

The Market Mechanism

EC 201: Principles of Microeconomics

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Winter 2020

Prologue

Agenda

Pit Market Activity

1. Read instructions handout
2. Join a team
3. Make trades and earn extra participation points

The Market Mechanism

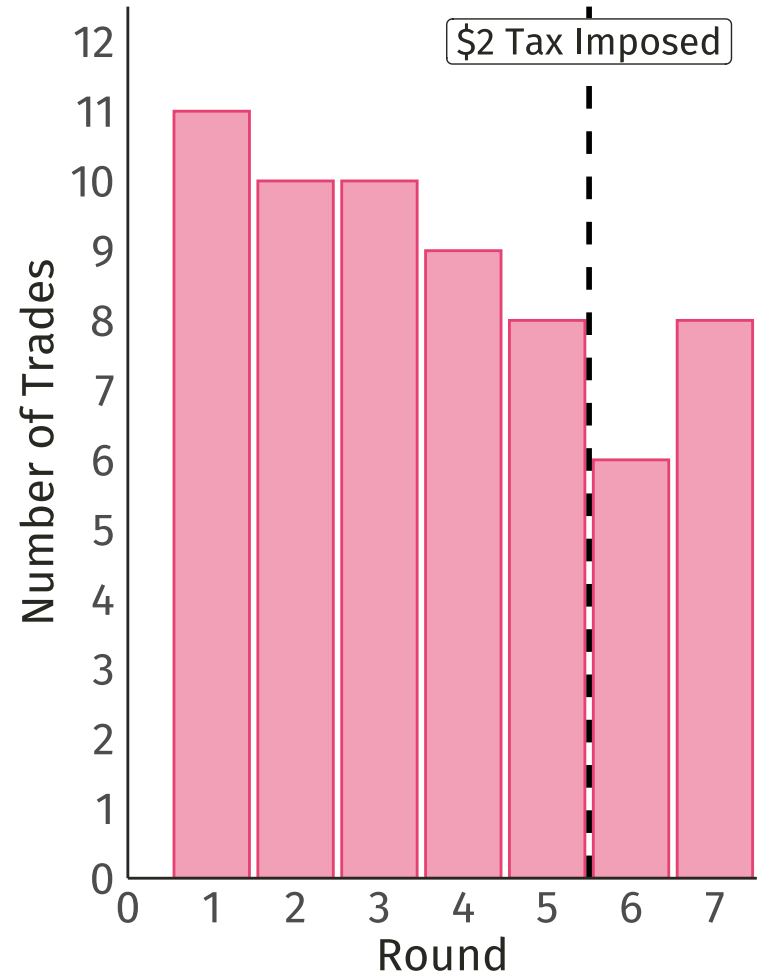
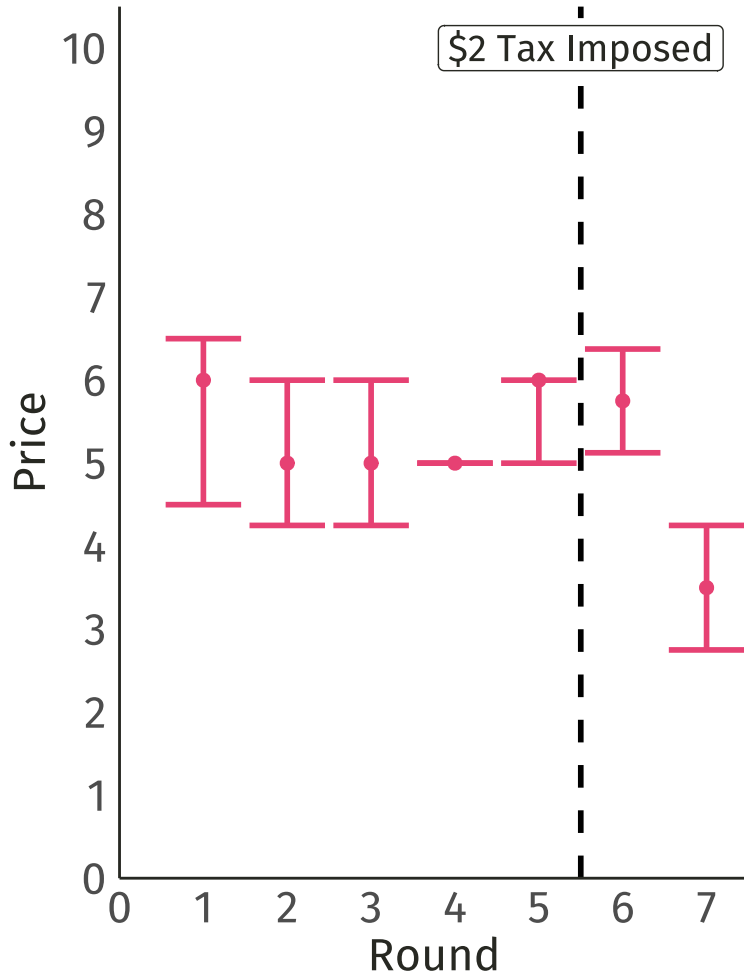
- Activity debrief and discussion

Midterm 1 Overview

- One week from today!

