Chapter 9

Application: International Trade

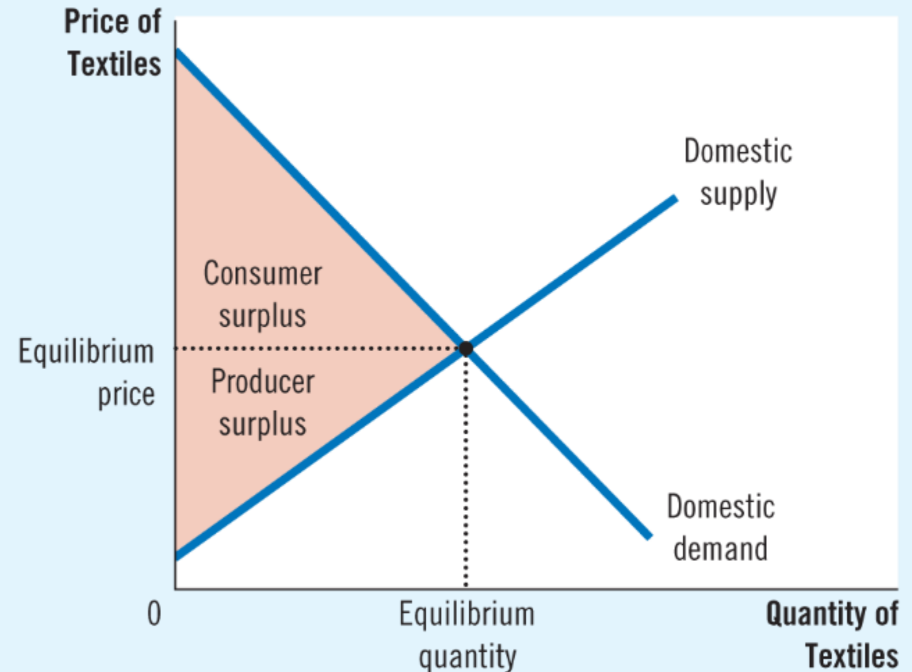
The Determinants of Trade

- 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

FIGURE 1

The 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.



The Determinants of Trade

- 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

- World price
  - Price of a good that prevails in the world market for that good

The Determinants of Trade

- Compare domestic price with world price (in terms of **opportunity cost**)
  - 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

- 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

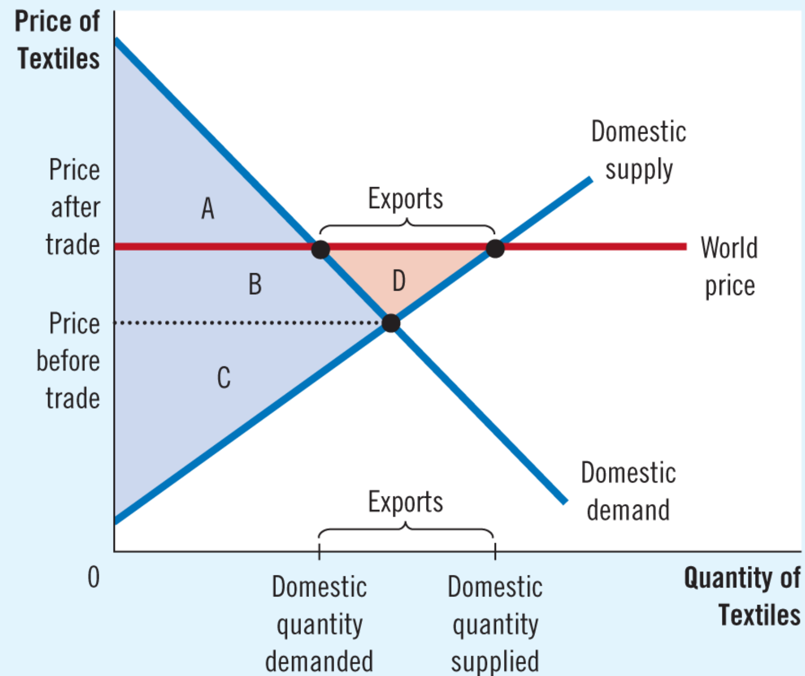
FIGURE 2

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

- 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

- 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

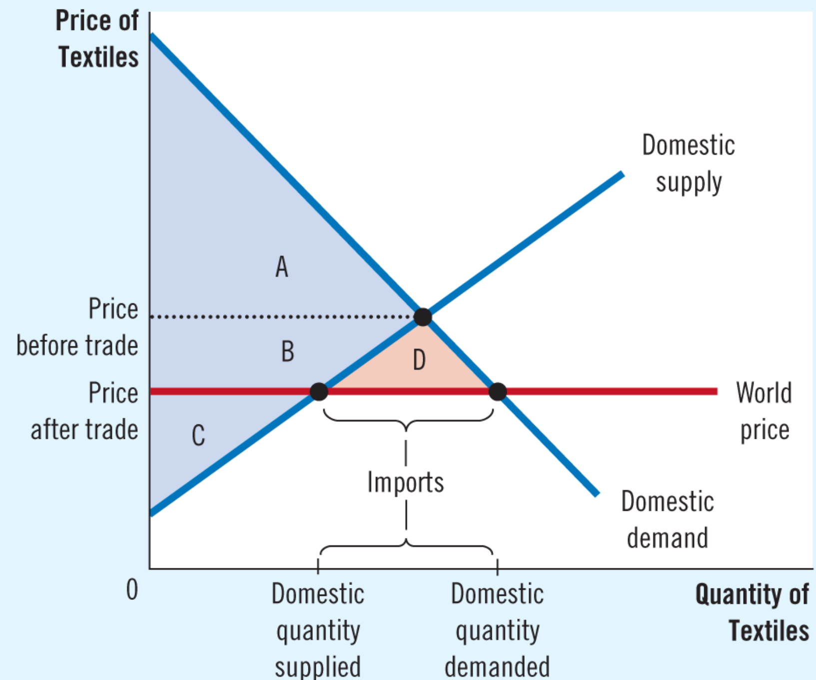
Figure 3 International Trade in an Importing Country

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

- 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

Winners and Losers from Trade

- 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

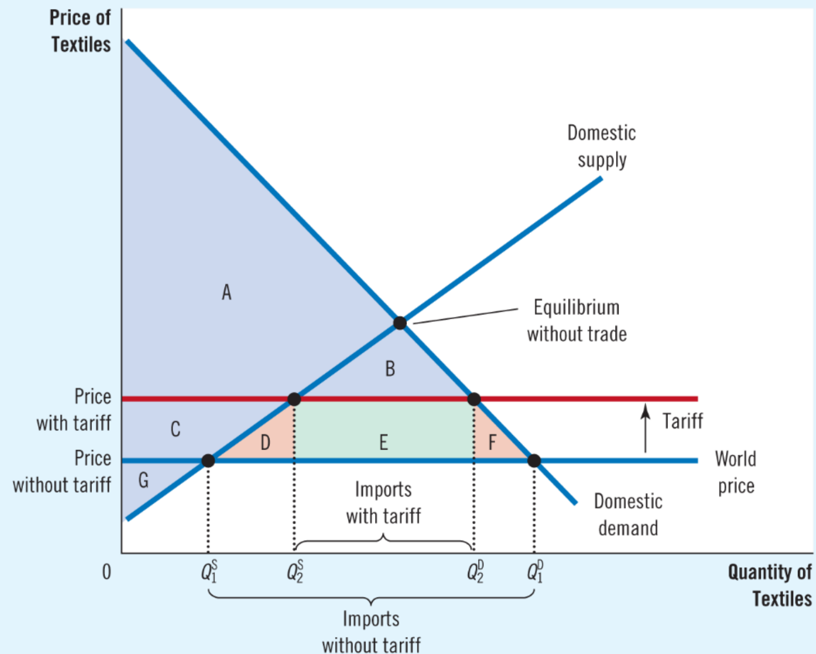
FIGURE 4

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

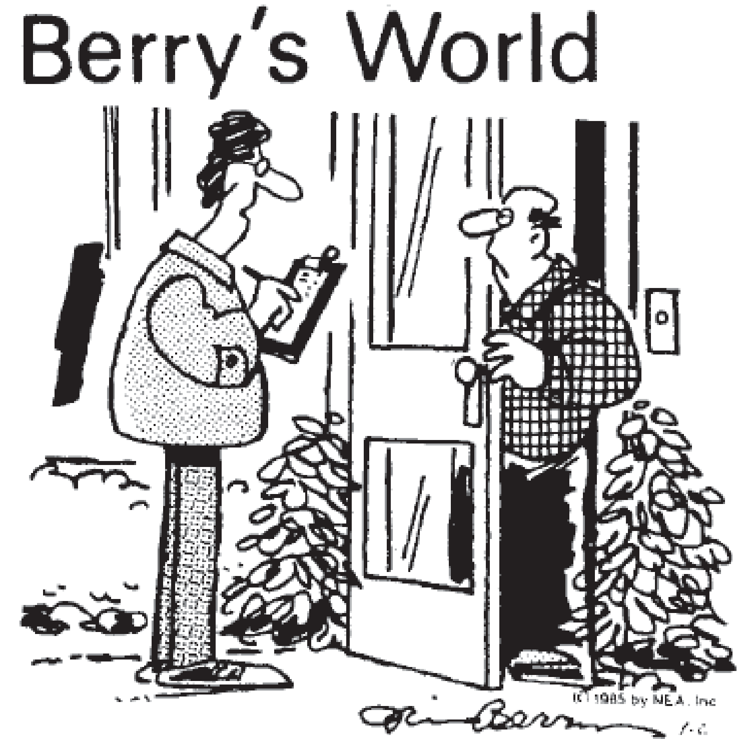
- Before the tariff
  - Consumer surplus
  - Producer surplus
  - Government tax revenue = 0
- The effects of a tariff
  - Consumer surplus is smaller
  - Producer surplus is bigger
  - Government tax revenue
  - Total surplus is smaller

Winners and Losers from Trade

- 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

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



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

Arguments for Restricting

- The jobs argument
  - "Trade with other countries destroys domestic jobs"
- The national-security argument
  - "The industry is vital for national security"

Arguments for Restricting Trade

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

Arguments for Restricting Trade

- The unfair-competition argument
  - "Free trade is desirable only if all countries play by the same rules"