

CIE Economics A-level

Topic 3: Government Microeconomic Intervention a) **Policies to achieve efficient resource allocation and correct market failure** Notes



Indirect Taxes

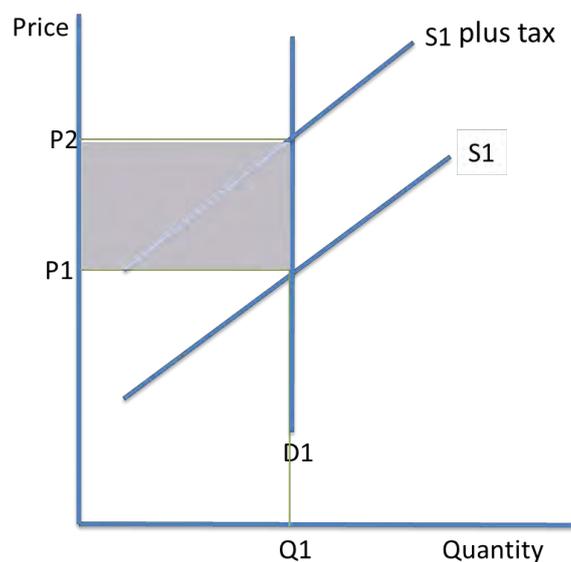
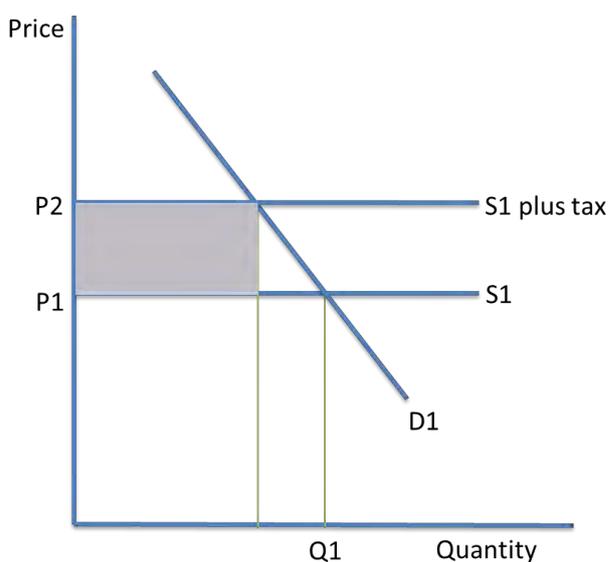
 Indirect taxes are imposed by the government and they increase production costs for producers. Therefore, producers supply less. This increases market price and demand contracts.

 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.

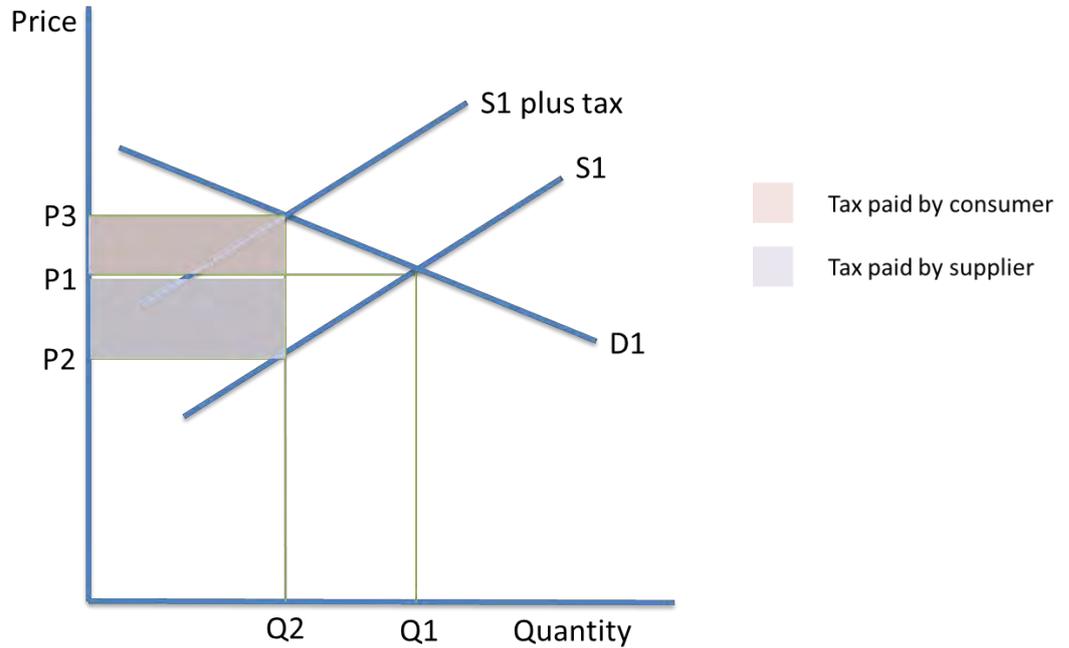
 Diagrammatically, it is shown by the vertical distance between two supply curves.

