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PRINCIPLES OF

ECONOMICS

Eight Edition

CHAPTER

9

Application: International Trade

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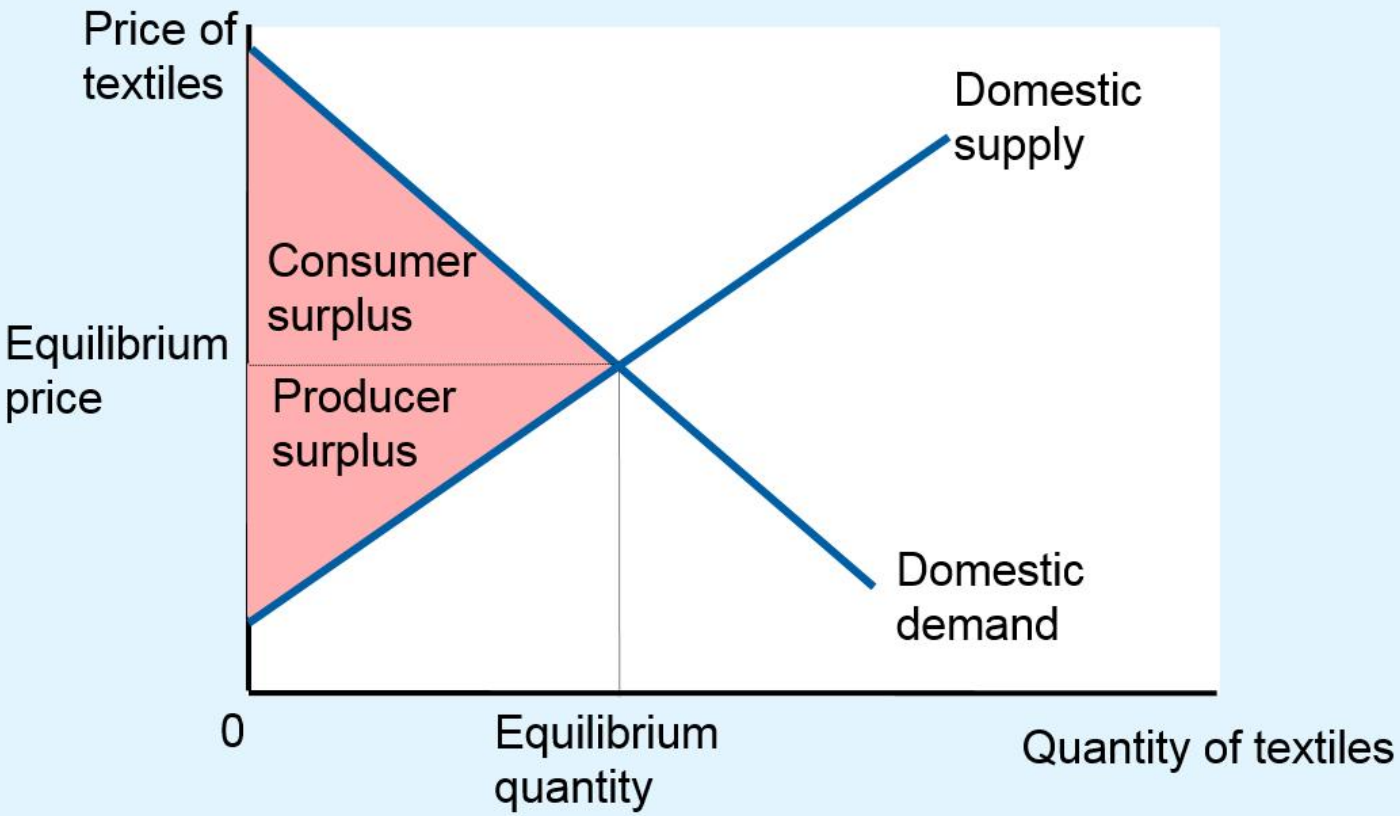
The Determinants of Trade Part 1

- The equilibrium without trade
  - Only domestic buyers and sellers
  - Equilibrium price and quantity
    - Determined on the domestic market
  - Total benefits
    - Consumer surplus
    - Producer surplus

