

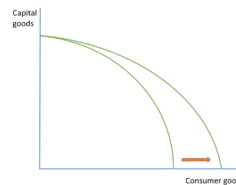
- Anywhere outside the graph is unattainable as the resources at this current period can only be stretched to the boundary of the graph.

Economic efficiency is achieved when resources are used for their best use. At all points on the PPF, resources are **productively efficient** as production is taking place at the lowest cost producing the maximum goods.

Allocatively efficient is when social welfare is maximised so not all points on the PPF are allocatively efficient.

A shift of the curve outwards suggests economic growth (increase production potential). This can be done when:

- There is an increase in finance
- Improvement of technology
- Increased skilled migration
- Discovery of raw materials
- Good weather
- Increase in education
- Increase in resources and their quality



Shift in production of one good

A shift of the curve inwards suggests economic decline (decrease production potential). This can be due to:

- Natural disasters
- Bad weather
- Wars
- Fall in education spending
- Migration (labour quantity and quality)

These can destroy capital or consumer goods removing economic potential. It also can remove skilled labour.

Movement along the curve indicates a change in the combination of goods produced, the same amount of resources are allocated amongst the two goods differently.

A shift of the curve indicates a change in the productive potential of the economy; this is either growth or decline. There has been a change in the number of resources and/or the technology available to the country and so their potential output has changed.

A linear ppf shows constant opportunity cost (same ratio) whilst the concave ppf shows that opportunity cost varies as more of one good is made.

The PPF is limited as it shows choices not an indication of what will be produced. It is a simplified model of reality, only considers two variables and does not show where maximum social welfare is achieved.

1.1.5 Specialisation and division of labour

Specialisation is a system of organisation where economic units such as households are not self-sufficient but focus on producing certain goods and services and trading the surplus with others.

Division of labour is where the production process is divided into different stages allowing workers to specialise in different tasks to make a good or service in cooperation with other workers.

This concept was created by the Scottish economist Adam Smith. He focused on a pin factory to show that when a production of a pin was divided into separate tasks and the workers divided accordingly resulted in an exponential increase in productivity compared to one person making the pin, he claimed this was because workers were specialised and so were more efficient. He argued one person could make 20 pins whilst 10 specialised workers could make 48000 pins a day.

The car manufacturer that modernised this concept was Ford Motors.

This increased **productivity** (output per unit input employed) is due to increase in **labour productivity** (output per worker) and **capital productivity** (output per unit of capital employed).

Adam Smith famous phrase- 'It is not from the benevolence of the butcher, the brewer or the baker that we expect our dinner but from their regard to their own self interest.'

Bourgeois and **proletariat** stems from the french revolution. The bourgeoisie refers to the factory owners and the proletariat the factor workers.

Smith recognised that some government intervention such as to correct abuse of monopolies was justified and that creating a framework was needed. While Hayek argued that governments should not intervene as it would worsen or distort markets e.g. national minimum wage. He was strongly for individual freedoms and believed central planning imposed the minorities ideas. Hayek also argued the government would not be able to process information effectively (information gaps) and malinvestments will occur. Whilst consumers at least know what they want even if they lack information.

Marx argued that free markets exploit workers and simply makes the rich richer with higher profits, which do not get trickled down to the workers. He was strongly in favour of common ownership of the means of production.

Advantage of a free market:

- **More choice** (consumer sovereignty) in products and jobs and free to spend more, creating higher welfare. This is a lot higher for those on higher incomes.
- **Strong incentives to innovate** and produce **high quality** low priced goods in this competitive market, however this may be outstripped by monopoly power and manipulative advertising.
- **Higher flexibility** to adapt quickly to market needs.
- **Automatic** due to the invisible hand.
- **High efficiency and productivity** due to competition and incentive, providing less waste.
- **Higher economic growth** due to innovation and efficiency, especially in the short term, raising living standards.
- High **political and economic freedom** for consumers and firms.
- **Optimal allocation of resources** to meet consumer needs.

Disadvantage of a free market:

- **Larger inequality** and lower taxes as the firm's profit, goods are only for those that can afford them.
- **Prolonged trade cycles** as markets take time to adjust, looking after the system.
- **Workers are exploited** as firms try to maximise profits with high unemployment.
- **Negative externalities** lowering living conditions/standards.
- **Monopolies exploiting** the market and consumers.
- There are often **missing provisions** and **high risk** with few benefits provided by the government.
- **Increased demerit goods** and lack of merit goods.
- **Resources wasted** on unproductive expenses like advertising.
- Many **missing markets** occur like the army.

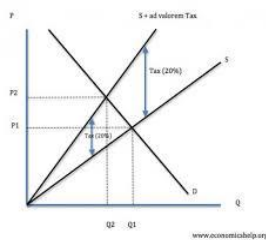
Advantage of a command economy:

- **Higher equality** as the government equally tries to distribute resources and they charge higher redistributive taxes. This creates a **minimum living standard looking after social welfare**.
- **No wasted resources** on competition, the government fully employs them all.
- **Cost effective** standardised products.
- **No boom and bust** cycle.
- There is **low risk** with all of society normally provided for with necessary provisions like healthcare and unemployment benefits provided, motivated by wellbeing.
- **No exploitation** of workers.
- **Few negative externalities**

Two main types of indirect tax:

- **Specific/unit tax**, the tax does not change with the value of the good but with the quantity purchased. E.g. Excise duties (bringing goods over), £196.42 per thousand cigarettes. For the specific tax there is a parallel shift of the supply curve.
- **Ad valorem tax**, which is when a tax increases in proportion to the value of the good, it's a percentage of the price of the product. E.g. VAT (20% in the UK). Therefore the higher the value the higher the tax. There is a pivoting shift of the supply curve.

