The Economic Problem

Economic problem

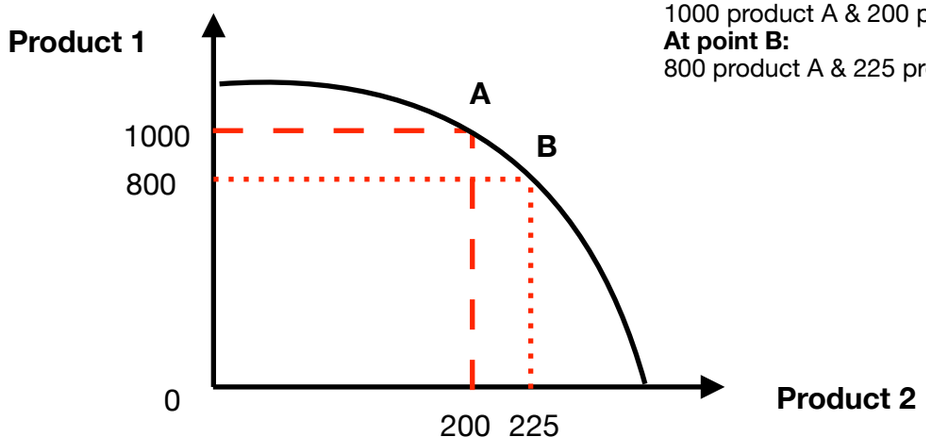
unlimited wants exceeding limited resources.

Factors of production

- **Land:** Natural resources including physical land
- **Labour:** Human input (physical and mental)
- **Capital:** Man-made resources to aid production (including buildings, processed materials etc.)
- **Enterprise:** Risk bearing and decision making (the drive behind the firm)

Production Possibility Curve (PPC)

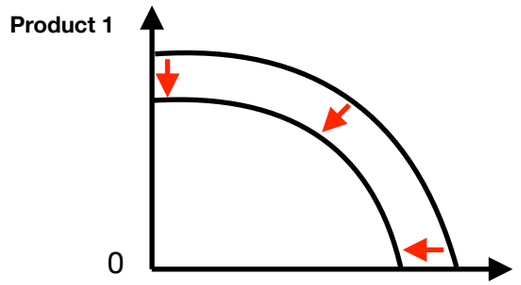
Shows the maximum output of two types of products and the combination of those products that can be produced with the existing resources and technology, thereby showing the opportunity cost of choosing one product over the other.



At point A:
1000 product A & 200 product B
At point B:
800 product A & 225 product B

Opportunity Cost: the best alternative forgone.

Shift of a PPC



Left

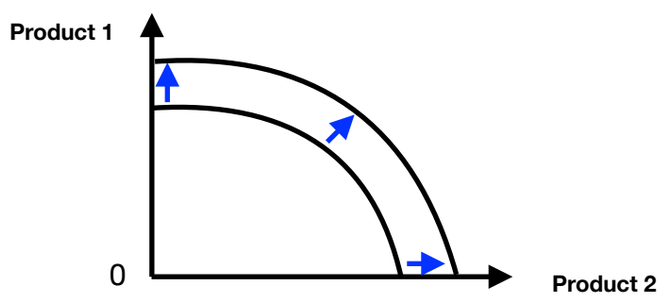
Possible reasons for a shift:

- **worker exodus (migration/change in demographics)**
- **capital stock not being replaced (old machinery not being updated)**
- **Natural Disasters (wipes out crops, prevents construction etc.)**

Right

Possible reasons for a shift:

- **Increase in labour force (migration, change in demographics)**
- **improved technology**
- **Improved education**



Supply and Demand Revision Cards

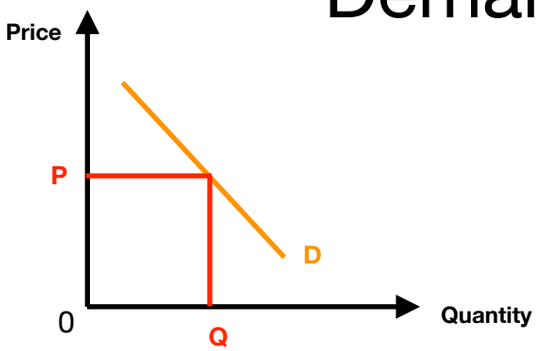
Supply: the willingness and ability to sell a product.

