

# Edexcel (A) Economics A-level

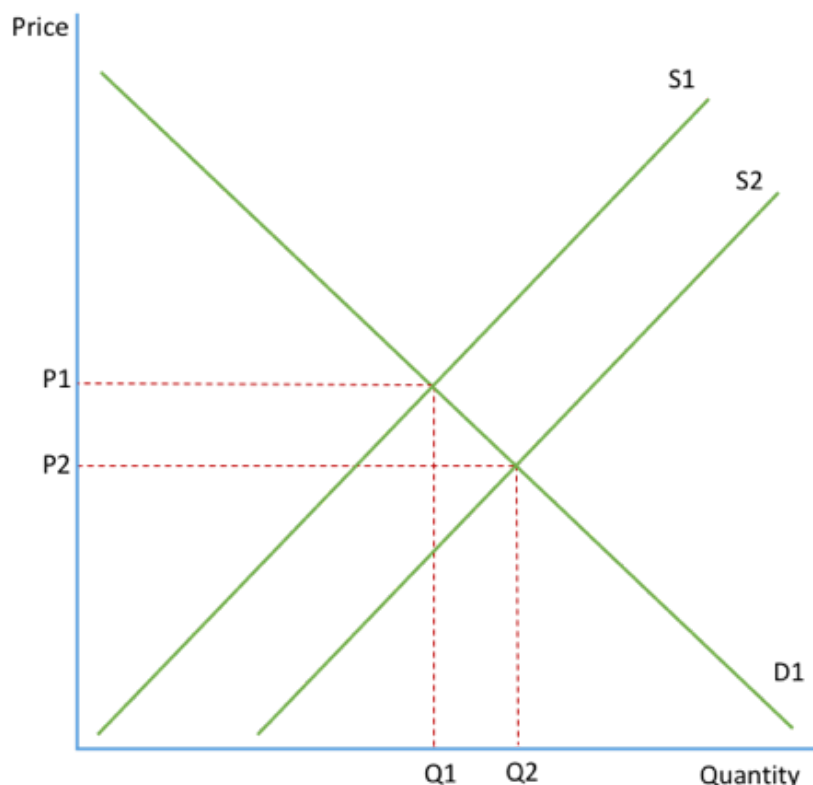
## A-level Paper 1: Markets and Business Behaviour

### Example answers

Evaluate the likely microeconomic impact of a reduction of excise duty on petrol and diesel fuel in the UK



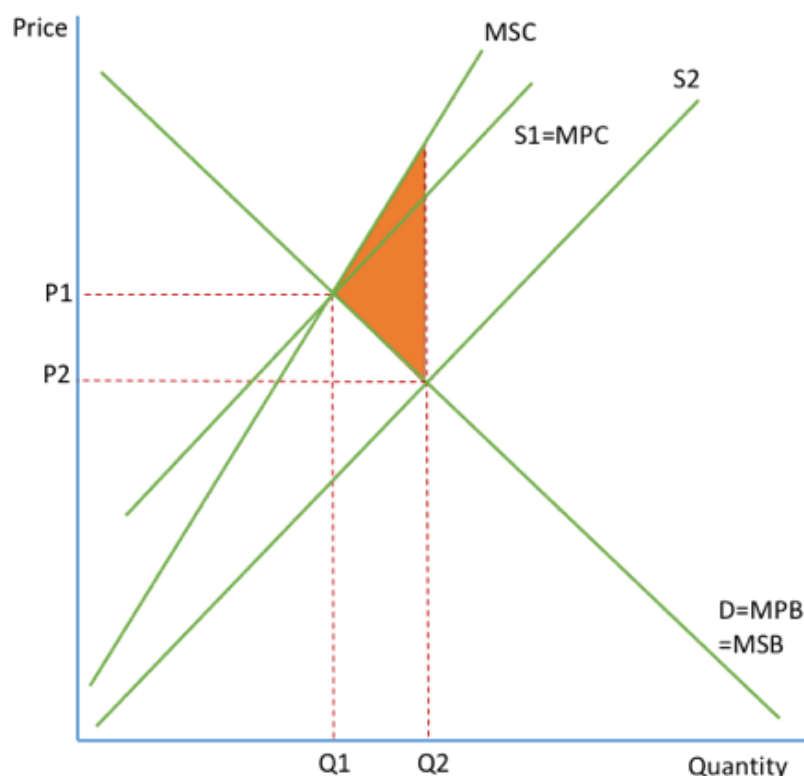
An excise duty is a specific indirect tax on the use of petrol and diesel fuel. A reduction in duty will cause a fall in price and an increase in output as seen by the diagram. The lower tax will lead to a reduction in costs for the producers of the petrol and thus they will be willing to supply more for each price, causing an increase in supply from  $S_1$  to  $S_2$ . This leads to a fall in price and an increase in output. The size of the fall in price will depend on the price elasticity of demand: if demand is inelastic, there will be a large fall in price and little increase in output whilst if it is elastic, there will be a small fall in price and a large increase in output. Demand is likely to be inelastic since there are few substitutes for petrol and diesel and for most people it is a necessity. Therefore, prices are likely to fall by a large amount and therefore consumers and firms which use petrol/diesel will benefit greatly.



