THE PRICE SYSTEMS
THE MICROECONOMY

- Price mechanism: The means of allocating resources in a market economy.
- Market: Where buyers and sellers get together to trade.

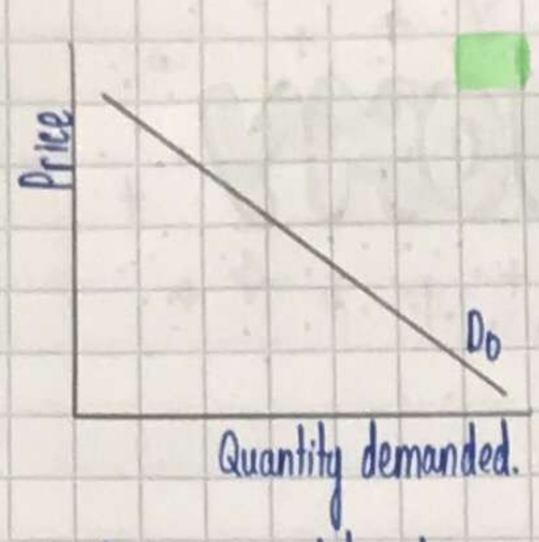
2.1. Demand

- Demand: The quantity of a product that consumers are willing and able to buy at different prices.
  - ↳ Quantity: This refers to the numerical quantity of a product that is being demanded.
  - ↳ Product: The item that is being traded. It can be used for goods or services. Can include tradable items like money or other financial assets such as shares.
  - ↳ Purchasers: Buyers of the product and are often referred to as 'consumers', can also be intermediaries in the supply chain.
  - ↳ Willing to buy: Purchasers must want a product if they are going to enter into the market with the intention to buying it.
  - ↳ Able to buy: To an economist, the national demand for a product, which emerges from wanting it, must be backed by purchasing power if the demand is to become an effective demand. Sellers are only willing to sell a product if the purchaser has the money to pay for the product. It is this effective demand that is of particular importance for economists.
  - ↳ Various prices: Altough many things influence demand for a product, it is at the time of purchase, when we have to hand over our money and pay the price that we really judge whether the product is value for money. Why is this?
  - ↳ Per period of time: Demand must be time related
  - ↳ Other things being equal: Ceteris paribus.
- Notional demand: This demand is speculative and not always backed up by the ability to pay.
- Effective demand: Demand that is supported by the ability to pay.

* Demand Curve

- Demand curve: represents the relationship between the quantity demanded and price of a product.

- Market demand: The total amount demanded by consumers.
- Demand schedule: The data from which a demand curve is drawn.



The graph shows:

- An inverse or negative relationship between price and quantity demanded.
  - ↳ Price ↑, demand ↓
  - ↳ Price ↓, demand ↑
  - ↳ If the curve is drawn as a straigh line → linear
- A linear relationship
- A continuous relationship
- A time-based relationship (weekly)
- Others → ceteris pa.

* Factors Influencing Demand.

↳ Income: Usually this is taken to mean what a person has left after tax has been deducted.

↳ In terms of market demand, it refers to the income of all consumers and is invariably related to the state of the macroeconomy.

↳ There is positive relationship between income and demand.

↳ Goods and services that are characterised by this relationship are called normal goods.

↳ For some products, however, there is negative relationship.

↳ Inferior goods eg are poor quality foodstuffs.

↳ Price and availability of related products:

↳ Substitutes: Alternative goods and can satisfy the same want or need.

↳ Complements: These goods have a joint demand as they enhance the satisfaction that consumers derive from another product.

↳ Fashion, taste and attitudes: Are largely a matter of individual behaviour.

- Normal goods: One whose demand increases as income increases.
- Inferior goods: One whose demand decreases as income increases.
- Substitute: An alternative good.
- Complement: A good consumed with another.
- Joint demand: When two goods are consumed together.

Bonus:

↳ Changes in the composition of the population.

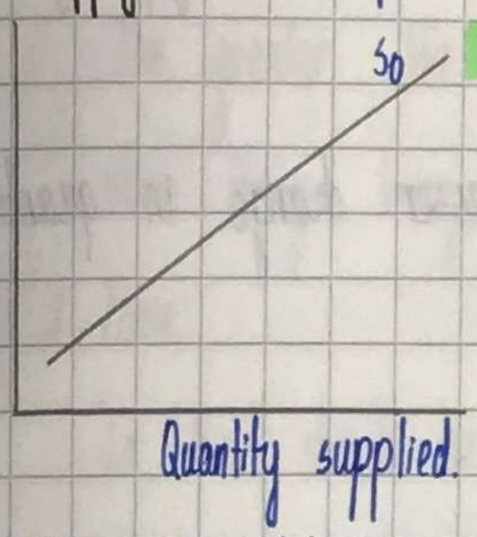
↳ Changes in expectations about future prices or other factors that affect demand: expectations abo the future price - or expectations about tastes and preferences, income, and so on- can affect demand.