Figure 1 Equilibrium without International Trade

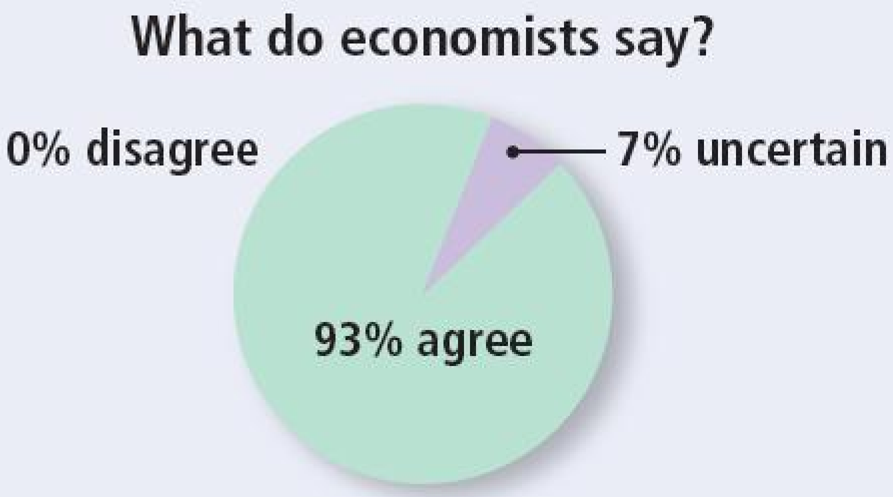


When an economy cannot trade in world markets, the price adjusts to balance domestic supply and demand. This figure shows consumer and producer surplus in an equilibrium without international trade for the textile market in the imaginary country of Isoland.

ASK THE EXPERTS Part 1

Trade Deals

“Past major trade deals have benefited most Americans.”



The Determinants of Trade Part 2

- Allow for international trade?
  - Price and quantity sold in the domestic market?
  - Who will gain from free trade; who will lose, and will the gains exceed the losses?
  - Should a tariff be part of the new trade policy?

The Determinants of Trade Part 3

- World price
  - Price of a good that prevails in the world market for that good
- Domestic price
  - Opportunity cost of the good on the domestic market

