WJEC (Eduqas) Economics A-level

Microeconomics

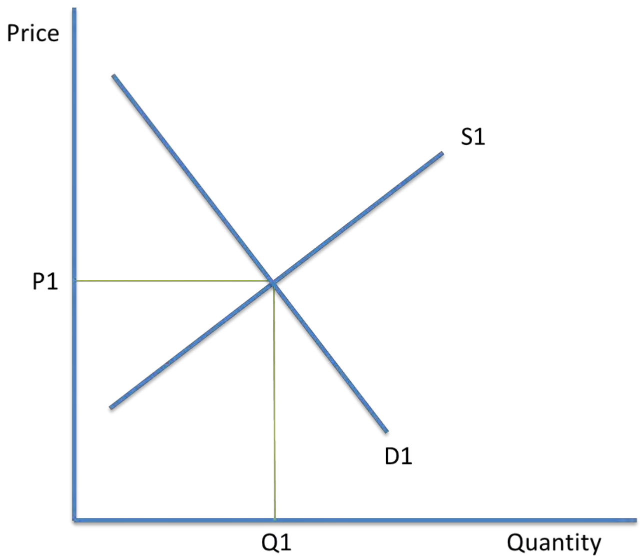
Topic 2: Demand and Supply in Product Markets

2.2 The determination of equilibrium price and output in a freely competitive market

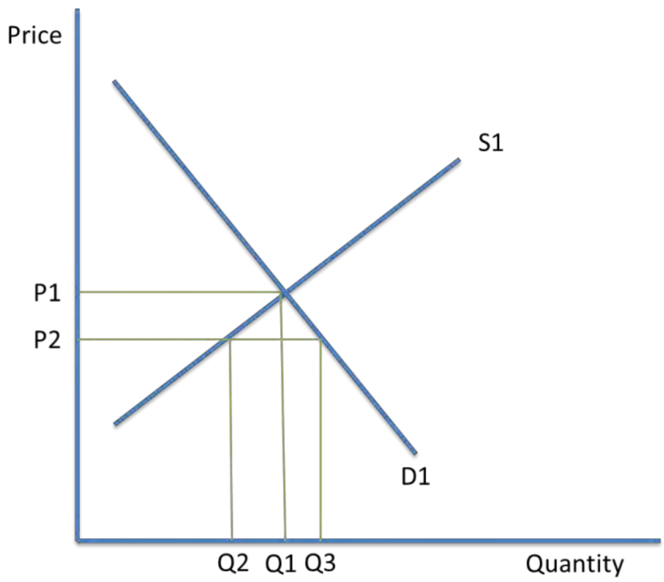
Notes

Equilibrium price and quantity

- This is when supply meets demand. On the diagram, this is shown by P1 and Q1.
- At market equilibrium, price has no tendency to change, and it is known as the **market clearing price.**



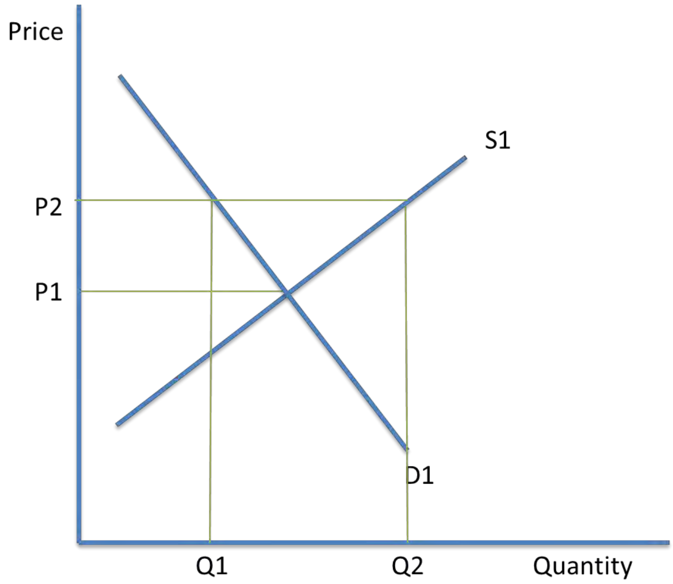
Excess demand



- At Q2, price is at P2 which is below market equilibrium. Demand is now greater than supply, which can be calculated by Q3-Q2. This is a state of **disequilibrium.** The demand price does not equal the supply price, and the quantity demanded does not equal the quantity supplied.
- This is a **shortage** in the market. This pushes prices up and causes firms to supply more. Since prices increase, demand will contract.
- Once supply meets demand again, price will reach the market clearing price, P1.

