

Discussion 1 - Econ 101

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Principles

WHAT IS ECONOMICS??

Economy comes from the Greek word *oikonomía*, where

- **Oiko** means house
- **Nomía** means management or distribution

Today, we can define Economics as the social science that analyzes how individuals **allocate scarce resources**.

WHAT IS ECONOMICS??

Scarce resources:

- Money
- Goods
- Time

Allocation (Trade-off):

- Should I buy a book or a new mug?
- Should I wear formal or informal clothes?
- Should I go to the discussion or go to the lake?

THE COST-BENEFIT PRINCIPLE

The essence of this principle is that individuals should assess all benefits and costs of a decision. For example:

- Benefit of going to the discussion: Learning :)
- Cost of going to the discussion: One more hour of class on a Friday :(

THE COST-BENEFIT PRINCIPLE

We can also view this in terms of economic surplus.

- You have two options: Buy Taylor Swift's new biography for \$10 or a Jordan Love mug for \$4.
- You value the Taylor Swift's Biography \$15
- You value the Jordan Love mug 10\$
- Which one do you choose?

THE COST-BENEFIT PRINCIPLE

- **Economic Surplus Book:** $\$ 15 - \$10 = \$ 5$
- **Economic Surplus Mug:** $\$10 - \$ 4 = \$ 6$

Maximizing the Economic Surplus: You choose Jordan Love's Mug

OPPORTUNITY COST PRINCIPLE

- In Economics, we are allocating scarce resources. This means we **cannot** have everything, so we need to make choices
- In the previous example, we would either buy the Jordan Love mug or Taylor Swift's book—we couldn't have both.
- Therefore, we say that the **opportunity cost** of the Jordan Love mug is Taylor Swift's book, since we must give up the book to obtain the mug.

OPPORTUNITY COST PRINCIPLE

- **Sunk Costs:** Costs that cannot be recovered.
- Suppose you paid \$50 to attend a party, and now you're deciding whether to buy snacks for \$10 or drinks for \$5.
- You should ignore the sunk cost. In other words, the fact that you paid \$50 to go to the party should not influence your decision.

MARGINAL PRINCIPLE

Water X Diamond Paradox:

- Water is essential for life—if we don't drink it, we can die. Yet, we pay only \$2 for a bottle.
- Diamonds are beautiful, but not necessary for survival. However, they are very expensive.
- Why is water cheaper than diamonds?

MARGINAL PRINCIPLE

Water X Diamond Paradox:

- Suppose you are in the desert with a bag of diamonds but no water. Would you trade one diamond for a bottle of water?
- Yes, because without water, you would die.
- Now, if you're in a city with plenty of water, would you trade a diamond for a bottle of water?
- No, because diamonds are more valuable in that situation.

INTERDEPENDENCE PRINCIPLE

- Your decision depends on others: "I'm only going to the party if my friends are also coming."
- Your decision depends on other markets: If the price of butter increases, you may consume less bread.
- Your decision depends on the future: What if there's another bubble in the real estate market?

Demand

INTRODUCTION

To analyze demand, we need to understand two key concepts:

- **Price:** The cost of buying one unit.
- **Quantity Demanded:** The number of units that would be bought at a given price, p .

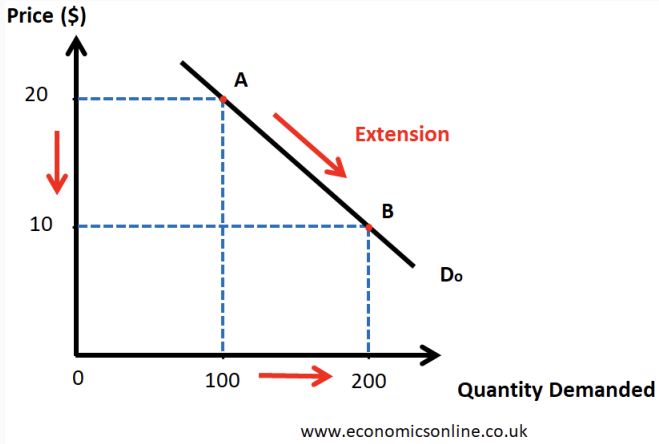
Law of Demand:

- Lower prices \Rightarrow Higher quantity demanded.
- Higher prices \Rightarrow Lower quantity demanded.

LAW OF DEMAND - IDEA

- When analyzing demand, we consider consumer behavior.
- In this context, prices represent costs and the goods represent benefits.
- If prices decrease, the cost of goods is lower, which encourages increased consumption to maximize economic surplus.
- If prices increase, the cost of goods is higher, which discourages consumption to maximize economic surplus.

LAW OF DEMAND - GRAPHICALLY



LAW OF DEMAND - MATH

Suppose the demand is a line of the format

$$y = ax + b$$

The Law of Demand imply that $a < 0$