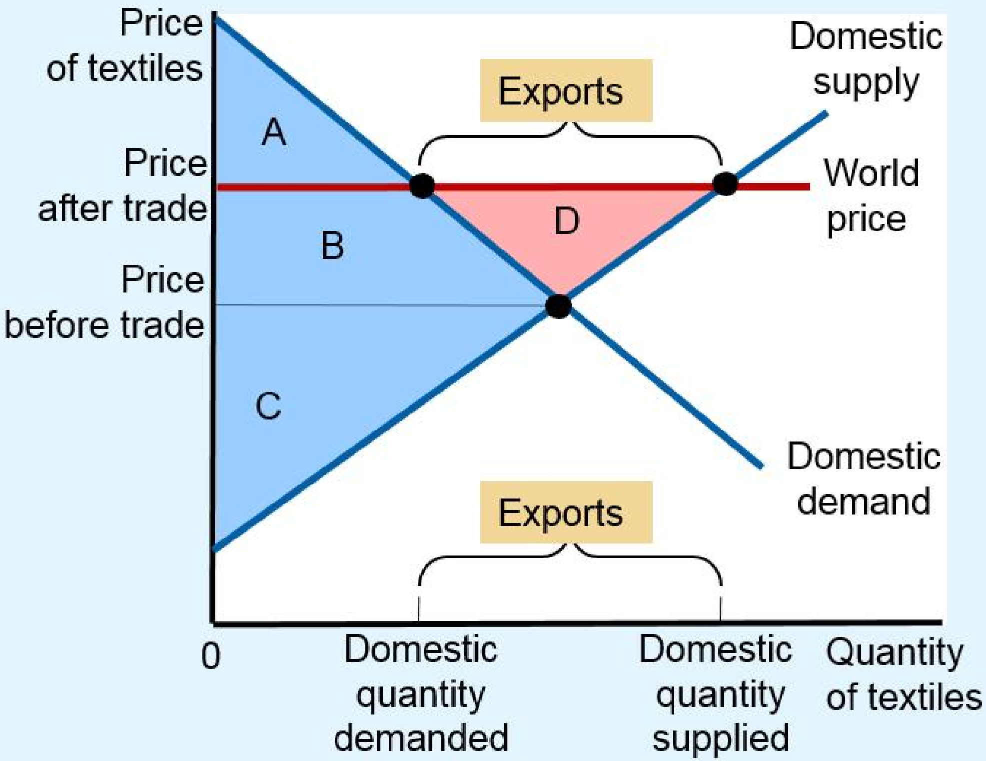
The Determinants of Trade Part 4

- Compare domestic price with world price
  - Determine who has comparative advantage
  - If domestic price < world price
    - Export the good
    - The country has comparative advantage
  - If domestic price > world price
    - Import the good
    - The world has comparative advantage

Winners and Losers from Trade Part 1

- Exporting country
  - Domestic equilibrium price before trade is below the world price
  - Once trade is allowed
    - Domestic price rises to equal the world price
    - Domestic quantity supplied is greater than domestic quantity demanded
    - The difference: exports

Figure 2 International Trade in an Exporting Country



Once trade is allowed, the domestic price rises to equal the world price.
The supply curve shows the quantity of textiles produced domestically, and the demand curve shows the quantity consumed domestically.
Exports from Isoland equal the difference between the domestic quantity supplied and the domestic quantity demanded at the world price.
Sellers are better off (producer surplus rises from C to B + C + D), and buyers are worse off (consumer surplus falls from A + B to A). Total surplus rises by an amount equal to area D, indicating that trade raises the economic well-being of the country as a whole.

	Before Trade	After Trade	Change
Consumer Surplus	A + B	A	- B
Producer Surplus	C	B + C + D	+ (B + D)
Total Surplus	A + B + C	A + B + C + D	+ D

The area D shows the increase in total surplus and represents the gains from trade

Winners and Losers from Trade Part 2

- Exporting country
  - Before international trade
    - Consumer surplus
    - Producer surplus
  - With international trade
    - Smaller consumer surplus
    - Higher producer surplus
    - Higher total surplus