 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.

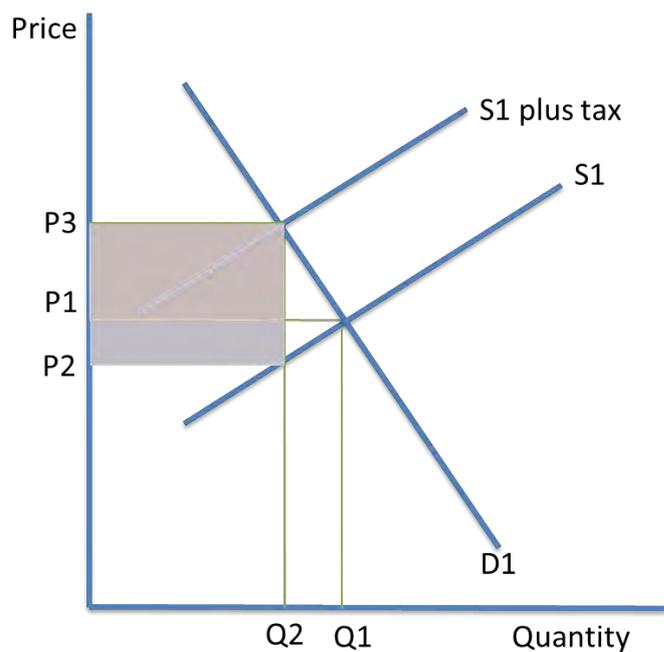


The burden of tax with different PEDs

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

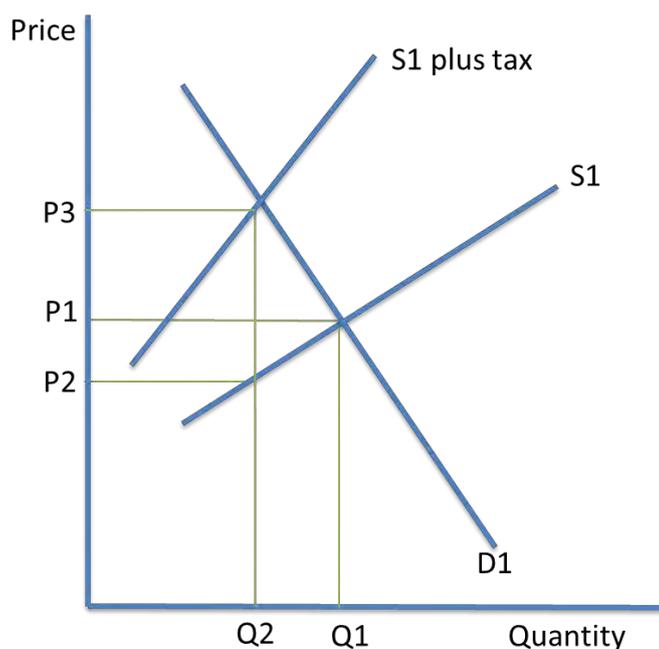


 If demand is more inelastic ($PED < 1$), the incidence of the tax will fall mainly on the consumer.



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.

