Introduction

• Economics is about choices.

• Definition:

• Scarcity: A resource is scarce when it is not freely available - when its price exceeds zero.

• Resources (Factors of Production):

• Four categories of resources:
  – Labor
  – Capital
    • Physical Capital: Goods used to make MORE goods and services.
      – Example:
    • Human Capital:
  – Natural Resources
    • Inputs into production provided by nature.
      – Example:
    – Special human resource that takes the initiative to combine labor, capital, and natural resources into goods and services

• Resources make goods and services:
  – Goods
  – Services

• Making choices in a world of scarcity means we must pass up some goods and services.

• Every decision we make is a trade-off:

Model 1: Circular Flow Diagram

• Simple model is describe the flow of resources, products, income and revenue.

• Assumptions:
  – 2 Decision makers:
  – 2 Markets:
    – Households own and sell the resources, and buy and consume the products.
    – Firms buy and use the resources, and make and sell the products.

Economic Analysis

• Key assumption =
  – People make the best choices they can, given the available information.

• Rational choice requires time and information:
  – Time and info are scarce and therefore valuable.
  – Because information is costly to acquire, we are often willing to pay others for it.
• Marginal Analysis
  – Economic choice is based on a comparison of expected marginal benefits and the expected marginal cost of an action.
    • Marginal =
      • If the expected MB > expected MC, a rational decision maker will engage in the action.
        – Example:

• Microeconomics
  – Study of economic behavior in particular markets.

• Macroeconomics
  – Study of economic behavior of entire economies.

Pitfalls of Faulty Economic Analysis
• The incorrect idea that if two variables are associated in time, one must necessarily cause the other.
  • Example:
• The incorrect belief that what is true for the individual, must necessarily be true for the group.
  • Example:
• Unintended consequences of economic actions that may develop slowly over time as people react to events.
  • Example:

Lecture Notes – Chapter 2 - Economic Tools and Economic Systems

Opportunity Cost
• Due to scarcity, whenever you make a choice, you must pass up another opportunity; you must incur an opportunity cost.
  • Definition: Opportunity Cost (OC) =
    • Example: The OC of a 8am class is 2 hours of sleep.
      • OC is
        • Sunk costs should not be considered:

Gains from Trade
• Terms:
  – Comparative Advantage (CA):
  •
  – The Law of Comparative Advantage:
  •
  – Absolute Advantage (AA):
  •
• Gains from trade are based on:
• Example: You and your roommate are very busy people, and have little time for ironing shirts and typing papers.
  – You =
  – Roommate =
  – You =
  – Roommate =
  – Without trade, what can be produced in one hour if the paper is a priority?
    • You =
    • Roommate =
    • Total Output =
  – With trade, what is total output?
    • First, determine opportunity cost:
      - OC of paper for you:
      - OC of paper for roommate:
      - OC of shirt for you:
      - OC of paper for roommate:
    • You specializes in ___________ (OC is lower)
    • Roommate specializes in ___________ (OC is lower)
  • In one hour, total output is:

Example 2: Island Economy
  • Tom and Wilson on an island
    – Tom can gather:
    – Wilson can gather:
  • Who has the absolute advantage?
    – AA in coconuts
    – AA in fish
  • Without trade, what is total production for one day (8 hours)?
    – Assume Tom and Wilson split their time evenly.
      • Tom: 4 hours on coconuts (__________) and 4 hours on fish (__________).
      • Wilson: 4 hours on coconuts (__________) and 4 hours on fish (__________).
      • Total Production:
  • With trade, what is total production for one day (8 hours)?
    – First, determine OC and specialization:
      • OC of 1 fish for Tom
        –
      • OC of 1 coconuts for Tom
      • OC of 1 fish for Wilson
      –
      • OC of 1 coconut for Wilson
      –
The Economy’s Production Possibilities

- Tom specializes in ____________ (OC is smaller)
- Wilson specializes in ____________ (OC is smaller)
- Tom spends all day:
  -
- Wilson spends all day:
  -
  * Total production is greater with trade!

The Household

- HH demand for goods and services determines:
- HH supplies of resources produce that output.
• HH make all kinds of decisions;
  –
  –
  –

• HH maximize utility
  – Utility =

• HH as resource suppliers
  – HH can use or sell their labor, capital, natural resources, and entrepreneurial ability.

• HH as demanders of goods and services
  – Personal consumption is divided into three broad categories:
    •
      – Example:
    •
      – Example:
    •
      – Example:

The Firm
  • Definition of firm:

  • Firms try to maximize profit
    – Profit =
  • Three main types of firms

    – Single owner who has the right to all profits, but bears unlimited liability for the firm’s losses and debts.
    – Multiple owners who share profits, but bear unlimited liability for the firm’s losses and debts.
    – Legal entity owned by stockholders whose liability is limited to the value of their stock ownership.