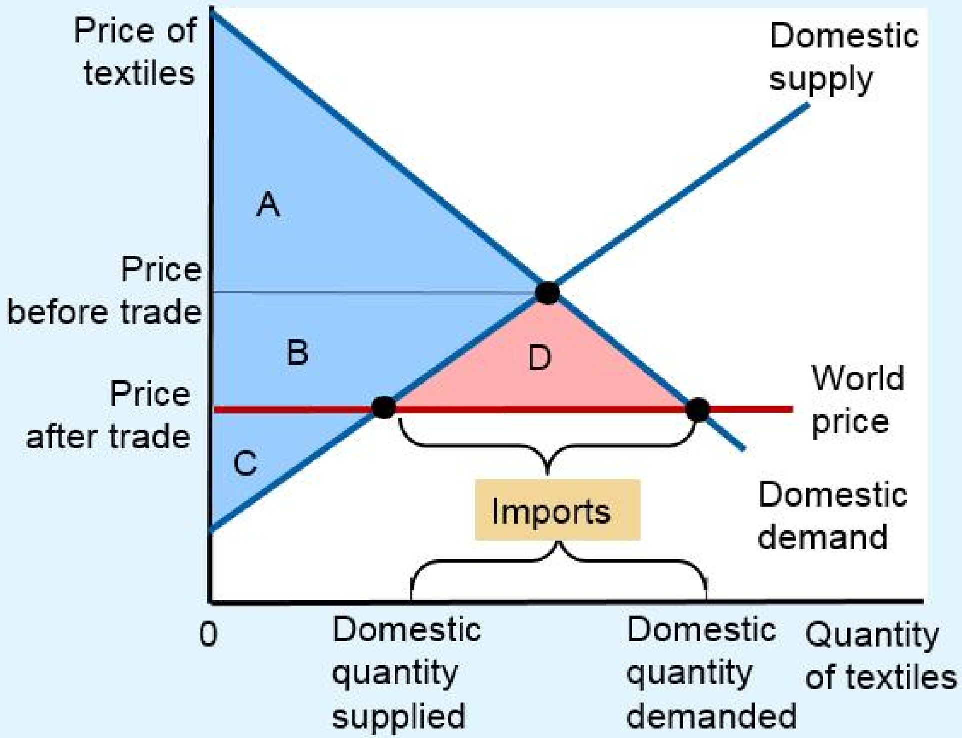
Winners and Losers from Trade Part 3

- Exporting country, with international trade
  - Domestic producers of the good are better off
  - Domestic consumers are worse off
  - Trade raises the economic well-being of a nation
    - Gains of the winners exceed the losses of the losers

Winners and Losers from Trade Part 4

- Importing country
  - Domestic equilibrium price before trade is above world price
  - Once trade is allowed
    - Domestic price drops to equal the world price
    - Domestic quantity supplied is less than domestic quantity demanded
    - The difference: imports

Figure 3 International Trade in an Importing Country



Once trade is allowed, the domestic price falls to equal the world price. The supply curve shows the amount produced domestically, and the demand curve shows the amount consumed domestically.
Imports equal the difference between the domestic quantity demanded and the domestic quantity supplied at the world price.
Buyers are better off (consumer surplus rises from A to A + B + D), and sellers are worse off (producer surplus falls from B + C to C). Total surplus rises by an amount equal to area D, indicating that trade raises the economic well-being of the country as a whole.

	Before Trade	After Trade	Change
Consumer Surplus	A	A + B + D	+ (B + D)
Producer Surplus	B + C	C	- B
Total Surplus	A + B + C	A + B + C + D	+ D

The area D shows the increase in total surplus and represents the gains from trade

Winners and Losers from Trade Part 5

- Importing country
  - Before international trade
    - Consumer surplus
    - Producer surplus
  - With international trade
    - Higher consumer surplus
    - Smaller producer surplus
    - Higher total surplus