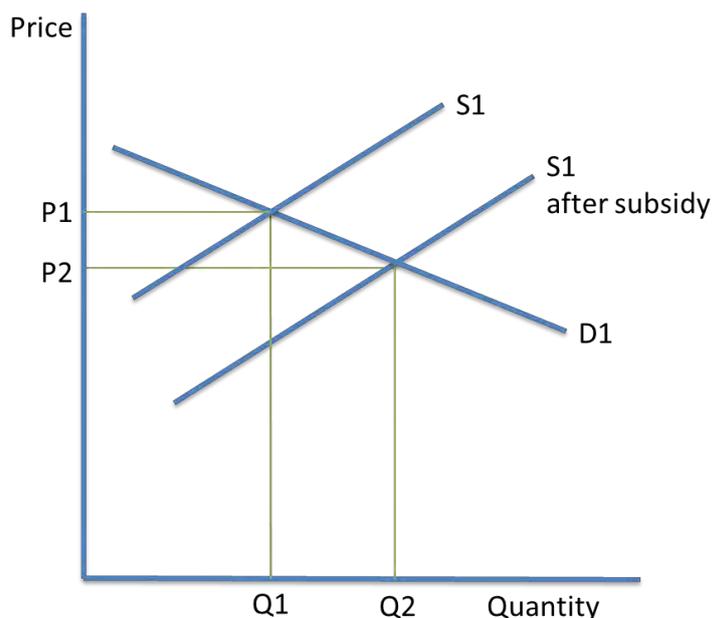


-  If demand is inelastic, government revenue from the tax is higher than if demand is elastic. This is because demand will only fall slightly with the tax.
-  For example, the duty on tobacco and fuel raises a lot of government revenue, because demand for these goods is inelastic.
-  If the tax is implemented 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

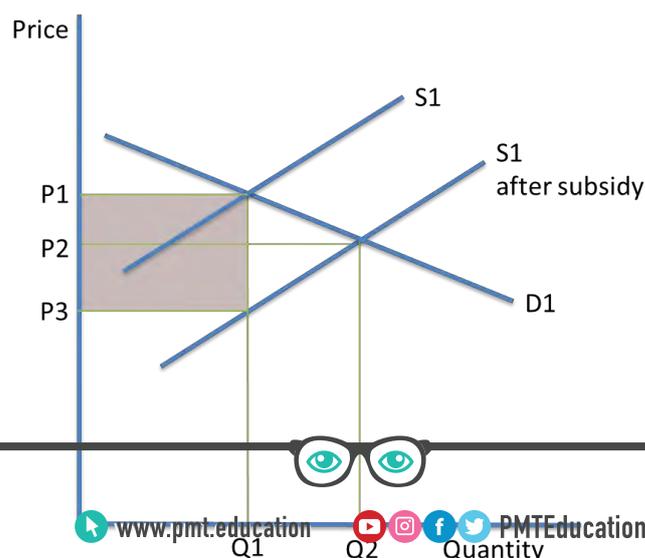
-  A subsidy is a payment from the government to a producer to lower their costs of production and encourage them to produce more.
-  For example, the government might provide apprenticeship schemes or help farmers by contributing towards their production costs.



-  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 P_3 and the producer receives P_1 , 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.

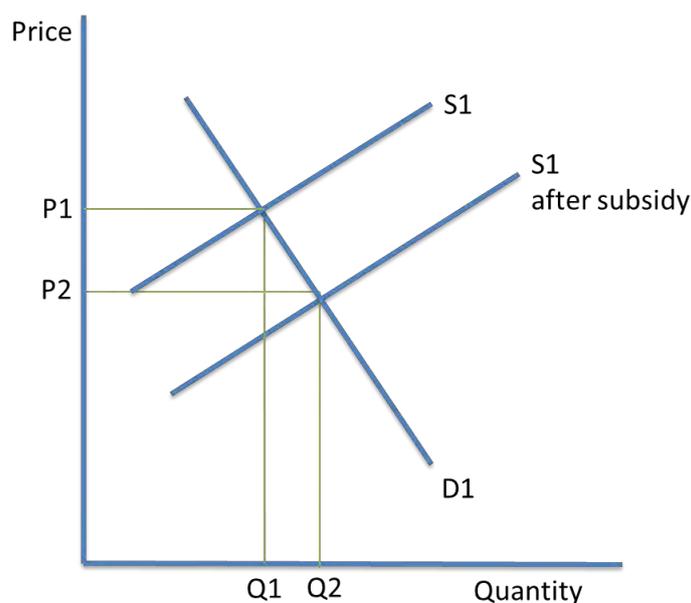
📖 Long run aggregate supply could increase if the subsidy is aimed towards a capital project.

📖 There could be government failure, if the government provides an inefficient subsidy or if the subsidy distorts the market price.

