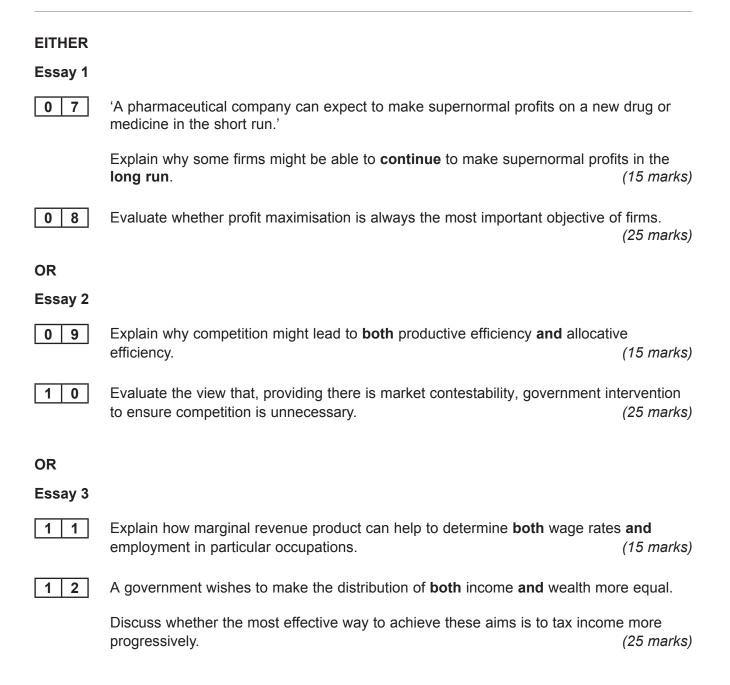
- Using Extract C, calculate the index of quantity of fish for Year Y and identify one significant feature of the data for the period 2003 to 2009. (5 marks)
- **O S** Explain what is meant by 'economies of scale' (**Extract D**, line 3) **and** analyse how **two** types of economy of scale could affect the fishing industry. (10 marks)
- Using the data and your economic knowledge, evaluate the view that intervention in the fishing industry by the EU is unlikely to correct market failure but is likely to result in government failure in **both** UK product markets **and** UK labour markets. (25 marks)

Turn over for the next question

#### Section B

Answer **one** essay from this section.

Each essay carries 40 marks.



## **END OF QUESTIONS**

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