

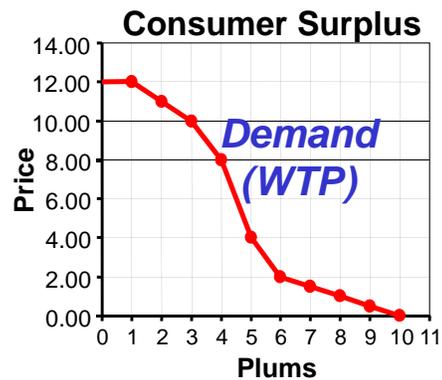
Lecture 11: Government Intervention in Competitive Markets

Read announcements on course website.
Read announcement about final-exam conflicts



Clicker Question

If the price in this market
were ____, the consumer
surplus would be ...



Deadweight Loss (*DWL*)

- Social Surplus (*SS*) is the sum of Consumer Surplus (*CS*) and Producer Surplus (*PS*).

$$SS = CS + PS$$

- In ideal conditions, perfect competition creates the maximum possible social surplus.
- However, market distortions or imperfections can reduce the social surplus to a level below the maximum.
- In that case, the social surplus that is missing is called the deadweight loss (*DWL*).

Free Markets: Allocation with Prices

- Every economic system has a process for deciding on the allocation of goods and services (who gets what, who does the work).
- In a free-market system, this is normally done with prices.
- If the system is competitive, using prices will maximize social surplus.
- Of course the results may not be equitable or the markets may be socially undesirable.

Welfare and Allocation with Prices

- When goods are allocated with equilibrium prices P^* ,

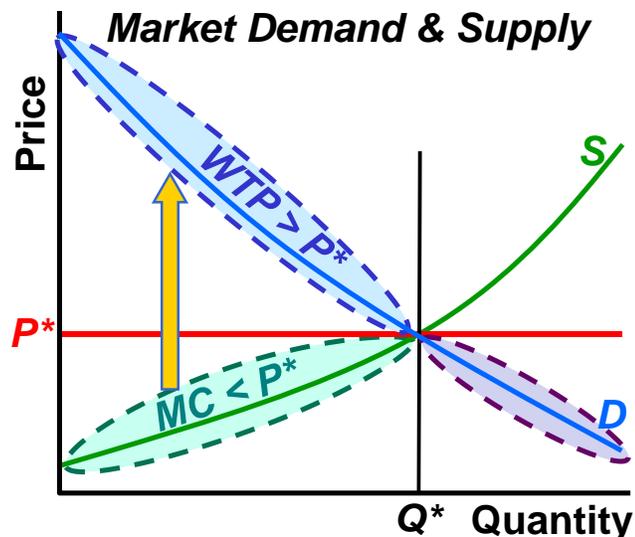
- consumers with $WTP > P^*$

- acquire goods with $MC < P^*$.

- Consumers with lower WTP do not acquire any goods.

- Allocation with prices maximizes surplus, because the competitive-equilibrium quantity Q^* is produced,...

- and goods with the lowest MC go to consumers with the highest WTP .



Dissatisfaction with Market Outcomes

- Free markets are very good at creating surplus and reducing deadweight loss,...

- ...even when they deviate from the perfectly competitive model.

- But sometimes free markets fail (e.g. economic crisis of 2008-10),...

- or they may produce unacceptable results.

- Free-market economies may have outcomes that seem unfair (inequitable), because free markets may yield

- many poor people who lack basic necessities, or

- individuals receiving more (or less) than they deserve.

- Also, in many cultures, some markets are thought to be socially undesirable (repugnant):
 - heroin, cocaine, alcoholic beverages
 - prostitution
 - body parts
 - babies
 - babysitting (??)
- For the opinion of a free-market supporter, read Alex Tabarrok, on the subject *[Course Schedule]*.
- Most economists think that some interference with markets is necessary,...
- but we believe that policymakers should be cautious about doing so.

Government Intervention

- Can government intervention into competitive markets create outcomes that are more acceptable to members of society?
- Common forms of government intervention:
 - price controls
 - nonprice rationing
 - taxes and subsidies applied to specific goods and services
 - income and wealth redistribution

Price Controls

- Frequently, large groups of people are unhappy with the market-equilibrium price.

- In such situations, governments may intervene to place ***upper limits*** or ***lower limits*** on prices.

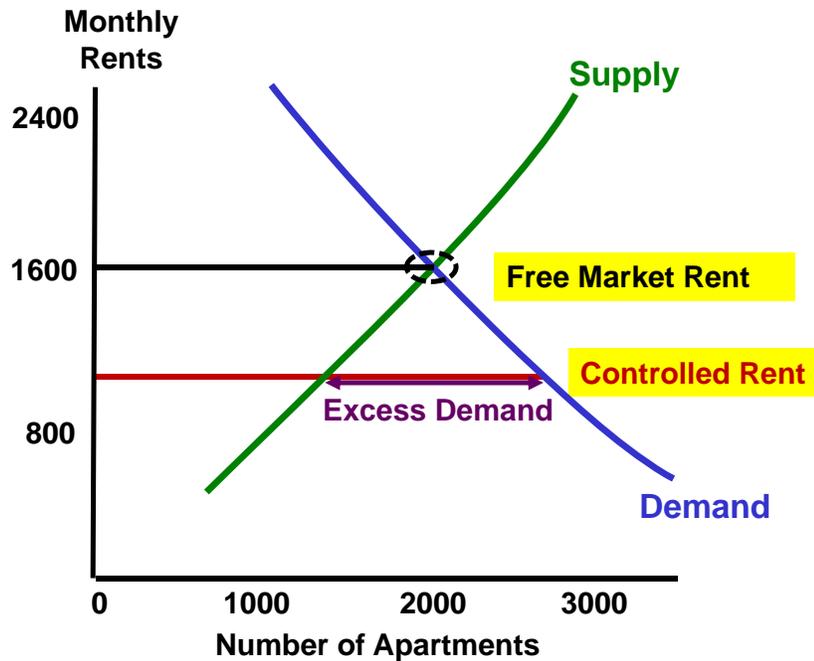
Types of Price Control

- Price Ceiling (effective if *below* the equilibrium price)
 - A government-set **maximum** price
 - **Example:** rent control
- Price Floor (effective if *above* the equilibrium price)
 - A government-set **minimum** price
 - **Example:** legal minimum wages
- In the past, these were common market interventions, even in wealthy countries,...
- but they are much less common nowadays.

Example: Controls on Housing Prices

- When apartment rental prices are too high, or rise too quickly, local governments sometimes impose **“rent controls.”**
- Rent controls are legal regulations that control apartment rental prices (a type of *price ceiling*).
- They are often enacted in times of emergencies or crises, (for example, during wars).

Graph of Rent Controls



Positive Effects of Rent Control

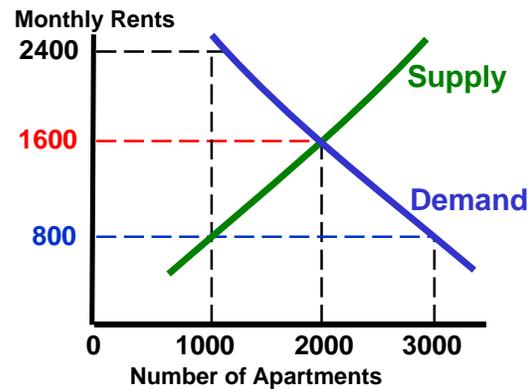
- Rent control may...
 - help poor families pay for their housing,
 - soften the effects of economic shocks, allowing people to stay in their apartments when rents would rise.
- In the short run, rent controls may make neighborhoods more stable,
 - preventing them from becoming **mostly rich**
 - or **mostly poor**.

Negative Effects of Rent Control

- Rent control creates excess demand.
- Some people who would have rented apartments without rent control...
- ...will not be able to find them with rent control.
- Other possible negative effects of excess demand:
 - bribes or illegal payments that exceed rent limits
 - poor maintenance of existing apartments
 - decline in number and quality of new apartments
 - difficulty in changing apartments
 - discrimination by landlords against racial or religious minorities

Clicker Question

In the graph to the right,
at a price of _____...



Nonprice-Rationing Mechanisms

- Distributing goods without using prices (nonprice rationing) occurs when the prevailing price creates excess demand.
- When there is excess demand, the price does not determine who gets what.
- Many possible mechanisms can be used for nonprice rationing. For example,
 - Ration books
 - Queues (lines)

- Other nonprice-rationing mechanisms:
 - first-come, first-served
 - bribery and “under-the-table” payments
 - personal connections

Nonprice Rationing: Advantages

- In situations of uncertainty and danger, nonprice rationing may be safer than markets.
 - Distribution of food during wars or famines.
 - Vaccinations to prevent disease.

- Nonprice rationing may increase efficiency when people pay less than cost.
 - General medical services.

- In emergencies, nonprice rationing may work faster than markets.
 - Police and fire department services.

Nonprice Rationing: Disadvantages

- Nonprice rationing is not efficient.

- *People with lower WTP may be more successful at obtaining goods than those with higher WTP.*
 - This lowers consumer surplus.

- Nonprice rationing mechanisms are costly to use.
 - **Example:** Under rent control, potential renters may waste a lot of time trying to convince landlords to let them have apartments.
 - These costs are called **transaction costs**.
 - Transaction costs lower consumer surplus.

- But keep in mind that free rental markets are not a Pareto improvement over rent-controlled markets,...
- ...because some renters would be worse off if rent controls are removed.
- This means that there will be strong opposition to removing rent controls once they are in place.

Summary of DWL from Price Controls

- When the distribution of income is very unequal, WTP is not a good measure of consumer value .
 - Then CS and SS isn't a great measure of efficiency.
- But suppose the distribution of income is equitable and WTP is a good measure of consumer value.
- $SS = WTP - MC$
- Raising or lowering the price with price controls, causes a fall in the quantity sold from Q^* to Q_C .
 - This reduces social surplus by the DWL (the area of the triangle between Q^* and Q_C).
- If price controls reduce the price, then there is excess demand and nonprice rationing.
 - If the goods are obtained by those with the highest WTP, the only DWL is the area of the triangle and transaction costs.
 - But if the goods are obtained by those with a lower WTP, there will be more DWL, and social surplus is reduced even more.

Taxes on Goods and Services

- Like other kinds of government intervention in markets for goods and services, taxes tend to reduce social surplus.
- But in general, economists prefer taxes to other kinds of intervention...
- ...because taxes lead to market-clearing* prices (*no excess demand or supply),...
- ...and do not result in nonprice rationing.

Clicker Question

In competitive equilibrium, when goods are allocated ***with prices***,...

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