

CHAPTER 9

**Application:  
International Trade**

PRINCIPLES OF  
**Economics**  
N. Gregory Mankiw

Premium PowerPoint Slides  
by Ron Cronovich

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

- § What determines how much of a good a country will import or export?
- § Who benefits from trade? Who does trade harm? Do the gains outweigh the losses?
- § If policymakers restrict imports, who benefits? Who is harmed? Do the gains from restricting imports outweigh the losses?
- § What are some common arguments for restricting trade? Do they have merit?

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**Introduction**

§ Recall from Chapter 3:  
A country has a **comparative advantage** in a good

Countries can gain from trade if each exports the goods in which it has a comparative advantage.

§ Now we apply the tools of welfare economics to see where these gains come from and who gets them.

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### The World Price and Comparative Advantage

§  $P_W =$

§  $P_D =$

§ If  $P_D < P_W$ ,

§ If  $P_D > P_W$ ,

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### The Small Economy Assumption

§ A small economy

§ Not always true – especially for the U.S. – but simplifies the analysis without changing its lessons.

§ When a small economy engages in free trade,  $P_W$  is the only relevant price:

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### A Country That Exports Soybeans

Without trade,

$P_D = \$4$

$Q = 500$

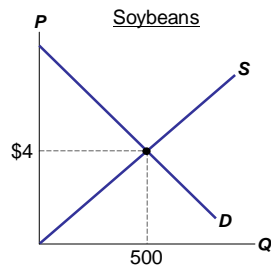
$P_W = \$6$

Under free trade,

§ domestic consumers demand \_\_\_\_\_

§ domestic producers supply \_\_\_\_\_

§



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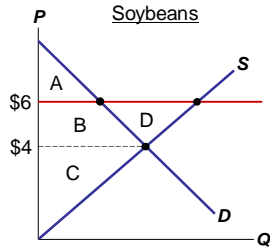
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### A Country That Exports Soybeans

Without trade,  
 CS =  
 PS =  
 Total surplus =



With trade,  
 CS =  
 PS =  
 Total surplus =

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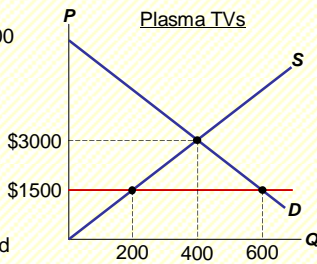
### ACTIVE LEARNING 1 Analysis of trade

Without trade,  
 $P_D = \$3000$ ,  $Q = 400$

In world markets,  
 $P_W = \$1500$

Under free trade,  
 how many TVs  
 will the country  
 import or export?

Identify CS, PS, and  
 total surplus without  
 trade, and with trade.



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### Summary: The Welfare Effects of Trade

	$P_D < P_W$	$P_D > P_W$
direction of trade		
consumer surplus		
producer surplus		
total surplus		

*Whether a good is imported or exported,  
 trade creates winners and losers.*

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### Other Benefits of International Trade

- § Consumers
- § Producers
  
- § Competition from abroad may
  
- § Trade

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### Then Why All the Opposition to Trade?

- § Recall one of the Ten Principles from Chapter 1:  
*Trade can make everyone better off.*

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- § Yet, such compensation rarely occurs.

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- § Hence, the losers have more incentive to organize and lobby for restrictions on trade.

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### Tariff: An Example of a Trade Restriction

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- § Example: Cotton shirts

$P_W = \$20$

Tariff:  $T = \$10/\text{shirt}$

Consumers must pay \$\_\_\_\_ for an imported shirt.

So, domestic producers can charge \$\_\_\_\_ per shirt.

- § In general, the price facing domestic buyers & sellers equals  $(P_W + T)$ .

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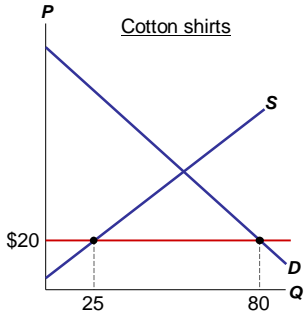
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### Analysis of a Tariff on Cotton Shirts

$P_w = \$20$   
 Free trade:  
 buyers demand \_\_\_\_  
 sellers supply \_\_\_\_  
 imports = \_\_\_\_  
 $T = \$10/\text{shirt}$   
 price rises to \_\_\_\_  
 buyers demand \_\_\_\_  
 sellers supply \_\_\_\_  
 imports = \_\_\_\_



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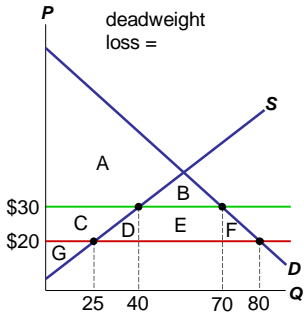
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### Analysis of a Tariff on Cotton Shirts

Free trade  
 CS =  
 PS =  
 Total surplus =  
 Tariff  
 CS =  
 PS =  
 Revenue =  
 Total surplus =



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### Import Quotas: Another Way to Restrict Trade

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- § Mostly has the same effects as a tariff:
  - § Raises price, reduces quantity of imports.
  - § Reduces buyers' welfare.
  - § Increases sellers' welfare.
- § A tariff creates revenue for the govt. A quota

§ Or, govt could auction licenses to import to capture this profit as revenue. Usually it does not.

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## Arguments for Restricting Trade

### 1. The jobs argument

#### Economists' response:

Look at the data to see whether rising imports cause rising unemployment...

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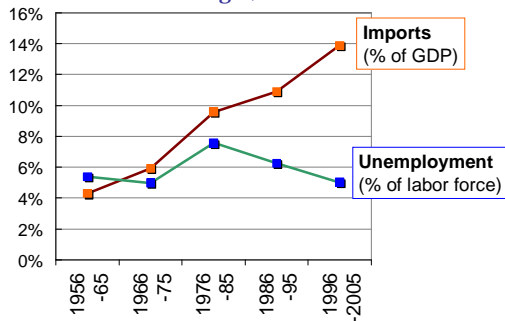
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U.S. Imports & Unemployment,  
Decade averages, 1956-2005



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## Arguments for Restricting Trade

### 1. The jobs argument

Trade destroys jobs in the industries that compete against imports.

#### Economists' response:

Total unemployment does not rise as imports rise, because

Even if *all* goods could be produced more cheaply abroad, the country need only have a \_\_\_\_\_ to have a viable export industry and to gain from trade.

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**Arguments for Restricting Trade**  
**2. The national security argument**

*Economists' response:*

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**Arguments for Restricting Trade**  
**3. The infant-industry argument**

*Economists' response:*

Besides, if a firm will be profitable in the long run, it should be willing to incur temporary losses.

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**Arguments for Restricting Trade**  
**4. The unfair-competition argument**

*Economists' response:*  
Great! Then we can import extra-cheap products subsidized by the other country's taxpayers.

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## Arguments for Restricting Trade

### 5. The protection-as-bargaining-chip argument

Example:

#### Economists' response:

Suppose France refuses. Then the U.S. must choose between two bad options:

A) Restrict imports from France,

B) Don't restrict imports,

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## Trade Agreements

§ A country can liberalize trade with

§ unilateral reductions in trade restrictions

§ multilateral agreements with other nations

§ Examples of trade agreements:

§ World Trade Organization (WTO), est. 1995,

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