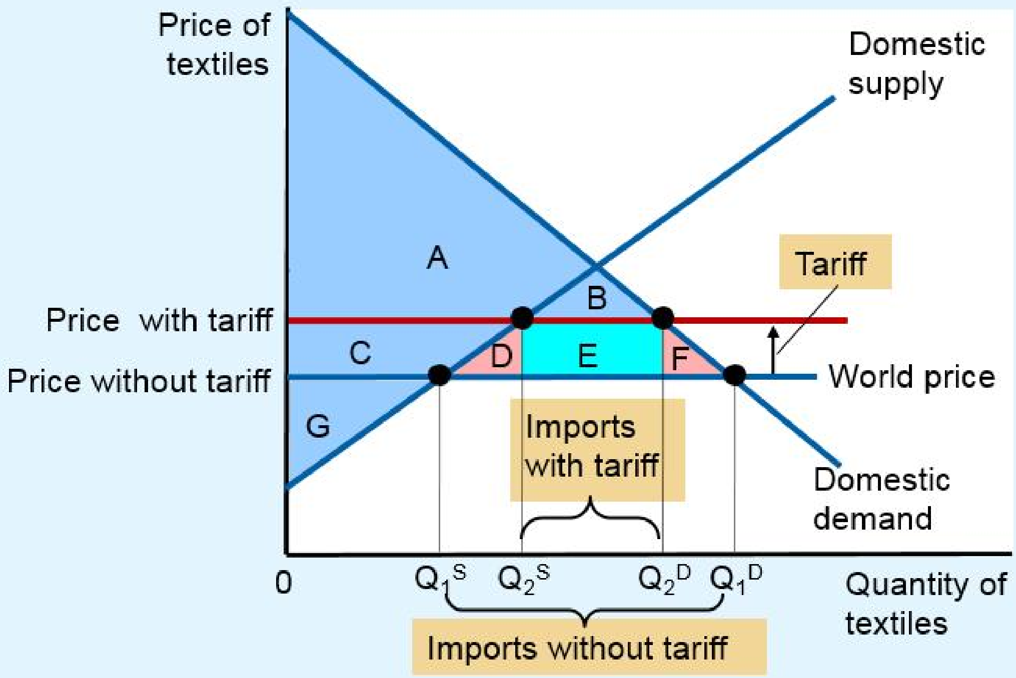
Winners and Losers from Trade Part 6

- Importing country, with international trade
  - Domestic producers of the good are worse off
  - Domestic consumers are better off
  - Trade raises the economic well-being of a nation
    - Gains of the winners exceed the losses of the losers
- Trade can make everyone better off

Winners and Losers from Trade Part 7

- Tariff
  - Tax on goods produced abroad and sold domestically
- Free trade
  - Domestic price = World price
- Tariff on imports
  - Raises domestic price above world price
    - By the amount of the tariff

Figure 4 The Effects of a Tariff



A tariff, a tax on imports, reduces the quantity of imports and moves a market closer to the equilibrium that would exist without trade. Total surplus falls by an amount equal to area D + F. These two triangles represent the deadweight loss from the tariff.

	Before Tariff	After Tariff	Change
Consumer Surplus	A + B + C + D + E + F	A + B	- (C + D + E + F)
Producer Surplus	G	C + G	+ C
Government Revenue	None	E	+ E
Total Surplus	A + B + C + D + E + F + G	A + B + C + E + G	- (D + F)

The area D + F shows the fall in total surplus and represents the deadweight loss of the tariff.

Winners and Losers from Trade Part 8

- The effects of a tariff
  - Price rises by the amount of the tariff
  - Domestic quantity demanded decreases
  - Domestic quantity supplied increases
  - Reduces the quantity of imports
  - Moves the domestic market closer to its equilibrium without trade
  - Domestic sellers are better off
  - Domestic buyers are worse off

Winners and Losers from Trade Part 9

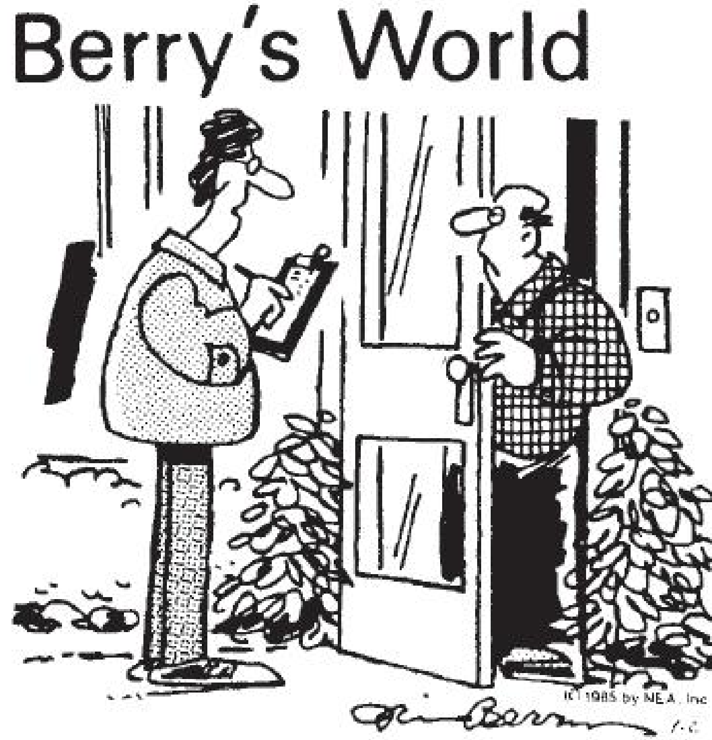
- Before the tariff
  - Consumer surplus
  - Producer surplus
  - Government tax revenue = 0
- The effects of a tariff
  - Consumer surplus is smaller
  - Producer surplus is bigger
  - Government tax revenue
  - Total surplus is smaller

Winners and Losers from Trade Part 10

- Other benefits of international trade
  - Increased variety of goods
  - Lower costs through economies of scale
  - Increased competition
  - Enhanced flow of ideas
    - Transfer of technological advances around the world

Arguments for Restricting Trade Part 1

- The domestic producers
  - Oppose free trade
  - Believe that the government should protect the domestic industry from foreign competition



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"You like protectionism as a 'working man.' How about as a consumer?"

