Economic Methodology & The Economic Problem

AQA A-Level Economics | Topic 1.1

Topics: Positive & Normative · Scarcity & Choice · Economic Agents · Rational Behaviour

What is Economics?

Definition

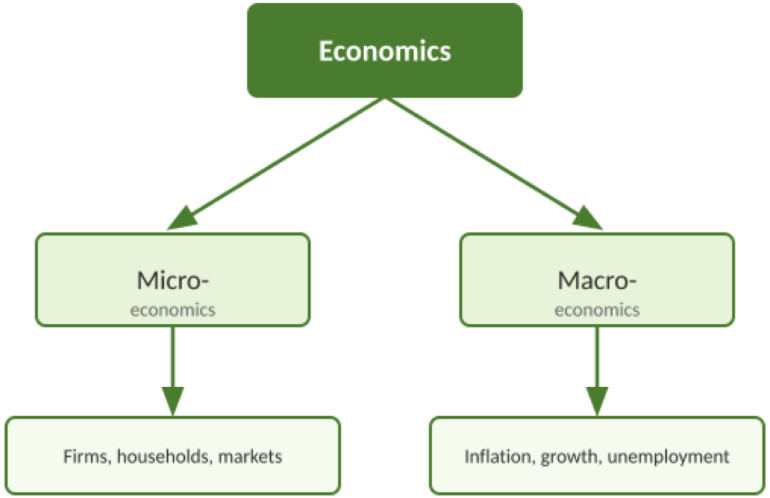
Economics is the study of how individuals, firms, and governments make decisions about how to allocate scarce resources in order to satisfy unlimited wants.

Two branches of economics:

Microeconomics — the study of individual economic agents: households, firms, and markets. E.g. how does a rise in the price of petrol affect consumer behaviour?
Macroeconomics — the study of the economy as a whole. E.g. what determines a country's rate of inflation, unemployment, or economic growth?

The central question in economics:

How should society best allocate its finite resources to satisfy its unlimited wants? This requires choices — and every choice has a cost.



Positive & Normative Statements

Positive Statements

Objective, factual statements that can be tested and proven true or false using evidence.

They describe what IS, not what OUGHT to be.

Examples:

- "A rise in the minimum wage increases unemployment among low-skilled workers."
- "The UK inflation rate was 3.2% in 2024."
- "A 10% rise in cigarette taxes reduces consumption by 4%."

Key point: economists may disagree on whether a positive statement is TRUE — but they agree it can be tested.

Normative Statements

Subjective, opinion-based statements that involve a value judgement. They cannot be proven true or false — they depend on beliefs.

They describe what OUGHT to be, not what IS.

Examples:

- "The minimum wage should be raised to £15 per hour."
- "The government ought to do more to reduce income inequality."
- "Free healthcare should be available to all citizens."

Key point: policy debates are often normative — different political values lead to different conclusions even from the same evidence.

Exam tip: Look for words like 'should', 'ought to', 'must' or 'better' → these signal a normative statement.

Economic Methodology

How do economists think?

Economics uses the scientific method — economists form hypotheses, test them against real-world data, and revise their theories accordingly.

Models & Assumptions:

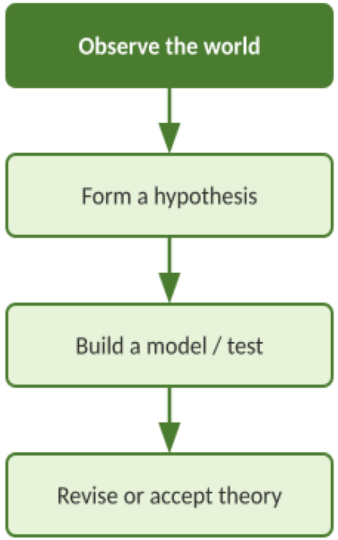
Because the real world is complex, economists build simplified models that isolate the key relationships between variables. All models rely on assumptions.

Ceteris paribus — 'all other things being equal':

When analysing the effect of one variable, economists assume all other variables remain constant. E.g. to study the effect of price on demand, we assume income, tastes, and the prices of other goods are unchanged.

Limitations of models:

- Models simplify reality — they may miss important real-world complexities
- Assumptions may not always hold (e.g. rational behaviour)
- Economists often disagree due to different value judgements (normative elements) within policy recommendations



The Economic Problem: Scarcity & Choice

- **The fundamental economic problem is scarcity.**
- Scarcity means that resources are finite while human wants are unlimited. This forces individuals, firms, and governments to make choices.
- **The three fundamental questions every economy must answer:**
  - WHAT to produce — which goods and services should be produced, and in what quantities?
  - HOW to produce — which combination of factors of production should be used? Should production be labour-intensive or capital-intensive?
  - FOR WHOM to produce — how should the output be distributed among members of society?
- These questions arise in every economic system, whether it is a free market, a planned economy, or a mixed economy.
- Every choice involves a trade-off — choosing more of one thing means having less of something else. This is captured by the concept of opportunity cost.

Opportunity Cost

Definition

Opportunity cost is the benefit of the next best alternative foregone as a result of making a particular choice.

Why does it matter?

Opportunity cost captures the real cost of any decision — not just the monetary price, but what must be given up. It applies to individuals, firms, and governments.

