



Rewarding Learning

ADVANCED SUBSIDIARY (AS)
General Certificate of Education
2009

Economics

Assessment Unit AS 1

Markets and Prices

[AE111]

FRIDAY 5 JUNE, AFTERNOON



AE111

TIME

1 hour 30 minutes.

INSTRUCTIONS TO CANDIDATES

Write your Centre Number and Candidate Number on the Answer Booklet provided.
Answer **Question 1** and **one** question from **Questions 2, 3 or 4**.

INFORMATION FOR CANDIDATES

The total mark for this paper is 80.

Quality of written communication will be assessed in all questions **except 1(b)**.

Figures in brackets printed down the right-hand side of pages indicate the marks awarded to each question or part question.

ADVICE TO CANDIDATES

You are advised to take account of the marks for each part question in allocating the available examination time.

Question 1: Data Response

The article below was written in April 2008.

Study it carefully and answer the questions which follow.

“Biofuel Disaster”

Index of grain prices (USA \$: January 2007 = 100)

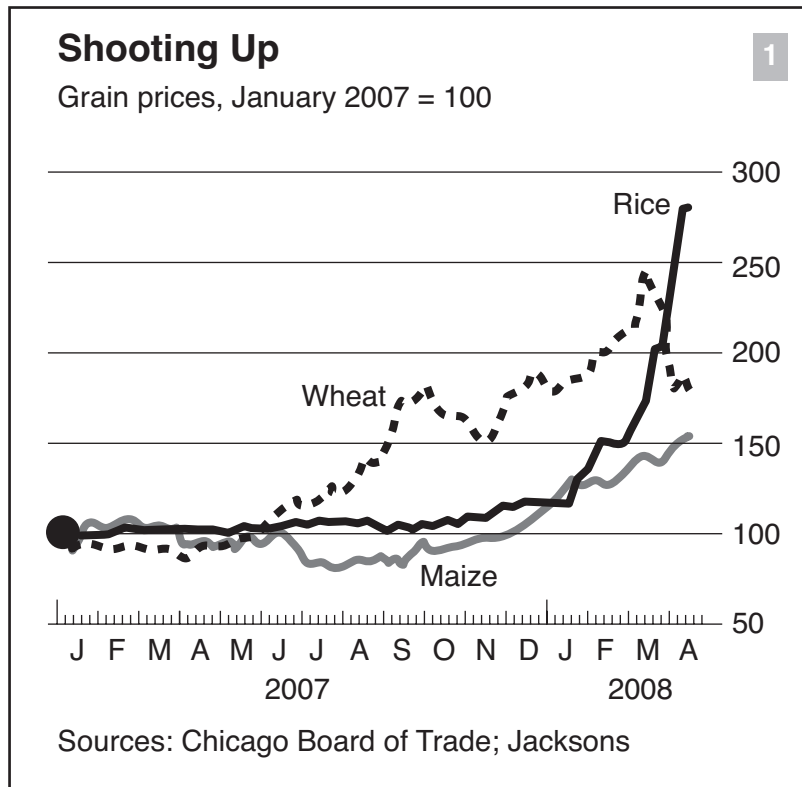


Fig. 1

Given the damage which the use of fossil fuels causes to the environment, it is little wonder that policymakers in many countries are promoting the use of biofuels, produced from grains such as corn and soya bean. These crops soak up carbon dioxide from the atmosphere as they grow and this more than balances the carbon dioxide produced when they are burnt.

1

Unfortunately, biofuels such as ethanol are extremely expensive and could not compete with oil and gas in a free market. So governments have stepped in to promote ethanol production. In the USA ethanol producers receive a government subsidy of between \$1.05 and \$1.38 per gallon. In the UK the government has recently introduced a law known as the Road Transport Fuel Obligation (RTFO) which requires that all petrol and diesel sold in garages must contain at least 2.5 per cent biofuel. This is set to rise to 5 per cent by 2010.

2

The Department of Transport estimates that the use of biofuels will reduce carbon dioxide emissions by 2.5 million tonnes by 2010. Transport minister, Jim Fitzpatrick, said: “Making it easier for motorists to use greener fuel is an important step towards reducing carbon emissions from transport. It should help save millions of tonnes of carbon dioxide in the coming years”.

3

However, the environmental credentials of biofuels have been questioned by some scientists. Tim Searchinger, writing in Science magazine, argues that the expansion of agriculture has been achieved largely by burning down forests which actually increases greenhouse gas emissions. When allowance is made for the fossil fuels used in fertiliser to help grow the grain and also in the production of biofuels it is likely that the net environmental impact of biofuels is negative.

Indeed not everyone is convinced about the benefits of increased usage of biofuels. The rise in demand for grain has led to massive price increases, which are hitting the world's poor hardest. Josette Sheeran, the head of the UN's World Food Programme, said: "Usually, a food crisis affects only one region when the harvest fails, often because of war or natural disaster. This crisis is different. It is occurring in many countries simultaneously and it is affecting a whole range of people not usually hit by famines".

5

Ms Sheeran described how the food crisis was affecting the world's poor: "For those living on \$2 a day, it means cutting out meat and taking the children out of school. For those on \$1 a day, it means cutting out meat and vegetables and eating only cereals. And for those on 50 cents a day, it means total disaster. The poorest are selling their animals, tools and even the tin roof over their heads." Not surprisingly there have been food riots in many countries. In El Salvador the poor are eating only half as much food as they were a year ago. Afghans are now spending half their income on food, up from a tenth in 2006.

6

One analyst described the promotion of biofuels as a perfect example of government failure where governments in attempting to correct market failure actually make things worse. He said: "Markets generally allocate resources more efficiently than governments and they should be left to function without interference from politicians who are motivated only by short-term posturing and vote-catching."

7

- (a) Using the information in Fig. 1, describe what happened to the prices of wheat, rice and maize between January 2007 and April 2008. [6]
- (b) (i) The USA government has promoted biofuels by paying a subsidy to producers. With the assistance of a demand and supply diagram explain the impact of a subsidy payment on the market for biofuels. [5]
- (ii) The UK government has promoted biofuels by requiring that all petrol and diesel sold in garages must contain at least 2.5% biofuel input. With the assistance of a demand and supply diagram explain the impact of this regulation upon the market for biofuels. [5]
- (c) Analyse how government support for biofuel production has affected world food prices. [6]
- (d) Explain how the production and use of biofuels such as ethanol might actually cause an increase in greenhouse gas emissions. [6]
- (e) "Government intervention in the biofuels market has punished the world's poor and is a perfect example of government failure."

Evaluate the view that markets should be free to allocate resources without any government intervention. [12]

Essays:

Answer **one** from **Questions 2, 3 or 4**.

2 “Scarcity is history”

- (a) Explain what a production possibility curve is designed to show. [10]
- (b) Analyse how the concept of opportunity cost is reflected in a production possibility curve. [15]
- (c) Evaluate the view that most people in the UK no longer face any significant form of scarcity. [15]

3 “Budget airline announces big fare increase”

- (a) Explain what is meant by price elasticity of demand. [10]
- (b) Explain how an awareness of relevant demand elasticities might be of benefit to the management of an airline. [15]
- (c) Critically examine the view that estimates of elasticities are of no value as consumer behaviour is neither rational nor predictable. [15]

4 “Big pay rise for doctors criticised”

- (a) Explain what is meant by economic rent. [10]
- (b) Explain why the balance between economic rent and transfer earnings is different for different occupations. [15]
- (c) Critically examine the view that high levels of economic inequality are inevitable in free market economies and government attempts to reduce this inequality do more harm than good. [15]

THIS IS THE END OF THE QUESTION PAPER
