

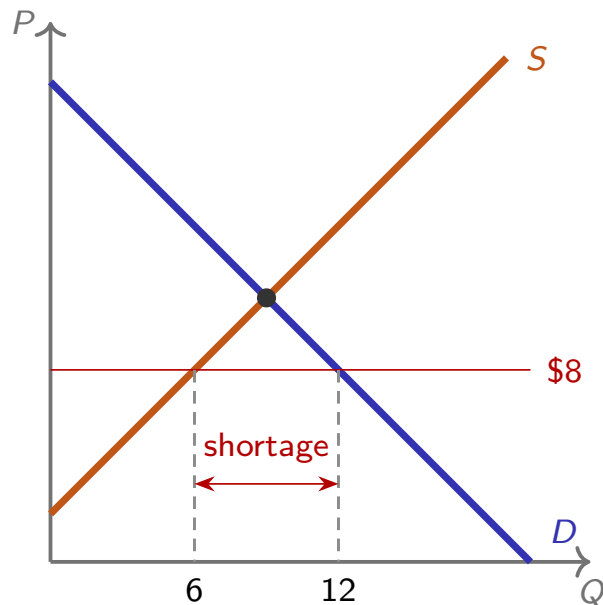
Exercise walk-through

2.9

International Trade and Public Policy

AP Microeconomics

Price controls



A **price ceiling** of \$8 binds below \$11.

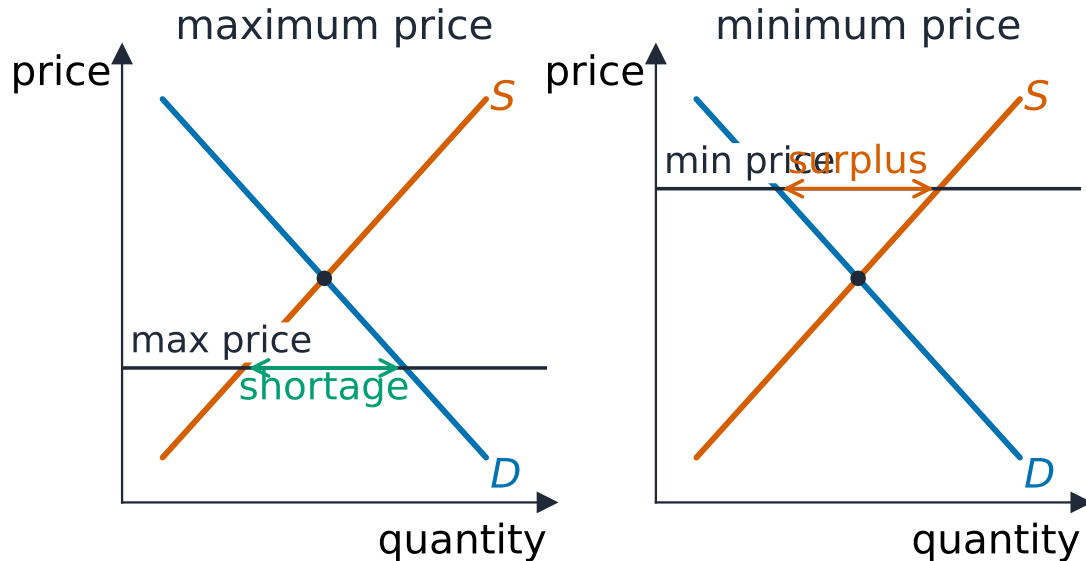
$$Q_d = 20 - P = 12$$

$$Q_s = P - 2 = 6$$

$$\text{shortage} = Q_d - Q_s = 6$$

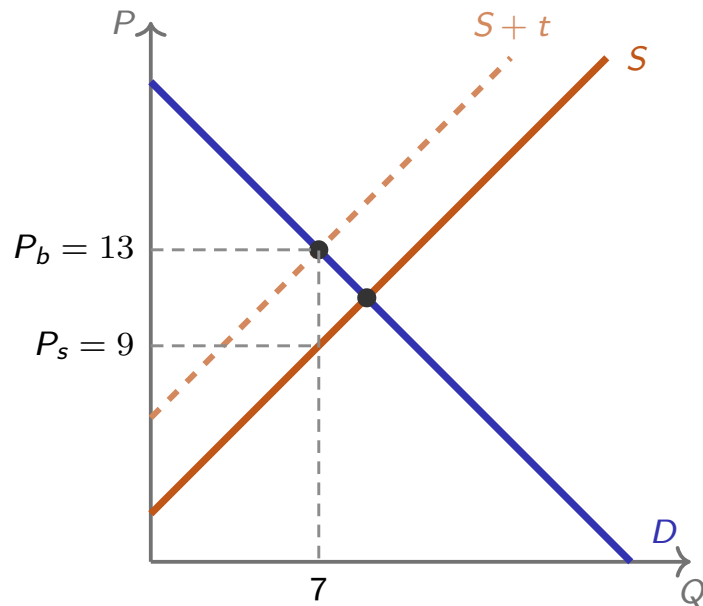
Without other supply, at most 6 units trade.

