

Government intervention in markets

Government intervention is used in mixed economies to correct market failure, raise government revenue, and promote equity. It can also be used to support firms/industries and help poorer households.

Indirect taxes

What is an indirect tax?

An indirect tax is a charge placed on the production or consumption of a good or service. It increases firms' costs, which tends to push prices up and reduce output.

Types of indirect tax

- **Specific tax:** a fixed amount per unit (e.g. £3 per unit). This increases costs by the same amount per unit, so supply shifts left in a parallel way. For example the fuel duty is a fixed amount , **52.95p** per litre of fuel .
- **Ad valorem tax:** a percentage of the price (e.g. 10%). The higher the price, the larger the tax per unit, so supply rotates and becomes steeper. For Example VAT is an ad valorem tax (e.g. UK VAT at 20% in 2026) .

Diagram For a Specific Tax

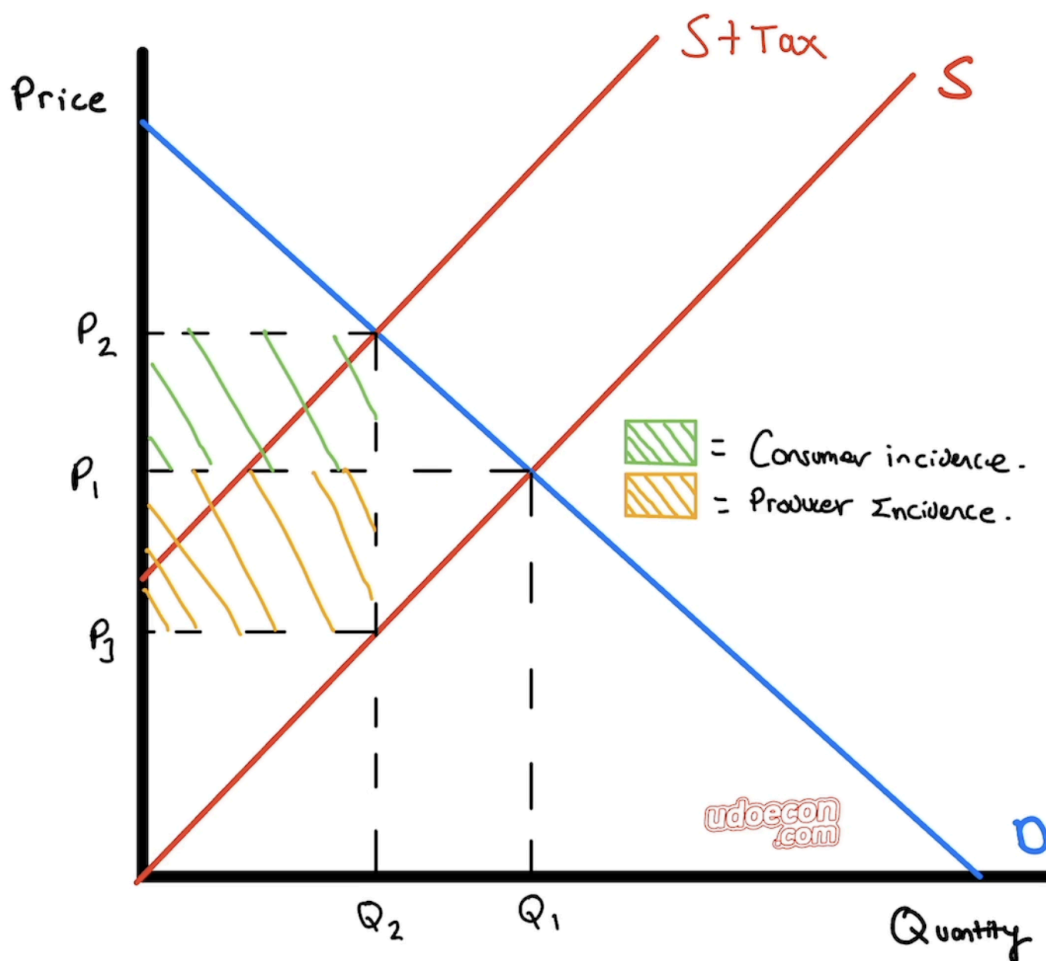
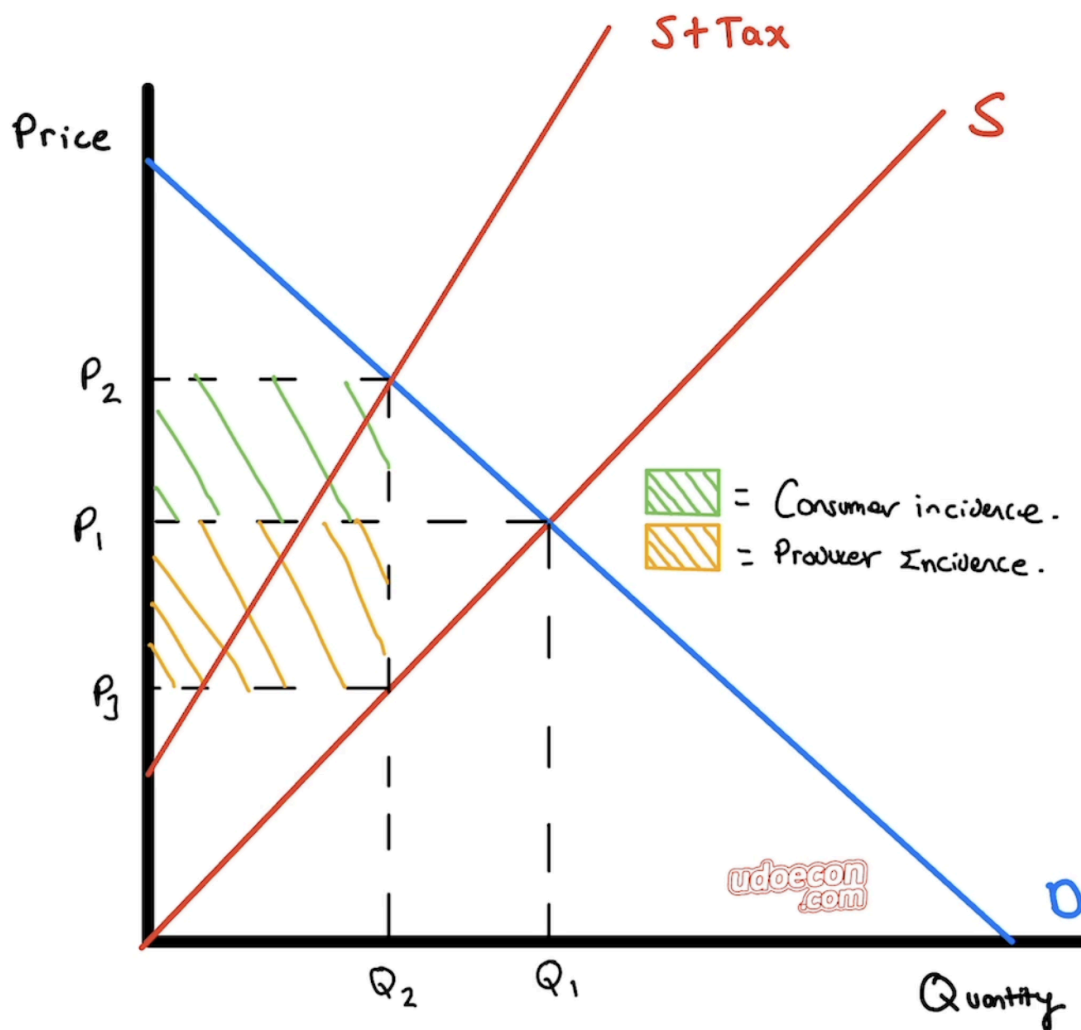


Diagram For an Ad Valorem tax

An ad valorem tax is a **percentage of the price** (e.g. 10%).