Excess supply

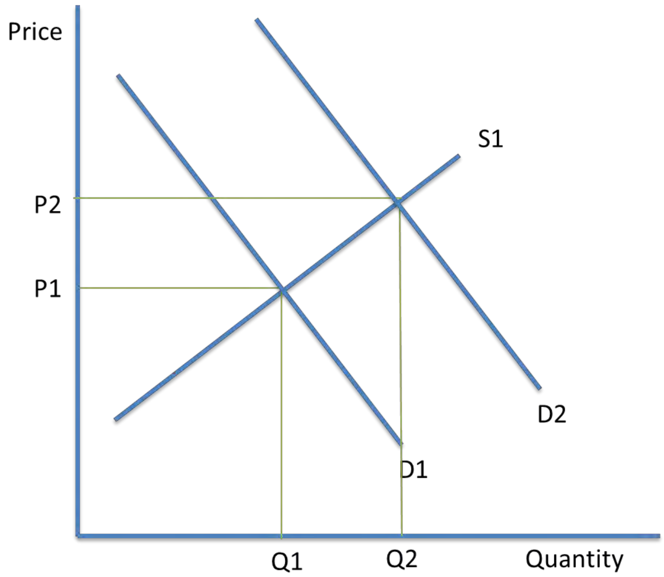
- This is when price is above P1.



- Supply is now at Q2 and demand is at Q1. There is a **surplus** of Q2- Q1. Price will fall back to P1 as firms lower their prices and try to sell their goods. The market will clear and return to equilibrium.

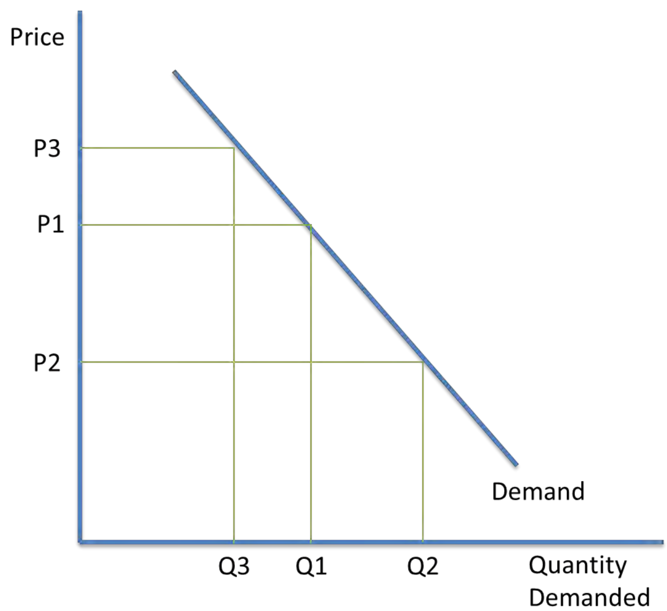
New market equilibriums

- When the demand or supply curves shift due to the PIRATES or PINTSWC reasons, new market equilibriums are established.



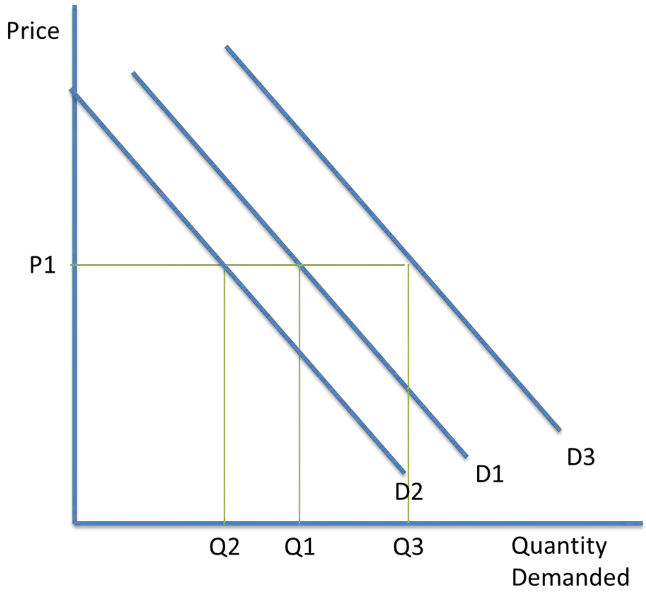
- For example, if there was an increase in the size of the population, demand would shift from D1 to D2.
- Price would increase to P2 and suppliers would supply a larger quantity of Q2. A new market equilibrium is established at P2 Q2.

Movements along the demand curve:



- At price P1, a quantity of Q1 is demanded. At the lower price of P2, a larger quantity of Q2 is demanded. This is an **expansion** of demand. At the higher price of P3, a lower quantity of Q3 is demanded. This is a **contraction** of demand. Only changes in price will cause these movements along the demand curve.