The Effects of Government Intervention in Markets



A binding ceiling causes a shortage; a binding floor causes a surplus

Taxes & incidence



A \$4 per-unit tax :

$$20 - Q = 2 + Q + 4$$

$$Q_t = 7, P_b = \$13, P_s = \$9$$

Buyers pay \$2 more; sellers receive \$2 less than the original \$11.

Tax incidence depends on relative elasticity. The more inelastic side generally bears more; these symmetric schedules split the burden equally.

Tax revenue and deadweight loss

Continue the \$4 tax: quantity falls from 9 to 7

$$\text{Tax revenue} = tQ_t = 4(7) = \$28$$

$$DWL = \frac{1}{2}t(Q^* - Q_t) = \frac{1}{2}(4)(9 - 7) = \$4$$

The \$28 is a transfer to government. The \$4 is the lost net benefit of trades prevented by the tax.

These losses assume an initially efficient market. A policy correcting an externality can instead improve social welfare; Unit 6 develops that case.

International trade

Use the same market: $P_D = 20 - Q$, $P_S = 2 + Q$

The no-trade price is \$11. The country can import at a world price of \$6. Assume a small competitive economy and no market failures.

Attempt before the next slide:

- 1 Calculate domestic quantity demanded and quantity supplied at \$6. How many units are imported?
- 2 A \$2 tariff raises the domestic price to \$8. Calculate the new imports and government revenue.
- 3 Do either domestic curve's determinants change?

Exercises 2.1-2.3

2.1 State when a country becomes an importer of a good. [1]

2.2 State the effect of a tariff on the domestic price of an imported good. [1]

2.3 State the effect of free trade on total surplus. [1]

Exercises 2.1-2.3

2.1 State when a country becomes an importer of a good. [1]

2.1

- when the world price is below the domestic (autarky) price
-

2.2 State the effect of a tariff on the domestic price of an imported good. [1]

2.2

- it raises it
-

2.3 State the effect of free trade on total surplus. [1]

2.3

- it raises total surplus

Exercises 3.1-3.2

3.1 A country imports a good when the world price is _____ the domestic price. [1]

☐

A above

B below

C equal to

D unrelated to

3.2 A tariff on imports

[1]

☐

A raises total surplus

B creates a deadweight loss

C lowers the domestic price

D increases imports

Exercises 3.1-3.2

3.1 A country imports a good when the world price is _____ the domestic price. [1]

☐

A above

B below

C equal to

D unrelated to

3.1 B

- below.

3.2 A tariff on imports

[1]

☐

A raises total surplus

B creates a deadweight loss

C lowers the domestic price

D increases imports

3.2 B

- creates a deadweight loss.

Exercise 3.3 (a)

3.3 The world price of steel is below a country's domestic price.

(a) State whether the country imports or exports steel.

[1]

Exercise 3.3 (a)

3.3 The world price of steel is below a country's domestic price.

(a) State whether the country imports or exports steel.

[1]

(a)

- it imports steel

Exercise 3.3 (b)

3.3 The world price of steel is below a country's domestic price.

(b) State the effect of free trade on domestic consumers.

[1]

Exercise 3.3 (b)

3.3 The world price of steel is below a country's domestic price.

(b) State the effect of free trade on domestic consumers.

[1]

(b)

- they gain (they pay the lower world price)

Exercise 3.3 (c)

3.3 The world price of steel is below a country's domestic price.

(c) State the effect of a tariff on the quantity imported.

[1]

Exercise 3.3 (c)

3.3 The world price of steel is below a country's domestic price.

(c) State the effect of a tariff on the quantity imported.

[1]

(c)

- it reduces the quantity imported