WJEC (Eduqas) Economics A-level

Microeconomics

Topic 7: Market Failure

7.2 Why and how governments intervene

Notes

Government intervention to target market failure:

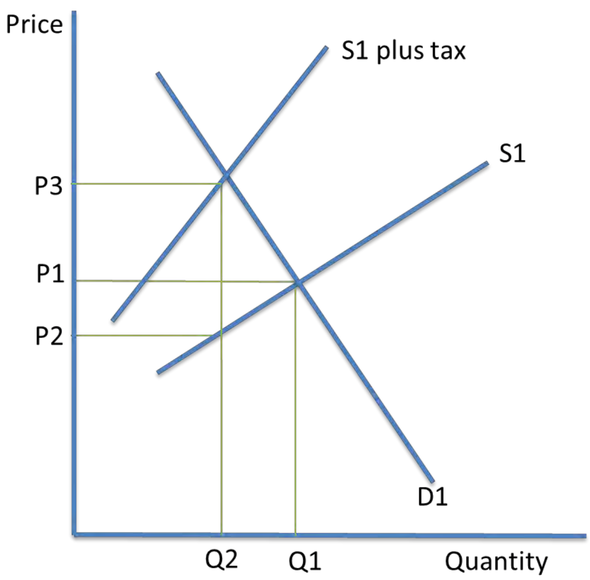
Governments intervene in the market to correct market failure. For example, they might provide healthcare and education, which the free market would underprovide.

Indirect taxes:

Indirect taxes are taxes on expenditure. They increase production costs for producers, so producers supply less. This increases market price and demand contracts. They could be used to discourage the production or consumption of a demerit good or service. For example, the government could impose a £1 tax per packet of cigarettes.

There are two types of indirect taxes:

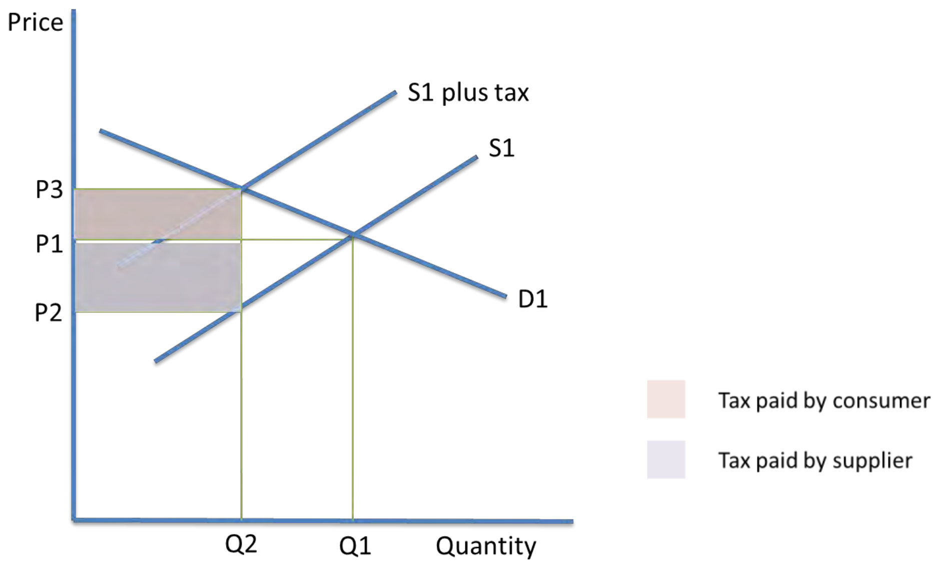
- **Ad valorem** taxes are percentages, such as VAT, which adds 20% of the unit price. This is the main indirect tax in the UK.



- The incidence of tax might fall differently on consumers and producers. Producers could make consumers pay the whole tax (P3 – P2), or if they feel this would lower sales and lose them revenue, they could choose to pay part of the tax. Producers might pay P1 – P2, whilst consumers might pay P3 – P1.

- The incidence of the tax depends on the price elasticity of demand of the good. For cigarettes, since the demand is fairly price inelastic, consumers might have the larger burden of tax.
- This should, in theory, discourage consumption of the demerit good and reduce negative externalities.
- Government revenue from ad valorem taxes is larger if demand is price inelastic. This is because demand falls only slightly with the tax.

- **Specific taxes** are a set tax per unit, such as the 58p per litre fuel duty on unleaded petrol.



