Skoolumy

CAMBRIDGE A LEVEL ECONOMICS TOPICAL ESSAY QUESTIONS

INDIRECT TAX AND SUBSIDY

PAST QUESTIONS

1. The International Oil Market

Fig. 1 shows how the price of oil has varied greatly over the last thirty years.

World Price of Oil 1970-1999

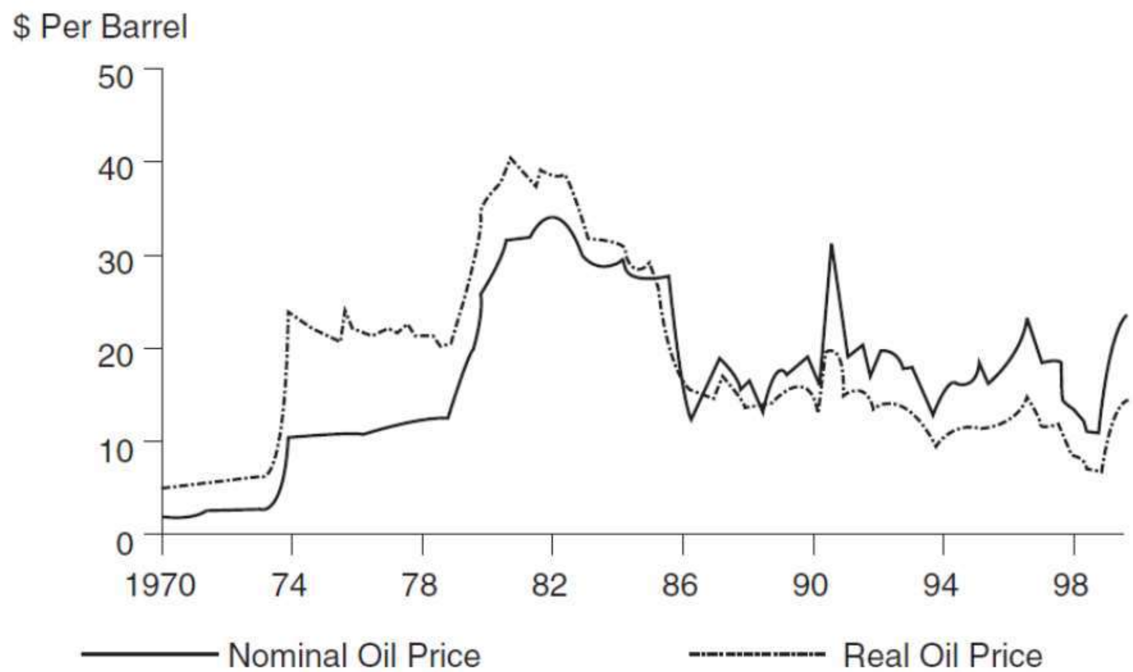


Fig. 1

Oil prices at the end of 1999 were averaging $25 per barrel. This compared with less than $10 per barrel a year earlier. This change was influenced by two main factors. First the Organisation of Petroleum Exporting Countries (OPEC), excluding Iraq, cut production by 4.3 million barrels per day from the level prevailing in 1998. Secondly, after slowing markedly in 1998, world demand grew by about 1 million barrels in 1999 as a result of the upturn in world economic activity.

Discuss the possible effects in an oil-consuming country if its government imposes an indirect tax on oil. [6]

2. There is increasing concern about the impact of foreign holidays on the environment of the host country.

Discuss whether an indirect tax on foreign holidays is likely to be effective in reducing the number of holidays taken. [12]

3. Taxes are often placed on manufactured products, even those that are necessities with few substitutes.

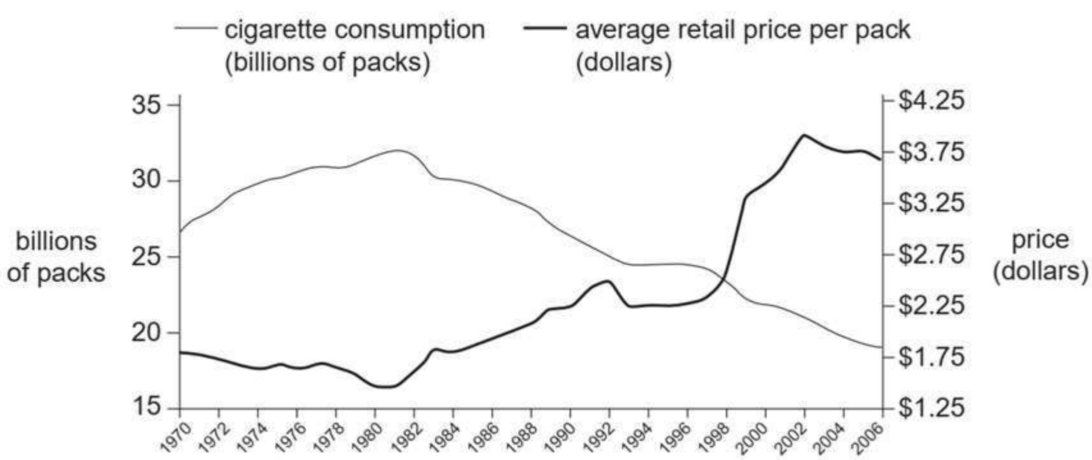
Discuss whether the incidence of a tax on a manufactured product always falls mainly on the producer. [12]

4. Economic Aspects of Cigarette Smoking

Smoking cigarettes is a controversial matter that illustrates a number of economic issues. As with most products, the key influence on the level of consumption is the product's price.

United States

Fig. 1 US cigarette consumption and cigarette prices 1970–2006



Malaysia

A study of cigarette smoking in Malaysia estimated the short-run and long-run price elasticity of demand (PED) and the income elasticity of demand (YED) for cigarettes between 1990 and 2004. The results are shown in Table 1.

Table 1: Demand elasticities for cigarettes in Malaysia

Short-run PED	Long-run PED	YED
–0.08	–0.57	+1.46

Europe

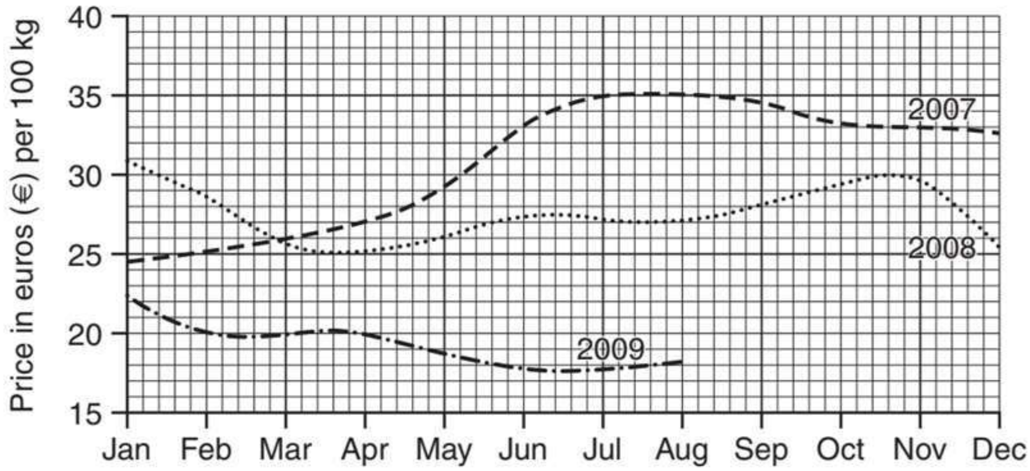
In Europe, taxation of cigarettes is particularly heavy. In 2006 it was 76.4% of the final selling price in Germany, 77.1% in the UK and 80.4% in France. European countries are increasingly banning smoking in enclosed public areas and workplaces. Some anti-smoking campaigners are calling for the smoking of cigarettes anywhere to be made illegal.

Explain two possible economic reasons why cigarettes are heavily taxed. [4]

5. Problems for Dairy Farmers in the United States

Milk is used to make a range of products, including butter, cheese and ice cream, as well as serving as a drink. This was of no help to US dairy farmers in 2009 when they faced a falling price for their milk. Fig. 1 shows the extent of the price change in recent years. While consumers purchase milk by volume (litres), farmers are paid by weight (kilograms).

Fig. 1: Average milk price paid to farmers in the US, Jan 2007 to August 2009



A price fall was also experienced by New Zealand as shown in Table 1.

Table 1: Average annual milk price (€ per 100 kg) in the US and New Zealand, 2007–2009

	2007	2008	2009
US	30.69	27.49	19.30
New Zealand	22.48	25.17	16.21

US farmers blamed their problems on the global recession, the strength of the US$ and high cattle feed prices. At the same time, New Zealand and Australia increased their exports and the European Union (EU) reintroduced its export subsidies on milk products.

The world milk industry has often had support from governments that have paid subsidies to farmers and supplied free milk to young children. US farmers were hoping for extra government intervention.