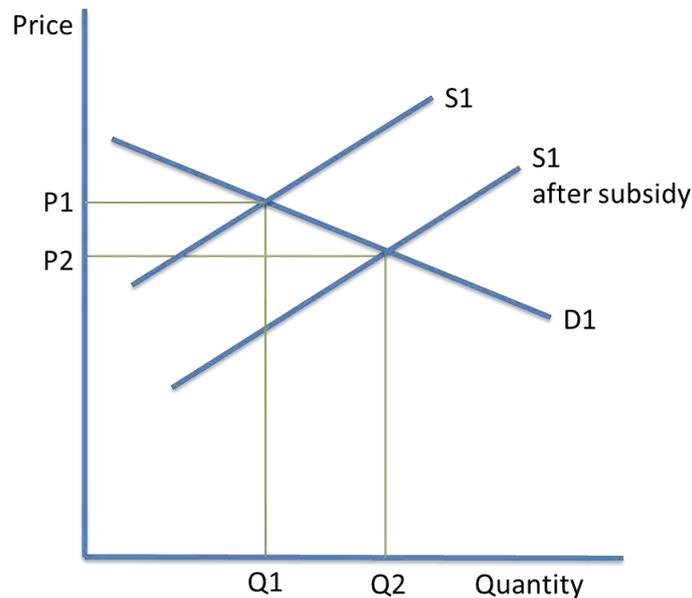
📖 Government revenue could be better spent elsewhere. The opportunity cost of the subsidy should be considered.

📖 It is usually the tax payer who pays for the subsidy, and they might not receive any direct benefit from the subsidy.

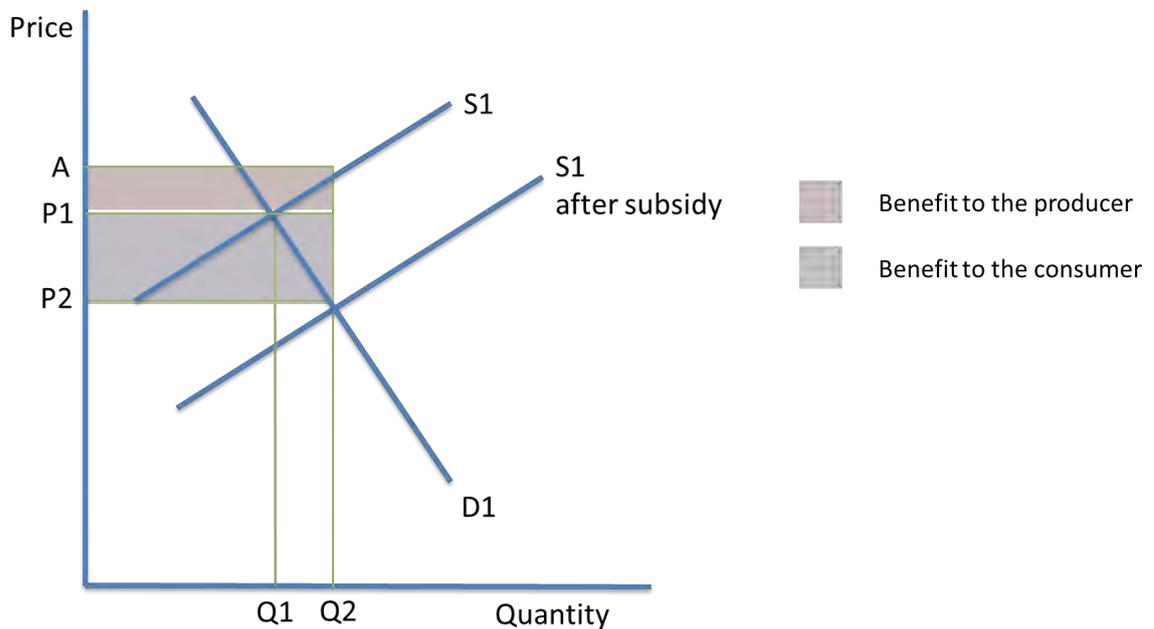
📖 If demand is price inelastic, the subsidy will have a large effect on equilibrium price. This gives a greater consumer gain than when demand is elastic.



-  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.



Nationalisation:

