



Rewarding Learning

ADVANCED SUBSIDIARY (AS)
General Certificate of Education
2017

Economics

Assessment Unit AS 1
assessing
Markets and Market Failure



SEC11

[SEC11]
MONDAY 15 MAY, MORNING

TIME

1 hour 30 minutes.

INSTRUCTIONS TO CANDIDATES

Write your Centre Number and Candidate Number on the Answer Booklet provided.
Answer **all** questions in section **A** and **B** and **one** question in section **C**.
You are permitted to use a calculator in this paper.

INFORMATION FOR CANDIDATES

The total mark for this paper is 80.

- Section A: 25 Marks
- Section B: 35 Marks
- Section C: 20 Marks

Figures in brackets printed down the right-hand side of the 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.

Quality of written communication will be assessed in Questions **5**, **6(b)**, **(c)** and **(d)**, **7** and **8**.
Quantitative skills will be assessed where appropriate.

Section A

Answer all questions (25 marks)

- 1 Belfast City Council has announced plans to spend £20 million building a flood defence system for the Connswater and East Belfast areas. The scheme will include new flood walls and river realignment works.

Explain why a flood defence system could be described as a public good. [4]

- 2 Successive UK governments have imposed high levels of taxation on tobacco products in order to reduce tobacco consumption. In 2015, cigarettes faced three separate taxes:

- a specific excise duty of £3.68 per pack of twenty;
- an ad-valorem excise duty of 16.50% of the retailer's recommended price;
- and VAT levied at the standard rate of 20% which equates to 16.67% of the retailer's recommended price.

While most people are in favour of cigarette taxation, some economists are opposed to further increases on the basis that cigarette taxation is regressive in nature.

- (a) Using the information above, calculate, to the nearest penny, the total tax burden on a packet of 20 cigarettes with a **retailer's recommended price** of £7.98. [3]
- (b) Explain why cigarette taxation could be considered to be regressive. [3]

- 3 In a debate about the future of the NHS, a left-wing MP stated "I believe that governments should provide basic healthcare free to all its citizens. There is not a single country in the European Union where citizens have to pay to see a doctor!"

With reference to the statement above, distinguish between a normative statement and a positive statement. [3]

- 4 Economists have estimated the Price Elasticity of Demand for beer to be -0.76 and the Cross Price Elasticity of Demand for spirits with respect to a change in the price of beer to be -0.59 .
- (a) Explain what this data suggests about the relationship between beer and spirits. [2]
- (b) Calculate the likely percentage change in the quantity demanded of beer as a result of a 6% increase in the price of beer. [4]
- 5 A report published recently has linked hydraulic fracturing or “fracking” for shale gas to a wide range of negative environmental effects. These include increased greenhouse gas emissions, contamination of local water supplies and an increase in seismic activity and earthquakes. Environmental groups such as Friends of the Earth are calling for a complete ban on fracking in the UK.
- With the aid of an appropriate diagram, explain why shale gas production by fracking may represent a socially inefficient allocation of resources. [6]

Section B: Data response

Answer all questions (35 marks)

- 6 The following passage was written in April 2015. Read it carefully and answer the questions which follow.

Rockets and feathers

UK motorists have long suspected that they are being ripped off at the pumps in a phenomenon known as “rockets and feathers”. This phrase refers to the situation where, when oil prices rise, petrol retailers respond quickly and petrol prices rocket on the forecourts. However, when oil prices fall, petrol prices float down slowly like a feather. 1

This view that petrol retailers are profiteering at the expense of the motorist seems to be supported by data. Fig. 1 below compares crude oil prices with average petrol prices in UK forecourts, and according to Darren Moore it “proves that petrol retailers are ripping drivers off by failing to pass the fall in oil prices on as a reduction in forecourt prices. Oil prices have fallen by about 60% since 2012 while petrol prices have fallen by less than 25% over the same period. The lack of real competition in the petrol retail market allows the big players to exploit consumers and keep prices higher than would be the case in a more competitive market.” 2

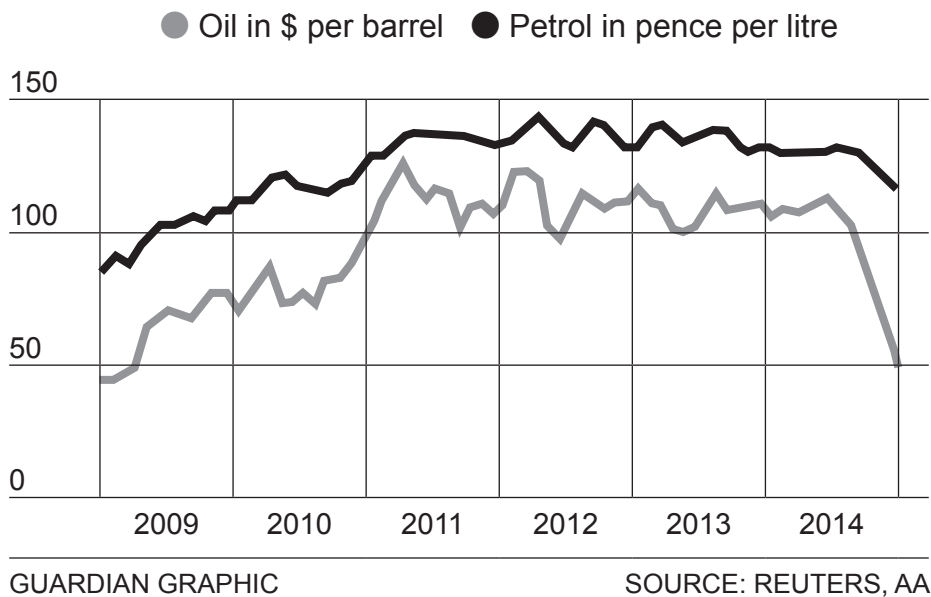


Fig 1: Price of oil and petrol Jan 2009 to Dec 2014

© Crude oil prices started 2015 relatively low, ended the year lower. Published by U.S. Energy Information Administration (06 January 2016)

