Scarcity: A situation in which unlimited wants exceed the limited resources available to fulfill those wants.

Economics: The study of the choices people make in their efforts to make the best use of scarce resources in achieving their goals

Economic models: simplifications of reality used to analyze real-world economic issues

People are rational

Economists think that people are rational in a sense that they will make decisions and do actions that they *believe* will make them happy

People prefer benefits > cost. People dont do things to make them worse off

People respond to incentive

ex. banks. our banks dont have crazy security like in the movies because the economic incentive for banks says that it is less costly to deal with the robberies than to have expensive armed security.

ex. dont have to pay for healthcare? i am less incentive to be healthy so then i could become obese easier

Optimal decisions are made at the margin

Economics is also known as *marginal science* because of how economists tend to think about decision. Some decisions are "all or nothing". Some decisions involve doing a little more or a little less

Marginal: extra or additional

Study or Netflix?
Marginal Benefit: watching another hour
Marginal Cost: lower grade from not studying

Net Benefit: benefit - cost
If you want a big net benefit then Marginal Benefit > Marginal Cost
getting as much net benefit as possible means that MB = MC

a company maximizes their profits when their producing a product brings more revenue (MB) than costs (MC) when revenue brought = cost brougt, then net benefit is maximized. this kind of thinking is called *marginal analysis*

Marginal Analysis: analysis that involved comparing marginal benefits and marginal costs

Trade-offs: doing more of one thing means that we have to do less of something else

Opportunity cost: the value of what we give up to engage in an activity. For something (like a good or service), it is the value of the next best alternative. (**IF THERE ARE MULTIPLE ALTERNATIVES, THEN THE HIGHESET VALUE IS THE OPPORTUNITY COST**)

- ex. opportunity cost of studying could be watching tv instead
- ex. I make $80k a year but i want to start a business, the opportunity cost of starting the business is the $80k i will lose out on (*does not matter if i make $80k in the business*)

Title

Fundamental economic Questions

1. What goods and services will be produced?
2. How will the goods and services be produced?
3. Who will recieve the goods and services produced?

What goods and services will be produced?

Consumers, firms, and governments make these decisions and deal with scarcity by trading off one good or service for another.

Each choice made comes with an opportunity cost, measured by the value of the best alternative given up.

How will the good and services be produced?

Usually firms or governments make this decision
Producers of goods and services face a trade-off between using more workers and using more machine

- Firms have to decide whether to produce in Canada using few workers and many machines or produce in developing countries using many workers and fewer machines

Who will receive the good and services produced?

In Canada, it is dependant on how income is distributed.
High income = ability to buy the most

Governments use taxes to help provide income to people in need. They also use taxes to supply goods and services that are not being provided in other ways.

Centrally planned vs market vs mixed economies

Centrally Planned Economy: An economy in which the government decides how economic resources will be allocated (ex. Soviet Union)

- not good at producing low cost (plentiful), high quality goods and services.
  - the material standard of living for the average person was low.
- **The incentive to work hard is not there compared to market economies**
- have all been dictatorships
  - always leads to collapse

Market Economy: An economy which relies on privately owned firms to produce goods and services and to decide how to produce them.

- **Market**: all potential buyers and sellers of a good or service as well as the rules that determine how buyer and sellers interact
- Firms must produce what people want or else they go out of business.
- All trades must be agreed to by all the people involved.
- People's income is determines by what they have to sell (goods, labour, services)
- **Directly awards people's hard work**
- **Decision making is shared by everyone in the market**
- Luck is a large factor

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

- In Canada, most of the things you buy are produced by privately owned firms in response to the demands of consumers:
- Other goods and services are provided by the government, such as roads, national defence, and health care.

Efficiency vs Equity

Market economies are more efficient than centrally planned economies

Productive Efficiency: occurs when a good or service is produced at the lowest possible cost.

Allocative Efficiency: occurs when a country's resources are used to produce the mix of goods and services that consumers want.

Voluntary Exchange: A situation that occurs in markets when both the buyer and seller of a product are made better off by the transaction.

Markets tend to be efficient because they rely on *voluntary exchange*. The voluntary nature of the exchange promotes competition that encourages producers to find cheaper ways to make good and services that they want to sell (customers want to pay less)

- leads to productive efficiency - can't compete? go out of business
  - competition promotes allocative efficiency
    - A firm that uses scarce resources to produce goods and services that consumers don't want to buy goes out of business.

Markets and competition promote efficiency but dont guarantee it
R&D costs, environmental damage, etc. Governments can intervene and increase efficiency.

Equity: The fair distribution of economic benefits
Many people prefer equity because then governments can tax the richer to help provide for those who need the money; produces a more equal distribution of economic benefits.

