Scarcity and Choice

Three Key Economic Ideas

- **Economics** is the study of the choices people and societies make to attain their unlimited wants given their scarce resources.
- Economics is used to answer questions, such as:
  - How are the prices of goods and services determined?
  - How does pollution affect the economy and what government policies can be used to deal with it?
  - Why do firms engage in international trade, and how do government policies affect it?
  - Why does government control the prices of some goods and services and what are the effects of those controls?
- Important definitions:
  - **Scarcity** is the situation in which unlimited wants exceed the limited resources available to fulfil those wants.
  - **Resources** are inputs used to produce goods and services, including natural resources, labour, capital and entrepreneurial ability. These are called *factors of production*.
  - **Economic models** are simplified versions of reality used to analyse real-world economic situations.
  - A **market** is a group of buyers and sellers of a good or service and the institution or arrangement by which they come together to trade.
- The three key economic ideas are:
  - People are rational.
    - This means economists assume that consumers and firms use as much of the available information as they can to achieve their goals.
    - Rational individuals weigh the benefits and costs of each action and they choose an action only if the benefits outweigh the costs.
  - People respond to economic incentives.
    - Economists emphasise that consumers and firms consistently respond to *economic* incentives.
  - Optimal decisions are made at the margin.
    - Economists use the word *marginal* to mean an extra or additional benefit or cost of a decision. E.g. the *marginal benefit* of watching more television is additional enjoyment, the *marginal cost* is the less time available to study.
    - Economists reason that the optimal decision is to continue any activity up to the point where the marginal benefit equals the marginal cost.
    - *Marginal analysis* involves comparing marginal benefits and marginal costs.

Scarcity, Trade-offs and the Economic Problem that every Society Must Solve

- **Trade-off** is the idea that, because of scarcity, producing more of one good or service means producing less of another good or service.

    - This is because society has a limited amount of economic resources, and therefore can produce only a limited amount of goods and services.
- Three fundamental economic questions:
    - What goods and services will be produced?
        - What is produced is determined by the choices made by consumers, firms and governments. This creates *demand*.
            - These groups face the problem of scarcity by trading off one good or service for another. This is *opportunity cost*.
            - **Opportunity cost** is the highest valued alternative that must be given up to engage in any activity.
    - How will the goods and services be produced?
        - Firms choose how to produce the goods and services they sell.
        - In many cases, firms face a trade-off between using more workers and using more machines.
    - Who will receive the goods and services produced?
        - Who receives the goods and services produced depends largely on how income is distributed.
        - Those individuals with the highest income have the ability to buy the most goods and services.
        - An important policy question is whether the government should intervene to make the distribution of income more equal.

Centrally Planned Economics vs Market Economies

- A **centrally planned economy** is an economy in which the government decides how economic resources will be allocated.
- A **market economy** is an economy in which the decisions of households and firms interacting in markets allocate economic resources.
- A central feature of market economies is *consumer sovereignty*.
    - **Consumer sovereignty:** The concept that in a market economy it is ultimately consumers who decide what goods and services will be produced.
    - This occurs because firms must produce goods and services that meet the wants of the consumers, or the firms will go out of business.

The Modern ‘Mixed’ Economy

- **Mixed economy:** An economy in which most economic decisions result from the interaction of buyers and sellers in markets, but in which the government plays a significant role in the allocation of resources.

Efficiency and Equity

- Market economies tend to be more efficient than centrally planned economies.
- **Productive (technical) efficiency** occurs when a good or service is produced using the least amount of resources.
    - This is achieved when competition between firms forces the firms to produce goods and services using the least amount of resources and therefore at the lowest cost.
- **Allocative efficiency** occurs when production reflects consumer preferences and resources are allocated throughout the economy to produce what consumers demand.

- This is achieved when the combination of competition between firms and voluntary exchange between firms and consumers results in firms producing the mix of goods that consumers prefer most.
- **Dynamic efficiency** occurs when new technologies and innovation are adapted over time.
  - Competition can lead to this as firms seek to adapt their product and use new technologies over time to secure their share in the market.
- Markets tend to be efficient because they *promote competition* and facilitate *voluntary exchange*.
  - **Voluntary exchange** refers to the situation in which both the buyer and seller are made better off by the transaction.
- Although markets promote efficiency, they do not guarantee it.
  - E.g. water usage may be to high if government restrictions on water usage and pricing are set too low, leading to *allocative efficiency*. Productive efficiency may also take time to occur, this happened with Blu-ray players which took time to discover low-cost production.
- Many people prefer economic outcomes that are considered fair or equitable, even if these outcomes are less efficient.
  - **Equity** is the fair distribution of economic benefits between individuals and between societies.
  - Although equity may be increased by reducing the incomes of high earners and increasing incomes of low earners, efficiency may be reduced. People now have less incentive to open business, to supply labour and to save if the government takes a significant amount of their income.
  - Thus, *there is often a trade-off between efficiency and equity*.

Economic Models

- Economic models are simplified versions of reality used to analyse real-world situations.
- To develop a model economists generally follow these steps:
  - Decide on the assumptions to be used in developing the model.
  - Formulate a testable hypothesis.
  - Use economic data to test the hypothesis.
  - Revise the model if it fails to explain the economic data.
  - Retain the revised model to help answer similar economic questions in the future.

Forming and Testing Hypotheses in Economic Models

- A *hypothesis* in an economic model is a statement that may be either correct or incorrect about an economic variable.
- An **economic variable** is something measureable that relates to resource use and that can have different values; for example, wages, prices or hours worked.
- Economic models make *behavioural assumptions* about the motives of consumers and firms.
  - Economists assume that: consumers will buy those goods and services that will maximise their wellbeing or satisfaction; and firms act to maximise their profits.
- In testing hypotheses, economists distinguish between *correlation* and *causality*.
  - Just because two things are *correlated* – that is – they are associated with each other – does not mean that one caused the other.