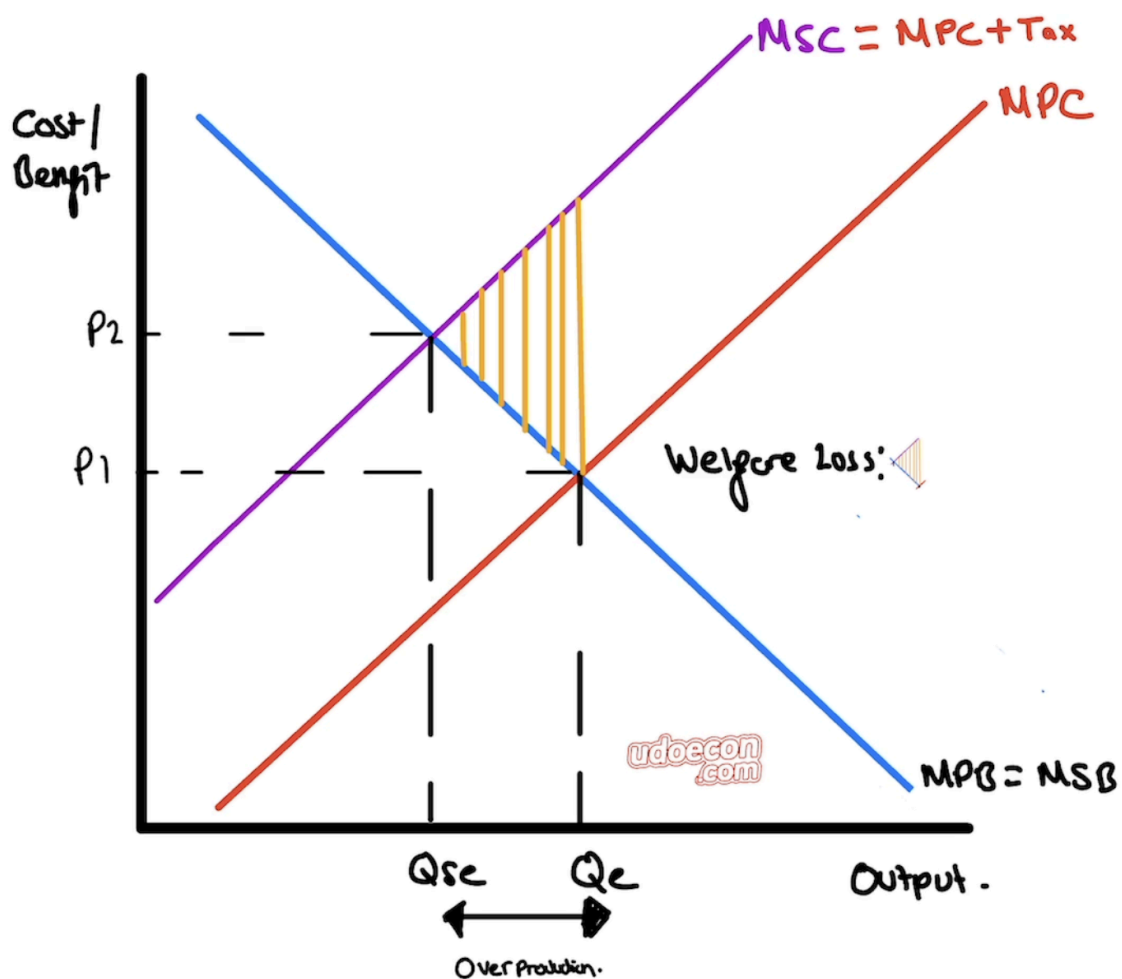
When the price is low, 10% is a small amount; when the price is high, 10% is a bigger amount. So the extra cost **isn't constant**. It gets **larger** as price **rises**.

That's why the post-tax supply curve doesn't sit the same distance above the original: the gap **widens at higher prices**, so the curve **pivots/rotates outward** ("fans out") rather than shifting up in parallel.