Examples at each level:

Individual — Choosing to spend Saturday studying means giving up leisure time. The opportunity cost is the enjoyment foregone.
Firm — A firm that invests £1m in new machinery cannot use that £1m to train workers or fund R&D.
Government — Spending £10bn on new hospitals means £10bn less available for schools or tax cuts.

Opportunity cost is at the heart of all economic decision-making — it explains why trade-offs exist and why the PPF slopes downward.

Individual

Study vs leisure — time spent on one cannot be spent on the other.

Firm

Capital investment vs R&D — the same £1m cannot fund both.

Government

NHS funding vs education — every pound spent in one area is unavailable in another.

Remember

All PPF movements involve opportunity cost — moving along the curve sacrifices some of one good for more of another.

Economic Agents & Their Objectives

The economy consists of three main economic agents, each with their own objectives and constraints:

Consumers / Households

- Objective: maximise utility (satisfaction) from consumption
- Subject to a budget constraint (income)
- Demand goods and services, supply labour
- Behaviour influenced by: price, income, preferences, expectations

Firms / Producers

- Objective: traditionally assumed to maximise profit
- Also may pursue: revenue maximisation, growth, market share
- Supply goods and services, demand factors of production
- Behaviour influenced by: costs, revenue, competition, regulation

Government

- Objective: maximise social welfare / public interest
- Corrects market failures, redistributes income, stabilises economy
- Uses fiscal policy (tax & spend) and regulation
- Behaviour influenced by: political objectives, economic data, international constraints

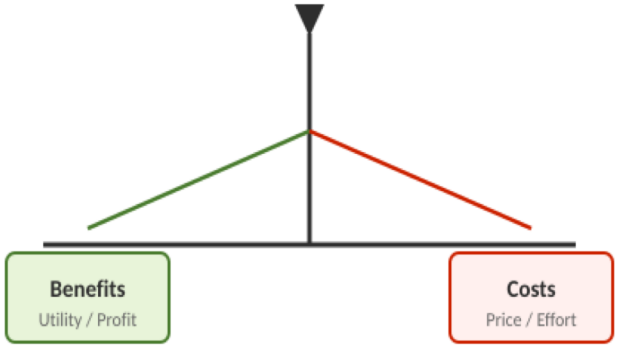
Rational Economic Behaviour

The Traditional Assumption: Rational Behaviour

Traditional economic models assume that all economic agents are rational — they weigh up costs and benefits and always choose the option that maximises their self-interest.

What does 'rational' mean for each agent?

Consumers — maximise utility (satisfaction) given their income and prices
Firms — maximise profit (revenue minus costs)
Governments — act in the public interest to maximise social welfare



Rational agent chooses:

Benefits > Costs → proceed

Benefits < Costs → do not proceed

Critique: Behavioural Economics

In reality, people do not always behave rationally. Behavioural economists (e.g. Kahneman & Tversky) show that decisions are influenced by biases, emotions, habits, and limited information. This challenges the standard rational model and has important policy implications — e.g. 'nudge theory'.

Types of Economic System

Every economy must decide how to answer the three fundamental questions. The type of economic system determines who makes these decisions:

Free Market Economy

- All economic decisions made by private individuals and firms
- Price mechanism allocates resources
- No government intervention
- Strengths: efficiency, innovation, consumer choice
- Weaknesses: inequality, market failures, public goods underprovided

Planned (Command) Economy

- Government makes all economic decisions
- State owns factors of production
- Resources allocated by central planning
- Strengths: equality, no cyclical unemployment
- Weaknesses: inefficiency, lack of incentives, poor information

Mixed Economy

- Both private sector and government play a role
- Most real-world economies are mixed
- Government corrects market failures, provides public goods
- Private sector drives innovation and efficiency
- E.g. UK, USA, Germany — varying degrees of state involvement

Factors of Production

The factors of production are the resources used to produce goods and services. They are the inputs into the production process:

L

Land — Reward: Rent

All natural resources used in production — not just land itself, but oil, minerals, water, farmland. Reward for its use is rent.

C

Capital — Reward: Interest/Profit

Man-made resources used in production — machinery, tools, factories, computers. Not money. Reward is profit or interest.

L

Labour — Reward: Wages

The human effort (physical and mental) that goes into production. The reward for labour is wages or salaries.

E

Enterprise — Reward: Profit

The entrepreneurial ability to organise the other three factors, take risks, and innovate. The reward for enterprise is profit.

Summary: Key Terms & Relationships

Key Term	Meaning
Economics	The study of how scarce resources are allocated to satisfy unlimited wants.
Microeconomics	The study of individual agents — households, firms, and specific markets.
Macroeconomics	The study of the economy as a whole — inflation, growth, unemployment.
Positive Statement	An objective, fact-based claim that can be tested and proven true or false.
Normative Statement	A subjective, opinion-based claim involving a value judgement ('ought to').
Ceteris Paribus	'All other things equal' — isolating the effect of one variable by holding others constant.
Scarcity	The fundamental problem: unlimited wants but finite resources — forces choices.
Opportunity Cost	The benefit of the next best alternative given up when a choice is made.
Rational Behaviour	Assumption that agents weigh costs vs benefits and maximise self-interest.
Factors of Production	Land, Labour, Capital, Enterprise — the four inputs into the production process.