Demand: the willingness and ability to buy a product.

Aggregate supply: supply for the whole market.

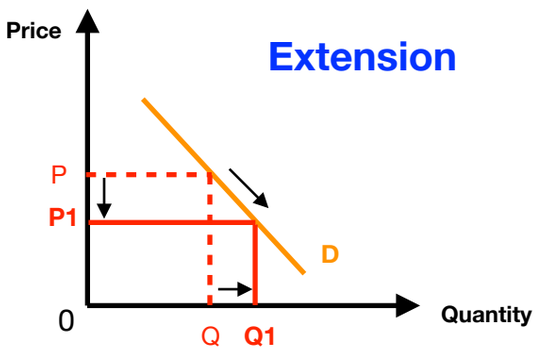
Aggregate demand: demand for the whole market.

Demand Curve

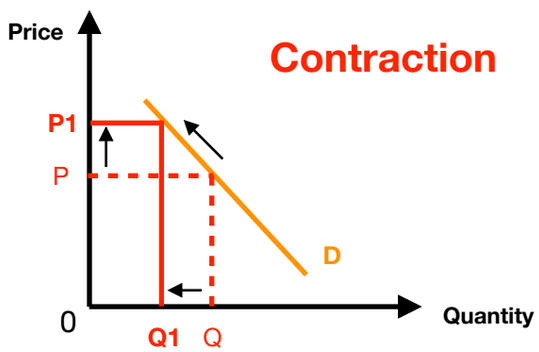


Extensions and contractions (moving up and down the demand curve) only ever occur in response to a change in price

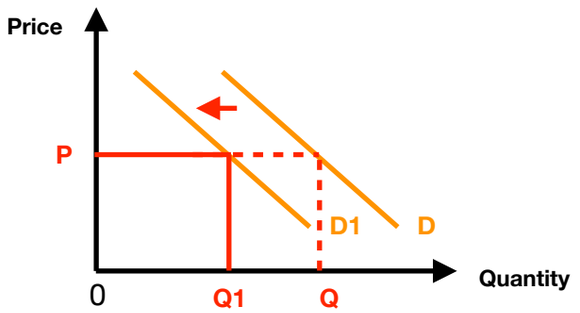
Extension



Contraction



Shift in demand curve



Left

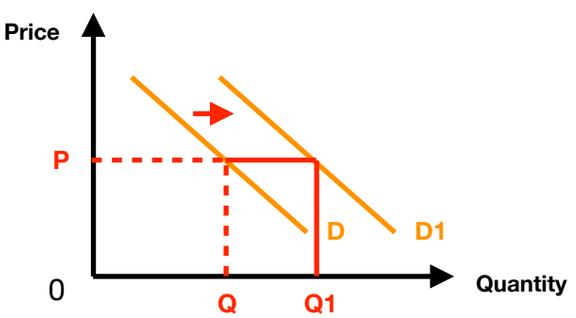
Possible reasons for a shift: SIT DIC

- Cheaper **S**ubstitutes
- Drop in **I**ncome/disposable income
- Change in fashions/**T**astes away from the product, or towards other similar products
- **D**emographic changes that don't favour the product.
- **I**nformation available - bad publicity, lack of advertising
- Price of **C**omplements

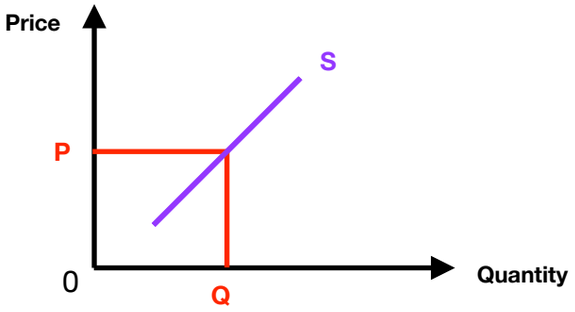
Right

Possible reasons for a shift: SIT DIC

- More expensive **S**ubstitutes
- Raise in **I**ncome/disposable income
- Change in fashions/**T**astes in favour of the product, or away from other similar products
- **D**emographic changes that favour the product.
- **I**nformation available - good publicity, plenty of successful advertising
- Price of **C**omplements