The Government
  • The role of government:
    – Intervene in the market if market failures exist.
      • Market failures =
        – Establishing and enforcing the rules of the game.
          •
        – Promoting competition
          •
        – Providing public goods
          •
        – Dealing with externalities
          •
        – Full employment, price stability, and economic growth.
          • Fiscal Policy:
          • Monetary Policy:
The Rest of the World

• Today’s market is heavily dependent on households, firms, and governments from the rest of the world.
  – International Trade
• Occurs because the opportunity cost of producing specific goods differs across countries.
  – Exchange Rates
    • Measure:
      • Affects the price of imports and exports, therefore the flow of foreign trade.
  – Trade Restrictions

Lecture Notes - Chapter 4 - Demand, Supply, and Markets

Demand

• Definition of Demand:

• Law of Demand
  – Quantity demanded varies inversely with price, all else constant.
    •
    •
• Explaining the law of demand:
  – 1.
    • When the price of a good falls, that good becomes cheaper compared to other goods so consumers tend to substitute that good for other goods.
  – 2.
    • A fall in the price of a good increases consumers’ real income, making consumers more able to purchase goods.

• Quantity Demanded:
  –

• Demand schedule (table) and demand curve:

• Shifts in the Demand Curve
  –
    • Any change that increases quantity demanded at every price
      •
  – Decrease in demand
Curve shifts left

Five Non-Price Demand Shifters:

- Normal Goods
  - As income rises, demand for normal goods __________.
- Inferior Goods
  - As income rises, demand for inferior goods __________.

- Substitutes
  - If the price of one good rises, the demand for its substitute will ________.
- Complements
  - If the price of one good rises, the demand for its complement will ________.

- Future income or prices.
  - More buyers = more demand
  - Less buyers = less demand

- Likes and dislikes for goods and services.

Important Terminology:

- Change in Demand
  - Entire curve shifts
    - Change in Quantity Demanded
      - Movement along curve

Supply

- Definition of Supply:
  - Law of Supply
    - Quantity supplied varies directly with price, all else constant.
  - Explaining the Supply Curve
  - Quantity Supplied:
    - The amount of a good that producers are willing and able to sell at a particular price.
- Supply schedule (table) and curve:
• Shifts in the Supply Curve
  – Increase in supply
    • Any change that increases quantity supplied at every price
  – Decrease in supply
    • Any change that decreases quantity supplied at every price

• Five Non-Price Supply Shifters:
  – More efficient production lowers costs, therefore increases supply.
  – Profits and production costs
    • Higher input prices ______ supply
    • Lower input prices ______ supply
  – If the price of an alternative good increases, supplying the alternative becomes more attractive, and the supply of the original good decreases.
  – Future prices and therefore, future profits.
  – More producers, more supply.
    • Less producers, less supply.

• Important Terminology:
  – Change in Supply
    • Entire curve shifts
  – Change in Quantity Supplied
    • Movement along curve

Demand & Supply
• Market:
  • Equilibrium
    – One unique point at which the demand and supply curves intersect.
    – Market has reached a price at which:
      – Corresponding price at intersection
      – Corresponding quantity at intersection
  • Equilibrium price
    – Buyers can buy all they want
Sellers can sell all they want

Surplus

• If price is above the eq’m price (P > P*) a surplus is created (excess supply).
  
  – Firms respond by lowering price until equilibrium price is reached and Q_s = Q_d.
    
    • Quantity supplied ____________
    • Quantity demanded ____________

Shortage

• If price is below eq’m price (P < P*) a shortage is created (excess demand).
  
  – Firms respond by rising price until equilibrium price is reached and Q_s = Q_d.
    
    • Quantity supplied ____________
    • Quantity demanded ______________

Analyzing Equilibrium

• 3-Step Process to analyze changes in equilibrium:
  
  – Does the event shift the demand or supply curve?
  – Which direction does the curve shift?
  – Use supply-and-demand diagram to determine new equilibrium (P* and Q*).

Example 1: Market for Ice Cream

• Event: Hot summer day
  
  – 1. Event impacts:
    •
  
  – 2.
    •
  
  – 3. Draw supply-and-demand diagram

Example 2: Market for Ice Cream

• Event: The price of sugar increases
  
  – 1. Event impacts:
    •
  
  – 2.
    •
  
  – 3. Draw supply-and-demand diagram

Disequilibrium

• Price floors
– Must be above \( P^* \) to have an impact.
– Result:

• Price ceilings
–
– Must be below \( P^* \) of have an impact.
– Result: