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Principles of
Macroeconomics
Sixth Edition

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Supply, Demand, and Government Policies

Premium PowerPoint Slides by Ron Cronovich

In this chapter, look for the answers to these questions:

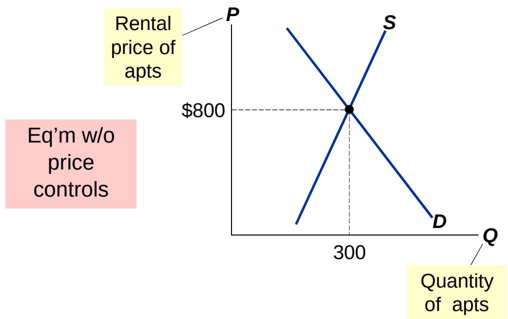
- What are price ceilings and price floors? What are some examples of each?
- How do price ceilings and price floors affect market outcomes?
- How do taxes affect market outcomes? How do the effects depend on whether the tax is imposed on buyers or sellers?
- What is the incidence of a tax? What determines the incidence?

Government Policies That Alter the Private Market Outcome

- Price controls
  - **Price ceiling**:
  - **Price floor**:
- Taxes
  - The govt can make buyers or sellers pay a specific amount on each unit.

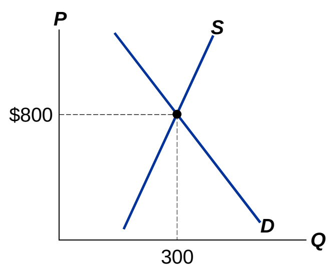
We will use the supply/demand model to see how each policy affects the market outcome (the price buyers pay, the price sellers receive, and eq'm quantity).

EXAMPLE 1: The Market for Apartments



How Price Ceilings Affect Market Outcomes

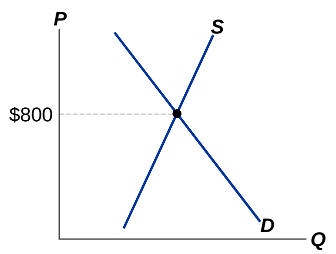
A price ceiling above the eq'm



How Price Ceilings Affect Market Outcomes

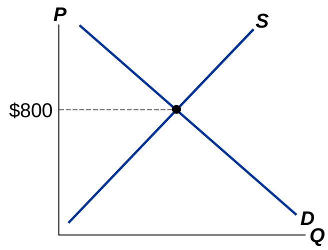
The eq'm price ($800) is

The ceiling is a



How Price Ceilings Affect Market Outcomes

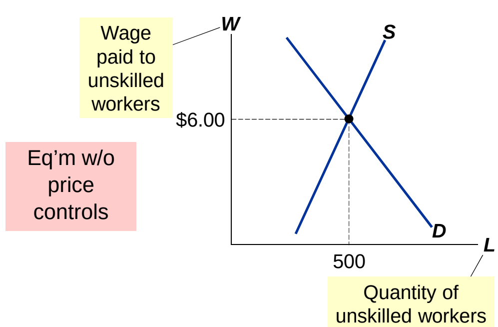
In the long run, supply and demand are more price-elastic.



Shortages and Rationing

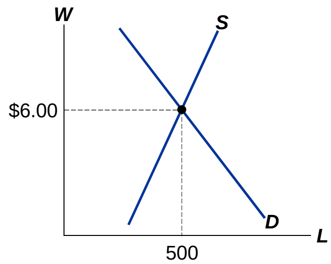
- With a shortage, sellers must ration the goods among buyers.
- Some rationing mechanisms:
- These mechanisms are often unfair, and inefficient:
- In contrast, when prices are not controlled, the rationing mechanism is

EXAMPLE 2: The Market for Unskilled Labor



How Price Floors Affect Market Outcomes

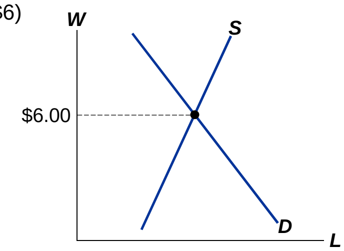
A price floor below the eq'm price



How Price Floors Affect Market Outcomes

The eq'm wage ($6) is

The floor is

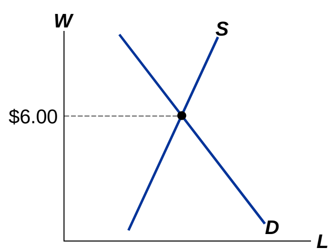


The Minimum Wage

Min wage laws do not affect highly skilled workers.