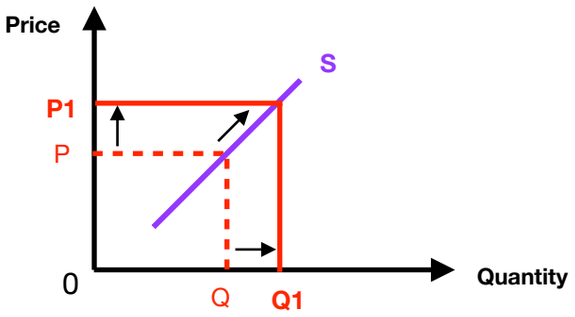


Supply Curve

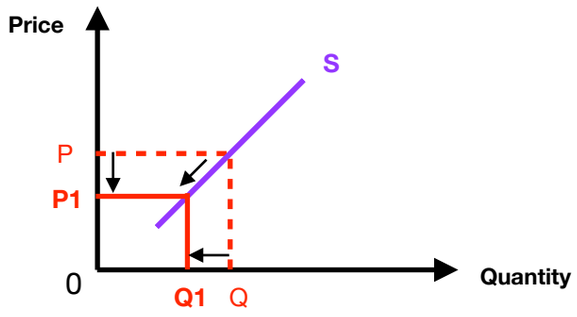


Extensions and contractions (moving up and down the supply curve) only ever occur in response to a change in price

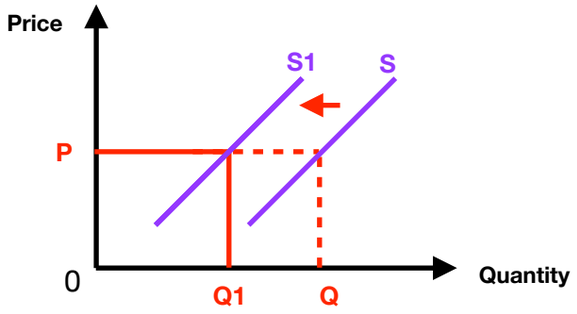
Extension



Contraction



Shift in Supply curve



Left

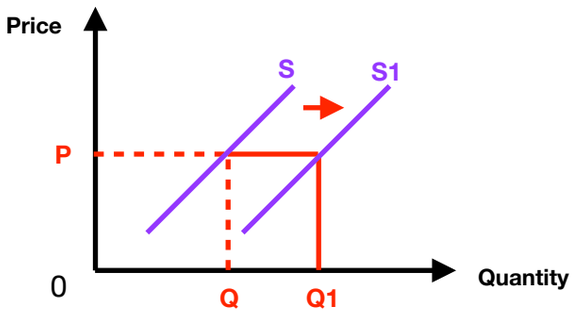
Possible reasons for a shift:

- Raise in production Costs
- Indirect Taxes - VAT, duty etc.
- Natural factors - weather conditions that hamper production

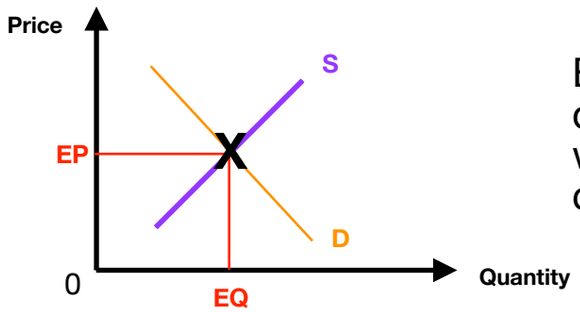
Right

Possible reasons for a shift:

- Lower production costs
- New technology - producing more for less
- Subsidies
- Positive natural factors - good growing weather



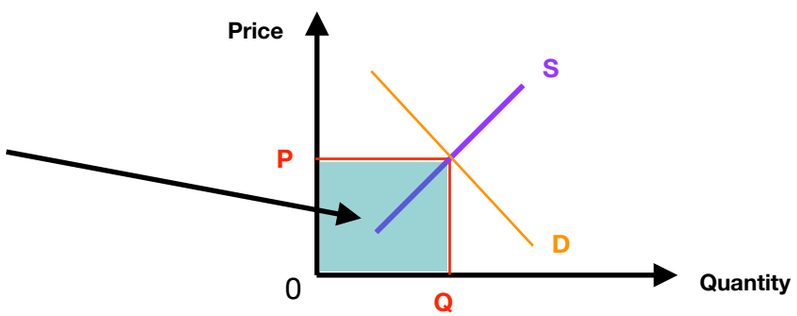
Equilibrium



Equilibrium price is when demand and supply are equal - where the supply and demand curve meet.

