Combining Supply and Demand

• How do supply and demand create balance in the marketplace?

• What are differences between a market in equilibrium and a market in disequilibrium?

• What are the effects of price ceilings and price floors?
The point at which quantity demanded and quantity supplied come together is known as equilibrium.

**Finding Equilibrium**

**Combined Supply and Demand Schedule**

<table>
<thead>
<tr>
<th>Price of a slice of pizza</th>
<th>Quantity demanded</th>
<th>Quantity supplied</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>$.50</td>
<td>300</td>
<td>100</td>
<td>Shortage from excess demand</td>
</tr>
<tr>
<td>$1.00</td>
<td>250</td>
<td>150</td>
<td>Equilibrium</td>
</tr>
<tr>
<td>$1.50</td>
<td>200</td>
<td>200</td>
<td></td>
</tr>
<tr>
<td>$2.00</td>
<td>150</td>
<td>250</td>
<td>Surplus from excess supply</td>
</tr>
<tr>
<td>$2.50</td>
<td>100</td>
<td>300</td>
<td></td>
</tr>
<tr>
<td>$3.00</td>
<td>50</td>
<td>350</td>
<td></td>
</tr>
</tbody>
</table>
If the market price or quantity supplied is anywhere but at the equilibrium price, the market is in a state called disequilibrium. There are two causes for disequilibrium:

**Excess Demand**
- Excess demand occurs when quantity demanded is more than quantity supplied.

**Excess Supply**
- Excess supply occurs when quantity supplied exceeds quantity demanded.

Interactions between buyers and sellers will always push the market back towards equilibrium.
In some cases the government steps in to control prices. These interventions appear as price ceilings and price floors.

- A **price ceiling** is a maximum price that can be legally charged for a good.

- An example of a price ceiling is rent control, a situation where a government sets a maximum amount that can be charged for rent in an area.
Price Floors

• A price floor is a minimum price, set by the government, that must be paid for a good or service.

• One well-known price floor is the minimum wage, which sets a minimum price that an employer can pay a worker for an hour of labor.
Section 1 Assessment

1. Equilibrium in a market means which of the following?
   (a) the point at which quantity supplied and quantity demanded are the same
   (b) the point at which unsold goods begin to pile up
   (c) the point at which suppliers begin to reduce prices
   (d) the point at which prices fall below the cost of production

2. The government’s price floor on low wages is called the
   (a) market equilibrium
   (b) base wage rate
   (c) minimum wage
   (d) employment guarantee

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Changes in Market Equilibrium

• How do shifts in supply affect market equilibrium?
• How do shifts in demand affect market equilibrium?
• How can we use supply and demand curves to analyze changes in market equilibrium?
Shifts in Supply

- **Understanding a Shift**
  - Since markets tend toward equilibrium, a change in supply will set market forces in motion that lead the market to a new equilibrium price and quantity sold.

- **Excess Supply**
  - A surplus is a situation in which quantity supplied is greater than quantity demanded. If a surplus occurs, producers reduce prices to sell their products. This creates a new market equilibrium.

- **A Fall in Supply**
  - The exact opposite will occur when supply is decreased. As supply decreases, producers will raise prices and demand will decrease.
Shifts in Demand

• Excess Demand
  – A shortage is a situation in which quantity demanded is greater than quantity supplied.

• Search Costs
  – Search costs are the financial and opportunity costs consumers pay when searching for a good or service.

• A Fall in Demand
  – When demand falls, suppliers respond by cutting prices, and a new market equilibrium is found.
Analyzing Shifts in Supply and Demand

Graph A: A Change in Supply

• Graph A shows how the market finds a new equilibrium when there is an increase in supply.

Graph B: A Change in Demand

• Graph B shows how the market finds a new equilibrium when there is an increase in demand.
Section 2 Assessment

1. When a new equilibrium is reached after a fall in demand, the new equilibrium has a
   (a) lower market price and a higher quantity sold.
   (b) higher market price and a higher quantity sold.
   (c) lower market price and a lower quantity sold.
   (d) higher market price and a lower quantity sold.

2. What happens when any market is in disequilibrium and prices are flexible?
   (a) market forces push toward equilibrium
   (b) sellers waste their resources
   (c) excess demand is created
   (d) unsold perishable goods are thrown out

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The Role of Prices

• What role do prices play in a free market system?
• What advantages do prices offer?
• How do prices allow for efficient resource allocation?
The Role of Prices in a Free Market

- Prices serve a vital role in a free market economy.
- Prices help move land, labor, and capital into the hands of producers, and finished goods into the hands of buyers.
- Prices create efficient resource allocation for producers and a language that both consumers and producers can use.
Advantages of Prices

Prices provide a language for buyers and sellers.

1. Prices as an Incentive
   Prices communicate to both buyers and sellers whether goods or services are scarce or easily available. Prices can encourage or discourage production.

2. Signals
   Think of prices as a traffic light. A relatively high price is a green light telling producers to make more. A relatively low price is a red light telling producers to make less.

3. Flexibility
   In many markets, prices are much more flexible than production levels. They can be easily increased or decreased to solve problems of excess supply or excess demand.

4. Price System is "Free"
   Unlike central planning, a distribution system based on prices costs nothing to administer.
Efficient Resource Allocation

• **Resource Allocation**
  – A market system, with its fully changing prices, ensures that resources go to the uses that consumers value most highly.

• **Market Problems**
  – Imperfect competition between firms in a market can affect prices and consumer decisions.
  – **Spillover costs**, or externalities, are costs of production, such as air and water pollution, that “spill over” onto people who have no control over how much of a good is produced.
  – If buyers and sellers have imperfect information on a product, they may not make the best purchasing or selling decision.
Section 3 Assessment

1. What prompts efficient resource allocation in a well-functioning market system?
   (a) businesses working to earn a profit
   (b) government regulation
   (c) the need for fair allocation of resources
   (d) the need to buy goods regardless of price

2. How do price changes affect equilibrium?
   (a) Price changes assist the centrally planned economy.
   (b) Price changes serve as a tool for distributing goods and services.
   (c) Price changes limit all markets to people who have the most money.
   (d) Price changes prevent inflation or deflation from affecting the supply of goods.

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