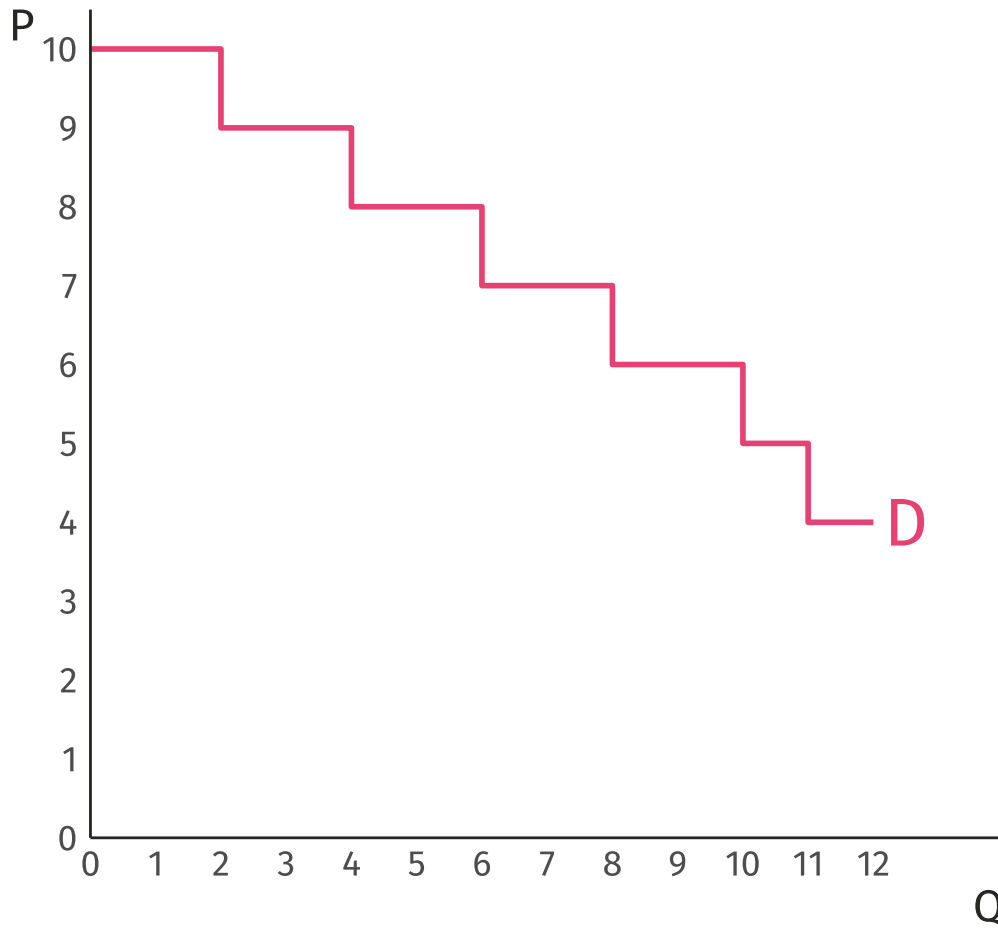
Pit Market Activity

Pit Market Results



The Market Mechanism

Pit Market



Buyers

Maximum willingness
to pay:

10 of ♦

10 of ♥

9 of ♦

9 of ♥

8 of ♦

8 of ♥

7 of ♦

7 of ♥

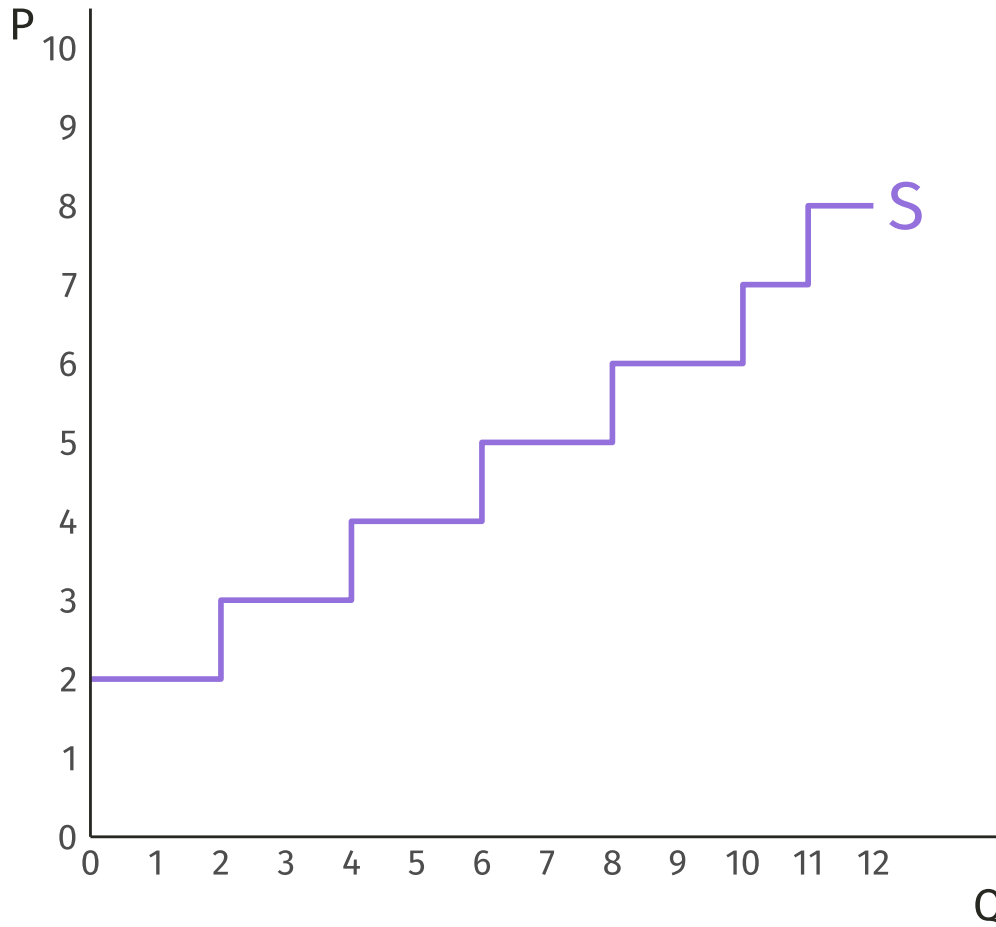
6 of ♦

6 of ♥

5 of ♦

4 of ♦

Pit Market



Sellers

Minimum willingness
to accept:

2 of ♠

2 of ♣

3 of ♠

3 of ♣

4 of ♠

4 of ♣

5 of ♠

5 of ♣

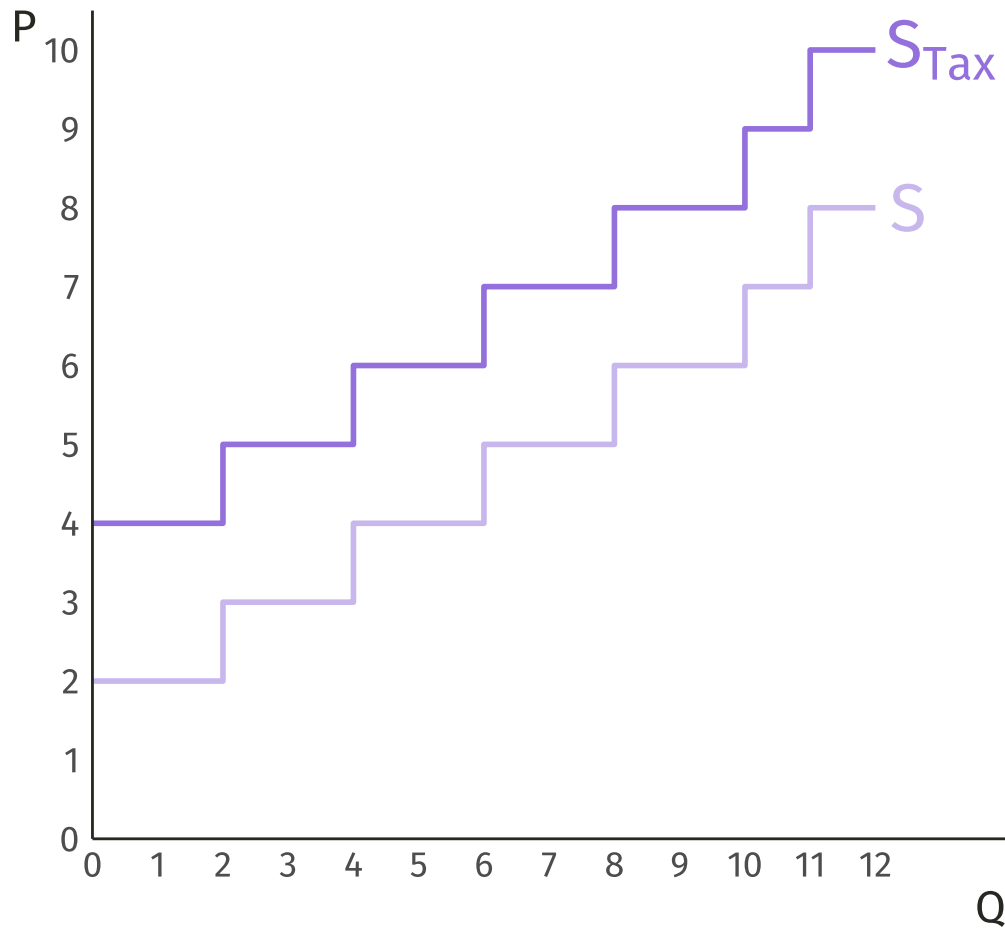
6 of ♠

6 of ♣

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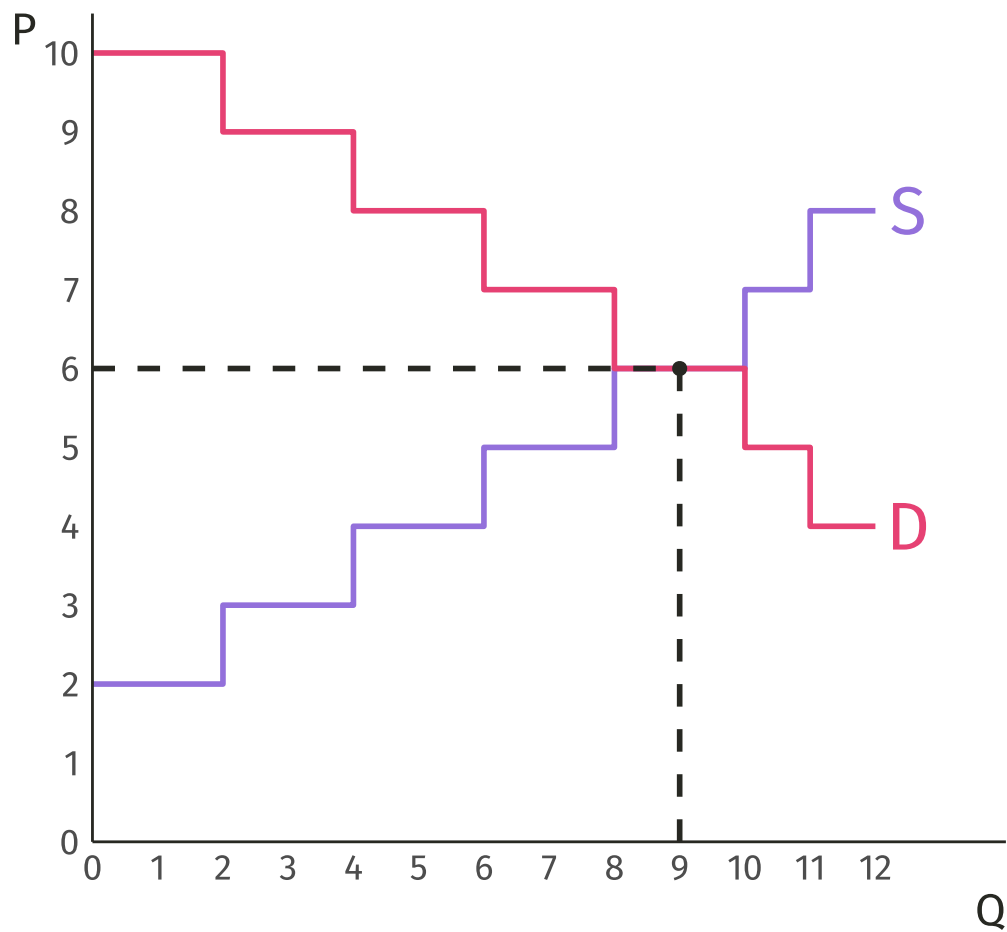
Pit Market



Sellers

The tax increases each seller's cost by \$2.