- This may reduce efficiency

Title

People have less incentive to open new businesses, to supply labour, and to save if the government takes a significant amount of the income they earn from working or saving.

Market economies are more efficient while centrally planned economies are more equitable

Economic Models

Economic models: simplified representations of reality used by economists to analyze complex real-world issues.

- They help in understanding interactions between different economic variables, such as prices, wages, and consumer behaviour.

Examples
"How much will you be paying for a cup of coffee?
Models to consider:

- they may use a model of how wages are determined to analyze the flexibility different firms have in their cost structures.
- They may use another model to consider how people will change their purchasing patterns.
- Yet another model might be used to explore how growers will react to a change in the price of raw coffee.

Steps to making a model

1. Decide on the assumptions to use in developing the model.
2. Formulate a testable hypothesis.
3. Use economic data to test the hypothesis.
4. Revise the model if it fails to explain the economic data well.
5. Retain the revised model to help answer similar economic questions in the future.

Assumptions

Economic models must be simple so we make assumptions
Ex. Behavioural assumptions - motives of consumers and firms

- Economists assume consumers will buy the goods and services that make them most happy
- Assume firms will maximize profits

Economic Variable: something measurable, like wages.

Hypothesis: a statement about an economic variable that may be either correct or incorrect (mainly a prediction)

- ex. favourable weather in Brazil will decrease the price of coffee in Canada
- **They must be tested first.** To test a hypothesis, we analyze statistics on the relevant economic variables (ex. get data on coffee prices and other variables).
- Note that hypotheses must be statements that could, in fact, turn out to be incorrect. Statements such as "high coffee prices are bad" or "high wages for baristas are good" are value judgments rather than hypotheses because there is no way to disprove them.

Scientific Method (in economics): The process of developing models, testing hypothesis, and revising models.

Positive analysis: concerns facts or logic (**economics is about this**)

- looks at measurable effects—such as job losses, firms' costs and profits, and wage gains for employed workers
  Normative analysis: about value judgements or what ought to be,
- whether the policy is "good" or "bad."

Microeconomics: The study of how individual economic agents make choices, how these choices come together to determine what happens in a single market, and the impact of government intervention on market outcomes

Macroeconomics: The study of the economy as a whole, usually of a country, province, or region. Focuses on inflation, unemployment, and economic growth, policy issues, and government intervention to prevent recessions.

some more key terms

Production

- The process of making goods and services.
- Often undertaken by **entrepreneurs**.

Entrepreneur

- Someone who operates a business.
- Decides what to produce and how to produce it.
- Often invests their own money and takes on risk.
- About half of new businesses close within a few years.
- Essential for economic progress.

Innovation

- **Invention**: Creation of a new good or process.
- **Innovation**: Practical application of an invention or a major improvement.
- Example:
  - 1945: ENIAC computer (invention).
  - 1981: First personal computer (innovation).
  - 1990s: Widespread adoption and ongoing improvements.

Technology

- The processes a firm uses to turn inputs into outputs (goods/services).

- Depends on:
  - Managers' skills
  - Workers' education
  - Quality of equipment

Firms (Company/Business)

- An organization that produces goods or services.
- Usually for profit, though some are non-profit (e.g., universities).
- Terms **firm**, **company**, and **business** are interchangeable.

Goods

- Tangible items people want (e.g., books, computers, clothing).

Services

- Activities done for others (e.g., haircuts, house cleaning, banking).

Revenue

- Total money a firm receives from selling goods/services.
- Formula: $\text{Price per unit} * \text{Quantity sold}$

Profit

- The difference between a firm's revenue and its costs.
- **Accounting profit**: Excludes some costs, only considers explicit costs.
- **Economic profit**: Includes all costs, including opportunity costs.
- In economics, *profit* usually means **economic profit**.
- ⚠️ Don't confuse profit with revenue!

Household

- Consists of all people making joint decisions in a home.
- Roles:
  - Supply factors of production (especially labour).
  - Consume goods and services produced in the economy.

Factors of Production (Economic Resources)

Firms use these to produce goods and services:

- **Labour**
- **Capital**
- **Natural resources** (including land)
- **Entrepreneurial ability**
  Households earn income by supplying these factors.

Capital

- **Financial capital**: Stocks, bonds, bank accounts, money.
- **Physical capital** (the usual meaning in economics): Manufactured goods used to make other goods (e.g., computers, factories, tools, trucks).
- **Capital stock**: Total physical capital in a country.

Human Capital

- Training, skills, and knowledge accumulated by individuals.
- Example: University graduates generally have higher human capital than high school graduates.