Chapter 4: The Market Forces of Supply and Demand
Principles of Economics, 8th Edition
N. Gregory Mankiw
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1. Supply and demand are the most important concepts in economics.

2. Markets and Competition
   a. Market is a group of buyers and sellers of a particular good or service. P. 66.
   b. These individuals are assumed to be rational attempting to maximize their welfare subject to the constraints that they face.
   c. A competitive market is a market in which there are many buyers and many sellers so that each has a negligible impact on the market price. P. 66.
   d. What is Competition?
      i. Perfectly competitive markets are defined by two characteristics:
         (1) homogeneous products and
         (2) many buyers and sellers so no one influences the price.
      ii. Under perfect competition, firms are price takers.
      iii. A market with only one seller is called monopoly.
      iv. A market with few sellers is called an oligopoly.
      v. A market with many sellers who sell slightly differentiated products is called monopolistic competition.
      vi. Some degree of competition is present in most markets.
   e. *The different environments in which firms operate:*

Type of Product	*Number of Sellers*		
	Many	*Few*	*One*
Homogeneous	*Competition (Wheat)*	*Oligopoly (Airlines)*	*Monopoly (Patent Holder)*
Differentiated	*Monopolistic Competition (Retail Shoes)*	*(Automobiles)*	*Price Discriminating Monopolist (Publisher)*

   f. We can also think about markets in terms of the difficulty of entry with
      i. competitive markets being easy to enter and
      ii. monopolistic markets being difficult to enter.

3. Demand
   a. The Demand Curve: The Relationship between Price and Quantity Demanded
      i. Quantity demanded is the amount of a good that buyers are willing

and able to purchase. P. 67.

ii. Law of demand is the claim that, other things being equal, the quantity demanded of a good falls when the price of the good rises. P. 67.

iii. Demand schedule is a table that shows the relationship between the price of a good and the quantity demanded. P. 67.

iv. Def: Demand curve is a graph of the relationship between the price of a good and the quantity demanded. P. 68.

v. **Figure 1: Catherine's Schedule and Demand Curve. P. 68.**

b. Market Demand versus Individual Demand

i. The market demand curve is the horizontal sum of the individual demand curves.

(1) This is true for private goods, which are all the goods traded in markets.

(2) The demand curve for a public good is the vertical summation of the individual demand curves.

(a) Public goods have two characteristics:
the marginal cost is essentially zero and
people cannot be excluded from consuming it no matter who pays.

(b) National defense and public television are examples of a public good.

(3) Because of the potential for free riding (not paying for a good that you are consuming), public goods are not viable in markets.

ii. **Figure 2: Market Demand as the Sum of Individual Demands. P. 69.**

c. Shifts in the Demand Curve

i. Income

(1) Normal good is a good for which, other things being equal, an increase in income leads to a increase in quantity demanded. P. 70.

(2) Inferior good is a good for which, other things being equal, an increase in income leads to a decrease in quantity demanded. P. 70.

(a) Public Transportation

(b) Economy cars

ii. Prices of related goods

(1) Substitutes are two goods for which an increase in the price of one good leads to an increase in the demand for the other good. P. 70.

(2) Complements are two goods for which an increase in the

price of one good leads to a decrease in the demand for the other good. P. 70.

iii. Tastes

(1) While economists do not normally try to explain people's tastes, they do examine what happens when tastes change.

iv. Expectations

(1) Your expectations about the future may affect your demand for a good or service today.

(2) *Think about recent activity in the housing market.*

v. Number of Buyers

(1) **Figure 3: Shifts in the Demand Curve. P. 70.**

vi. **Table 1: Variables That Influence Buyers. P. 71.**

d. **Case Study: Two Ways to Reduce the Quantity of Smoking Demanded, P. 71**

i. Shift the curve through education.

ii. Move along it by increasing the price.

iii. Tobacco and marijuana may be complements.

iv. **Figure 4: Shifts in the Demand Curve versus Movements along the Demand Curve. P. 72.**

4. Supply

a. The Supply Curve: The Relationship between Price and Quantity Supplied

i. Quantity supplied is the amount of a good that sellers are willing and able to sell. P. 73.

ii. Law of supply is the claim that, other things being equal, the quantity supplied of a good rises when the price of the good rises. P. 73.

iii. Supply schedule is a table that shows the relationship between the price of a good and the quantity supplied. P. 73.

iv. Supply curve is a graph of the relationship between the price of a good and the quantity supplied. P. 74.

v. **Figure 5: Ben's Supply Schedule and Supply Curve. P. 73.**

b. Market Supply Versus Individual Supply

i. The market supply curve is the horizontal summation of the individual supply curves.

(1) This is true so long as expansion in the industry does not have an impact on input prices.

ii. **Figure 6: Market Supply as the Sum of Individual Supplies. P. 74.**

c. Shifts in the Supply Curve

i. Input prices

ii. Technology
iii. Expectations
(1) *Think about non-renewable resources: if you think that prices are going to go up in the future, you have an incentive to withhold supply now, which has the effect of driving up prices now.*
iv. Number of Sellers
v. Summary
vi. **Figure 7: Shifts in the Supply Curve. P. 75**
vii. **Table 2: Variables That Influence Sellers. P. 76**

5. Supply and Demand Together
a. Equilibrium
i. Equilibrium is a situation in which supply and demand have been brought into balance. P. 76.
ii. Equilibrium price is the price that balances supply and demand. P. 76.
iii. Equilibrium quantity is the quantity supplied and the quantity demanded when the price has adjusted to balance supply and demand. P. 76.
(1) **Figure 8: The Equilibrium of Supply and Demand. P. 77.**
iv. Surplus is a situation in which quantity supplied is greater than quantity demanded. P. 77
v. Shortage is a situation in which quantity demanded is greater than the quantity supplied. P. 78
vi. Law of supply and demand is the claim that the price of any good adjusts to bring the supply and demand for that good into balance. P. 78.
(1) **Figure 9: Markets Not in Equilibrium. P. 78**
(a) Excess Supply and
(b) Excess Demand
b. Three steps to analyzing changes in equilibrium
i. Decide whether the event shifts the supply or demand curve or both.
ii. Decide which direction the curve shifts.
iii. Use the supply and demand diagram to see how the shift changes the equilibrium.
iv. **Table 3: A Three Step Program for Analyzing Changes in Equilibrium. P. 79.**
c. Example: A Change in Market Equilibrium Due to a Shift in Demand
ii. **Figure 10: How an Increase in Demand Affects the**

Equilibrium. P. 80.

d. Shifts in curves versus movements along curves
   i. *These are important terms.*
   ii. "Supply" refers to the position of the supply curve, whereas the "quantity supplied" refers to the amount suppliers wish to sell.
   iii. "Demand" refers to the position of the demand curve, whereas the "quantity demanded" refers to the amount buyers wish to buy.

c. Example: A Change in Market Equilibrium Due to a Shift in Supply
   i. **Figure 11: How a Decrease in Supply Affects the Equilibrium. P. 81**

d. Example: Shifts in Both Supply and Demand
   i. **Figure 12: A Shift in Both Supply and Demand. P. 82**
   ii. **Table 4: What Happens to Price and Quantity When Supply or Demand Shift? P. 82.**

6. Conclusion: How Prices Allocate Resources
   a. In any economic system, scarce resources have to be allocated among competing uses.
   b. The coordination that occurs in markets is not intuitively obvious.
   c. **In The News: Price Increases After Disasters, P. 84.**
      i. **Ask the Experts: 77% disagree with Conn. anti-gouging law.**

7. Summary