Supply, Demand and Government Policies

Chapter 6

In a free, unregulated market system, market forces establish equilibrium prices and exchange quantities.

One of the things government can do is to set price controls when the market price is seen as unfair to either buyers or sellers.

Price Ceilings & Price Floors

Price Ceiling
- A legally established maximum price at which a good can be sold. (Rent Controls)

Price Floor
- A legally established minimum price at which a good can be sold. (Price Supports for Agriculture)
Price Ceilings

Two outcomes are possible when the government imposes a price ceiling:

- The price ceiling is not binding if set above the equilibrium price.
- The price ceiling is binding if set below the equilibrium price, leading to a shortage.
- Binding means that there is an economic impact.

A Price Ceiling That Is Binding...

A Price Ceiling That Is Not Binding...
Effects of Price Ceilings

A binding price ceiling creates ...
- shortages because \( Q_D > Q_S \).
  - Example: Gasoline shortage of the 1970s
- nonprice rationing
  - Examples: Long lines, Discrimination by sellers

The Price Ceiling on Gasoline Is Not Binding...

1. Initially, the price ceiling is not binding...
   - \( P_1 \)

The Price Ceiling on Gasoline Is Binding...

2. ...but when supply falls...
   - \( S_2 \)
3. ...the price ceiling becomes binding...
   - \( P_1 \)
4. ...resulting in a shortage.
Rent Control

- Rent controls are ceilings placed on the rents that landlords may charge their tenants.
- Rent control can make housing more affordable.
- With a price ceiling, you cannot go above the ceiling.
- But what about the landlords?

Rent Control in the Short Run...

Supply and demand for apartments are relatively inelastic-Why is the supply curve vertical?

Rent Control in the Long Run...

Because the supply and demand for apartments are more elastic... What happens in the long run?
Price Floors

When the government imposes a price floor, two outcomes are possible.

- The price floor is not binding if set below the equilibrium price.
- The price floor is binding if set above the equilibrium price, leading to a surplus.
- Think of price floors as not being able to go below the floor.
Effects of a Price Floor

A binding price floor causes...

- a surplus because \( Q_S > Q_D \).
- nonprice rationing is an alternative mechanism for rationing the good, using discrimination criteria.

Examples: The minimum wage, Agricultural price supports
- State Minimum Wages

The Minimum Wage

A Free Labor Market

Labor supply

Labor demand

Equilibrium employment

Equilibrium wage

Quantity of Labor

Wage

0

The Minimum Wage

A Labor Market with a Minimum Wage

Labor surplus (unemployment)

Labor supply

Labor demand

Minimum wage

Quantity demanded

Quantity supplied

Quantity of Labor

Wage

0
What are some potential impacts of taxes?

- Taxes are used to raise money for the government.
- Taxes discourage market activity.
- When a good is taxed, the quantity sold is smaller.
- Buyers and sellers share the tax burden.
- But who bears the burden-tax incidence.

Impact of a 50¢ Tax Levied on Buyers...

Impact of a 50¢ Tax on Sellers...

A tax on sellers shifts the supply curve upward by the amount of the tax ($0.50).
The Incidence of Tax

- In what proportions is the burden of the tax divided?
- How do the effects of taxes on sellers compare to those levied on buyers?

The answers to these questions depend on the elasticity of demand and the elasticity of supply.

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Elastic Supply, Inelastic Demand...

1. When supply is more elastic than demand...
2. ...the incidence of the tax falls more heavily on consumers...
3. ...than on producers.

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Inelastic Supply, Elastic Demand...

1. When demand is more elastic than supply...
2. ...the incidence of the tax falls more heavily on producers...
3. ...than on consumers.