#### Intermediate Microeconomics and Its Application 11th Edition

Walter Nicholson, Amherst College

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## **Chapter 1**



# Economic Models

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#### What is Microeconomics?

#### • Economics

- The study of the allocation of scarce resources among alternative uses
- Microeconomics
  - The study of the economic choices individuals and firms make and how those choices create markets

## **Economic Models?**

- Simple theoretical descriptions that capture the essentials of how the economy works
  - Used because the "real world" is too complicated to describe in detail
  - Models tend to be "unrealistic" but useful
    - While they fail to show every detail (such as houses on a map) they provide enough structure to solve the problem (such as how a map provides you with a way to solve how to drive to a new location)

## **The Production Possibility Frontier**

- A graph showing all possible combinations of goods that can be produced with a fixed amount of resources
- Figure 1.1 shows a production possibility frontier where the good goods are food and clothing produced per week
  - At point A, 10 units of food and 3 units of clothing can be produced

#### FIGURE 1.1: Production Possibility Frontier



## **Uses of Microeconomics**

- While the uses of microeconomics are varied, one useful way to categorize is by types of users
  - Individuals making decisions regarding jobs, purchases, and finances
  - Businesses making decisions regarding the demand for their product or their costs
  - Governments making policy decisions regarding laws and regulations

## **The Basic Supply-Demand Model**

- A model describing how a good's price is determined by the behavior of the individual's who buy the good and the firms that sell it.
  - Economists argue that market behavior can generally be explained by this model that captures the relationship between consumers' preferences and firms' costs.

#### FIGURE 1.3: The Marshall Supply-Demand Cross



## Market Equilibrium

- In Figure 1.3, the demand and supply curve intersect at the market equilibrium point P\*, Q\*
- P\* is the equilibrium price: The price at which the quantity demanded by buyers of a good is equal to the quantity supplied by sellers of the good

#### FIGURE 1.3: The Marshall Supply-Demand Cross



## Market Equilibrium

- Both demanders and suppliers are satisfied at this price, so there is no incentive for either to alter their behavior unless something else happens
- Marshall compared the roles of supply and demand in establishing market equilibrium to the two blades of a pair of scissors working together in order to make a cut

## **Nonequilibrium Outcomes**

- If something causes the price to be set above P\*, demanders would wish to buy less than Q\* while suppliers would produce more than Q\*
- If something causes the price to be set below P\*, demanders would wish to buy more than Q\* while suppliers would produce less than Q\*

#### Change in Market Equilibrium: Increased Demand

- Figure 1.4 shows the case where people's demand for the good increases as represented by the shift of the demand curve from D to D'
- A new equilibrium is established where the equilibrium price has increased to P\*\*

#### FIGURE 1.4: An increase in Demand Alters Equilibrium Price and Quantity



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#### FIGURE 1.4: An increase in Demand Alters Equilibrium Price and Quantity



# Change in Market Equilibrium: decrease in Supply

- In Figure 1.5 the supply curve has shifted leftward reflecting a decrease in supply brought about because of an increase in supplier costs (say an increase in wages)
- At the new equilibrium price P\*\* consumers respond by reducing quantity demanded along the Demand curve D

#### FIGURE 1.5: A shift in Supply Alters Equilibrium Price and Quantity



#### FIGURE 1.5: A shift in Supply Alters Equilibrium Price and Quantity

