Edexcel Economics AS-level

Unit 1: Markets in Action

Topic 4: Price Determination

4.4 Indirect taxes and subsidies

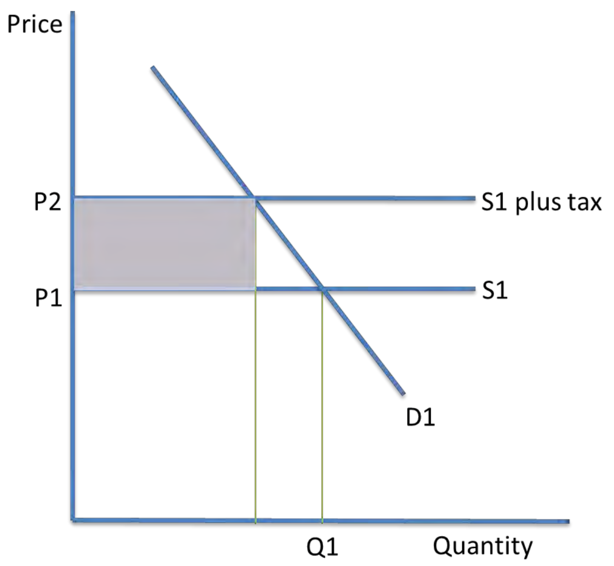
Notes

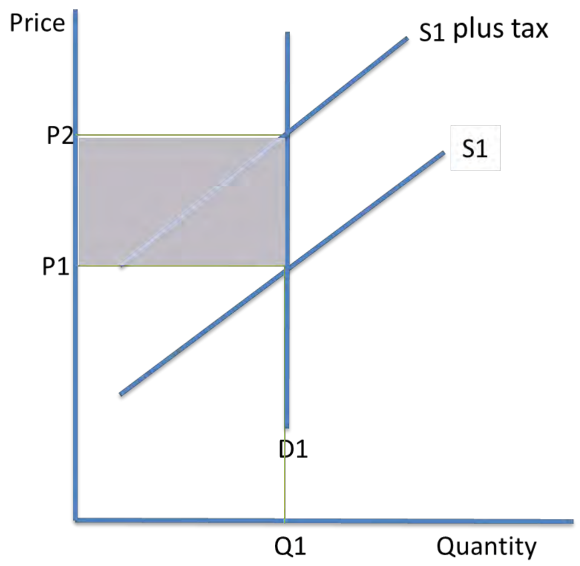
Indirect Taxes

- Indirect taxes are imposed by the government and they increase production costs for producers. Therefore, producers supply less. This increases market price and demand contracts.

- There are two types of indirect taxes:
  - **Ad valorem** taxes are percentages, such as VAT, which adds 20% of the unit price. This is the main indirect tax in the UK.
  - **Specific taxes** are a set tax per unit, such as the 58p per litre fuel duty on unleaded petrol.

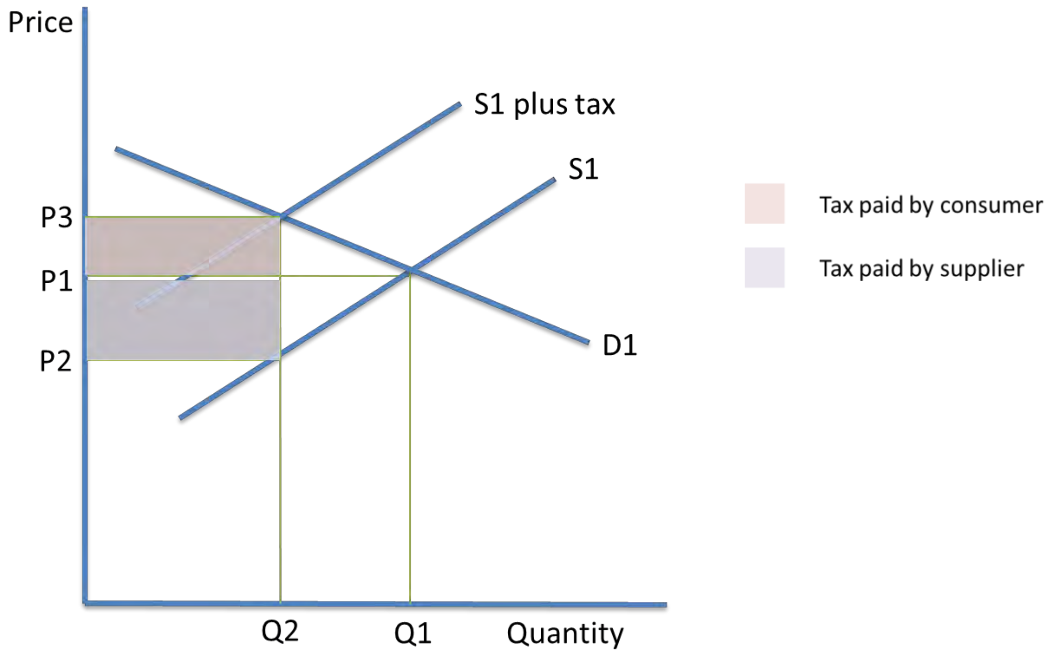
- Diagrammatically, it is shown by the vertical distance between two supply curves.
- When demand is perfectly inelastic, or supply is perfectly elastic, the incidence of the tax falls wholly on the consumer. The shaded area shows the size of the tax paid by the consumer.