2. 2. Supply.

- Supply: The quantity of a product that producers are willing and able to sell at different prices.
  - ↳ Quantities: Represents information in a quantitative way.
  - ↳ Product: Any item that is being traded.
  - ↳ Suppliers: Sellers of the product c and are often referred to as 'producers', can also be intermediaries.
  - ↳ Willing and able to sell at various prices: Must gain from selling their products they can withhold supply if the price is too low.
  - ↳ Per period of time: Must also be time related.
  - ↳ Other things being equal: Ceteris Paribus.

* Supply curve

- Supply curve: Represents the relationship between the quantity supplied and the price of the product.



The graph shows:

- A positive or direct relationship between price and quantity supplied.
  - ↳ Price causes Δq.supply

- A casual relationship
- A linear relationship
- A continuous relationship.
- A time-based relationship.

- Supply schedule: The data from which a supply curve is drawn.
- Subsidy: A payments made by governments to producers to reduce the market price.

* Factors Influencing Supply.

- ↳ Costs: Supply decisions invariably driven by the costs of producing and distrubuting.
- ↳ Size and nature of the industry: If an industry is growing in size, the more will be supplied to the market. Growth may well attract new entrants, the competition will increase and prices may fall resulting in some firms leaving the industry altogether.
- ↳ Change in price of other products: Most firms need to be continuously aware of competitors.
- ↳ Government policy: tax on a product will result in a reduction in supply; a subsidy will usually result in an increase in supply.
- ↳ New technology: Technological improvement that reduces costs of production.
- ↳ Other factors: Natural conditions.

2. 3. The Concepts of Elasticity

- Elasticity: A numerical measure of repre. responsiveness of one variable following a change in another variable, ceteris paribus.
- Elastic: Where the relative change in demand or supply is greater than the change in price.
- Inelastic: Where the relative change in demand or supply is less than the change in price.

2. 4. Price Elasticity of Demand.

- Price elasticity of demand (PED): a numercial measure of the responsiveness of the quantity demanded to a change in price of product.

↳ PED = $\frac{\%\text{ change in quantity demanded of a product.}}{\%\text{ change in price of that product.}}$ $\quad PED = \frac{\%\Delta Q_D}{\%\Delta P}$

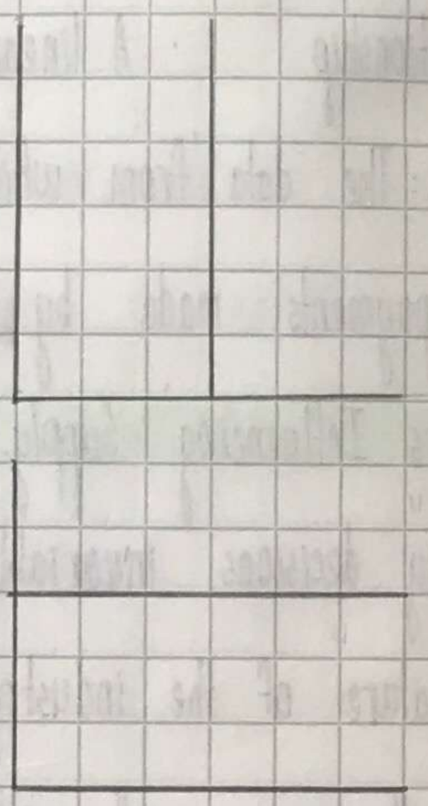
↳ If demand is elastic, then a small change in price will result in a relatively larger change in quantity demanded.

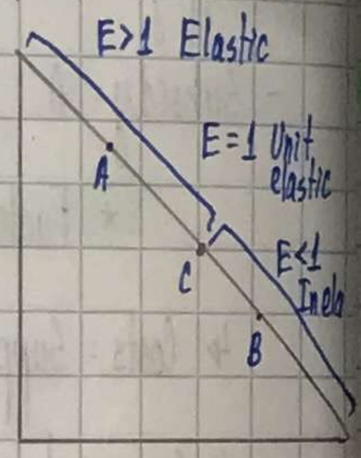
↳ On the other hand, if there is a large change in price and a far lesser change in quantity demanded, then demand is price inelastic.