Using a tax to correct market failure (negative externalities)

With a negative externality of production, $MSC > MPC$, so the free market overproduces. A **tax** increases firms' costs, shifting the cost curve up from MPC to $MPC + \text{tax}$ (purple, labelled $MSC = MPC + \text{tax}$). The new intersection with $MPB (= MSB)$ moves output **left from Q_e to Q_{se}** (and price rises from P_1 to P_2). If the tax is set to match the external cost, the new outcome is the **socially efficient equilibrium**, meaning the externality has been **internalised** and the welfare loss is reduced.



Advantages of a tax

- Reduces overconsumption/overproduction when a good creates external costs.
- Raises government revenue, which can fund other policies.
- Encourages consumers to switch to less harmful substitutes.

Disadvantages of a tax

- Lowers consumer surplus and may be regressive, hitting low-income households harder as a share of income.
- Lowers producer surplus and profits, which can reduce investment and employment.

- May lead to unintended substitution and increase incentives for avoidance or illegal markets.

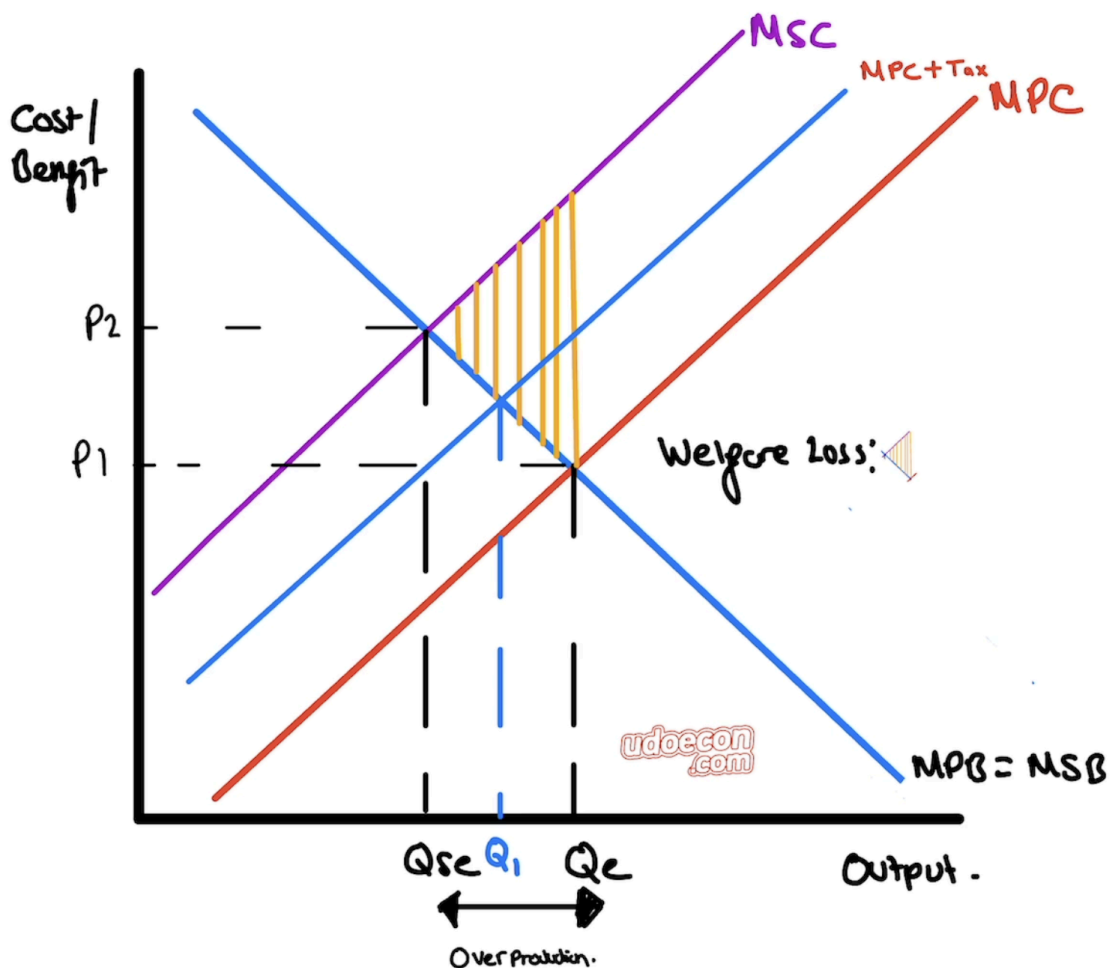
What affects how effective a tax is?