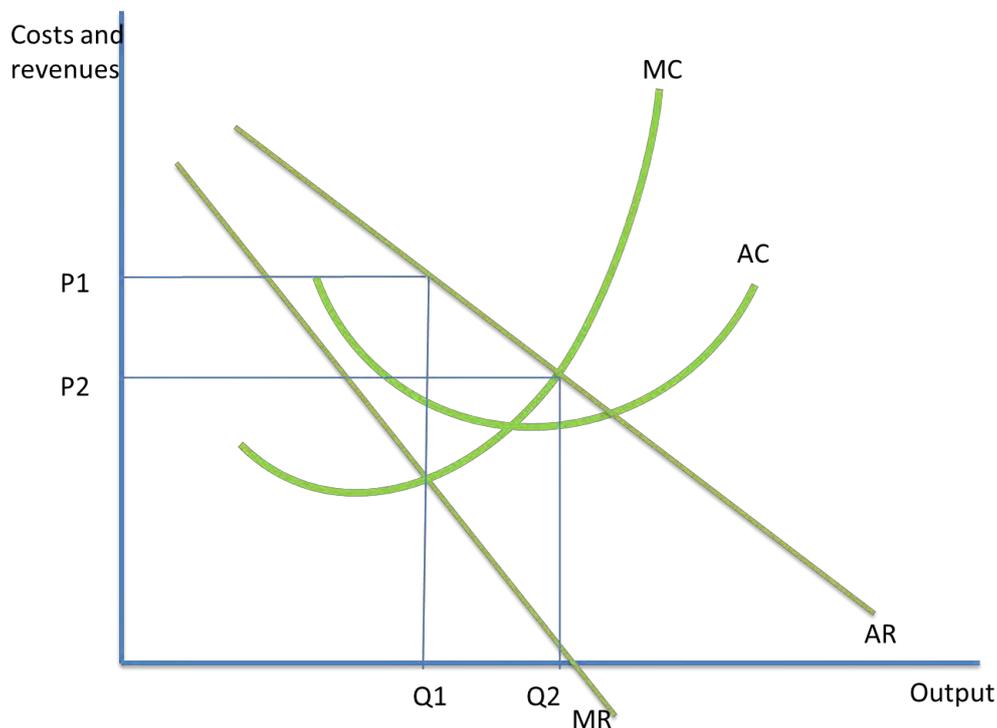
-  This occurs when private sector assets are sold to the public sector. In other words, the government gains control of an industry, so it is no longer in the hands of private firms.
-  The railway industry in the UK was nationalised after 1945.
-  By nationalising an industry, natural monopolies are created. This is because it is inefficient to have multiple sets of water pipes, for example. Therefore, only one firm provides water.
-  Some nationalised industries yield strong positive externalities. For example, by using public transport, congestion and pollution are reduced.
-  Nationalised industries have different objectives to privatised industries, which are mainly profit driven. Social welfare might be a priority of a nationalised industry.

Privatisation:

-  This means that assets are transferred from the public sector to the private sector. In other words, the government sells a firm so that it is no longer in their control. The firm is left to the free market and private individuals.
-  It also covers the deregulation of the market.
-  For example, British Airways was privatised in the UK and now operates in the competitive market.
-  Free market economists will argue that the private sector gives firms incentives to operate efficiently, which increases economic welfare. This is because firms operating on the free market have a profit incentive, which firms which are nationalised do not.
-  Since they are operating on the free market, firms also have to produce the goods and services consumers want. This increases allocative efficiency and might mean goods and services are of a higher quality.
-  Competition might also result in lower prices.
-  By selling the asset, revenue is raised for the government. However, this is only a one-off payment.

The diagram shows where nationalised and privatised firms operate. Privatised firms operate at Q1 P1, which is the profit maximising level of output and price. A nationalised firm is more likely to operate at Q2 P2, which is the allocatively efficient level of output ($AR=MC$).





Deregulation

By deregulating the public sector, firms can compete in a competitive market, which should also help improve economic efficiency.

Deregulation is the act of reducing how much an industry is regulated. It reduces government power and enhances competition.

Excessive regulation is also called 'red tape'. It can limit the quantity of output that a firm produces. For example, environmental laws and taxes might result in firms only being able to produce a certain quantity before exceeding a pollution permit.

Excessive taxes, such as a high rate of corporation tax, might discourage firms earning above a certain level of profit, since they do not keep as much of it. This might limit the size that a firm chooses, or is able to, grow to.



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.

Property rights

- Consumers and producers have a right of ownership of the goods they produce where there are property rights. This encourages entrepreneurship and inventions, since ideas are protected. However, without these rights, markets become inefficient. Resources could be over-exploited or misused, which can lead to market failure.

Behavioural insights and 'nudge' theory

- Consumer behaviour can influence the policies that governments employ. These policies might be different to traditional policies, and the two types of policy could work with each other. Policies developed from the theories of behavioural economics could be more effective for dealing with economic issues.
- Nudges aim to change the behaviour of consumers without taking away their freedom of choice. It comes under the category of choice architecture. For example, rather than banning something like junk food, replacing it with healthier food is a nudge. This still allows consumers to make a free choice, but it alters their behaviour to choose the healthier option.



It is sometimes argued that nudges are manipulative and consumers do not get a free choice with them. However, due to imperfect information that exists between consumers and firms, nudges can help prevent consumers making irrational or poor choices, so their welfare is maximised.