Pit Market



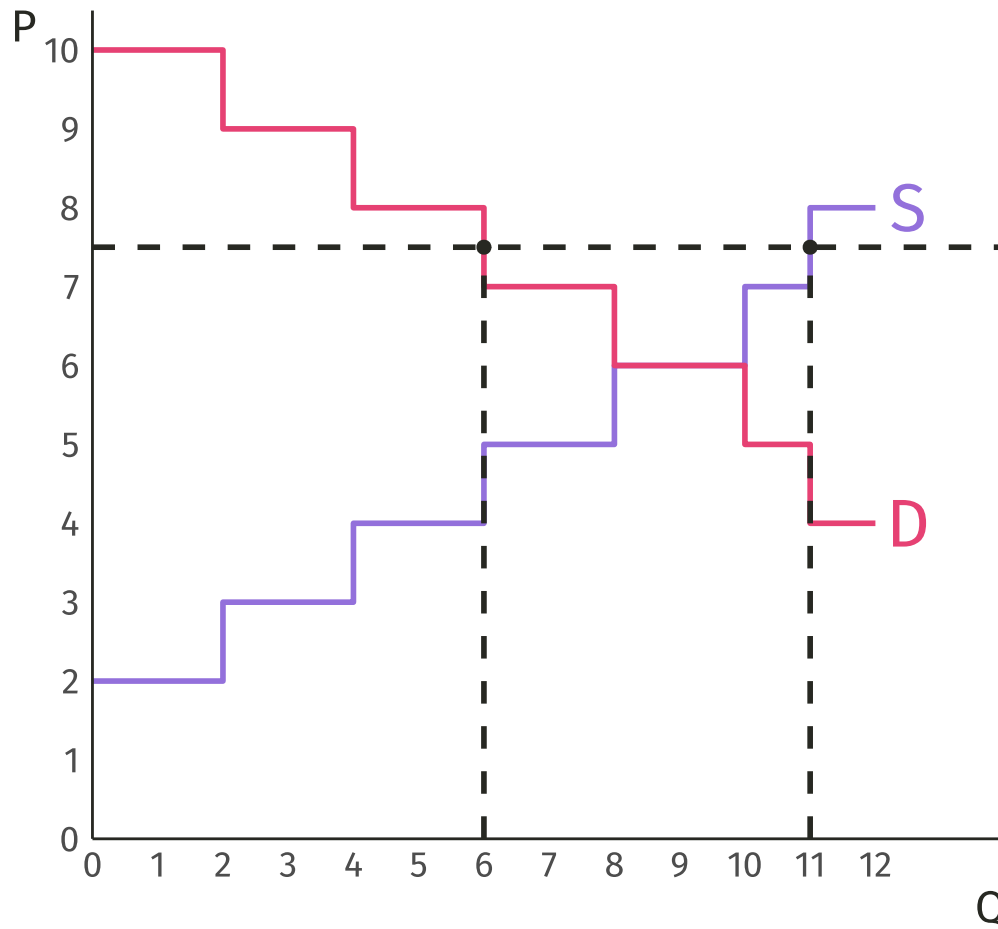
Equilibrium

Theory predicts that a price of \$6 clears the market.[†]

Q: Who trades? Who doesn't?

[†]: Clears the market $\iff Q_D = Q_S$.

Pit Market

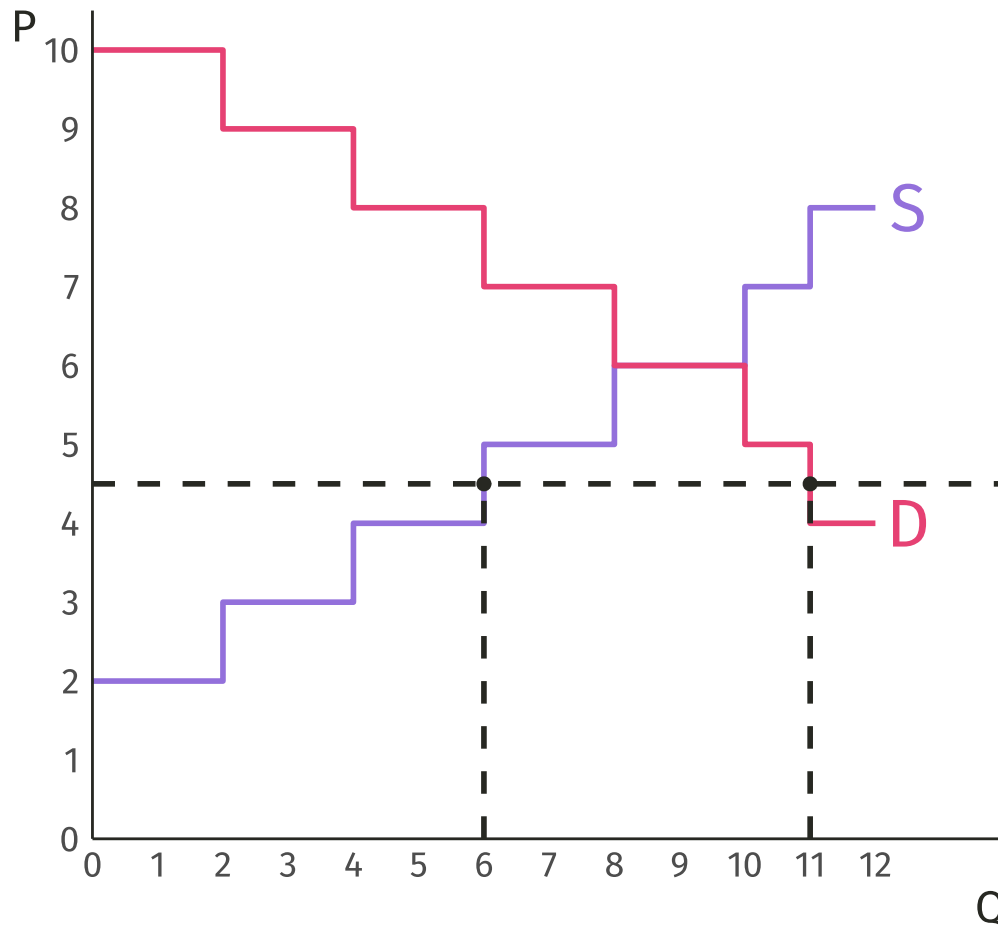


Market Surplus

Theory predicts that prices above \$6 create a market surplus.[†]

[†]: Market surplus $\iff Q_D < Q_S$.