Effectiveness depends on **PED** and how responsive consumers are to higher prices. E.G Sugar Tax

It also depends on the availability of close substitutes (XED), since consumers may switch away more easily.

There is a risk of **government failure** because the government may not know the exact size of the external cost, so it can set the tax **too low or too high**. In the diagram, the tax shifts the cost curve from **MPC** (red) up to **MPC + tax** (blue), but this new curve still sits **below MSC** (purple).

That means output only falls from **Q_e** to **Q₁**, rather than all the way to the **socially efficient** level **Q_{se}**. So the market is still **overproducing**, and some **welfare loss remains**. This is government failure because the intervention hasn't fully corrected the market failure, so resource allocation is still not socially efficient.



Subsidies

What is a subsidy?

A subsidy is a government payment to a firm to encourage production of a particular good, often a merit good. It reduces firms' costs and makes the good cheaper for consumers.

Examples include subsidising EV .

What the diagram shows

A **subsidy** lowers firms' costs, so the supply curve shifts right from **S** to **S + subsidy** (as shown on the diagram). This moves the market equilibrium from **(Pe, Qe)** to **(P1, Q1)**, meaning the **price falls** from **Pe** to **P1** and **quantity rises** from **Qe** to **Q1**.

The subsidy creates a “wedge” between what consumers pay and what producers receive. Consumers benefit because they now pay the lower price **P1**, while producers receive a **higher effective price** (the market price plus the subsidy per unit), which is why firms are willing to supply more at every price.

Advantages of a subsidy

- Increases consumption and production of merit goods, reducing underconsumption.
- Increases consumer surplus through lower prices and higher output.
- Increases producer surplus and profitability, which can support reinvestment.
- Encourages switching away from demerit goods if a cleaner substitute is subsidised.

Disadvantages of a subsidy

- Has an opportunity cost, since government spending could be used elsewhere or requires higher taxes/borrowing.
- Can create dependency, weakening incentives for firms to cut costs or innovate.
- May distort competition, especially if it protects inefficient firms.

What affects how effective a subsidy is?

The impact depends on **PED** and **PES**, which influence how much output rises and who benefits most.

Government failure is possible if policymakers misjudge the size of the external benefit.

Minimum prices

What is a minimum price?

A minimum price is a legal floor below which the price cannot fall. It is used to discourage consumption of some goods or to protect incomes in certain markets.

Examples include minimum unit pricing for alcohol in Scotland (65p per unit)

What the diagram shows

For a **minimum price** to have an effect, it must be set **above the free market equilibrium** at **P_e**. In the diagram, the minimum price is **P₁**, which sits above **P_e**.

At the higher price **P₁**, firms are willing to supply more, so output rises to **Q₂** (move along the supply curve). But consumers demand less at **P₁**, so quantity demanded falls to **Q₁** (move along the demand curve). The result is **excess supply (a surplus)**, shown by the gap between **Q₁** and **Q₂** at the minimum price.

Advantages of a minimum price

- Can reduce consumption of demerit goods by increasing price, moving output closer to the social optimum.
- Can provide income certainty for producers, such as in agriculture, and protect suppliers facing strong buyer power.

Disadvantages of a minimum price

- Reduces consumer surplus and can affect addicted consumers most.
- Surpluses can lead to waste, storage costs, and illegal markets selling below the minimum price.
- If the government buys the surplus, the policy creates a significant fiscal cost and opportunity cost.