* Understanding PED.

· Inelastic $0 < 1 < +\infty$ Elastic

- Perfectly inelastic: where a change in price has no effect on quantity demanded.
- Perfectly elastic: where all that is produced is sold a given price.
- Unit elasticity: Where the change in price is relatively the same as the change in quantity demanded giving a numerical value of 1.





* Factors affecting Price Elasticity of Demand.

1. The range and attractiveness of substitutes.

The greater the number of substitute products and the more closely substitutable those products are, the more we could expect consumers to switch away from a particular product when it's price goes up. (or towards that product if its price falls).

It is important, however, to distinguish between the substitutability of products within the same group of products and substitutability with goods from other product groupings. As we aggregate

products into groupings, demand will start to become more price inelastic.

Other substitutability issues to l. consider include:

↳ The quality and aceessibility of information that consumers have about products that are available to satisfy particular wants and needs.

↳ The degree to which people consider the product to be a necesity.

↳ The addictive properties of the product.

↳ The brand image of the product.

2. The relative expense of the product.

A rise in price will reduce the purchasing power of a person's income and hence the ability to pay. The larger the proportion of income that the price represents, the larger the impact will be on the consumer's income level of a change in the product's price. The greater the relative proportion of income accounted by the product, the higher the PED, other things being equal.

PED and the slope of a demand curve is different. They are exactly inverse to each other.
Slope = $\frac{\Delta P}{\Delta Q}$ Elasticity = $\frac{\Delta Q}{\Delta P}$

3. Time.

In the short term, people may find it hard to change their spending pattens. However, if the price of a product goes up and stays up, then over time people will find ways of adapting and adjusting, so the PED is likely to increase over time.

2.5. Income Elasticity of Demand.

- Income elasticity of demand (YED): a numercial measure of the responsiveness of the quantity demanded following a change in income.

↳ $YED = \frac{\%\text{ change in quantity demanded}}{\%\text{ change in income}}$

↳ For the normal goods, YED has a positive value. For the inferior goods, YED has a negative value.

↳ So the sign that precedes the YED tells you the nature of the relationship between income and the quantity that is demanded; the numercial value tells you how. the strength of that relationship.

* YED and Luxury Goods. and Necessity Good.

A luxury good means an increase in income causes a bigger percentage increase in demand. ($E>1$)

Necessity goods are products and services that consumers will buy regardless of the changes in their income levels, therefore making these products less sensitive to income. change.

As for any other normal good, an income rise will lead to a rise in demand, but the increase in necessity good is less than proportional to the rise in income, so the proportion of expenditure on these goods falls as income rises.

2.6. Gross Elasticity of Demand.

- Cross elasticity of demand (XED): a numerical measure of the responsiveness of the quantity demanded for one product following a change in the price of another related product.
  - ↳ XED = $\frac{\%\text{ change in quantity demanded for a product A}}{\%\text{ change in the price of a product B.}}$

The sign indicates the nature of the relationship (a negative) one between complements) and the numerical value indicates the strength of that rel.ship.

  - ↳ Products that are substitutes for each other, will have positive values for the XED.
  - ↳ Prudcts that are complements will have negative values of XED.

2.7. Business Relevance of Demand Elasticities.

★ Price Elasticity of Demand.

Knowledge of PED is useful to help understand price variations in a market, the impact of changing prices on consumer expenditure, sales revenue and government indirect tax receipts.

Variations in price elasticity of demand can also be used to explain.

- ↳ The difference between peak and off peak rail travel in some countries.
- ↳ Why it is usually cheaper to purchase airline tickets a few months rathan. rather than a few days ahead of travel.
- ↳ Why restaurant meals are more expensive during religious festivals.

In all of these cases, businesses are using price variations to try to maximize their revenue.

They are well aware that there are variations in price elasticity of demand in their markets and therefore trying to exploit the opportunities presented to them.

- Price Elastic PED and total expenditure / total revenue.

PED can help us understand how total spending by consumers will change as price rises or falls.

- ↳ Total Expenditure = P x Q
  - ↳ This is the expense of the consumer in buy a product (s).
- ↳ Total Revenue = P x Q
  - ↳ This is the total earned by firms from selling in a product (s).