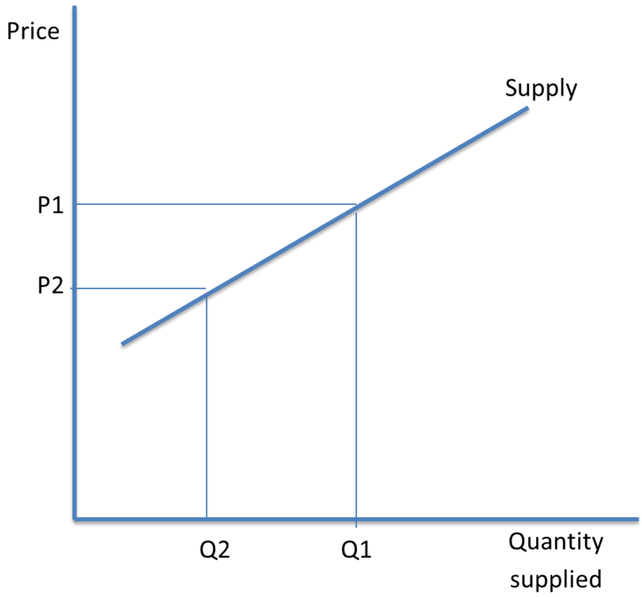
- **Shifting the demand curve:**



- Price changes do not shift the demand curve. A shift from D1 to D2 is an inward shift in demand, so a lower quantity of goods is demanded at the market price of P1. A shift from D1 to D3 is an outward shift in demand. More goods are demanded at the market price of P1.
- The factors that shift the demand curve can be remembered using the mnemonic PIRATES:
    - **P- Population.** The larger the population, the higher the demand. Changing the structure of the population also affects demand, such as the distribution of different age groups.
    - **I- Income.** If consumers have more disposable income, they are able to afford more goods, so demand increases.
    - **R- Related goods.** Related goods are **substitutes** or **complements**. A substitute can replace another good, such as two different brands of TV. If the price of the substitute falls, the quantity demanded of the original good will fall because consumers will switch to the cheaper option. A complement goes with another good, such as strawberries and cream. If the price of strawberries increases, the demand for cream will fall because fewer people will be buying strawberries, and hence fewer people will be buying cream.

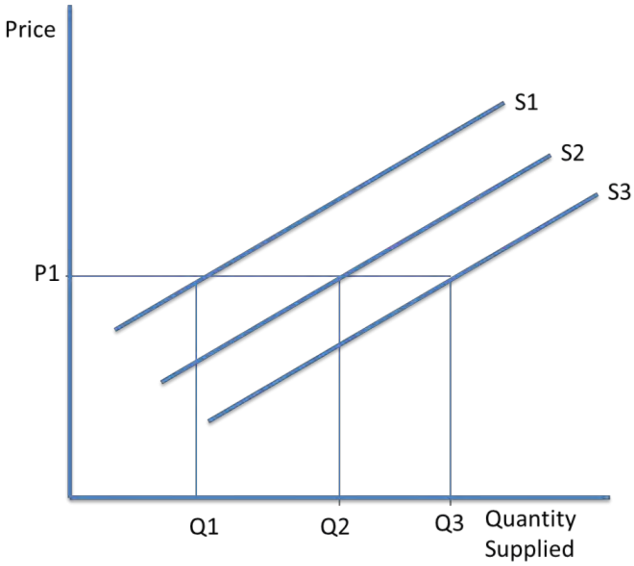
- **A- Advertising.** This will increase consumer loyalty to the good and increase demand.
- **T- Tastes and fashions.** The demand curve will also shift if consumer tastes change. For example, the demand for physical books might fall, if consumers start preferring to read e-books.
- **E- Expectations.** This is of future price changes. If speculators expect the price of shares in a company to increase in the future, demand is likely to increase in the present.
- **S- Seasons.** Demand changes according to the season. For example, in the summer, the demand for ice cream and sun lotions increases.

Movements along the supply curve:



- At price P1, a quantity of Q1 is supplied. At the lower price of P2, Q2 is supplied. This is a **contraction** of supply. If price increases from P2 to P1, QS increases from Q2 to Q1. This is an **expansion** of supply. Only changes in price will cause these movements along the supply curve. This is based on the theory of the **profit motive.** Firms are driven by the desire to make large profits.

- **Shifting the supply curve:**



- Price changes do not shift the supply curve. A shift from S1 to S2 is an outward shift in supply, so a larger quantity of goods is supplied at the market price of P1. A shift from S3 to S1 is an inward shift in supply. More goods are supplied at the market price of P1.
- The factors that shift the supply curve can be remembered using the mnemonic PINTSWC:
    - **P- Productivity.** Higher productivity causes an outward shift in supply, because average costs for the firm fall.
    - **I- Indirect taxes.** Inward shift in supply.
    - **N- Number of firms.** The more firms there are, the larger the supply.
    - **T- Technology.** More advanced the technology causes an outward shift in supply.
    - **S- Subsidies.** Subsidies cause an outward shift in supply.
    - **W- Weather.** This is particularly for agricultural produce. Favourable conditions will increase supply.
    - **C- Costs of production.** If costs of production fall, the firm can afford to supply more. If costs rise, such as with higher wages, there will be an inward shift in supply.
    - Also, depreciation in the exchange rate will increase the cost of imports, which will cause an inward shift in supply.