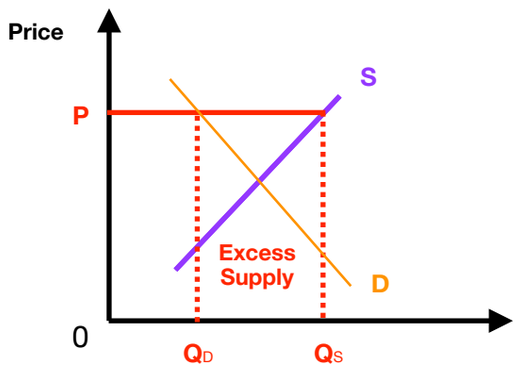
Total revenue:

Price X Quantity

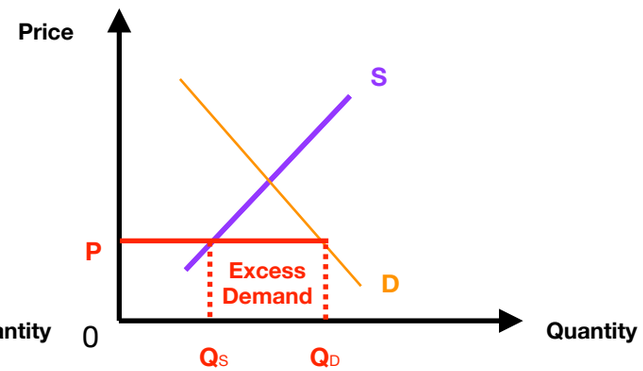


Excess Supply and Demand

When supply and demand are in **disequilibrium**, we get an excess of supply or demand.



The amount by which supply is greater than demand.



The amount by which demand is greater than supply.

Left

Shift in Supply

Excess ..... Demand

Price ..... **increase**

Contraction ..... in D curve

Quantity supplied .. **decreases**

Right

Shift in Supply

Excess ..... Supply

Price ..... **decrease**

Expansion ..... in D curve

Quantity supplied .. **increases**

Left

Shift in Demand

Excess ..... Supply

Price ..... **decrease**

Contraction ..... in S curve

Quantity supplied .. **decreases**

Right

Shift in Demand

Excess ..... Demand

Price ..... **increase**

Expansion ..... in S curve

Quantity supplied .. **increases**

Left

Shift in Supply

Caused by:

- Cost of production up - supply less for the same amount
- Government taxes pushing up price
- Natural disasters, poor weather conditions
- Price of production substitutes go down - make more growing wheat instead of barley, so fewer grow barley
- Number of producers in market goes down (AS)
- Change in market objectives - saving planet,

Right

Shift in Supply

Caused by:

- Cost of production up - supply more for less
- Changes in technology - supply more for less
- Government subsidies taking price down
- Good weather conditions for production
- Price of production substitutes go up - make more growing barley than wheat, so more grown barley
- Number of producers in market goes up (AS)
- Change in market objectives - flood market to win market share,

Left

Shift in Demand

Caused by:

- Less income/disposable income
- Fashions and tastes that don't favour the product
- Price of substitutes go down
- Price of complements go up
- demographic changes that don't favour the product
- Negative or no information given about the product

Right

Shift in Demand

Caused by:

- Income/disposible income increases
- Fashions and taste change in favour of the product
- Price of substitutes increase
- Price of complements go down
- Demographics change in favour of the product
- Good information available about the product, including positive reviews, advertising etc.

Price Elasticity of Demand

PED = Percentage change in quantity demanded / Percentage change in price

Nearly always negative, so we ignore the sign.