Maximum prices

What is a maximum price?

A maximum price (price cap) is a legal limit that the price cannot exceed. It is often used to keep essential goods and services affordable.

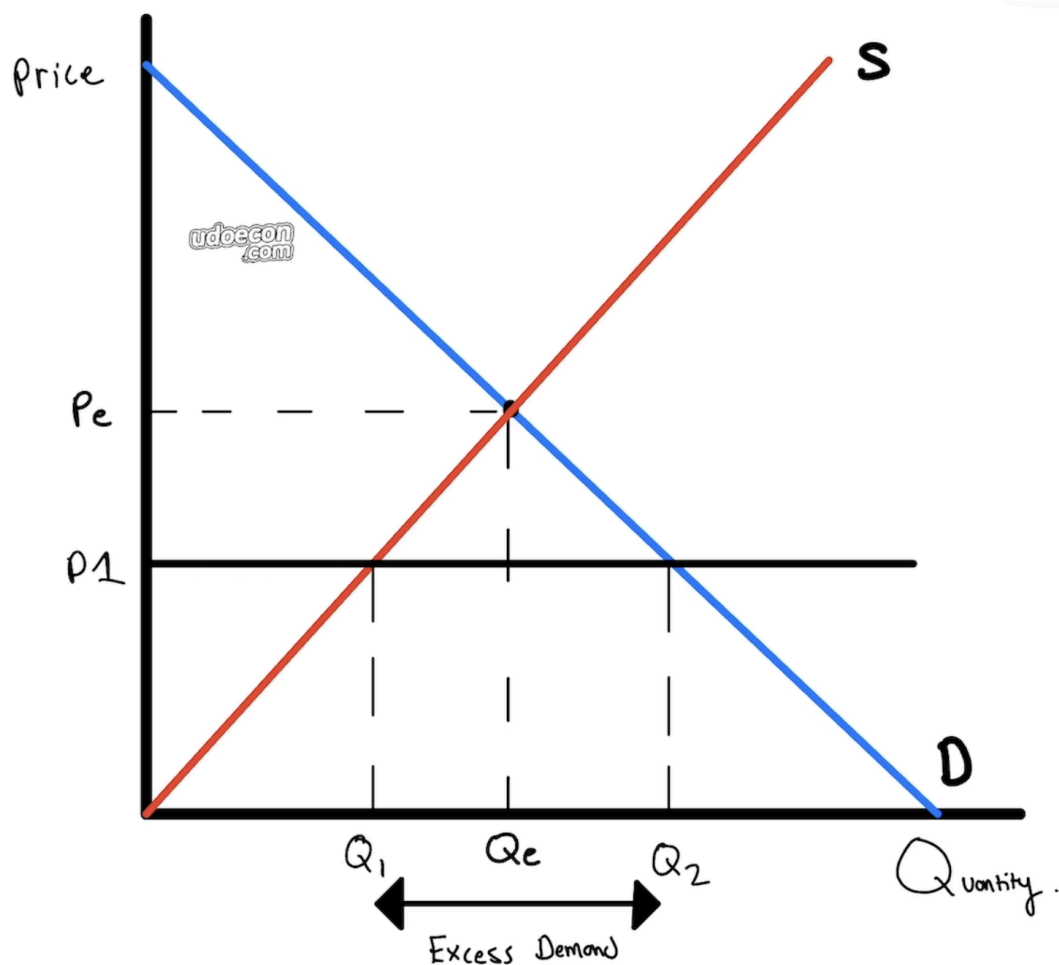
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Examples include uni tuition fee caps in the UK (2025-26 = £9,535 → Rising for next few years , great real world application)

What the diagram shows

For a **maximum price** to have an effect, it must be set **below the free market equilibrium** at P_e . In the diagram, the maximum price is P_1 , which is below P_e .

At the lower price P_1 , consumers want more, so **quantity demanded rises to Q_2** (move along the demand curve). But firms are less willing to supply at this lower price, so **quantity supplied falls to Q_1** (move along the supply curve). This creates **excess demand (a shortage)**, shown by the gap between Q_1 and Q_2 at P_1 .



