Outline

1. Price Ceilings
2. Price Floors
3. Quantity Constraints
Prices play a key role in a market economy.
- They signal consumers willingness to pay for a commodity
- and the firms willingness to accept for producing a commodity

But not everyone is happy with the prices in the market-place
- Apartment dwellers complain that their rents are too high
- Consumers complain that gasoline prices are too high
- Producers complain that commodity prices are too low
- Everyone complains that medical costs are too high

As we will see later on in the course, there may be good reasons to intervene in the marketplace to correct various types of market failures such as
- market concentration on either the supply or demand side
- externalities
- public goods, etc.

but it is also important to understand the possible impacts of market interventions

Price Ceilings

**Price controls** are legal restrictions on how high or how low a market price may go.
- **Price ceilings** specify a maximum price sellers are allowed to charge for a good or service.
- **Price floors** specify a minimum price buyers are required to pay for a good or service.

One does not have to look hard to find examples of or calls for price ceilings:
- Rent controls (e.g., New York City or San Francisco).
- Calls for salary caps for Wall Street CEO’s
- Calls for price controls in medicine.
- Price controls in Venezuela
- Natural gas price controls (Natural Gas Act of 1938)
- Gasoline price controls during the OPEC Oil Embargo
- Pennsylvania price controls for commodities essential to the Continental Army (1777-1778)
The Impact of Price Ceilings - The First Effect

As we shall see, price ceilings create multiple problems, but the first effect stems from the shortages it creates.

The Inefficiencies Created by Price Ceilings

- The graph illustrates the first (but not only) inefficiency due to price ceilings: the deadweight loss in total surplus due to the quantity transacted in the market being below the efficient market equilibrium.

- However, there are additional inefficiencies created

  1. **Wasted Resources**: The constraint causes individuals to spend time and money to acquire the scarce resource.

  2. **Inefficiently Low Quality**: Producers, unable to sell their good at the unconstrained price, are encouraged to reduce their costs by providing a lower quality good.

  3. **Black Markets**: Individuals are encouraged to exchange the good outside of legal markets in order to bypass price restrictions.

  4. **Inefficient Allocation to Consumers**: The units sold no longer necessarily go to the individuals who value it the most.

- In an unconstrained market, those who value the good the most can and will outbid those who value the good less.

- The price ceiling prevents this from happening.
In New York, the vacancy rate is typically half the national average.

While it is illegal to sublet apartments, it does occur and resources are expended to stop it.

Bribes often take the form of
- “key money” paid to move up on an apartment waiting list.
- requirements that prospective tenants purchase existing (low quality) furniture at inflated prices.

Other consequences include
- conversions of apartments to office space or condominiums
- abandoned apartments or reduced upkeep
Other Examples: Natural Gas

- Interstate prices regulated by Natural Gas Act of 1938
- led to shifts between interstate and intrastate sales
- during the mid-1970s, gas companies stopped signing long-term contracts
- during the late 1970s, gas shortages led to school and business closures during winter months
- Also distorted research in energy field
- Gradually, price controls were lifted starting with the Carter Administration

Other examples: Pennsylvania during Revolutionary War

- Pennsylvania legislature passed price controls prior to winter 1777-1778 to help Washingtons Continental Army (housed at Valley Forge)
- Price controls had unintended consequences:
  - Farmers refused to sell goods at unfair prices
  - Some sold food to British instead who paid in gold
  - Washingtons army nearly starved to death
- Continental Congress banned price controls on June 4, 1778 because they are not only ineffectual for the purposes proposed, but likewise productive of very evil consequences.
So, Why Price Ceilings, if They Are So Bad?
The problem is that some individuals benefit.

Price Floors

Price floors are the flip side of price ceilings
Price floors really take two forms

1. Legal floors; i.e., the government specifies a minimum price below which the good or service cannot be sold.
2. Price support programs in which the government intervenes in the market, purchasing the good or service until the price reaches the desired level.

The most famous example of the first type of price floor is the minimum wage, though price floors have been used in the trucking and airline industries.

Price support programs have been frequently used in the agricultural sector, including corn, sugar ($1.4 b/year), milk, tobacco, cotton, etc.

Farm price supports began in 1933 as a temporary method of dealing with an emergency the Great Depression

As with price ceilings, price floors do help some sectors of the economy, but they create a number of inefficiencies.
The Impact of Price Floors

As with price ceilings, price floors create multiple problems, but the first effect stems from the surpluses it creates.

The Inefficiencies Created by Legal Price Floors

- The graph illustrates the deadweight loss due to price floors.
- There are additional inefficiencies created that vary by the type of price floor
- For legal price floors, we have
  
  1. **Inefficient Allocation Sales Among Producers:** The units sold are no longer sold by individuals who have the lowest marginal cost.
     - In an unconstrained market, those who can produce at the lowest cost can and will underprice those with higher marginal cost.
     - The price floor prevents this from happening.
  2. **Wasted Resources:** The constraint causes firms to spend time and money to be the ones making the sales (e.g., get employed in the case of minimum wage laws).
  3. **Inefficiently High Quality:** Producers, unable to sell their good at the unconstrained price, are encouraged to compete by inefficiently increasing the quality of the good (e.g., airlines).
  4. **Black Markets:** Firms are encouraged to exchange the good outside of legal markets in order to sell their good (e.g., by-passing labor laws).
The Inefficiencies Created by Price Support Programs

- The additional inefficiencies created by price support programs are somewhat different.
- The major problem lies in terms of the government’s disposal of the “surplus” that it has purchased.
  - If the surplus is simply destroyed, this is clearly a waste of resources.
  - Often, with food items, the surpluses are used domestically to help with food programs (school lunches, etc.) and in terms of foreign aid.
    - The food program donations can skew the food menus in ways that are not necessarily healthy.
    - Used as foreign aid, they can impact production in the recipient state.
- Price floors often get government deeply involved in production decisions, rather than leaving them to the market
- Taxpayers pay for the surpluses generated twice
  1. Once directly in the government purchases of the surpluses
  2. The second time through higher commodity prices

Quantity Constraints

- An alternative to controlling the price in a market is to control the quantity.
- Examples include
  2. Limits to the work-week to 35-hours in France.
  3. Catch limits in fisheries.
  4. Limits to individual foreign currency holdings.
  5. Professional license requirements (AMA, etc.)
- The forms of quotas or quantity controls can have valuable rationale (e.g., to correct for market failures), but they can also have unintended consequences.
The Surplus Loss with Quotas

The "quota rent"

Deadweight Loss

Price=$5.00

Quantity (millions of rides/yr)