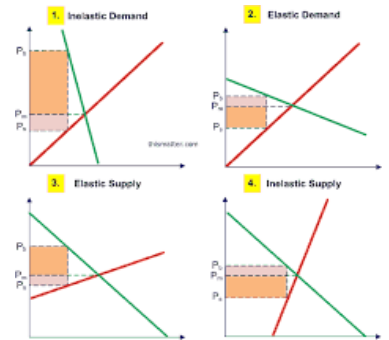
Graph types:



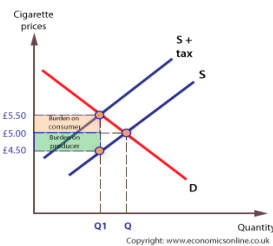
Ad valorem



Specific

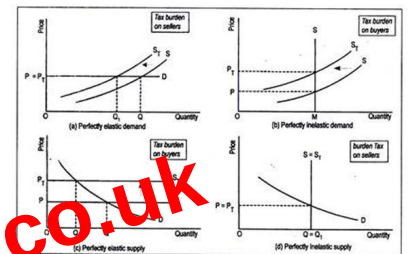


The incidence of tax is the burden of tax on the taxpayer.



When taxed to draw a curve:

1. Shift supply backwards as cost of productions increase so you can no longer supply as much
2. The equilibrium moves from Q_1P_1 to Q_2P_2
3. Draw a line to the old supply
4. From there draw a line to the Y axis
5. The whole box is government revenue, the top half is consumer burden, the bottom half is producer burden
6. The consumer pays the final price
7. The size of the tax can be seen as the difference between the supply curves. The equilibrium change is consumer tax



Demerit goods like alcohol and cigarettes may be taxed to limit both production and consumption as such goods are deemed to be bad for society, which can act as a source of revenue for the government. The government will tax inelastic products to maximise revenue.

The revenue change for producers is $Q_1 \cdot P_1 - Q_2 \cdot P_2$. However they only lose out on the tax burden. The new revenue for producers is new revenue minus the government tax.

The extent of burden depends on the elasticity of demand and supply:

	Demand	Supply
Perfect elastic	Producer pays whole burden	Consumer pays the whole burden
Perfect inelastic	Consumer pays whole burden	Producer pays the whole burden
Elastic	Producer pays a higher burden than the consumer	Consumer pays a higher burden than the producer
Inelastic	Consumer pays a higher burden than the producer	Producer pays a higher burden than the consumer

by consumers. This distortion may lead to excess demand/supply, black markets arising and the allocation of funding towards failing industries.

Examples:

- Taxes on products like wheat being imported allows more inefficient firms who would normally be priced out the market to profit and stay in business. However this results in higher prices and does not allow a more efficient usage of the land that would occur without this price distortion. Thus government failure occurs when the losses to consumers outweigh farmers gains.
- Price signal changes in the labour market e.g. due to minimum wage being too high results in people put out of work due to wages being too high for firms to afford and their thus being excess workers in the labour market. It also might increase the amount unemployed due to higher benefits encouraging laziness.

Information gaps

When the government does not have full information this might lead to them to make incorrect decisions. The government can only make decisions based on their own bounded rationality.

Example:

- The pandemic led to the government having to make assumptions as it was impossible for them to have all the information.

Excess administrative costs

Government intervention will require some level of funding which creates an opportunity cost, the social costs may thus be higher than social benefits once administration costs are taken into account.

Interventions such as buffer stock schemes, pollution permits are schemes which require governments to monitor and fund these operations. Further giving subsidies and providing benefits means these are raised via taxes lowering current living standards.

Example:

- The government may spend £30,000 a worker to put them back in work, however the overall gain may be worth less than this resulting in an overall reduction in social welfare due to this opportunity cost.

Failure examples:

- **Buffer stock schemes**, these aim to reduce price fluctuations by setting maximum and minimum prices. This involves buying and selling agricultural stock. However this leads to overproduction of these stocks leading to dumping and price distortions in other markets reducing other farmers welfare and incomes.
- **Housing market**, the government has tried to impose maximum prices on rented accommodation to make living more affordable. This makes renting less attractive for landlords who may then decide to sell those houses meaning there will be less affordable rental houses as there is less supply in the market of rental houses. Similarly by reducing deposits for first time buyers (the help to buy scheme, you need 5% instead of the normal 20%) leading more to come to the market pushing up house prices making it more unaffordable.
- **Public transport**, the government may decide to subsidise public transport in order to reduce congestion. However they may have a negative YED as people may prefer the comfort of their own private vehicle or ubers which does not produce congestion. These subsidies may be a misallocation as it is arguably an ineffective malinvestment.
- **Fishing industry**, the government may implement fishing quotas to limit overfishing. However if the quota is too high this will have no effect. Further if the fisherman went over the quota they may dump dead fish to avoid fines which is highly wasteful, which is also difficult to monitor.

Conflicting objectives

Every decision has an opportunity cost. However decisions thus lead to higher opportunity costs sometimes, resulting in conflicting objectives of importance. This results in wrong policy decisions.

Politicians maximising their own social welfare and corruption

Much of economics assumes that governments maximise social welfare however **public choice theory** opposes that. E.g. implement policies benefiting their own electors and they may also seek to redistribute resources to benefit themselves not society e.g. bribed to vote a certain way.