Pit Market

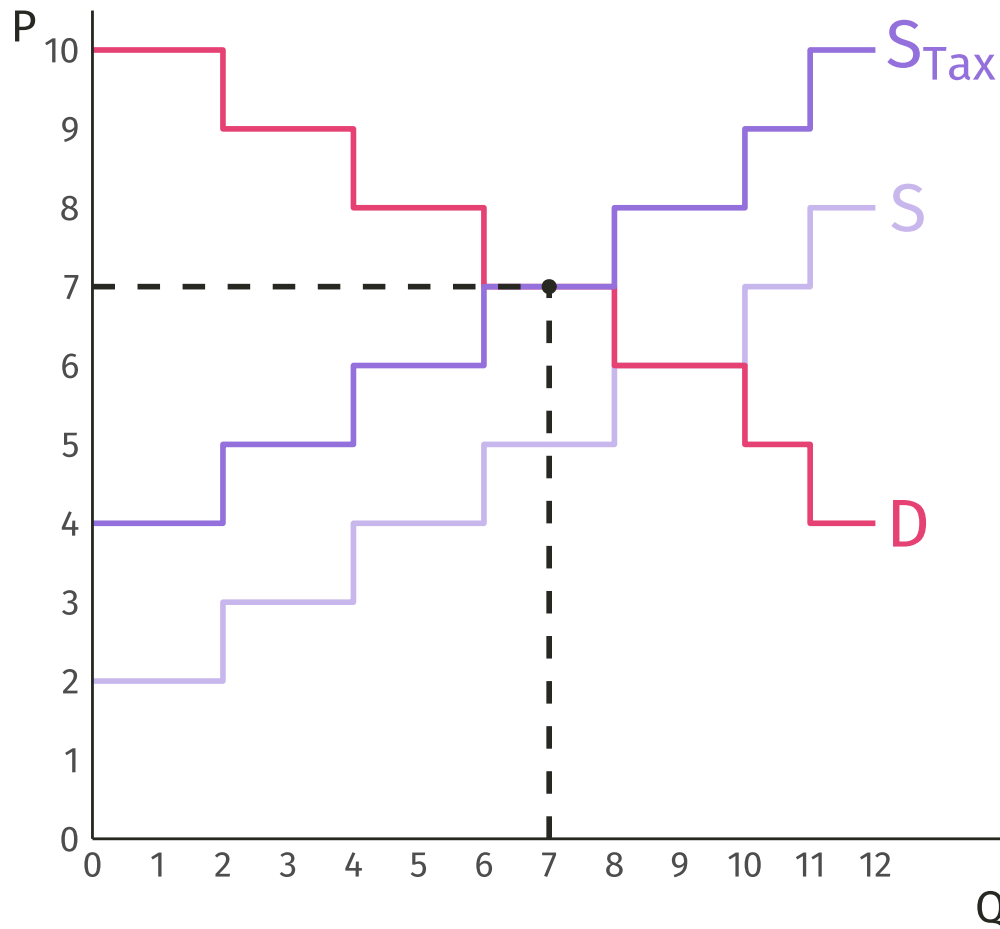


Shortage

Theory predicts that prices below \$6 create a shortage.[†]

[†]: Shortage $\iff Q_D > Q_S$.

