

## **Introduction to Economics**

- I. What is Economics?
  - A. Economics: the allocation of scarce resources toward alternative productive enterprises.
    - 1. Resources: Land, labor, capital, entrepreneurial/managerial ability
    - 2. Productive enterprises: Goods and services
  - B. What do we produce? Who produces? Who consumes? When...? Where...? Why...?
  - C. Microeconomics and Macroeconomics
- II. Economics is about Scarcity and Choices
  - 1. Unlimited wants/needs/desires
  - 2. Limited resources
  - 3. Individuals/Societies need to choose from alternative goods, services, and activities

## **Thinking Like an Economist**

- I. The Economist as Scientist
  - A. The Scientific Method: Observation, theory, and more observation
  - B. Why economists disagree (and the role of assumptions)
    - 1. Differences in values
    - 2. Differences in models, methods, data, and analysis/conclusions
    - 3. Charlatans and cranks
    - 4. Theory vs. reality
  - B. Skills for students to develop
    - 1. Critical thinking
    - 2. Problem solving
    - 3. Decision making
- II. The Economist as Policymaker
  - A. Positive versus normative analysis
  - B. Economists in Washington (and Frankfort!)
- III. Economic Behavior
- IV. Appendix: Graphing
  - A. Graphs of a single variable
  - B. Graphs of two variables
    - 1. The coordinate system
    - 2. Positive and negative relationships
    - 3. Graphing three variables
  - C. Curves in the coordinate system
  - D. Slopes of linear and non-linear functions
  - E. The 45-degree line

## **Production Possibilities, Opportunity Cost, and Comparative Advantage**

- I. Scarcity and Choice: Finite resources, infinite wants
- II. Production Possibilities Frontier (pp. 37, ff.)
  - A. Technology and resources
  - B. Daniel Boone: Building an economic community
    1. The Dan'l story: Housing and Food
    2. Clones and robots vs. real people
    3. Straight line vs. curved PPF
    4. Requirements
      - a. Technology
      - b. Resources: Land, Labor, Capital (Physical and Financial), Entrepreneurship
  - C. Opportunity Costs (pp. 36, ff.)
    1. Defined (in barter terms): What you give up for what you get
    2. Graphical: "Triangle"
    3. Measured: What you give up divided by what you get
      - a. Linear PPF exhibits constant opportunity costs. The opportunity cost of the horizontal good is equal to the slope of the line,  $\Delta V/\Delta H$ . The opportunity cost of the vertical good is equal to the inverse of the slope of the line,  $\Delta H/\Delta V$ .
      - b. Curved PPF: Opportunity cost increases with increased (horizontal) production
        - 1) Mark the horizontal axis in constant unit intervals.
        - 2) Look at the change in vertical units produced with increases in horizontal units produced: Increasing opportunity cost!!
      - c. Graphing marginal (opportunity) cost below PPF
    - D. Further PPF issues
      1. Attainable vs. unattainable, efficient vs. inefficient points
        - a. Technical efficiency
        - b. Economic (allocative) efficiency
      2. Growth: With increases in technology or resources
        - a. Primarily technology-determined
        - b. Capital accumulation
          - 1) Hong Kong vs. United States
          - 2) Consumer goods and capital goods
    - E. Questions each society / economic system must answer
      1. What (where) to produce?
      2. How to produce?
      3. Who consumers?
  - III. Alternative Economic Systems (pp. 46 ff.)
    - A. Two visions (systems): Socialism and Capitalism
    - B. Components of both economic systems: How are they different?
      1. Prices
      2. Competition
      3. Private property
      4. Exchange
    - C. The role of government

## Supply and Demand

### I. The Circular-Flow Diagram (not in text)

1. Households and Firms
  - a. Households own and provide Resources / Inputs / Factors of Production
  - b. Firms produce Goods and Services
2. Markets: Input (resources) markets; Output (goods and services) markets