Discuss the case for the use of government subsidies for the production of milk. [6]

6. With the help of a demand and supply diagram, explain how the introduction of an indirect tax affects equilibrium in a market and consider the extent to which the incidence of the tax will fall on the consumer. [8]

MARK SCHEME

Table A: AO1 Knowledge and understanding and AO2 Analysis

Level	Description	Marks
3	• A detailed knowledge and understanding of relevant economic concepts is included, using relevant explanations. Explanations are supported by examples, where appropriate. • The response clearly addresses the requirements of the question and explains economic issues, and fully develops these explanations. • Analysis is developed and detailed and makes accurate and relevant use of economic concepts and theories. Where necessary, there is accurate and relevant use of analytical tools such as diagrams and formulae, and these are fully explained. • Responses are well-organised, well-focused and presented in a logical and coherent manner.	6–8
2	• Knowledge and understanding of some relevant economic concepts is included, using explanations and examples that are limited, over-generalised or contain inaccuracies. • The response addresses the general theme of the question and the relevant economic issues, with limited development. • Analysis is generally accurate with some development but little detail. Uses analytical tools such as diagrams and formulae where necessary. Use of these tools is partially accurate or not fully explained. • Responses are generally logical and coherent but are sometimes lacking in focus or organisation.	3–5
1	• A small number of relevant knowledge points are included and the response is limited by significant errors or omissions. • The response has little relevance to the question. • Analysis where provided is largely descriptive. Use of analytical tools such as diagrams and formulae, where necessary, may contain significant errors or be omitted completely. • Responses show limited organisation of economic ideas.	1–2
0	No creditable response.	0

Table B: AO3 Evaluation

Level	Description	Marks
2	• Provides a justified conclusion or judgement that addresses the specific requirements of the question. • Makes developed, reasoned and well-supported evaluative comment(s).	3–4
1	• Provides a vague or general conclusion or judgement in relation to the question. • Makes simple evaluative comment(s) with no development and little supporting evidence.	1–2
0	No creditable response.	0

1. Effects on price, output and tax revenue linked to consumer, producer, government (4) development e.g., elasticity, tax burden (2)

2. Up to 8 marks for Analysis

• Effectiveness of an indirect tax in reducing the number of holidays taken (up to 4 marks)

• Lack of effectiveness of an indirect tax in reducing the number of holidays taken (up to 4 marks)

Up to 4 marks for Evaluation

For exercising some judgement on whether an indirect tax on foreign holidays is likely to be effective in reducing the number of holidays taken

Reserve 1 mark for a conclusion

3. Analysis:

Analysis of the incidence of a tax on a manufactured product on the producer (up to 4 marks)

Analysis of the incidence of a tax on a manufactured product on the consumer (up to 4 marks)

8 marks maximum

Evaluation:
For exercising some judgement on whether the incidence of a tax on a manufactured product always falls mainly on the producer. (up to 4 marks)
Reserve 1 mark for a conclusion

4 marks maximum

Guidance:

The incidence of a tax:

• the incidence of a tax refers to the extent to which the burden of a tax is borne by the producer and the consumer

• this will depend on the price elasticity of demand for the product

• depends on the elasticity of the supply curve.

The producer:

• if the demand for the product is relatively price elastic, then the producer will have to pay a greater part of the tax

The consumer:

• if the demand for the product is relatively price inelastic, then the consumer will have to pay a greater part of the tax

Necessities and substitutes:

• the degree to which a manufactured product is a necessity with few substitutes will influence the PED for the product.

• in this situation, the PED for the product is likely to be relatively price inelastic

There are no KU marks awarded in (b) for merely defining/explaining **terms used within the question.**

4. To raise revenue (1) based on inelastic demand for cigarettes (1) or to cover costs of externalities – "polluter pays" principle (1)

To discourage consumption (1), to reduce negative externalities and demerit goods (1) or to discourage production (1), as above or to improve resource allocation (1)

5. Benefits: increase exports, reduce imports, support essential industry and employment, lower prices for basic foodstuff for low incomes, promotion of merit good etc. to max. (4)

Problems: financial cost (taxation), opportunity cost, misdirection of resources, inefficiency, dependence, etc. to max. (4)

6. AO1 Knowledge and Understanding (max 3 marks)

An accurate definition of an indirect tax (1) shown through an accurate diagram, correctly labelled axes and equilibrium price and quantity (1).

Understanding that indirect taxes are used to discourage the consumption of demerit goods (1).

AO2 Analysis (max 3 marks)

Uses the diagram to explain that an indirect tax shifts the supply curve to the left (1), which causes an increase in the price of the good to the consumer (1) and reduces the quantity demanded (1).

AO3 Evaluation (max 2 marks)

One mark for a valid explanation that the incidence of tax borne by the consumer will depend on the PED of the product (1), (and that the more price inelastic demand is the greater the proportion of the tax is passed onto the consumer (1)), with a second mark for a justified conclusion.

AO1 Knowledge and understanding 3

AO2 Analysis 3

AO3 Evaluation 2