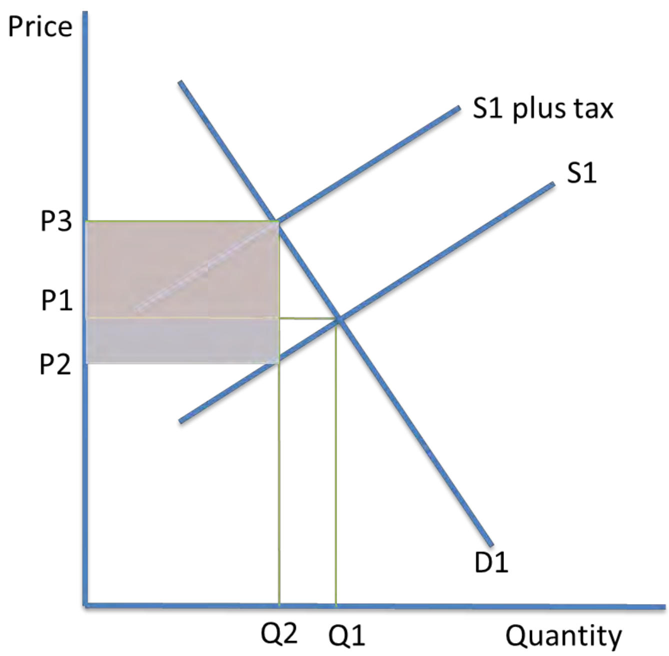


The burden of tax with different PEDs

If demand is more elastic (PED>1), the incidence of the tax will fall mainly on the supplier.

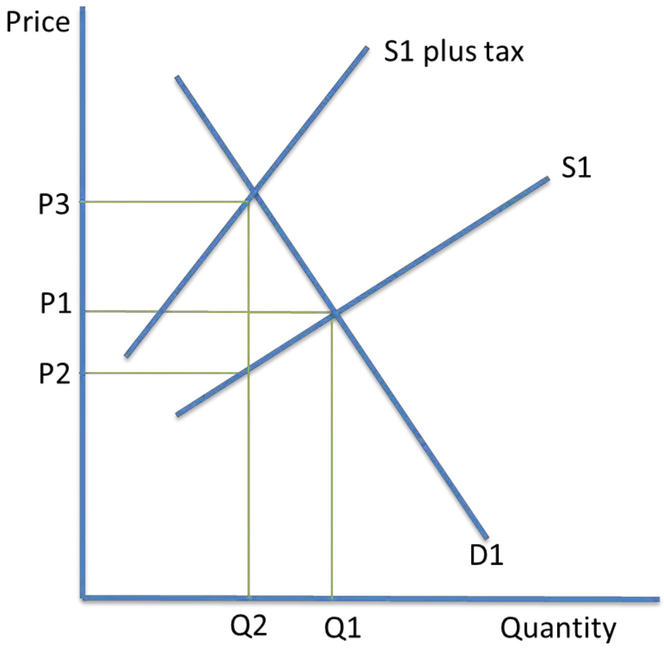


If demand is more inelastic (PED<1), the incidence of the tax will fall mainly on the consumer.



Ad Valorem Taxes

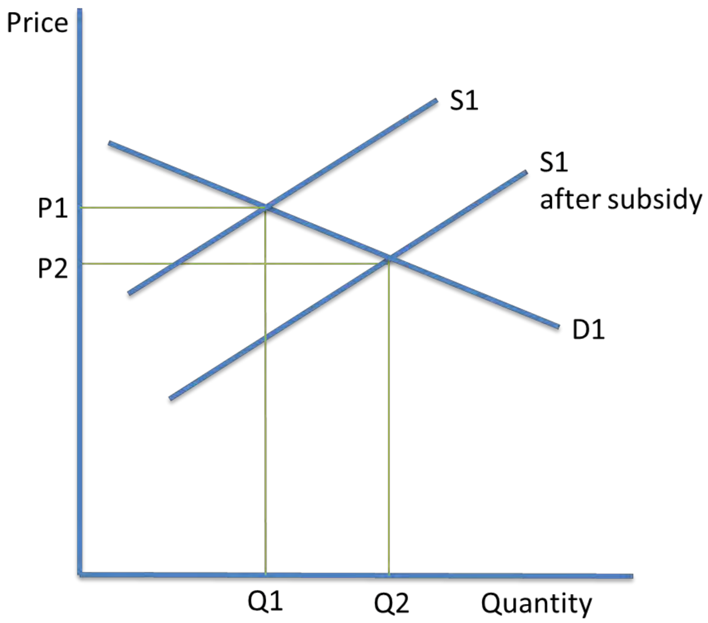
- Since the tax is a percentage of the cost of the good, the absolute value of the tax increases as the price of the good increases. For example, with VAT at 20%, a good costing £10 will have £2 of tax. A good costing £100 will have £20 of tax. This causes the supply curve to pivot.



- If demand is inelastic, government revenue from the tax is higher than if demand is elastic. This is because demand will only fall slightly with the tax.
- For example, the duty on tobacco and fuel raises a lot of government revenue, because demand for these goods is inelastic.
- If the tax is implemented with the intention of internalising the externality, it is hard to put a monetary value on the externality.
- Internalising the externality means the individual or firm which causes the negative externality, for example pollution, pays for the damage.
- Taxes could be expensive for the government to collect.
- Some taxes could be regressive, so they impact those on low and fixed incomes the most.
- Taxes could be inflationary.

Subsidies

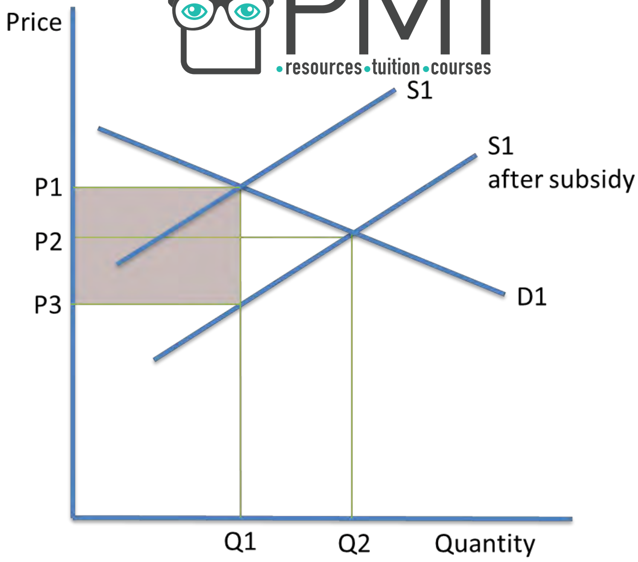
- A subsidy is a payment from the government to a producer to lower their costs of production and encourage them to produce more.
- For example, the government might provide apprenticeship schemes or help farmers by contributing towards their production costs.



- Subsidies shift the supply curve to the right, which lowers the market price.
- The vertical distance between the supply curves shows the value of the subsidy per unit.

Government spending on subsidy

- This is shown by the shaded area and is calculated by the value of the subsidy per unit times the output.

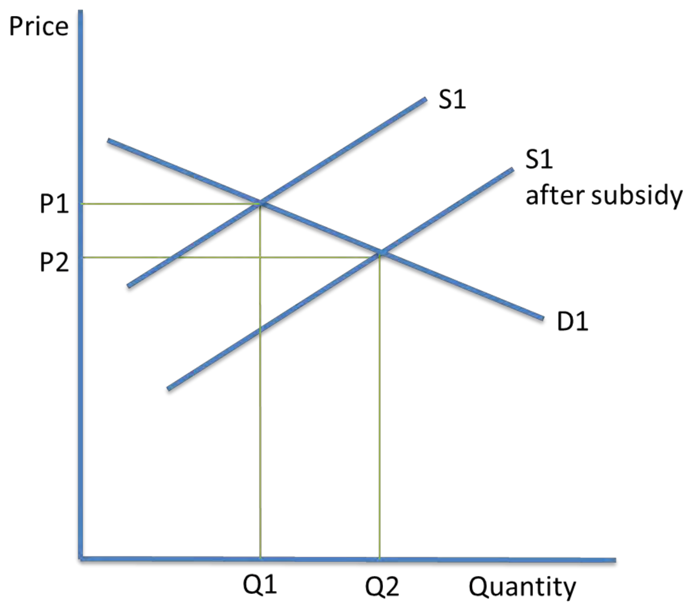


- The consumer pays P3 and the producer receives P1, which includes the subsidy.

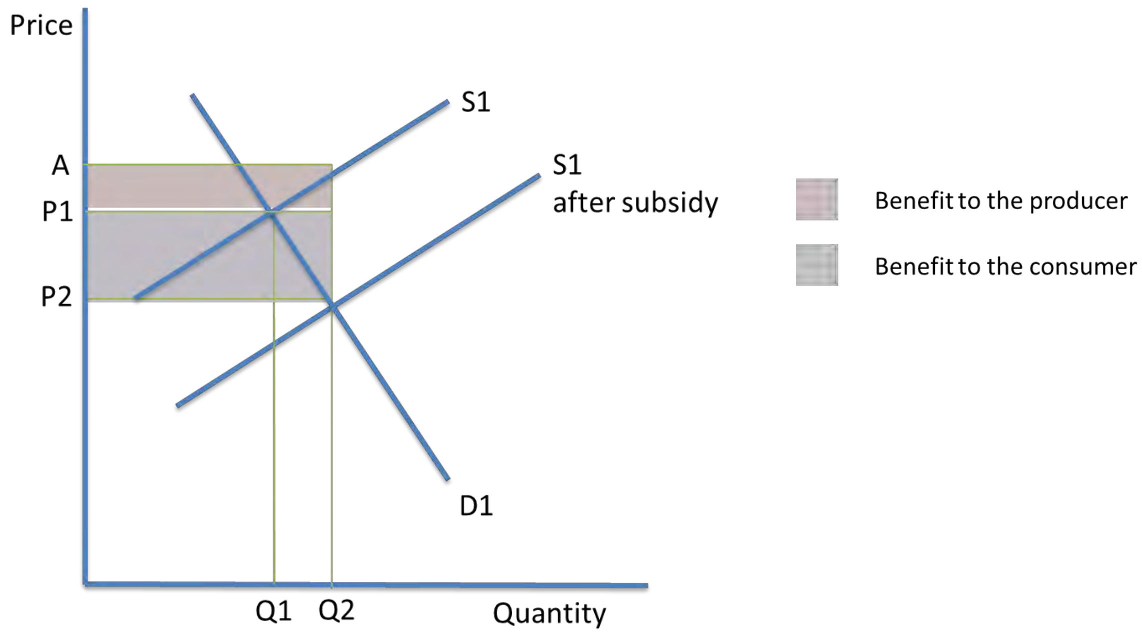
- **Effects of subsidies**

- Subsidies increase output and lower prices for consumers, which could help families on low and fixed incomes.
- They increase the employment rate, by making workers more skilled through apprenticeship schemes and lowering the cost of employing workers.
- They reduce inequality in society, if the subsidy is progressive.
- Subsidies could help control inflation, by keeping costs of production low.
- They could help boost demand during periods of economic decline.
- Subsidies could encourage the consumption of merit goods, which creates positive externalities.
- Long run aggregate supply could increase if the subsidy is aimed towards a capital project.
- There could be government failure, if the government provides an inefficient subsidy or if the subsidy distorts the market price.
- Government revenue could be better spent elsewhere. The opportunity cost of the subsidy should be considered.
- It is usually the tax payer who pays for the subsidy, and they might not receive any direct benefit from the subsidy.
- If demand is price inelastic, the subsidy will have a large effect on equilibrium price. This give a greater consumer gain than when demand is elastic.

- If demand is price elastic, the subsidy will have a large effect on quantity, and therefore benefit producers more.



- **Producer and Consumer Subsidies**



- A consumer subsidy encourages consumers to purchase more of a particular good or service. It could be a direct grant or a loan without interest, for example.
- Consumer subsidies affect demand and do not shift the supply curve.
- Producer subsidies lower the cost of production and shift the supply curve.