Price Ceilings and Floors

Introduction and Description

Legislators often have been dissatisfied with the outcomes of free markets. The invisible hand is not good enough for them, so they mandate prices that are lower or higher than the equilibrium price. A *price ceiling* is a legal maximum price that may be charged for a good or service. If a price ceiling is below the equilibrium price, it will cause shortages and illegal, or underground, markets to develop. A *price floor* is a legal minimum price that may be charged for a good or service. If a price floor is above the equilibrium price, it will cause surpluses.

In your presentation of price ceilings and floors, discuss how changing prices are incentives that determine what to produce, how to produce and for whom to produce. Sometimes the students are mechanistic and merely identify shortages and surpluses on a graph. They should instead understand why price ceilings cause shortages and price floors cause surpluses. People react to incentives in predictable ways.

Objectives

1. Define and describe *price ceilings* and *price floors.*
2. Illustrate price ceilings and floors on graphs.
3. Analyze the effects of price ceilings and floors in terms of surpluses and shortages.
4. Analyze how prices act as incentives that influence human behavior.

Time Required

One class period or 45 minutes

Materials

1. Activity 22
2. Visuals 2.11 and 2.12

Procedure

1. Use Visual 2.11 to illustrate a price ceiling. Ask questions such as the following:

   (A) What is the quantity demanded and supplied of Greebes at the equilibrium price? Why?

   (B) What is the quantity demanded if the government mandates a $2 price ceiling? Why? ***Emphasize that the lower price is an incentive for buyers to buy more Greebes.***

   (C) What is the quantity supplied at a price ceiling of $2? Why? ***Emphasize that a lower price is an incentive for producers to produce fewer Greebes and use their resources to produce something else.***

   (D) With the price ceiling, what is the shortage of Greebes? ***800***

   (E) If people want to buy more Greebes, who will get the Greebes? ***Market can't determine answer.***

   (F) Why do we call a price that is lower than equilibrium a *price ceiling*? ***This confuses the students. Point out that the price cannot go higher than the price ceiling. If they could jump ten feet, the ceiling would keep them from going higher.***

   (G) What would happen if all goods and services were free? Who would produce the goods and services? What would happen to inventories? What would be the long-run effects of such a policy? ***Students sometimes have problems conceptualizing the idea that price ceilings can have harmful effects. After all, aren't lower prices a good thing for consumers? Students fail to see the effects of lower prices on producers. The discussion of these questions will help the students visualize these effects.***

2. Use Visual 2.12 to illustrate price floors. Ask questions such as these:

   (A) What is the quantity demanded and quantity supplied at the equilibrium price? Why?

   (B) What is the quantity demanded if there is a price floor of $5? Why? ***Emphasize the concept that a higher price makes the opportunity cost of buying a Greebe higher.***

   (C) What is the quantity supplied at a price floor of $5? Why? ***Emphasize that a higher price is an incentive to producers to supply more Greebes.***

   (D) At a price floor of $5, what is the surplus of Greebes? ***1,600***

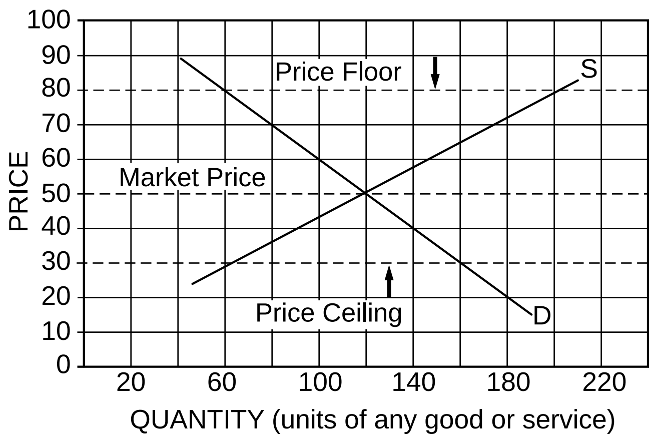
   (E) If people want to sell more Greebes than consumers want to buy, who will get the surplus? ***The government will probably buy them, or the price floor will not be effective.***

   (F) Why is this called a *price floor*? In economics, why is a price floor above a price ceiling? ***The floor keeps the price from going lower, just like the floor in the classroom keeps the students from going lower.***

3. Have the students complete Activity 22 and discuss the answers.

Maximum and Minimum Price Controls

Figure 22.1
Price Floors and Ceilings



Price floors and ceilings can be plotted with supply and demand curves. Use Figure 22.1 to answer the questions. Fill in the answer blanks or underline the correct words in parentheses.

1. What is the market price? ***$50***

2. What quantity is demanded and what quantity is supplied at the market price?
   (A) Quantity demanded ***120***
   (B) Quantity supplied ***120***

3. What quantity is demanded and what quantity is supplied if the government passes a law requiring the price to be no higher than $30? This is called a *price ceiling.*
   (A) Quantity demanded ***160***
   (B) Quantity supplied ***60***
   (C) There is a (***shortage*** / *surplus*) of ***100*** .

4. What quantity is demanded and what quantity is supplied if the government passes a law requiring the price to be no lower than $80? This is called a *price floor.*
   (A) Quantity demanded ***60***
   (B) Quantity supplied ***200***
   (C) There is a (*shortage* / ***surplus***) of ***140*** .
   (D) What happens to total consumer or producer surplus? ***It decreased.***
   (E) Is society better or worse off after the price floor is imposed? ***Worse off***
   (F) Who gains from the price floor? ***Producers, especially high-cost producers***