Price Controls

Government Intervention in the Market

- Buyers look to government for ways to hold prices down.
- Sellers look to government for ways to hold prices up.

Price Ceilings

- A **price ceiling** is a government-imposed limit on how high a price can be charged.
Rent Controls

- Rent control is a price ceiling on rents set by government.
- An example is rent control in Paris following World War I and World War II.

Rent Controls

- Rent control in Paris resulted in:
  - A huge shortage of living quarters.
  - New housing construction stopped.
  - Existing housing was allowed to deteriorate.
  - Many families had to double up with other family members.

Rent Controls

Rent control is a price ceiling on rents set by government.
- Rent control in Paris after World War I created a housing shortage.
- The shortage would have been eliminated if rents had been allowed to rise to $17 per month.
Price Floors

• A price floor is a government-imposed limit on how low a price can be charged.

Minimum Wage

• The minimum wage is an example of a price floor.
• A minimum wage is set by government specifying the lowest wage a firm can legally pay an employee.

Minimum Wage

• The minimum wage creates winners and losers:
  - Those who can find work earn a higher wage.
  - Others become unemployed.
  - Production costs increase.
  - Consumers pay higher prices.

Minimum Wage

• Economists disagree about the effects of the minimum wage.
Minimum Wage

- The minimum wage, a price floor, is set by government specifying the lowest wage a firm can legally pay.
- A minimum wage, $W_{\text{min}}$, above the equilibrium wage, $W_e$, helps those who are employed, $Q_2$, but hurts those who would have been employed at $W_e$ but can no longer find employment, $Q_e - Q_2$.

Excise Taxes

- An excise tax is a tax that is levied on a specific good.
- A tariff is an excise tax on an imported good.
- Taxes and tariffs raise prices and reduce quantity.

Excise Taxes

- A luxury tax was imposed on expensive boats in 1990.
- Because the luxury tax was imposed on the boat builders, the supply curve moved up by the amount of the tax.

Excise Taxes

- The price of expensive boats rose by less than the tax, while the quantity supplied and quantity demanded fell.
Excise Taxes

- A tariff has the same effect on equilibrium price and quantity as an excise tax.
- The difference is that foreign producers sending goods into the U.S. pay the tax.

Excise Taxes

- An excise tax is a tax that is levied on a specific good.
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A $10,000 excise tax on luxury boats shifts the supply curve up by $10,000.

At $70,000, there is excess supply of 600 - 420 = 180.

The price of the boats rises by less than the tax to $65,000.
Quantity Restrictions

- Governments often regulate markets with licenses which limit entry into a market.
- Quantity restrictions tend to increase price.

Quantity Restrictions in the Market for Taxi Licenses

In 1937 New York City limited the number of taxi licenses to 12,000 to increase the wages of taxi drivers. Because taxi medallions were limited in supply, as demand for taxi services rose, so did the demand for medallions, increasing their price to $2500 by 1947. Today, medallions sell for $300,000!

Third-Party-Payer Markets

- In third-party-payer markets, the person who receives the good differs from the person paying for the good.
- Equilibrium quantity and total spending is much higher in third-party-payer markets.
Third-Party-Payer Markets

With a co-payment of $5, consumers demand 18 units. Sellers require $45 for that quantity.

Total expenditures, shown by the entire shaded region, are much greater than when consumers pay the entire cost, shown by the dark shaded area.

Summary

- Almost all events can be explained in terms of shifts of and movements along demand and supply curves.
- Supply and demand analysis is used to determine exchange rates - prices of currencies.
- Price ceilings, government-imposed limits on how high a price can be charged, create shortages.
- Price floors, government-imposed limits on how low a price can be charged, create surpluses.

Summary

- Taxes and tariffs paid by suppliers shift the supply curve up by the amount of the tax or tariff and increase equilibrium price and decrease quantity.
- Quantity restrictions increase equilibrium price and reduce equilibrium quantity.
- In a third-party-payer market, the consumer and the one who pays the cost differ. Quantity demanded, price, and total spending are greater when a third party pays.
Review Question 5-1  Use a graph to explain the likely impact on the price of gasoline of a decrease in OPEC oil production due to instability in Iraq and an increase in sales of large SUVs.

The decrease in production will decrease supply from $S_0$ to $S_1$. The increase in demand for SUVs (a complement) will increase demand from $D_0$ to $D_1$. Price increases from $P_0$ to $P_1$.

Review Question 5-2

Given the following demand and supply of pizza:

<table>
<thead>
<tr>
<th>Price per Pizza</th>
<th>Quantity Supplied</th>
<th>Quantity Demanded</th>
</tr>
</thead>
<tbody>
<tr>
<td>$8$</td>
<td>200</td>
<td>60</td>
</tr>
<tr>
<td>$7$</td>
<td>150</td>
<td>80</td>
</tr>
<tr>
<td>$6$</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>$5$</td>
<td>50</td>
<td>120</td>
</tr>
<tr>
<td>$4$</td>
<td>0</td>
<td>140</td>
</tr>
</tbody>
</table>

What is the effect of a price floor of $8$?

A price floor of $8 will create a surplus of $200 - 60 = 140$ Pizzas.