

What does economics study?

- How to allocate resources and outputs.
- How people make decisions.
- How people interact with others.
- Analyze factors and trends that affect the economy as a whole.

Who makes decisions?

1. Individual
2. Household
3. Firm
4. Society (Government)

Why need to allocate resources?

- Resources are scarce.
- People always face trade-offs (“there ain’t no such thing as a free lunch”)
- There is always an opportunity cost accompanying with every decision.

What tools do we use?

- Economic models (Graphs, Math Equations)
- The principle of economic modeling is to simplify the complexity and only focus on a few important economic facts.

□ Economic models always rely on some assumptions.

□ People are rational people always make decisions to achieve their own best.

Benefit vs Cost

“Marginal Benefit vs Marginal Cost”

□ Marginal change: small incremental adjustment to the existing plan of activity.

□ People respond to incentives. Crucial for analyzing the market “price” teach people how to act.

EX: What happens when the congress passes the seat belt law?

- The death per accident will go down
- More accidents

Example of Economic Model

1. The Circular-Flow diagram (grand view of the economy)

The production possibility frontier (PPF)

-A graph which shows the combination of outputs that the economy can possibly produce given the available resources and technology.

The economy only produces two goods:

Machine: Capital Good

Pizza: Consumption Good

More capital goods today will produce more consumption goods tomorrow.

Lecture 2:

Job of economists:

Scientist: positive (descriptive, about how the world is)

Policy advisor: normative (prescriptive, about how the world ought to be)

Market: for one good or one service

Buyer: determine the demand of the good

Seller: determine the supply of the good

Demand and supply together will determine the price and the quantity of the good.

(Perfectly) Competitive Market

- Must have many sellers, many buyers for an identical good.
- Each buyer/seller have a negligible impact on the price.
- The market price is determined by sum of demands and sum of supplies.
- Easy entry into the market, easy exit from the market.

Monopoly Market

- One seller in the market.
- The seller is a price maker.

Oligopoly Market

- Few sellers (ex. Market for Cigarettes/Beer/Prime Copper)
- Mutual interdependent sellers.
- Take strategic behaviors (take into account the reaction of others)

Monopolistic Competition



- Relatively large number of sellers
- Produce differentiated goods.
- Easy entry into market and easy exit out of market.
- Advertising

Demand and Supply Analysis

Demand: relationship between the price of a good and the quantity of a good.

Quantity Demanded: Amount of a good that buyers are willing and able to purchase.

Price	Quantity
0	12
0.5	10
1.0	8
1.5	6
2	4

-Demand Schedule/ Demand Curve

-Law of demand: When the price goes up, the quantity demanded goes down (holding other things constant)

Market Demand (Sum of individual demands)

-Given price

-Market Demand shows how many quantities marginal buyers want to buy.

-Given a quantity, market demand shows how much marginal buyers will pay

Change of Quantity

-A \rightarrow B or B \rightarrow A (movement along the original demand curve)

-The only cause is change of the price of the good.

Change of Demand

-A shift of the original demand curve

-To the right (demand increase)

-To the left (demand decrease)

Income Change

-Normal good: when income increases, the demand increases.

-Inferior good: when income increases, the demand decreases.

Price of related goods

-Substitute good: Increase in price=increase in demand

-Compliment good: Increase in price=decrease in demand.