Pit Market



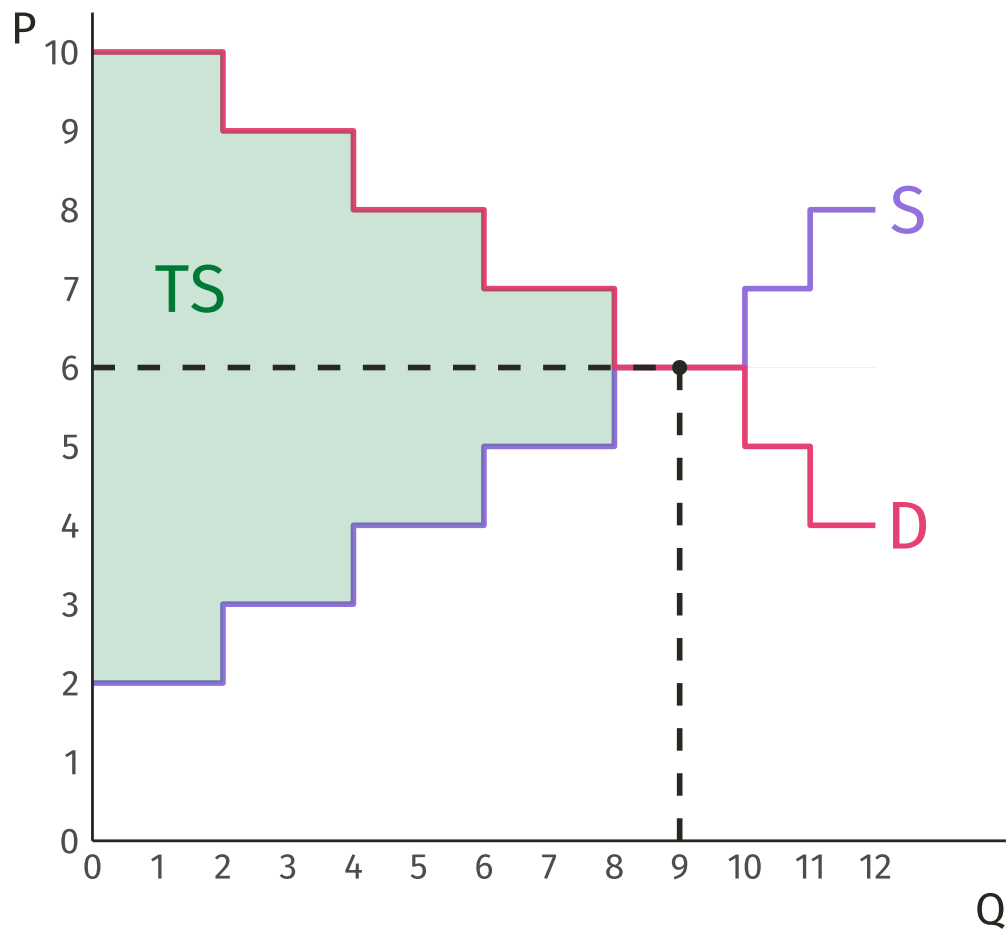
Tax

The tax increases each seller's cost by \$2:

1. Supply curve shifts.
2. Market adjusts to a new equilibrium.

Q: By how much does the equilibrium price increase?

Mutual Gains from Trade

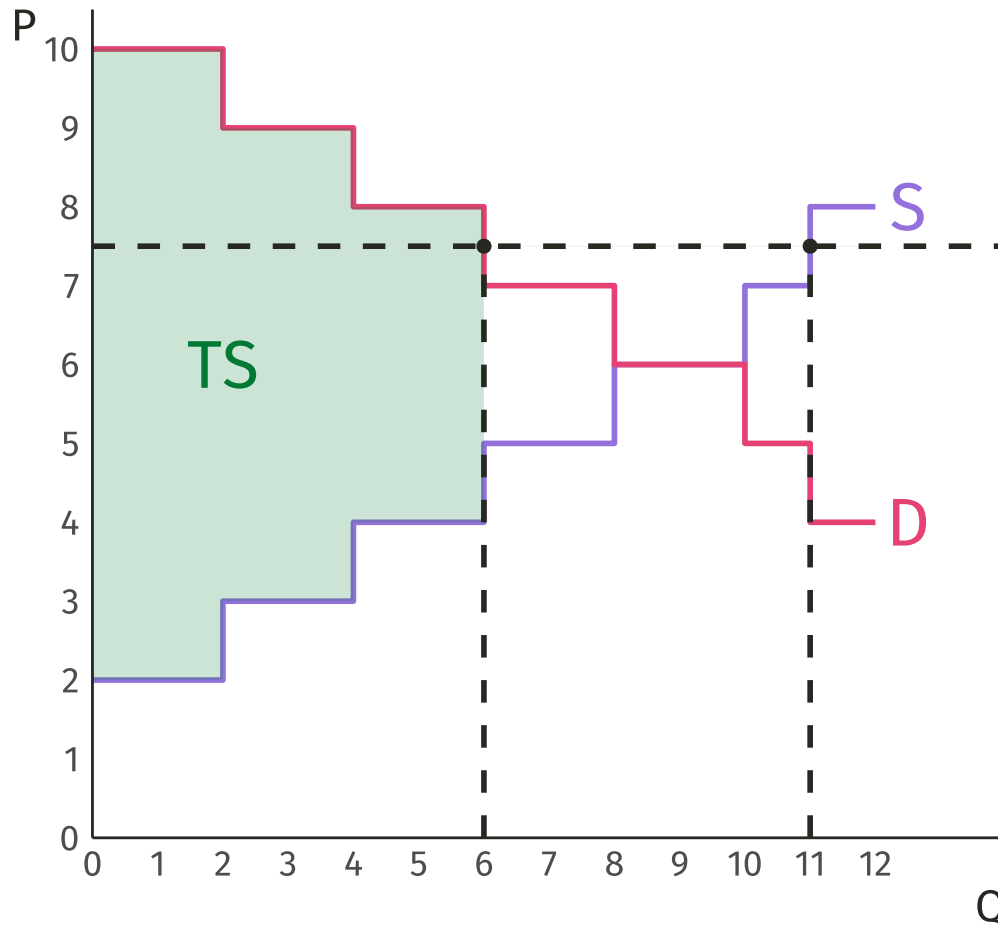


Consumer surplus =
sum of buyers'
earnings.

Producer surplus =
sum of sellers'
earnings.

Total surplus =
consumer surplus +
producer surplus.