However, as is usually the case in these matters, the story is not as simple as first appears. Kevin Doyle, a fuel market analyst, suggests that a number of factors explain why petrol prices have not fallen as rapidly as oil prices. “While I have no doubt that some of the gap between the fall in oil prices and the fall in petrol prices can be explained by a lack of competitive pressure in petrol retailing, it is only part of the story. Crude oil is priced in dollars and the recent 12% drop in the value of the pound against the dollar has reduced the impact of falling oil prices on UK motorists. In addition UK petrol is the most heavily taxed fuel in the EU, with a specific duty of 58p per litre and VAT at 20%. This means that the cost of crude oil accounts for only around 40% of the price of petrol.” 3

But why has the price of oil plummeted? It seems the answer lies in the law of supply and demand. Kevin Doyle stated “the high oil prices of the last decade encouraged investment in shale oil, with the US now producing about 4 million barrels of shale oil every day. While many felt this would cause OPEC to cut production, Saudi Arabia has refused to bow to pressure from other members. On the other side of the equation demand has tapered off in Asia and Europe as the German and Chinese economies have slowed down and countries such as Indonesia have reduced the subsidies available for fuel consumption. If you add the fact that US drivers have finally begun switching to fuel efficient cars you can see that there has been an almost perfect storm for oil prices.”

4

While the fall in oil and petrol prices might be a good thing for UK consumers, it has caused significant problems for North Sea oil producers who are not profitable when oil falls below \$60 a barrel, with many firms shedding jobs and scaling back investment. Chancellor George Osborne responded to industry pleas for help by slashing the supplementary tax on oil production from 30% to 20%. He claimed this would secure the future of North Sea oil production and thousands of highly paid jobs.

5

However, not everyone was pleased with the Chancellor’s decision. Environmentalist Brad Smyth claimed the decision was costly to the Treasury, the economy and the environment. “The supplementary tax on oil production was introduced to ensure that the whole nation benefited from the UK’s oil reserves, not just a few energy companies. The Chancellor’s decision will cost the UK economy £1.3bn in lost tax revenue and makes a mockery of the government’s claim to be the greenest government ever. By making investment in oil production more appealing, this tax cut will divert investment away from renewables such as wind and tidal, and will as a result lead to greater CO₂ emissions and global warming.”

6

- (a) Using the information in **Fig. 1**, compare the trends in the world price of oil and the UK price of petrol between Jan 2009 and Dec 2014. [5]
- (b) Explain why UK petrol prices have not fallen by as much as world oil prices since 2012. (Paragraphs 2 and 3) [6]
- (c) With the aid of an appropriate diagram, explain why oil prices have fallen rapidly since 2012. (Paragraph 4) [9]
- (d) Critically examine the decision by George Osborne to cut the supplementary tax on North Sea oil production in the 2015 budget. [15]

Section C: Essay section

Answer one question (20 marks)

- 7 Government data suggests that national public sector pay scales result in the real incomes of public sector workers in low cost areas (such as Northern Ireland and the North East) being up to 15% higher than those of similar workers in high cost areas (such as London and the South East). Some economists argue that this makes it difficult for private sector employers in low cost areas to employ high quality staff.

Critically examine the proposal to introduce regional rates of pay for public sector workers. [20]

- 8 A health minister claims that, as a result of an ageing population and medical advances, the cost of running the NHS is set to rise from £108bn today to £230bn by 2030. Some economists have used these figures to claim that universal healthcare, free at the point of use, is no longer affordable for the UK.

Critically examine the view that the government should abandon the National Health Service and allow healthcare in the UK to be provided by the free market. [20]

THIS IS THE END OF THE QUESTION PAPER

Sources

- Q6. . Source 1: Reference from: Fuel prices: the 'rocket and feather effect' explained by Nick Collins. Published by The Telegraph, 06 November 2014 <https://www.telegraph.co.uk/news/uknews/road-and-rail-transport/11212890/Fuel-prices-the-rocket-and-feather-effect-explained.html>
Source 2: Reference from: Falling oil prices: Who are the winners and losers? By Tim Bowler. Published by BBC News, 19 January 2015 <http://www.bbc.co.uk/news/business-29643612>
Source 3: Reference from: UK petrol prices cut again as oil hits six-year low by Larry Elliott. Published by The Guardian, 12 January 2015 <https://www.theguardian.com/business/2015/jan/12/oil-slump-uk-petrol-prices-fall>
Source 4: Reference from: Oil price crash threatens the future of the North Sea oilfields by Terry Macalister. Published by The Guardian, 14 January 2015
<https://www.theguardian.com/business/2015/jan/14/oil-price-slump-could-threaten-north-sea-oilfields>
- Q7. . Source 1: Reference from: UK inflation rate falls to 0.5% in December. Published by BBC News, 13 January 2015.
<http://www.bbc.co.uk/news/business-30794673>
Source 2: Reference from: World Bank cuts global growth forecast. Published by BBC News, 13 January 2015
<http://www.bbc.co.uk/news/business-30802166>