They do affect teen workers.

Studies:

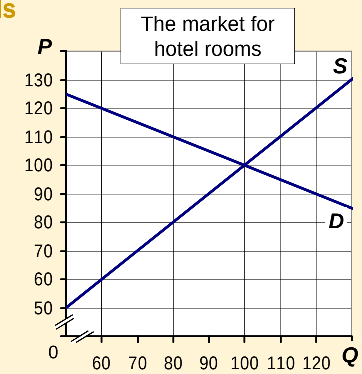


ACTIVE LEARNING 1

Price controls

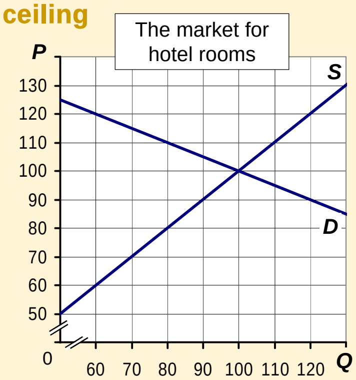
Determine effects of:

- **A.** $90 price ceiling
- **B.** $90 price floor
- **C.** $120 price floor



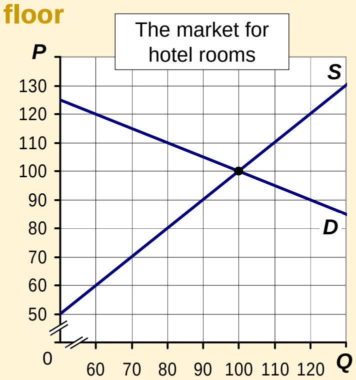
ACTIVE LEARNING 1

A. $90 price ceiling



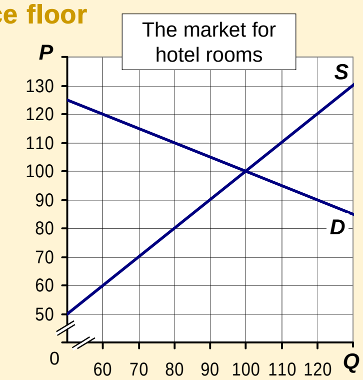
ACTIVE LEARNING 1

B. $90 price floor



ACTIVE LEARNING 1

C. $120 price floor



Evaluating Price Controls

- Recall one of the Ten Principles from Chapter 1:
  Markets are usually a good way to organize economic activity.
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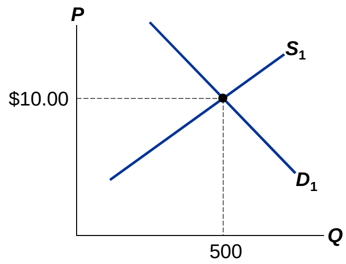
- Price controls often intended to help the poor, but often hurt more than help.

Taxes

- The govt levies taxes on many goods & services to raise revenue to pay for national defense, public schools, etc.
- The govt can make buyers or sellers pay the tax.
- The tax can be a % of the good's price, or a specific amount for each unit sold.
  - For simplicity, we analyze per-unit taxes only.

EXAMPLE 3: The Market for Pizza

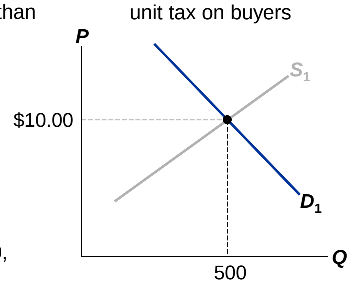
Eq'm
w/o tax



A Tax on Buyers

The price buyers pay is now $1.50 higher than the market price ***P***.

Effects of a $1.50 per unit tax on buyers



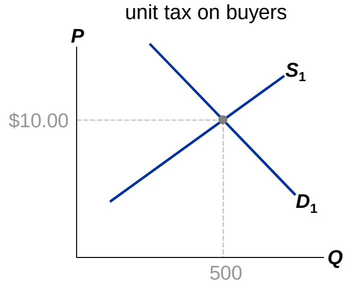
E.g., if ***P*** falls from $10.00 to $8.50, buyers still willing to purchase 500 pizzas.

