Economists assume humans are self-interested and economically motivated.

Wealth gives us command over goods and services.

Scarcity – Society has limited resources and therefore can’t produce all goods and services that people want. The price mechanism allocated scarce resources.

People and society have to make choices and are raced with trade-offs.

The cost of something is what you give up to get it.

1. Decisions require comparing costs and benefits of alternatives.
   - Whether to go to uni or work?
   - Whether to study or go out?

Opportunity cost – What you will give up to obtain an item. The benefits forgone of the next best alternative.

Production possibility frontier

- Shows the maximal output of goods and services that can be produced.

The factors that effect it are...

1. Available resources
2. Current available technology.

If producing inside the diagram then you are being productively inefficient.

Trade-offs – Movement along the frontier involves giving up something to get something else.

Opportunity costs – The amount of units of good A you are giving up for additional units of good B.
Production and costs

The firm
- The firm is a planning unit that turns factors of production into outputs.
- Its objective is to maximise profit.
- In the long run, all factors of production are variable
- In the short run, at least one factor is fixed, e.g. capital (machinery)

SHORT RUN PRODUCTION

The production function
- The technical relationship between the output set (Q) and the input set (X) is defined by the production function.
- The production function is \( Q = f(X) \)
- It measures the maximum output given for a given input set.
- Typically assume that \( Q = f(K, L) \). Where K = Capital, and L = Labour.
- For an efficient firm, output can only be increased by increasing the amount of input used or by improving productivity.
- The transformation of inputs into output for a given technology is \( f(\cdot) \).

The law of diminishing returns

Diminishing returns – When extra units of one factor of production are employed, with all others held constant, there will come a point when each extra unit will produce less additional output than the previous unit.
There are 4 different market structures...

1. **Perfect competition**
   - Many firms
   - Low/no barriers to entry
   - Homogenous products
   - Perfectly elastic demand
   - E.g. Carrots/Wheat

2. **Monopolistic competition**
   - Many/several firms
   - Low/no barriers to entry
   - Slightly differentiated products
   - Downward sloping demand curve
   - E.g. Plumbers

3. **Oligopoly**
   - Few firms
   - Some barriers to entry
   - Differentiated products
   - Downward sloping demand curve
   - E.g. Cars

4. **Monopoly**
   - One firm
   - High barriers to entry
   - Unique product
   - Downward sloping demand curve
   - E.g. Medicine

The SCP diagram involves 3 steps...

1. **Structure**
   - Number of firms
   - Barriers to entry
   - Product differentiation

2. **Conduct**
   - Pricing
   - Output
   - Advertising
   - Research and development

3. **Performance**
- Profitability
- Product/service quality
- Productivity

The role of government policy is...

1. Promote competition to benefit buyers
   - M&A policy, prevent mergers that create firms with monopolistic power.
   - Break up large firms e.g. LloydsTSB

2. Regulation
   - Price controls e.g. some train tickets
   - Environmental policy e.g. pollution taxes

PERFECT COMPETITION

The assumptions are...
- Firms are price takers
- No barriers to firms entering an industry
- Homogenous products
- Perfect knowledge

![Graph showing perfect competition](image)

Short run

- The price is given by market demand and supply
- Output is where P=MC
- \( \text{Profit} = (AR - AC) \times Q \)
- Supernormal profit and losses are possible in the short run.
Market Structure – Monopoly and Price Discrimination

MONOPOLY

- Industry structure where with one firm, the firm supplies the whole market.
- Firm supply = Industry supply
- A monopolist’s product does not have close substitutes
- Depends how narrowly the market is defined, which is a matter of judgement
- Monopoly power is determined by the closeness of substitutes
- Monopolist faces a downward sloping demand curve, the market curve

Barriers to entry

- Economies of scale
- Network economies e.g. eBay (Use of large networks)
- Economies of scope e.g. Pharmaceutical firms share R&D facilities across a range of products (Increasing the number of different goods produced).
- Product differentiation and brand loyalty
- Learning economies e.g. Chip manufacturers
- Ownership or control over key factors
- Ownership or control of distribution channels e.g. National grid
- Legal protection i.e. patents, e.g. medicine

Monopolies profit maximising equilibrium

- In the long run, a monopolist makes supernormal profit
  \( P > MC = MR \)
- The more inelastic the monopolist’s demand curve, the greater the monopoly power, the greater the \( P-MC \) mark-up.
- Barriers to entry prevent supernormal profits from being competed away
- The monopolist is a price setter
- There is excess capacity i.e. monopolist produces on downward sloping part of the AC curve.

![Diagram of Monopoly Equilibrium](image-url)