



General Certificate of Education  
Advanced Level Examination  
June 2012

## Economics

## ECON3

### Unit 3 Business Economics and the Distribution of Income

Tuesday 12 June 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: Carbon emissions from fossil fuels, world and selected countries, 2007**

(i) **Total CO<sub>2</sub> emissions**

	Millions of tonnes
China	6 500
USA	6 000
Russia	1 500
UK	500
Brazil	400
Nigeria	95
Qatar	60
Morocco	45
World	29 300

(ii) **Per capita CO<sub>2</sub> emissions**

	Tonnes per head
Qatar	55.5
USA	19.0
Russia	11.0
UK	9.0
China	5.0
Brazil	2.0
Morocco	1.5
Nigeria	0.5
World	4.5

Note: Figures are rounded

Source: official statistics

### Extract B: Climate change

In 2004, Russia signed up to the Kyoto Protocol, an international agreement on policies to manage climate change. This committed Russia to a United Nations programme to reduce emissions of greenhouse gases. In 2010, Russia's emissions were as low as their 1990 levels, but this was less to do with environmental policy and more to do with the collapse of heavy industry following the fall of the Soviet Union. A large contribution towards the UK's Kyoto targets also came from deindustrialisation. However, China, like the USA, did not sign up to the Kyoto Protocol. 1  
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International action to control carbon emissions is necessary. One policy is known as 'carbon trading'. Countries agree overall emissions limits and try to create an international market for permits to pollute. The idea is to put a money value on emissions and, over time, to create incentives for businesses to invest in less-polluting technology. As well as the large compulsory 'compliance' market for carbon credits, there is also a smaller voluntary market for 'carbon offsets'. 10

For example, an organisation can be paid to plant trees to allegedly offset the damage that an airline journey does to the ozone layer. Some companies are using these offsets, together with greater energy efficiency and reduced polluting activities, to claim to be 'carbon neutral'. Some environmentalists are suspicious of offset schemes and claim, for instance, that offset schemes have hidden environmental costs. 15

Some economists argue that the pollution and depletion of communal resources such as clean air, water reserves and fish stocks are made worse by a lack of property rights. Critics say that carbon trading amounts to 'privatisation of the atmosphere', with property rights in this vast new market being grabbed by speculators or by those who already pollute the most. They also claim that activities such as buying credits from Russia are an 'accounting fraud' because they do not necessarily arise from energy efficiency but from the collapse of heavy industry. There is concern that carbon trading is a further blow to manufacturing and that service industries are treated more leniently. If the UK relies on manufactured imports, it can be argued that factories located in China are actually creating UK emissions. 20 25

Some major UK businesses appear happier with permit trading than with alternative policies such as quotas on emissions or the taxation of fuel. There is a suspicion that carbon trading might mislead the public into believing that pollution from airlines and other industries is no longer damaging. Governments are accused of being overgenerous in allotting permits to industries that they see as nationally important, such as car manufacturing and electricity generation. While the UK might reduce its domestic demand for carbon, it continues to contribute to the world supply of fossil fuels through activities such as oil prospecting and opencast mining. Russia, China and less-developed countries with coal reserves show few signs of reducing their output of this form of carbon. 30 35

Source: news reports, 2010

- 0 1** Using **Extract A**, calculate to one decimal place the percentage of world CO<sub>2</sub> emissions generated by the UK **and** identify **one other** significant feature of the data shown. (5 marks)
- 0 2** Explain what is meant by 'property rights' (**Extract B**, line 20) **and** analyse how an absence of property rights can worsen the environmental market failures of **both** pollution **and** the rapid depletion of natural resources. (10 marks)
- 0 3** 'Some major UK businesses appear happier with permit trading than with alternative policies such as quotas on emissions or the taxation of fuel' (**Extract B**, lines 29–30).  
Using the data and your economic knowledge, evaluate the possible impact on UK businesses of policies to reduce pollution and climate change. (25 marks)

Turn over ►

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: Some comparisons of pay in the EU and UK**

**(i) Estimated monthly minimum wage, selected EU countries, 2007**

	€(euros)
Luxembourg	1570
Ireland	1400
UK	1360
France	1250
Spain	670
Portugal	470
Poland	250
Bulgaria	90

**(ii) Comparative pay over time, selected UK occupations**

	Year	
Typical annual pay of:	1980 (£)	2009 (£)
Office cleaner	4 500	14 000
Nurse	5 000	29 500
Teacher	6 500	35 000
Doctor	12 500	78 500
Chief Executive of a FTSE 100 company	85 000	4 900 000

Note: Figures are rounded

Source: official statistics

**Extract D: Policies for fairness**

The European Union is one of the richest areas in the world but both absolute poverty and relative poverty exist within the EU. Although unemployment is a major cause of poverty, the working poor, whose wages are at or below the 'poverty line', are estimated to number 20 million across the EU.