>1 = demand elastic (relatively elastic)

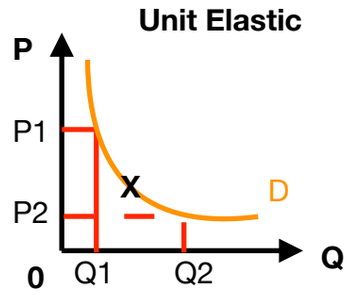
<1 = demand inelastic (relatively inelastic)

0 = Perfectly inelastic

1 = Unit elastic

∞ = Perfectly elastic

$$\frac{\%\Delta QD}{\%\Delta P}$$

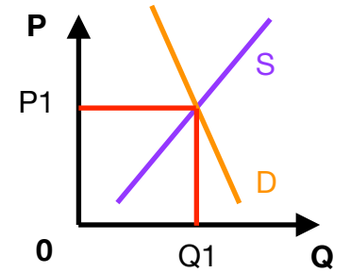


PED = 1

Demand Elasticity

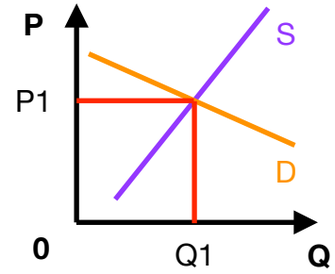
PED >1

Relatively Demand Inelastic



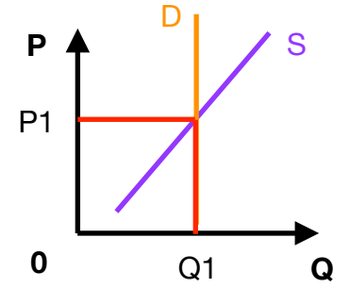
PED <1

Relatively Demand Elastic



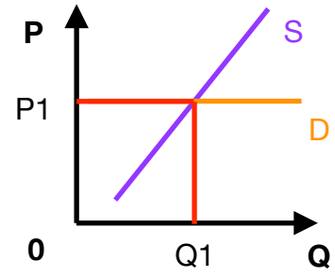
PED = 0

Perfectly Demand Inelastic



PED = ∞

Perfectly Demand Elastic



Price Elasticity of Supply

PES = Percentage change in quantity supplied / Percentage change in price

Always positive.

>1 = supply elastic (relatively elastic)

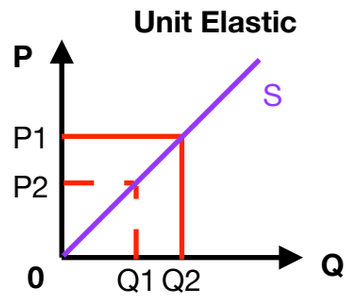
<1 = supply inelastic (relatively inelastic)

0 = Perfectly inelastic

1 = Unit elastic

∞ = Perfectly elastic

$$\frac{\%\Delta QS}{\%\Delta P}$$

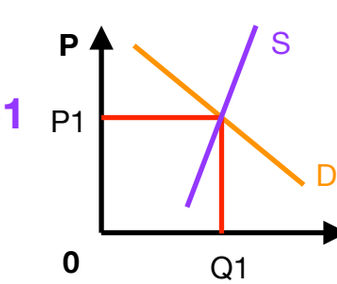


PED = 1

Supply Elasticity

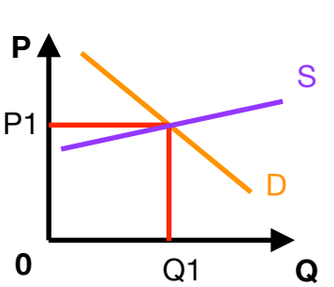
PES >1

Relatively Supply Inelastic



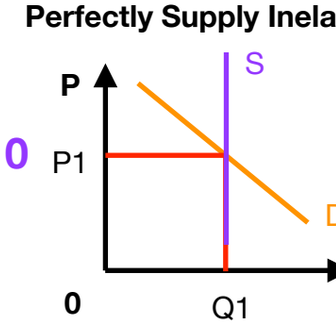
PES <1

Relatively Supply Elastic



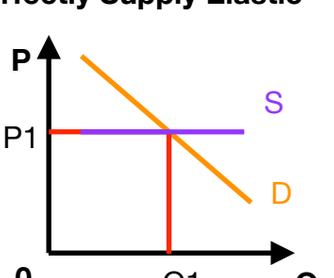
PES = 0

Perfectly Supply Inelastic



PES = ∞

Perfectly Supply Elastic



Allocation of Resources

Macroeconomics

The study of the economy as a whole.

Decisions made by: governments and central banks

Microeconomics

The study of the behaviour and decisions of households and firms, and he performance of individual markets.

Decisions made by: individual companies and people

Fundamental Economic Questions

- What to produce?
- How to produce? (where, by whom)
- For whom?

Economic Systems

Market

An economic system that relies on the price mechanism to allocate resources.

Planned

Factors of production are owned and managed by the government - gov't decide what, how and for whom.

Mixed

Bit of both. Some resources are owned and managed by the sate, and some by individuals.

Price Mechanism:
The system by which the market forces of demand and supply determine price.

Assumptions

- Business wants to maximise profit
- Consumers want to maximise satisfaction
- Everyone is rational in their decision making

Market Failure

When market forces fail to produce the products that consumers demand, in the right quantities and at the lowest possible cost, i.e. when markets are inefficient.

Externalities:

Costs and benefits not directly involved in the consumption and production of goods and services, i.e. to a third party.

We split this up into **external costs** and **external benefits**

Private costs and benefits:

Costs and benefits to those directly involved in the consumption and production of goods and services.

Social Costs and Benefits

The total costs and benefits of an economic activity.

External costs and benefits + private costs and benefits

Rational Choice Theory suggests:
Individuals will only consider their private costs.

Pros of considering social costs/benefits

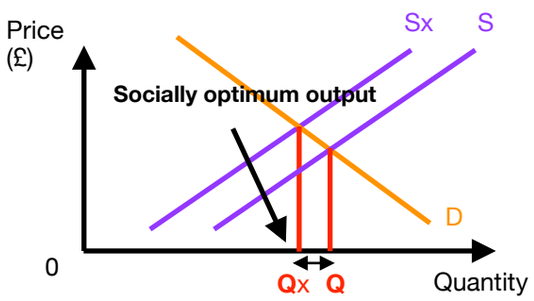
- Truer picture of costs and benefits
- Taxes and subsidies can balance out net effects
- If externalities are not taken into account, it will lead to market failure

Cons of considering social costs/benefits

- Impossible to identify and quantify all possible costs and benefits
- Might over-look financial viability of a venture in favour of externalities
- If market forces are not left to decide, this can lead to over/under production

When social costs vary significantly from private costs we get a socially inefficient outcome in a free market - MARKET FAILURE

Market Failure - over-production



If the total costs of supply were taken into account, equilibrium supply would be along curve Sx, but while a firm only pays private costs, it can supply at S.

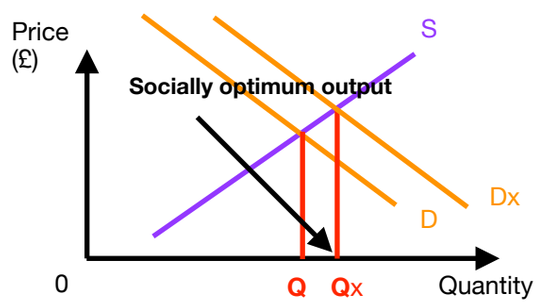
The gap between Qx and Q is the difference between what an efficient market would produce and what is actually produced.

E.g. cigarettes

Market Failure - under-production

If the total benefits of demand were taken into account, demand would be at Dx, but while individuals only consider private benefits and not social benefits, demand stays down at D.

E.g. vaccinations



Indicators of market failure:

- Shortages
- Surpluses
- High Prices
- Poor Quality
- Lack of innovation

Causes of market failure:

- Not all costs and benefits taken into account, e.g. cars
- Information failure, e.g. not understanding the calorie content in foods
- Abuse of monopoly power, e.g. price fixing by Roland and Korg
- Factor mobility - not getting the right factors of production in the right place at the right time.