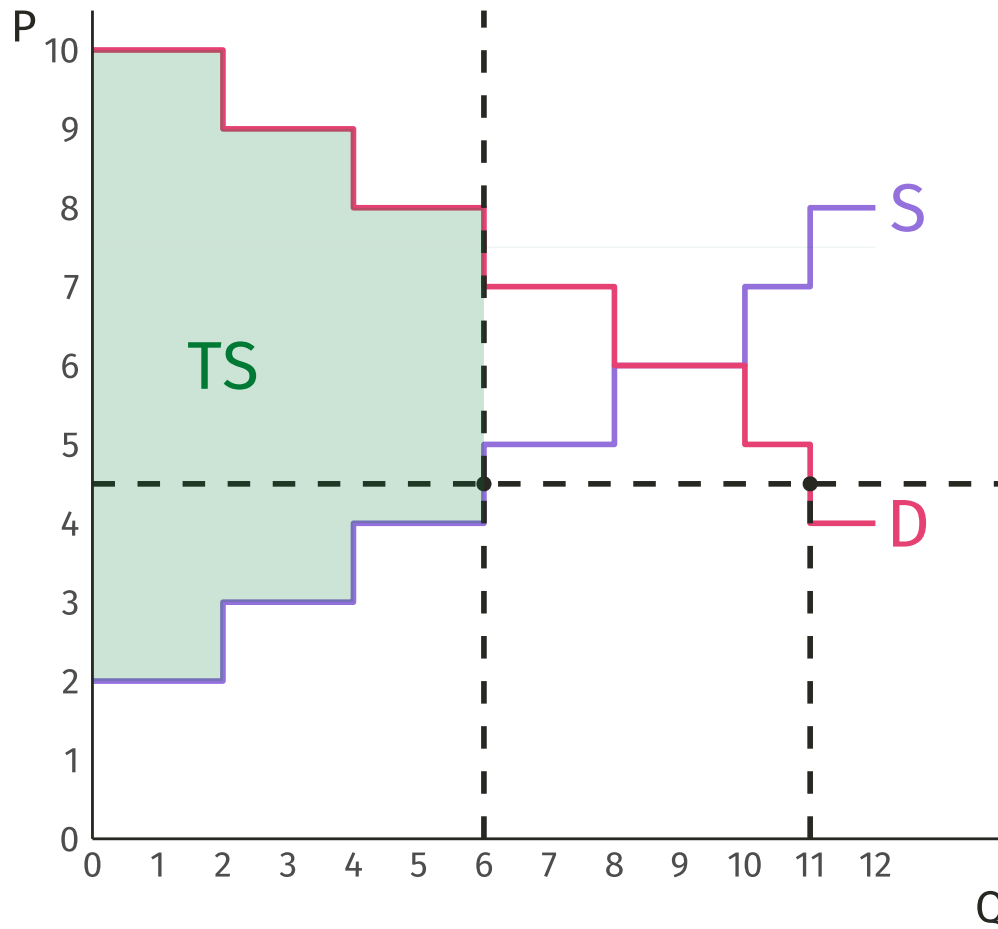
Mutual Gains from Trade



Market Surplus

$$P = \$7.50 \implies TS = \$36.$$

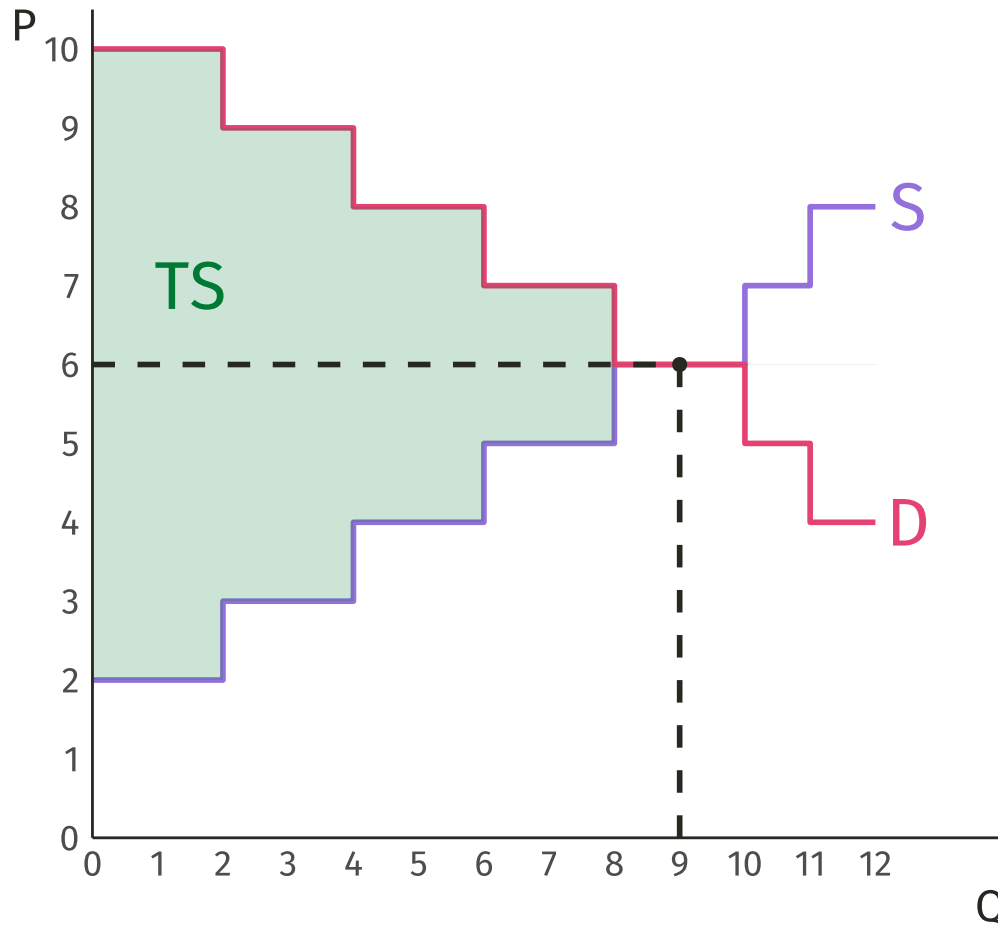
Mutual Gains from Trade



Shortage

$$P = \$4.50 \implies TS = \$36.$$

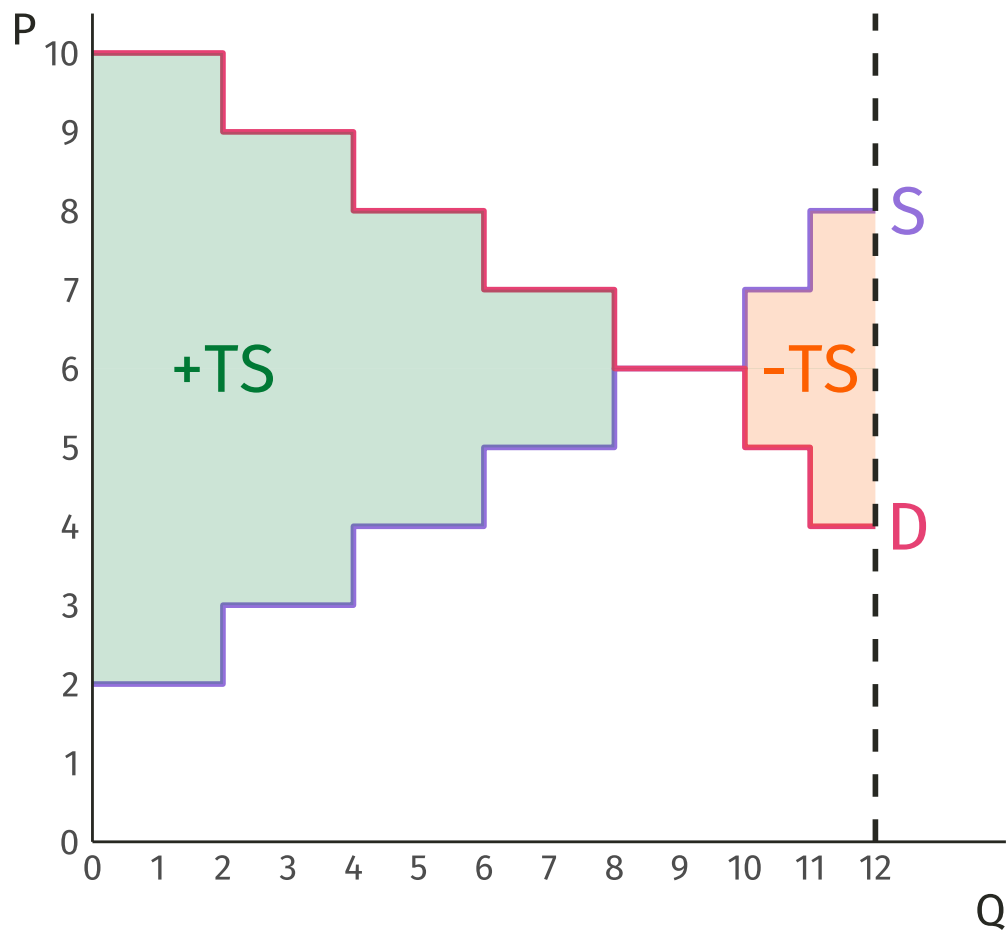
Mutual Gains from Trade



Equilibrium

$$P = \$6 \implies TS = \$40.$$

Mutual Gains from Trade



Intervention

Q: True or false? The government can increase TS by mandating 12 trades.

A. True

B. False

TS would decrease from \$40 to \$34

Q: What is the source of mutual benefits from voluntary trade?

A: Differences in marginal values.

Example: You own a pair of sneakers. You value them at \$20. I value them at \$50. Could we benefit from trade?

- **A:** Yes! Marginal value differential of \$30 = \$30 in mutual benefits![†]

[†]: The distribution of the benefits depends on the price we negotiate.

Q: What role do "middlemen"[†] play?

A: They play match-maker in exchange for part of the marginal-value differential.

[†]: e.g., real estate agents, stock brokers, grocers, retailers, etc.

Efficiency

Definition 1 (market-specific)

The outcome that maximizes mutual benefits from voluntary trade (*i.e.*, total surplus).

Definition 2 (more general)

The absence of waste.

Definition 3 (*Pareto Efficiency*)

The state in which no person can be made better off without harming someone else.

Podcast Question: What problem(s) did Alaska's food bank have before *Feeding America* established an auction market?

- A.** It received too few pickles.
- B.** It received so much fresh produce that it would rot before people could eat it.
- C.** It received too many potatoes.
- D.** It received too few potatoes.
- E.** It received too many pickles.

Podcast Question: Which food banks received the most "fake money" to use in the auction market?

- A.** Those in relatively affluent areas.
- B.** Those in relatively poor areas.
- C.** Those with the most donors.
- D.** Those most willing to pay.
- E.** Those with the most food stockpiled.

Q: What problems did the *Feeding America* auction market solve?

1. **Local information problem:** Food bank directors knew exactly what they wanted, but *Feeding America* executives had to make guesses.