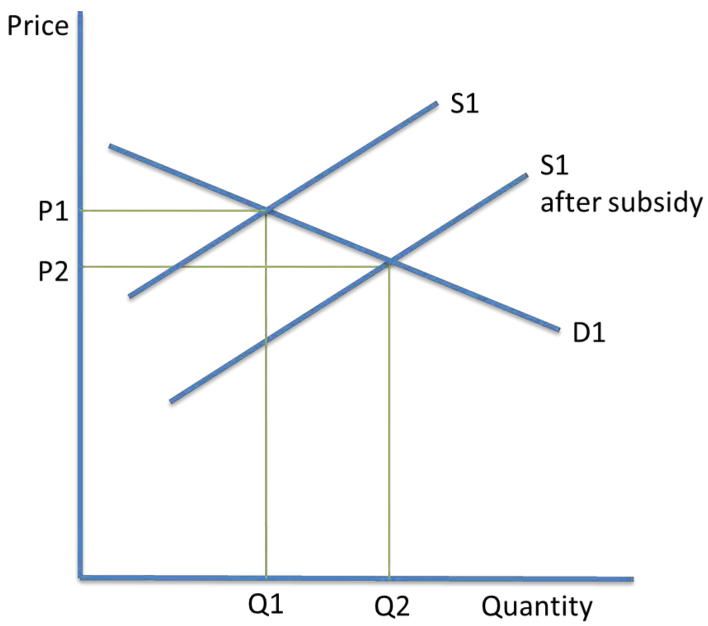
- The more inelastic the demand, the higher the tax burden for the consumer, and the lower the burden of tax for the producer.

- Indirect taxes could reduce the quantity of demerit goods consumed, by increasing the price of the good. If the tax is equal to the external cost of each unit, then the supply curve becomes MSC rather than MPC, so the free market equilibrium becomes the socially optimum equilibrium. This **internalises the externality**. In other words, the polluter pays for the damage.

Subsidies:

- A subsidy is a payment from the government to a producer to lower their costs of production and encourage them to produce more.

- Subsidies encourage the consumption of merit goods. This includes the full social benefit in the market price of the good. Therefore, the external benefit is internalised.
- For example, the government might subsidise recycling schemes so it is cheaper for consumers to recycle waste, which will yield positive externalities for the environment.
- The supply curve shifts to the left. More of the merit good is produced and the price falls from P1 to P2.
- The vertical distance between the supply curves shows the value of the subsidy per unit.



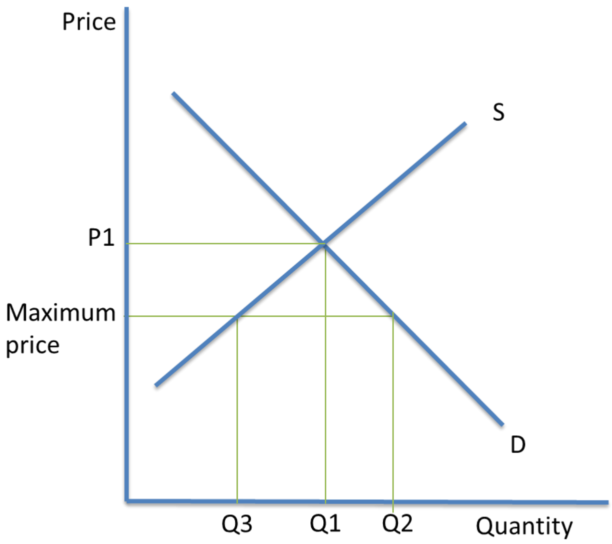
- Consumers gain more from the subsidy when demand is price inelastic, whilst producers supply more when demand is price elastic.
- The disadvantages of subsidies include the opportunity cost to the government and potential higher taxes, the potential for firms to become inefficient if they rely on the subsidy and government failure, if they subsidise less efficient industries.

Maximum and Minimum Prices:

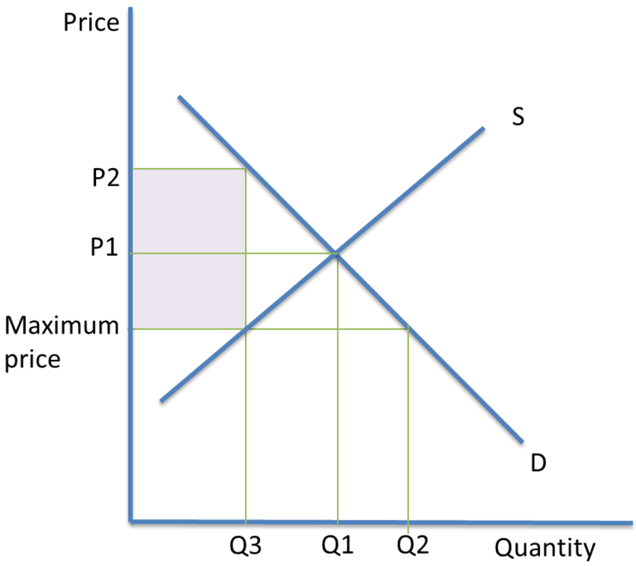
Maximum price

- The government might set a **maximum price** where the consumption or production of a good is to be encouraged. This is so the good does not become too expensive to produce or consume.