Advantages of a maximum price

- Keeps essential or merit goods affordable, supporting equity and low-income households.
- Can limit the abuse of market power when firms could otherwise raise prices.

Disadvantages of a maximum price

- Shortages mean some consumers miss out entirely, even if they are willing to pay more.
- Can encourage black markets or rule-breaking, such as unofficial charges or illegal higher prices.
- Lower producer profits can reduce investment, employment, and long-run supply.

What affects how effective a maximum price is?

The size of the shortage depends on **PED** and **PES**, since more elastic demand or supply can widen the gap. Maximum prices tend to work better when combined with policies that increase supply, such as subsidies.

Other methods of government intervention

These policies are used to tackle market failure without directly changing price through taxes/subsidies. They are most common where there are negative externalities, information gaps, or public goods.

Tradeable pollution permits

What are tradeable pollution permits?

The government creates a market for pollution permits and gives or sells permits to firms. Each permit usually allows the emission of a fixed amount of pollution (e.g. one tonne).

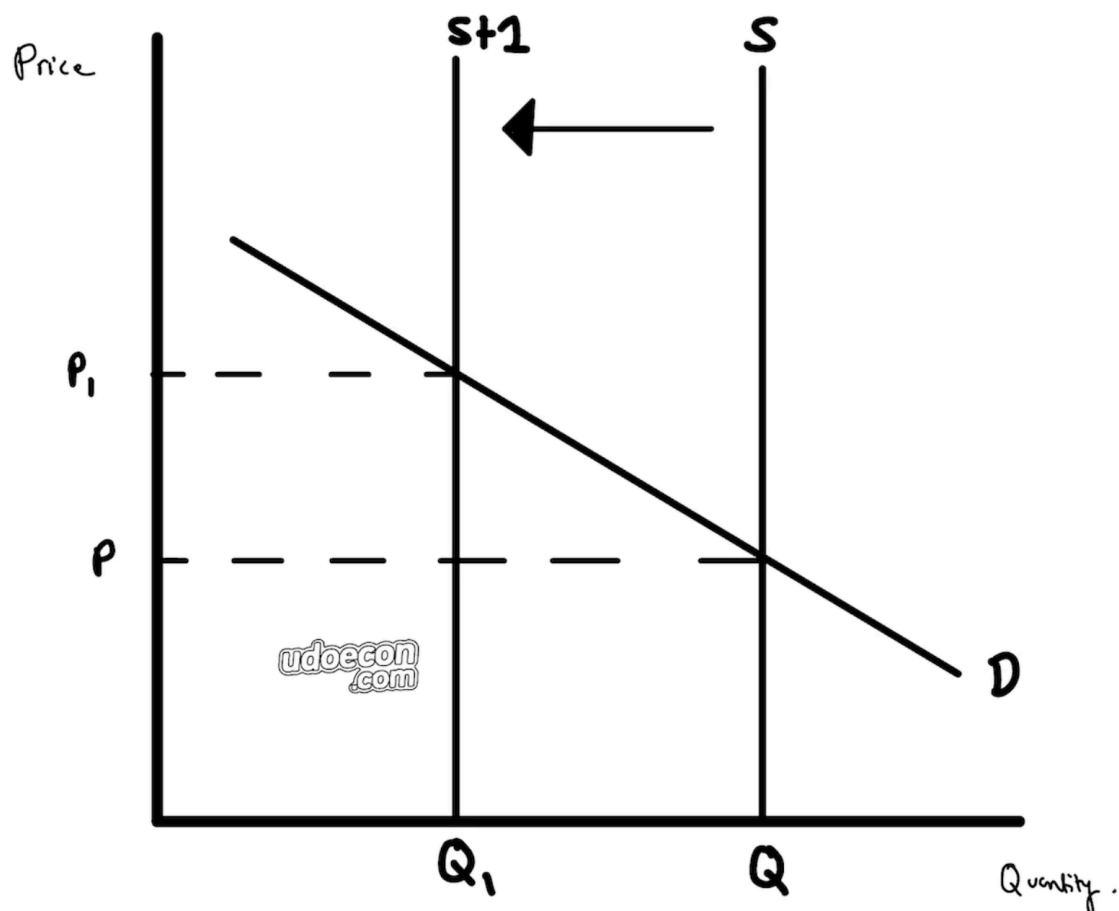
How the policy works

Firms that pollute more must buy extra permits from firms that pollute less. This puts a price on pollution, making it an additional cost of production.

Why it can reduce negative externalities

If buying extra permits is more expensive than investing in cleaner technology, firms are incentivised to cut emissions. Firms that reduce pollution can sell spare permits and gain extra revenue.

What the diagram shows



The **supply of permits is fixed by the government**, so it is shown as a **perfectly inelastic (vertical) supply curve** at **S**. Firms demand permits because they need them to legally pollute, so the market price is set where **D intersects S**, giving a permit price **p** and quantity of permits **q**.

Tightening the cap

If the government **reduces the number of permits available**, the supply of permits shifts **left from S to S1**. This reduces the number of permits from **q to q1**, meaning firms are allowed to emit less pollution overall.

Why it discourages pollution

Because permits are now scarcer, the **permit price rises from p to p1**. This increases firms' costs, making pollution more expensive, which incentivises firms to cut emissions and invest in cleaner technology instead of buying costly permits.

Advantages

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- Reduces negative externalities by making pollution costly.
- Encourages firms to switch to cleaner production methods when it is cheaper than buying permits.
- Rewards cleaner firms because they can sell unused permits.

Disadvantages / evaluation links