Arguments for Restricting Trade Part 2

- The jobs argument
  - "Trade with other countries destroys domestic jobs"
  - Free trade creates jobs at the same time that it destroys them
- The national-security argument
  - "The industry is vital for national security"
  - When there are legitimate concerns over national security

Arguments for Restricting Trade Part 3

- The infant-industry argument
  - "New industries need temporary trade restriction to help them get started"
  - Difficult to implement in practice
  - The "temporary" policy is hard to remove
  - Protection is not necessary for an infant industry to grow

Arguments for Restricting Trade Part 4

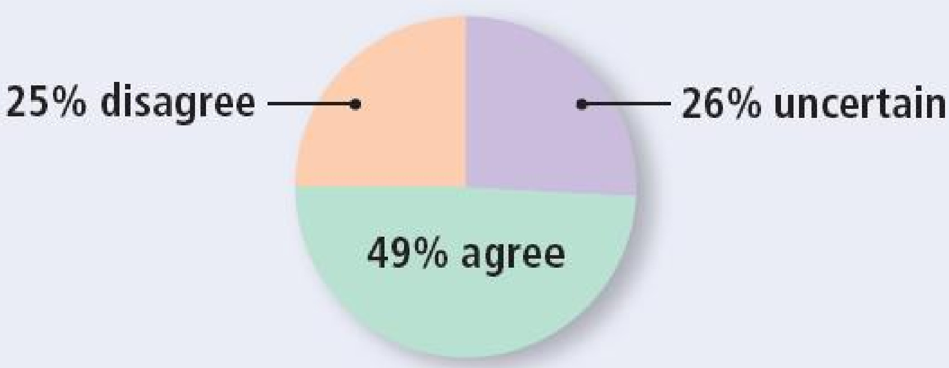
- The unfair-competition argument
  - "Free trade is desirable only if all countries play by the same rules"
  - Increase in total surplus for the country
- The protection-as-a-bargaining-chip argument
  - "Trade restrictions can be useful when we bargain with our trading partners"
  - The threat may not work

ASK THE EXPERTS Part 2

Trade Deals

"Refusing to liberalize trade unless partner countries adopt new labor or environmental rules is a bad policy, because even if the new standards would reduce distortions on some dimensions, such a policy involves threatening to maintain large distortions in the form of restricted trade."

What do economists say?



CASE STUDY

Trade agreements and the WTO Part 1

- World Trade Organization, WTO
- Unilateral approach to achieve free trade
  - Remove its trade restrictions on its own
  - Great Britain, 19th century
  - Chile and South Korea, recent years
- Multilateral approach to free trade
  - Reduce its trade restrictions while other countries do the same
  - NAFTA, GATT

Trade agreements and the WTO Part 2

- North American Free Trade Agreement (NAFTA)
  - 1993, lowered trade barriers among the United States, Mexico, and Canada
- General Agreement on Tariffs and Trade (GATT)
  - Continuing series of negotiations among many of the world's countries with the goal of promoting free trade

CASE STUDY

Trade agreements and the WTO Part 3

- GATT
  - United States helped to found GATT
    - After World War II
    - In response to the high tariffs imposed during the Great Depression
  - Successfully reduced the average tariff among member countries from about 40 to 5%
  - Enforced by the WTO
  - 2015: 162 countries; more than 97 % of world trade

CASE STUDY

Trade agreements and the WTO Part 4

- Advantages of the multilateral approach
  - Potential to result in freer trade than unilateral approach
    - Reduce trade restrictions abroad and at home
  - Political advantage
    - Producers are fewer and better organized than consumers
    - Greater political influence