A Tax on Buyers

<u>New eq'm:</u>

Q =

Effects of a $1.50 per unit tax on buyers



The Incidence of a Tax:

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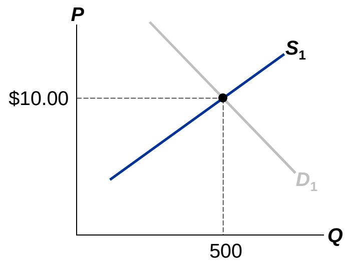
A Tax on Sellers

Effects of a $1.50 per unit tax on sellers

Sellers will supply 500 pizzas only if



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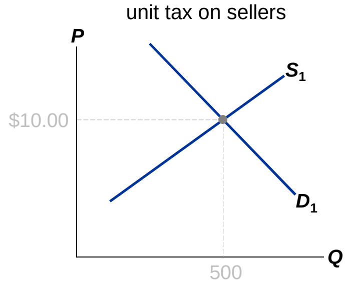
A Tax on Sellers

New eq'm:

Q =

Effects of a $1.50 per unit tax on sellers



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The Outcome

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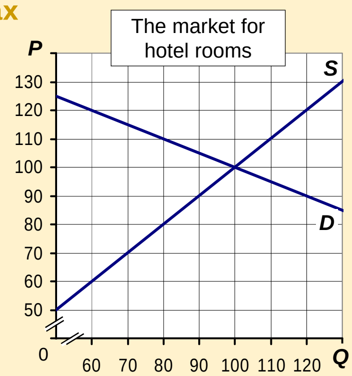
ACTIVE LEARNING 2

Effects of a tax

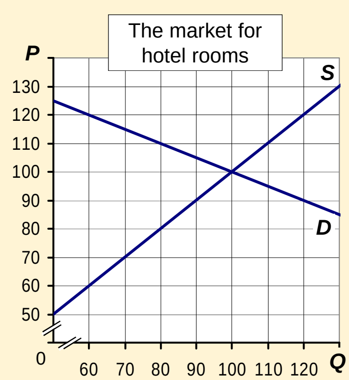
Suppose govt imposes a tax on buyers of $30 per room.

Find new Q, P_B, P_S, and incidence of tax.



ACTIVE LEARNING 2

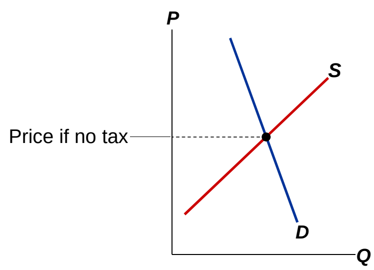
Answers



Incidence

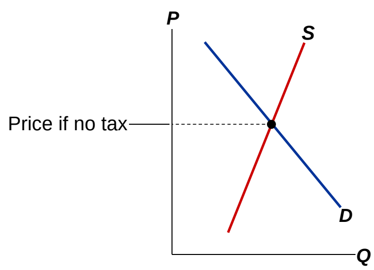
Elasticity and Tax Incidence

CASE 1: Supply is more elastic than demand



Elasticity and Tax Incidence

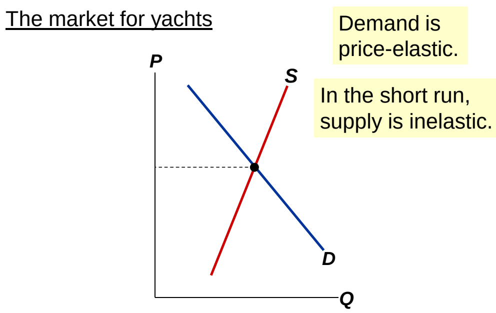
CASE 2: Demand is more elastic than supply



CASE STUDY: Who Pays the Luxury Tax?

- 1990: Congress adopted a luxury tax on yachts, private airplanes, furs, expensive cars, etc.
- Goal: raise revenue from those who could most easily afford to pay—wealthy consumers.
- But who really pays this tax?

CASE STUDY: Who Pays the Luxury Tax?



ACTIVE LEARNING 3

The 2011 payroll tax cut

- Prior to 2011, the Social Security payroll tax was 6.2% taken from workers' pay and 6.2% paid by employers (total 12.4%).
- The Tax Relief Act (2010) reduces the worker's portion from 6.2% to 4.2% (for 2011 only), but leaves the employer's portion at 6.2%.

QUESTION:

Will the typical worker's take-home pay rise by exactly 2%, more than 2%, or less than 2%? Do any elasticities affect your answer? Explain.

ACTIVE LEARNING 3

Follow-up question

- Who gets the bigger share of this tax cut, workers or employers? How do elasticities determine the answer?

CONCLUSION: Government Policies and the Allocation of Resources

- Each of the policies in this chapter affects the allocation of society's resources.
  - *Example 1:* A tax on pizza
  - *Example 2:* A binding minimum wage causes
- So, it's important for policymakers to apply such policies very carefully.