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The EU named 2010 as the 'European Year for Combating Poverty and Social Exclusion', but this hardly featured at all in the UK media. However, the concept of fairness is very much on the national agenda. For example, the UK Prime Minister, David Cameron, did at one stage suggest that the earnings of the highest paid public servant should be no more than 20 times that of the lowest. Furthermore, many commentators have suggested that, if such a formula were introduced, the idea could spread to the private sector. The UK is one of 20 out of 27 EU member states with a minimum wage. Across those 20 countries, minimum wages are between 30% and 50% of average earnings. The European Parliament has floated the idea of an all-EU 'minimum income' but this is not expected to be taken up by governments just yet. And how long before there are also serious proposals for a national, or even an all-EU, maximum wage?

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Between 1980 and 2005, the distribution of income in the UK became less equal. In 1980, the top 1% of earners received 12% of all income. However, by 2005 the top 1% of earners received 16% of all income, with bonuses in the financial sector pushing this figure nearer

to 18%. The trend towards greater income inequality in the UK in recent years has largely been justified by the idea that market forces provide 'incentives' for successful businesses and that the spending power of high earners 'trickles down' to the rest of society. 20

Fairness is difficult to define. One view, suggested by the UK's *Institute for Public Policy Research*, is that fairness involves basic minimum entitlements and equal opportunities, plus an absence of obstacles created by factors such as where an individual is born or where they happen to live. Addressing unfairness in the UK tends to focus on policies to redistribute income after it has been earned: for example, through the tax and benefits system. On the other hand, much EU policy is aimed at reducing the unequal distribution of income at source, through what are called cohesion policies to target supply-side obstacles. 25

EU policies are, to a large extent, aimed at boosting the employability and earning potential of workers through measures such as skills training and business advice. They work on the 'supply side' of the labour market but the demand for labour cannot be ignored. For example, despite receiving significant levels of EU funding, recently Wales lost 900 well-paid, skilled jobs when the German company *Robert Bosch* moved its factory to Hungary, where wages are much lower. Perhaps an all-EU minimum wage would have helped to prevent this. 30 35

Source: news reports, 2010

**0 4** Using **Extract C**, calculate to one decimal place the typical annual pay of a teacher in 1980 as a percentage of the typical annual pay of a teacher in 2009 **and** identify **one other** significant feature of the data. (5 marks)

**0 5** Explain the distinction between absolute poverty and relative poverty (**Extract D**, lines 1–2) **and** analyse **two** causes of poverty. (10 marks)

**0 6** 'Addressing unfairness in the UK tends to focus on policies to redistribute income after it has been earned... On the other hand, much EU policy is aimed at reducing the unequal distribution of income at source...' (**Extract D**, lines 25–28).

Using the data and your economic knowledge, evaluate the view that a fair distribution of income can better be achieved by policies which aim to redistribute income after it is earned rather than by policies which tackle supply-side obstacles in the economy. (25 marks)

**Turn over for the next question**

**Turn over ►**

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## Section B

Answer **one** essay from this section.

Each essay carries 40 marks.

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### EITHER

#### Essay 1

'Bigger is better.... Small is beautiful.... Size does not matter.'

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 Explain how a firm can experience diminishing returns in the short run **and** economies of scale in the long run. (15 marks)

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 Discuss whether large firms in the UK today are necessarily more efficient than small firms. (25 marks)

### OR

#### Essay 2

An oligopolistic firm is trying to decide on the selling price and output of its product, and is also considering colluding with other firms in the industry.

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 Explain why oligopolistic firms are affected by both interdependence and uncertainty when selling their product. (15 marks)

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 Evaluate policies which a UK government could use to control the activities of oligopolists. (25 marks)

### OR

#### Essay 3

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 Explain the main principles that would be involved in a cost-benefit analysis (CBA). (15 marks)

1	2
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 In December 2010, the *Federation of Small Businesses* estimated that UK industry had lost at least £1 billion due to the disruption caused by one week's heavy snow. It was suggested that both product markets and labour markets would benefit from investment in snow-clearing equipment.

Evaluate the advantages **and** disadvantages of using CBA when deciding whether or not to invest in snow-clearing equipment. (25 marks)

**END OF QUESTIONS**

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