On top of this, there is likely to be a reduction in costs for firms. For van drivers and transport companies, petrol and diesel make up a significant proportion of their costs and so the fall in price will mean they see a large reduction in costs. They may pass this fall onto their consumers, who are other firms that need to transport their goods. Thus, this will mean that there will be lower costs for almost all businesses since most firms need to transport their goods. As a result, the cost of the majority of goods will fall and this will be positive for consumers who will now be able to afford more. Not all of the lower costs will be passed on and so most businesses will see a rise in their profits. This could lead to increased investment and a growth in dynamic efficiency. Firms may also be able to compete easier with foreign firms since they have lower costs. For the majority of firms, there will only be a small change since petrol and diesel make up a small proportion of their costs. Transporting firms will see the biggest difference and, if demand for their service is price inelastic, they may decide not to pass on their fall in costs at all since the fall in prices will lead to a reduction in revenue.



On the other hand, the reduction in the duty will lead to increased externalities and market failure. Petrol and diesel have high negative externalities since they produce high levels of emissions which contribute to global warming. The tax will ensure that consumers realise the full extent of their actions. The social optimum position is  $Q_1P_1$ , where  $MSC=MSB$ , and the imposition of the tax means that society produces there as  $MPB=MPC$  at this point. However, the removal of the excise duty means that the  $MPC$  will fall and shift to  $S_2$ . The market will produce  $S_2=MPB$  at  $Q_2P_2$  and as a result there will be social welfare loss of the shaded area. The reduction in the tax will lead to market failure and negative externalities. This depends on other government policies, for example the government may believe the tax is no longer needed to be so high because consumers realise the implications of their decisions. This could be due to the provision of information by the government, which had been made possible by the tax. In this case,  $MPC$  may not shift at all or the shift may be much smaller and thus there will be no to little social welfare loss. In addition, the tax may have been set too high and so there was a loss of welfare and government failure due to under production. This would mean a reduction leads to production at the social optimum position. In reality, it is unlikely this is the case and climate change is still a significant issue. The reduction in the tax will almost certainly lead to a loss in welfare and an increase in emissions since not enough has been done for consumers to realise the full cost.



Overall, although the reduction in tax may help business costs and reduce prices for consumers, it will be extremely negative for the environment. The cost to the environment will be much greater than the gain to businesses; environmental impacts are real issues that need to be dealt with and this tax is one essential way to do so. The extent of the impacts either way will clearly depend on the size of the reduction.

**Teacher's comments: 20/25**

**Could talk about impact on greener fuels. And short run/long run.**

