

# Economic Foundations

Topic 1

# Learning Objectives

- Understand and apply the three key economic ideas
- Describe the framework that economists use to model human behavior
- Address the economic problem
- Learn about economic models
- Distinguish the two main branches of economics: micro- and macroeconomics
  
- Define the discipline of economics

# What is Economics?

- ‘economics’ comes from the Greek word *oikonomia*
  - *oikos* (house)
  - *nomos* (law, rule)
- Economics tries to answer the question of how households manage their resources.
- The study of human decision-making.

# Key Economic Ideas

- Market
  - A group of buyers and sellers of a good or service and the institution or arrangement by which they come together to trade
- Assumptions about markets:
  - People are rational (Rational decision-maker)
  - People respond to economic incentives (Incentive Principle)
  - Optimal decisions are made at the margin (Cost-benefit Principle)

# Marginal Analysis Example

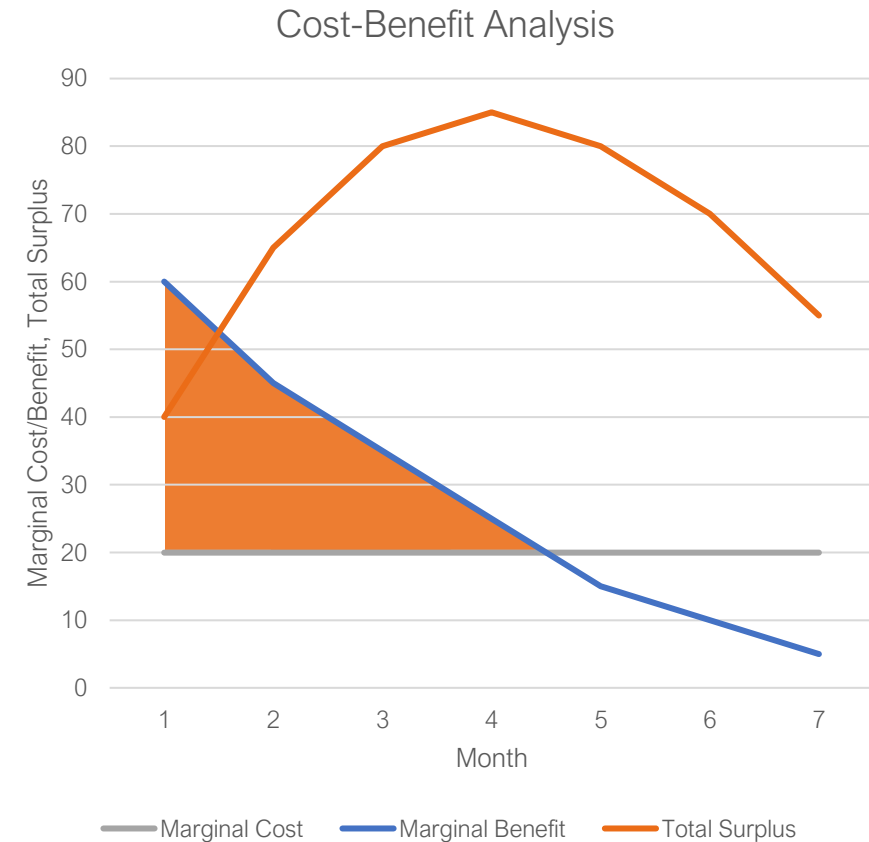
- Cost-Benefit Principle
  - An individual should undertake an activity if and only if the additional benefit of doing so is greater than or equal to the additional cost of doing so.
- Cost-Benefit Analysis
  - Direct comparison of the marginal benefit of the activity to the marginal cost of the activity
- Marginal Benefit
  - The change in the value of total benefits as more of an activity is undertaken
  - **Diminishing returns**: the additional value from doing an activity declines as it is consumed more
- Marginal Cost
  - The change in the value of total cost as more of an activity is undertaken

# Marginal Analysis Example

TV Months	Total Benefit	Total Cost	Marginal Benefit	Marginal Cost	Marginal Surplus	Total Surplus
0	0	0	-	-	-	-
1	60	20				
2	105	40				
3	140	60				
4	165	80				
5	180	100				
6	190	120				
7	195	140				

# Marginal Analysis Example – Ctd.

TV Months	Total Benefit	Total Cost	Marginal Benefit	Marginal Cost	Marginal Surplus	Total Surplus
0	0	0	-	-	-	-
1	60	20	60	20	40	40
2	105	40	45	20	25	65
3	140	60	35	20	15	80
4	165	80	25	20	5	85
5	180	100	15	20	-5	80
6	190	120	10	20	-10	70
7	195	140	5	20	-15	55



# What is Economics? – Ctd.

- Do you have everything you want?
- Why don't you have everything you want?
- What are some scarce resources that you face?
- What does scarcity force us to do?
- What did you give up to be here today?



# What is Economics? – Ctd.

- Scarcity
  - A universal phenomenon that arises because resources are limited.
- Trade-offs
  - Acquiring more of one thing can often only be done at the expense of getting by with less of something else.
- Opportunity Cost
  - The cost of a good in terms of another good that must be given up.