Ways of managing market failure:

- Maximum and minimum pricing
- Subsidies and taxes (impact depends on elasticity of demand)
- Regulations
- Privatisation
- Nationalisation
- Direct provision
- Information

Market Economic System

*A system where most **resources are owned and controlled by individuals** and are allocated through **market forces**, leaving the role of government to oversee and enforce the basic principles of supply demand.*

Advantages

For the individual
- The customer is king (power over production)
- Competition promotes:
  - low **price**
  - high **quality**
  - high **choice**
- Hard work is financially rewarded

For the firm
- Innovation
- Competition promotes firm efficiency through:
  - low **costs**
  - high **quality**
  - high **choice**
  - Resources allocated to products with highest demand - firms that don't die
- Governements cannot interfere in operations

For the country
- Responsive to change in customer demand
- Price mechanism: effective allocation of resources
- Competition promotes resource efficiency through:
  - low **prices and costs**
  - high **quality**
  - high **choice**
  - Only 'healthy' firms stay in the market.
- Pushes up GDP and standards of living
- Enables international trade

Disadvantages

For the individual
- Advertising distorts true demand for a product
- Insufficient information leads to poor decision making

For the firm
- Small companies are pushed out of the market

For the country
- Companies put own interests before third parties', leading to things like environmental damage
- Competition not always there - natural monopolies, market domination, etc.
- Public goods would not be produced - free riders prevent them from being profitable
- Inequality in income leading to inequality in wealth
- Most vulnerable in society are least protected

Price Mechanism: The system by which the market forces of demand and supply determine price.

Mixed Economic System

*An economy where both **private and public sectors** play an important role.*

Advantages

For the individual
- The customer is king (power over production)
- Competition promotes:
  - low **price**
  - high **quality**
  - high **choice**
- Regulation reduces market failure - prevents artificially high prices, dangerous quality, false information etc.
- Governments support people to find work
- Vulnerable groups are ensured access to the basic necessities
- Entrepreneurs can make a profit
- Hard work is rewarded financially

For the firm
- Government invests in infrastructure enabling private firms to operate and make a profit
- Private ownership of business, incentive to be efficient
- Limits to government interference

For the country
- Public goods still provided
- Governments can encourage use of merit goods and discourage use of demerit goods
- Governments can finance goods and services that cannot be charged for directly, e.g. defence
- Governments can plan and finance long-term ventures, e.g. Large Hadron Collider
- Regulation reduces market failure - climate change, monopolies, etc.
- A degree of equality - greater than market, less than planned
- Macroeconomic stability - policies to correct recession etc.
- Legal support from private property and government provision of law and order
- Resources effectively allocated

Planned Economic System

*The **government makes all the crucial decisions** on what to produce, how to produce it and for whom.*

Advantages

For the individual
- Government funds the provision of public goods

For the firm
- Businesses are protected from financial failure
- Co-operation (due to no competition) between firms can lead to high productivity.

For the country
- A more equal society - less inequality of income and wealth
- Less unemployment
- Less inflation
- External costs can be limited through S&D
- Can push merit goods and reduce use of demerit goods

Disadvantages

For the individual
- Shortages and surpluses - poor resource allocation
- **Price** - high
- **Quality** - low
- **Choice** - low

For the firm
- Lack of innovation
- Less financial incentive for high performance from managers

For the country
- Slow economic growth
- Slow improvement in living standards

Disadvantages

For the individual
- Regulation prevents products being produced at the lowest possible price, or potentially being produced at all, e.g. illegal drugs

For the firm
- Regulation can stifle economic maximisation

For the country
- Government failure - poor decision making, short-term decision making to fit around elections, corruption - leading to market failure
- Excessive inequality if not controlled by government

Public goods: Products that are non-rival and non-excludable, and so need to be financed by taxation. E.g. street lighting, flood defences, roads etc.
- **Non-rival:** One person using it, doesn't prevent another from using it.
- **Non-excludable:** Cannot exclude people from using it.

Merit goods: Products that the government considers consumers do not fully appreciate the **benefits** of, and so are **under-consumed** if left to market forces, e.g. vaccinations.
Demerit goods: Products that the government considers consumers do not fully appreciate the **harmful** effects of, and so are **over-consumed** if left to market forces, e.g. cigarettes.