

## Rent Controls (Price Ceiling)

### Key Concepts

#### Housing Markets and Rent Ceilings

The response of the housing market to shocks depends on whether the market is regulated. Suppose that the supply decreases, perhaps because of an earthquake. In an unregulated market:

- ◆ In the short run the equilibrium rent rises and there is no shortage. This outcome is demonstrated in Figure 6.1, which shows what happened in San Francisco after the 1906 earthquake. Supply decreased and demand did not change. Rents rose from \$16 to \$20 and the equilibrium quantity of apartments decreased to 74,000 units.
- ◆ The higher rent encourages building activity, so as time passes supply increases and the short-run supply curve shifts rightward.
- ◆ In the long run the rent and quantity of apartments rented return to their original levels.

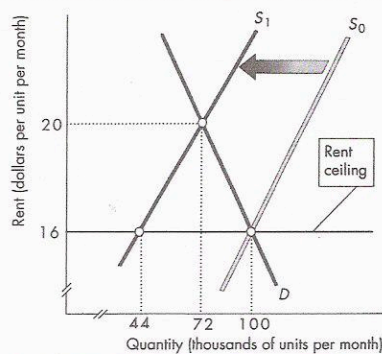
The government might regulate a market. A **price ceiling** is a regulation that makes it illegal to charge a price higher than a specified amount. A price ceiling imposed in a housing market is a rent ceiling. A **rent ceiling** prohibits charging rent that exceeds the ceiling amount. Rent ceilings alter the outcome of a supply shock:

- ◆ Figure 6.1 shows that with a rent ceiling of \$16, after the decrease in supply the rent stays at \$16 and a shortage of 56,000 units (100,000 demanded minus 44,000 supplied) emerges.

A shortage leads to:

- ◆ **search activity** — time spent looking for someone with whom to do business.
- ◆ **black markets** — an illegal market in which the price exceeds the legally imposed price ceiling.

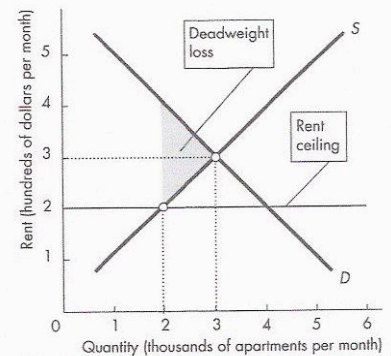
FIGURE 6.1  
The Housing Market in San Francisco



Rent ceilings create inefficiency and a deadweight loss. Figure 6.2 (on the next page) illustrates the deadweight loss created by a rent ceiling. In the absence of a rent ceiling, in the figure the equilibrium rent would be \$300 and the quantity of apartments would be 3,000. With a rent ceiling of \$200 per month, the quantity of apartments decreases to 2,000, a shortage exists, and a deadweight loss — the gray triangle — is created.

Because rent ceilings block voluntary exchange, they are unfair according to the *fair rules* view of fairness. Rent ceilings do not necessarily allocate more apartments to the poorest. Instead they allocate apartments to those who are lucky, not to those who are poor. They also can lead to increased discrimination. So rent ceilings violate the *fair results* view of fairness.

FIGURE 6.2  
The Deadweight Loss from a Rent Ceiling



## Unskilled Workers and the Minimum Wage (Price Floor)

### ■ The Labor Market and the Minimum Wage

In an unregulated labor market, in the short run a decrease in the demand for a type of labor lowers the wage rate for that type of labor. The lower wage rate influences workers to leave this labor market, which decreases the supply of this type of labor, which offsets the initial fall in the wage rate and further decreases employment in this labor market decreases.

A **price floor** is a regulation that makes it illegal to buy or sell at a price lower than the specified level. A **minimum wage law** is a price floor that makes hiring workers for less than the specified wage rate illegal.

- ◆ In a regulated labor market, when the demand for labor decreases minimum wage laws create lower employment and create unemployment.
- ◆ Most economists believe that minimum wage laws contribute to high unemployment among low-skilled young workers.
- ◆ Minimum wage laws create inefficiency, and result in unemployment and excessive job search.

A **living wage** has been defined as an hourly wage rate that enables a person who works a 40-hour work week to rent adequate housing for not more than 30 percent of the amount earned. Some cities have imposed living wage laws that requires wages to be equal to or higher than the living wage. These laws have effects (unemployment among the young, inefficiency, and excessive job search) similar to minimum wage laws.

## **Taxes (Key Part of this Chapter)**

### ■ Taxes

**Tax incidence** is the division of the burden of a tax between the buyer and the seller. If the price paid by the buyers rises by the full amount of the tax, then the full amount of the burden falls on the buyers; if the price rises by less than the amount of the tax, the burden falls on both the buyers and the sellers; and if the price does not rise, then the full amount of the burden falls on the sellers.

- ◆ A tax on sellers decreases the supply of the taxed good, so the supply curve shifts leftward. The vertical distance between the supply curve with the tax and without it equals the amount of the tax. The price paid by buyers rises and the price received by sellers, net of the tax, falls.
- ◆ A tax on buyers decreases the demand for the taxed good, so the demand curve shifts leftward. The vertical distance between the demand curve with the tax and without it equals the amount of the tax. The price paid by buyers, including the tax, rises and the price received by sellers falls.

The price paid by buyers and the price received by sellers is the same regardless of whether the tax is imposed on buyers or sellers.

The division of the tax depends on the elasticities of demand and supply. The more inelastic the demand, the more demanders pay of the tax.

- ◆ Perfectly inelastic demand — buyers pay all the tax.
- ◆ Perfectly elastic demand — sellers pay all the tax.

The more inelastic the supply, the more sellers pay of the tax.

- ◆ Perfectly inelastic supply — sellers pay all the tax.
- ◆ Perfectly elastic supply — buyers pay all the tax.

Usually products with inelastic demands are taxed because the tax does not reduce the quantity purchased by as much as taxing goods with elastic demands. So taxing a good with an inelastic demand results in more tax revenue and a smaller deadweight loss than taxing a good with an elastic demand.

In general, imposing a tax on a product creates a deadweight loss. (If the demand or supply is perfectly inelastic, imposing the tax creates no deadweight loss.)