2. **Shortages and surpluses:** Food banks had insufficient quantities of sought-after items but abundant quantities of unwanted items.

Q: Are food banks and their clients better off now than they were before?

A: Yes.

- Less food waste → more food for people in need.
- **Pareto improving:** More mutually beneficial transactions.[†]

[†]: *Pareto improvement* = A transaction that makes at least one person better off without harming others.

Efficient Markets

Conditions

1. Well-defined property rights.
2. No market power.
3. *Symmetric* information.

Result

If all three conditions hold, then an *unregulated* market maximizes total surplus.

Efficient Markets

Result

If all three conditions hold, then an *unregulated* market maximizes total surplus.

Implications

1. When all three conditions hold, government intervention in a market can generate inefficient outcomes.
2. When at least one condition fails, an *unregulated* market can generate inefficient outcomes.
 - Well-designed government intervention *can* redress inefficiencies.

Efficient Markets

Q: What kinds of markets are most likely to yield efficient outcomes?

A: Markets that feature

1. Transactions that don't hurt or help those outside the transaction.
2. Many buyers and sellers.
3. Goods with easily observable quality.

Examples?

Midterm 1

Midterm Topics

Anything from the lectures, discussions, or podcasts **is fair game!**

1. What is Economics?
2. Motivating the Economic Problem
3. Consumer Theory I
4. Consumer Theory II
5. The Market Mechanism
6. Demand and Supply

Midterm Structure

Multiple Choice

- 50 questions
- 1 point per question

Midterm Protocol

Materials

- Writing utensil
- 3-inch-by-5-inch note card
- Basic or scientific calculator (no graphing or programming capabilities)
- **Nothing else**

Procedure

- **Randomized** seating chart
- 80 minutes from *"you may begin"* to *"pencils down"*
- First 30 minutes: **quiet period** (no questions, no getting up)
- Last 50 minutes: ask lots of questions
- Show your UO ID card as you turn-in your exam

Midterm Preparation

1. Lecture slides
2. Discussion worksheets
 - New worksheet this week!
3. Practice midterm questions
 - No solutions posted, but you can ask about the questions in discussion or in office hours.
4. Extra office hours next week (TBA)
5. Prepare your note card