# The Economic Problem

- Thinking about how a society uses its scarce productive resources, three fundamental questions must be addressed:
  - What to produce? - Production decision
  - How to produce? - Resource use decision
  - For whom to produce? - Distributional decision
- How societies answer these three questions is reflected in their economic system.
- Economic system reflects the rules and methods put in place by a society to determine what goods are produced, how they are produced and for whom they are produced.

# Economic Systems

- Whether we categorize economic systems by resource allocation mechanism or political ideology, the following three are consistent:
  - Planned economy/ Socialism
  - Mixed economy
  - Market economy/ Capitalism
- Commonalities among different economic systems are four primary institutions:
  - Households
  - Firms
  - Markets
  - Government

# Economic Systems – Ctd.

- Planned Economy/ Socialism

- Socialism is defined by government ownership of resources and relies upon centralized decision making to allocate productive resources.
- For example:
  - Soviet Union, North Korea, Cuba, Nicaragua, Venezuela

- Marx' Communism

- economic system in which the means of production are collectively owned by all of the people in a society (without intervention by a government or state).

# Economic Systems – Ctd.

- Mixed economies
  - blending elements of market economies with elements of planned economies, free markets with state interventionism, or private enterprise with public enterprise.
- Social Market Economics
  - Balances the freedom of the market with equitable social development.
  - Access to finances, health, and education are regulated by government.
  - For example:
    - European Union

# Economic Systems – Ctd.

- Market Economy/ Capitalism
  - Capitalism is defined by private ownership of resources, and relies upon decentralized decision making in free markets to allocate productive resources
  - For example
    - United States
- Consumer Sovereignty
  - the freedom for an individual to choose to purchase (or to choose to not purchase) a good or service at a price determined in a free, unfettered market
- Robert Bosch
  - I don't pay good wages because I have a lot of money; I have a lot of money because I pay good wages.

# Efficiency vs. Equity

- Efficiency

- Productive efficiency:

- A situation in which a good or service is produced at the lowest possible cost.

- Allocative efficiency:

- a state of the economy in which production is in accordance with consumer preferences; in particular, every good or service is produced up to the point where the last unit provides a marginal benefit to society equal to the marginal cost of producing it.

- Equity

- The “fair” distribution of economic benefits.

# What is Economics? – Ctd.

- Economics is the Social Science that studies how people make decisions in the face of scarcity and the resulting impact of such decisions on both society as a whole and on the individual therein.
- How does Economics differ from other disciplines that also study human decision-making?
  - Marginalism as its methodology
  - Opportunity cost as measurement
  - Actors as rational decision-maker



# Economic Models

- A simplified version of reality used to analyze real-world economic situations.
- Developing an economic model
  1. What are the underlying assumptions?
  2. What is a testable hypothesis?
  3. What data allows for testing the hypothesis?

# Positive vs. Normative Analysis

- Positive analysis
  - Aims to describe how the world actually is or actually functions
  - Observations on or predictions about outcomes, without judging of their desirability
- Normative analysis
  - Aims to assess the desirability of how the world is or functions
  - Statements explicitly or implicitly supported by priorities, goals, and value judgements of the person making the statement
- Disagreement among economists
  - Over a positive statement: because not enough data and evidence has yet been gathered to prove the statement either true or false.
  - Over a normative statement: because of different opinions, priorities, or value judgments.

# What is Economics? – Ctd.

- Economics is the Social Science that studies how people make decisions in the face of scarcity and the resulting impact of such decisions on both society as a whole and on the individual therein.
- This implies:
  - “Micro-level”: The individual within an economy
  - “Macro-level”: The economy as a whole

# Microeconomics

- Is the branch of economics which studies how individual decision-makers behave and interact with each other.
- Often focuses on how households and firms behave and interact with each other in markets.
- For example:
  - How do households allocate its scarce resources among its various members, taking into account each member's abilities, effort, and desires?
  - Who cooks dinner? Who does laundry? Who goes grocery shopping? What is consumed?

# Macroeconomics

- Is the branch of economics which studies the functioning and performance of a society's economy as a whole.
- Often focuses on levels and changes in aggregate measures.
- For example
  - How can problems in the housing market spread to the rest of the economy?
  - Why are so many countries poor? What policies might help them grow out of poverty?
  - What is a trade deficit? How does it affect a country's well-being?

# The Importance of Economics

- Economists develop conceptual models of behavior to predict responses to changes in policy and market conditions.
- Economists use rigorous statistical analysis to investigate these changes (Econometrics).
- Thus, they contribute to the development of many public policies, including health care, welfare, and school reforms and efforts to reduce inequality, pollution, and crime.
- Whether you major in economics or not, economic fundamentals may help to better understand “what is going on in the news” and provide a tool for making decisions in everyday life.

# Summary

- **Marginal Analysis** is the direct comparison of the marginal benefit of the activity to the marginal cost of the activity.
- **Three Economic Questions:** What, How, and for whom to produce?
- **Positive analysis** aims to describe how the world actually is or actually functions.
- **Normative analysis** aims to assess the desirability of how the world is or functions.
- **Microeconomics** studies how individual decision-makers behave and interact with each other.
- **Macroeconomics** studies the functioning and performance of a society's economy as a whole.