### II. Demand (pp. 56, ff.)

#### A. The Law of Demand

1. The Law: Higher prices, lower quantity demanded
2. Substitution effect: buy related, cheaper goods (substitutes)  
Income effect: it's like having a reduction in income
3. Demand implies WILLINGNESS and ABILITY TO PAY
4. Demand curves and demand schedules

#### B. Demand determinants

1. Movement along a demand curve (change in quantity demanded)
  - a. A change in the price of the good
2. Movement to a new demand curve
  - b. Prices of related goods: Substitutes and Complements
  - c. Income: Normal goods and Inferior goods
  - d. Population (number of buyers)
  - e. Preferences
  - f. Expected future prices

#### C. "Change in Quantity Demanded" vs. "Change in Demand"

1. Movement along a demand curve
2. A shift of the demand curve to a new curve

### III. Supply (pp. 68, ff.)

#### A. The Law of Supply

1. The Law: Higher prices, greater quantity supplied
2. Supply implies RESOURCES/TECHNOLOGY and PROFITABILITY
3. Supply curves and supply schedules

#### B. Supply determinants

1. Movement along a supply curve (change in quantity supplied)
  - a. A change in the price of the good
2. Movement to a new supply curve
  - b. Prices of related goods produced
    - 1) Substitutes in production (beef and dairy cattle)
    - 2) Complements in production (meat and leather)
  - c. Prices of productive resources
  - d. Technology
  - e. Number of sellers
  - f. Expected future prices
  - g. Taxes, subsidies and government restrictions

#### C. "Change in Quantity Supplied" vs. "Change in Supply"

1. Movement along a supply curve
2. A shift of the supply curve to a new curve

#### IV. Market Equilibrium

- A. Defined in terms of “equilibrium prices”
  1. Where supply and demand intersect
  2. The price at which the market clears
  3. No tendency to change
- B. Dis-equilibrium helps us to understand equilibrium
  1. At a high price, quantity supplied exceeds demand: surplus (ES)
  2. At a low price, quantity demanded exceeds supply: shortage (ED)
  3. Dynamics of dis-equilibrium
    - a. The setting: UK tickets
      - 1) Few sellers, many buyers: Excess Demand
      - 2) “Side market” action: Non-ticket-holders offer higher price
    - b. The setting: ECU tickets
      - 1) Many sellers, few buyers: Excess Supply
      - 2) “Side market” action: Ticket holders offer lower price

#### V. Shifts of Demand and Supply

- A. Effects on equilibrium price
  1. Creates a temporary surplus or shortage at old price
  2. Anticipated price change forces movement along unchanged function
  3. Price moves either up or down
- B. Effects on equilibrium quantity transacted

#### VI. Consumer and Producer Surplus (pp. 76, ff.; pp. 32-33)

- A. Consumer Surplus for an individual is the (vertical) amount someone is willing to pay in excess of selling price. For the market, Consumer Surplus is bounded by the demand curve, the price line and the vertical axis.
- B. Producer Surplus for an individual is the (vertical) amount a seller receives for his/her product in excess of his/her minimum selling price. For the market, Producer Surplus is bounded by the supply curve, the price line and the vertical axis.

#### VII. Price Controls (pp 79, ff.)

- A. Price Floors: Set above the naturally occurring equilibrium price.
- B. Price Ceilings: Set below the naturally occurring equilibrium price.

#### VIII. Algebraic Demand and Supply

- A. Demand:  $Q_d = a - bP$        $Q_d = 80 - 3P$ 
  1. “a” is horizontal intercept
  2. “-b” is inverse slope
- B. Supply:  $Q_s = c + dP$        $Q_s = 0 + 2P$ 
  1. “c” is horizontal intercept
  2. “+d” is inverse slope
- C. Two equations, three unknowns:
  - (1) Quantity demanded, (2) Quantity supplied, (3) Equilibrium price
- D. Closing the system
  1.  $Q_d = Q_s$ , and solve:  $2P = 80 - 3P \rightarrow P = 16$
  2.  $P = z$ , and plug in
  3.  $Q = z$ , and solve for price