- Maximum prices **have to be set below the free market price,** otherwise they would be ineffective.



- The free market equilibrium is at P1, Q1.

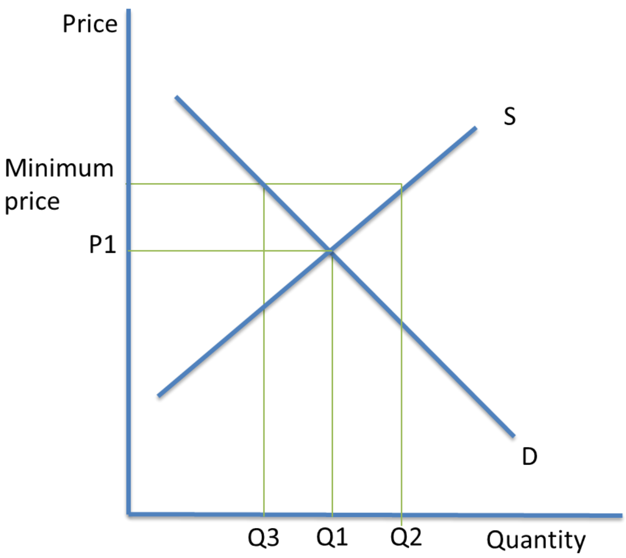


- If suppliers only produced at Q3, some consumers would be willing to pay P2. The shaded area shows the consumer surplus producers can take with the higher price.
- A quantity of Q3 would require rationing or auctioning, since quantity demanded is Q2.
- They prevent monopolies exploiting consumers. For example, in the EU, price caps on roaming charges are in place to make sure it is not too expensive for consumers to use their mobile phones abroad.
- Maximum prices control the market price, but this could lead to government failure if they misjudge where the optimum market price should be.

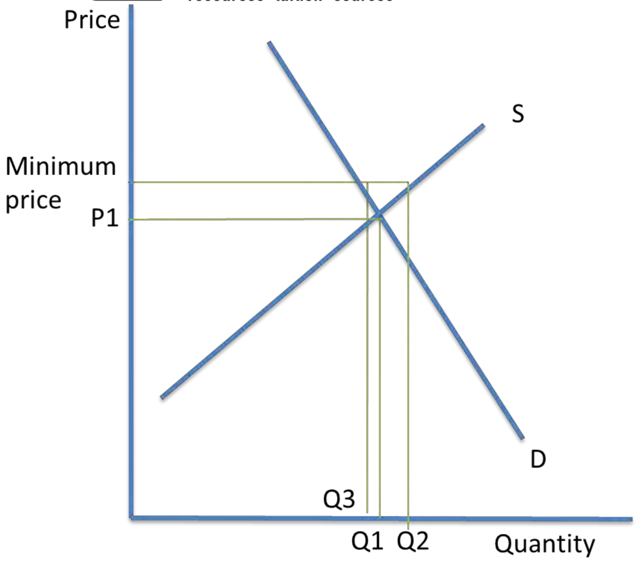
- Maximum prices could lead to welfare gains for consumers by keeping prices low, and they could increase efficiency in firms, since they have an incentive to keep their costs low to maintain their profit level.
- However, it could reduce a firm's profits, which could lead to less investment in the long run. Moreover, firms might raise the prices of other goods, so consumers might have no net gain.

Minimum price

- The government might set a **minimum price** where the consumption or production of a good is to be discouraged. This ensures the good never falls below a certain price.
- For example, the government might impose a minimum price on alcohol, so it is less affordable to buy it. The **National Minimum Wage** is an example of a minimum price.
- Minimum prices would reduce the negative externalities from consuming a demerit good, such as alcohol.
- Minimum prices **have to be set above the free market price,** otherwise they would be ineffective.
- The minimum wage could be used as an example.



- The diagram suggests that a minimum wage leads to a fall in the employment rate (Q1 – Q3). It depends on what level the wage is set, though. An inelastic labour demand will mean there is only a small contraction in demand for labour (Q1 – Q3).