Effectiveness depends on where the government sets the total number of permits. If too many permits are issued, permit prices stay low and firms have little incentive to cut pollution.

State provision of public goods

Why public goods need state provision

Public goods benefit society but private firms often won't provide them due to the free rider problem. Because people can enjoy the good without paying, firms struggle to make revenue.

How the state provides public goods

Public goods are often provided free at the point of use, but funded through general taxation. This ensures provision even when the price mechanism would fail.

Examples

Examples include roads, parks, lighthouses, and national defence.

Advantages

- Ensures essential public goods are provided when the market would underprovide or not provide at all.
- Can improve living standards and support economic activity (e.g. transport infrastructure).

Disadvantages / evaluation links

State provision has an opportunity cost because tax revenue could be spent elsewhere. The government may also provide too much or too little if it misjudges demand or costs.

Provision of information

Why information matters

Information gaps cause market failure because consumers and firms may not make informed choices. This can lead to overconsumption or underconsumption, especially with merit and demerit goods.

How governments improve information

Governments can provide information portals and campaigns to reduce asymmetric information. This helps consumers make better decisions without directly forcing behaviour.

Examples

Examples include cigarette packet warnings , traffic light nutrition labels on foods and campaigns such as Change4Life .

Advantages

- Tackles information failure by improving consumer understanding.
- Often cheaper and less interventionist than taxes or regulation.
- Can shift demand in a welfare-improving direction over time.

Regulation

What is regulation?

Regulation is when the government sets rules to limit harm from negative externalities of production or consumption. It often involves standards, bans, limits, or compulsory requirements.

How regulation is enforced

Governments set up regulatory agencies to monitor compliance and enforce rules. In the UK there are many regulators, such as the **CMA (Competition Regulator)** , **Ofsted (Education)**, **Ofgem (Energy)** and **Ofwat (Water)** and firms or individuals can face fines for breaking rules.

Advantages

- Can directly reduce harm by setting clear legal limits on damaging behaviour.
- Works well when the government wants a guaranteed outcome (e.g. banning a harmful chemical).

Disadvantages / evaluation links

Regulation can be costly to monitor and enforce, especially across large industries. Firms may try to avoid rules, and strict regulation can raise costs, reduce output, and cause unintended consequences such as black markets.