- This minimum price will yield the positive externalities of a decent wage, which will increase the standard of living of the poorest, and provide an incentive for people to work.

Tradeable pollution permits:

- These could limit the amount of negative externalities, in the form of pollution, created in industries. Firms will be allowed to pollute up to a certain amount, and any surplus on their permit can be traded.
- This means firms can buy and sell allowances between themselves.
- For example, there could be a limit on the quantity of carbon dioxide emissions released from the steel industry.
- **Advantages**
- This should benefit the environment in the long run, by encouraging firms to use green production methods.
- The government could raise revenue from the permits, because they can sell them to firms. This revenue could then be reinvested in green technology.
- If firms exceed their permit, they will have to purchase more permits from firms which did not use their whole permit. This raises revenue for greener firms, who might then invest in green production methods.
- **Disadvantages**
- However, it could lead to some firms relocating to where they can pollute without limits, which will reduce their production costs.
- Firms might pass the higher costs of production onto the consumer.
- Competition could be restricted in the market, if the permits create a barrier to entry for potential firms.
- It could be expensive for governments to monitor emissions.

State provision of public goods:

- The government could provide public goods which are underprovided in the free market, such as education and healthcare. These have external benefits.
- This makes merit goods more accessible, which might increase their consumption and yield positive externalities.
- It could be expensive for governments to provide education, and the government will incur an opportunity cost of spending their revenue.

Provision of information:

- By providing information, governments can ensure there is no information failure, so consumers and firms can make informed economic decisions.
- For example, governments might make it illegal for second-hand car dealers not to reveal the entire history of a car, so consumers know exactly what they are buying.
- This could be expensive to police.

Regulation:

- The government could use laws to ban consumers from consuming a good. They could also make it illegal not to do something. For example, the minimum school leaving age means young people have to be in school until the age of 16, and education or training until they turn 18.
- This has positive externalities in the form of a higher skilled workforce.
- If there was a compulsory recycling scheme, it would be difficult to police and there could be high administrative costs. Bans could be enforced for harmful goods, although they can still be consumed on the black market.
- Firms which fail to follow regulations could face heavy fines, which acts as a disincentive to break the rule.
- It could raise costs of firms, who might pass on the higher costs to consumers.

Buffer stock systems:

- This is mainly in agricultural markets, where prices are volatile.
- Governments might use buffer stocks to smooth out these fluctuations.
- However, historically, these have been unsuccessful.
- Governments buy up harvests during surpluses, then sell the goods onto the market when supplies are low.
- **Advantages:**

- Farmer incomes remain stable, because fluctuations in the market are reduced.
- This will be particularly beneficial in rural areas, where farming is a main source of income.
- It also increases consumer welfare by ensuring prices are not in excess.
- **Disadvantages:**
- Governments might not have the financial resources to buy up the stock.
- By guaranteeing farmers a minimum price, they might overproduce. This could be expensive and damaging to the environment.
- Storage is difficult and expensive, since agricultural goods do not last long, and there are administrative costs.

Reduce income inequality

- In the absence of government intervention, the market mechanism is likely to result in a very unequal and inequitable distribution of income and wealth.
- An unequal distribution can lead to negative externalities, such as social unrest. In a market economy, an individual's ability to consume goods and services depends upon their income and wealth and an inequitable distribution of income and wealth is likely to lead to a misallocation of resources and hence market failure. Some consumers might not be able to buy goods and services at all.
- Those with the lowest incomes are the unemployed, the underemployed, the elderly and low skilled workers. Governments can use progressive taxes and government spending to reduce inequality. Progressive taxes take more income from the rich less from the poor. In the UK, income tax is progressive. With government spending on welfare payments, the inequality between the richest and poorest can be reduced.
- An example of a welfare payment is when the unemployed receive Job Seeker's Allowance, to help support them whilst looking for a job.
- In Wales, there are income inequalities between parts of rural Wales and South Wales Valleys and the larger cities, such as Swansea and Cardiff. The government could use income redistribution methods to reduce these inequalities, for example.

The Welsh Government

- The Welsh government has intervened to help correct market failure. For example, free NHS prescriptions are given to ensure everyone who needs healthcare is able to get it, and those on low incomes are also able to receive medicines.
- This increases social welfare and yields positive externalities in the form of longer life expectancies and a higher standard of living.
- It also leads to a more efficient allocation of resources.

- Moreover, the Welsh government charges consumers for plastic bags. This reduces the negative externalities associated with littering and pollution, and means seawater is cleaner, because fewer plastic bags are dumped in the water. This reduces market failure.