




## LECTURE NINE - PART TWO



### Let's Go Back in Time!

- Imagine a debate between Ricardo and another economist in front of a group of European trade ministers.
- They must decide whether to impose protective tariffs on America.



**John Strawman: A strong supporter of the theory of absolute advantage.**

American and European Labor Requirements for Production		
Product	Necessary labor for production (labor-hours)	
	In America	In Europe
1 unit of food	1	3
1 unit of clothing	2	4

**Question:**

- Which country has the absolute advantage in **food**?
- Which has the absolute advantage in **clothing**?

American and European Labor Requirements for Production		
Product	Necessary labor for production (labor-hours)	
	In America	In Europe
1 unit of food	1	3
1 unit of clothing	2	4



Which country has the **comparative** advantage in food versus clothing?

A Profound Result!  
If Europe trades some of its clothing for America's food, BOTH trading partners will be better off!

American and European Labor Requirements for Production		
Product	Necessary labor for production (labor-hours)	
	In America	In Europe
1 unit of food	1	3
1 unit of clothing	2	4

Answer

1. America has the comparative advantage in food!
2. Europe has the comparative advantage in clothing!!

American and European Labor Requirements for Production		
Product	Necessary labor for production (labor-hours)	
	In America	In Europe
1 unit of food	1	3
1 unit of clothing	2	4

David Ricardo uses a simple production possibilities frontier or PPF analysis to demonstrate.

## Ricardo's PPF Demonstration

### Assumptions:

1. America and Europe each have 600 hours of labor.
2. Costs are constant so our production possibilities curves are straight lines.
3. Transportation costs are zero.



### American and European Labor Requirements for Production

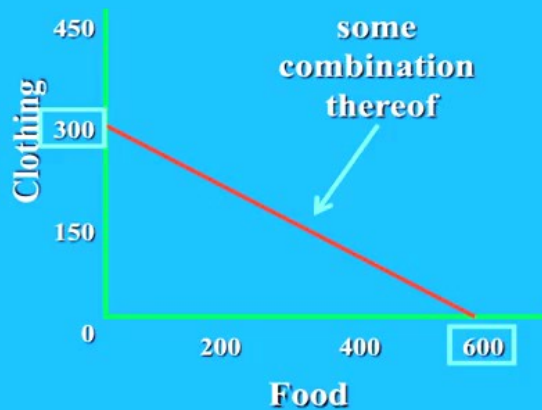
Necessary labor for production  
(labor-hours)

Product	In America	In Europe
1 unit of food	1	3
1 unit of clothing	2	4

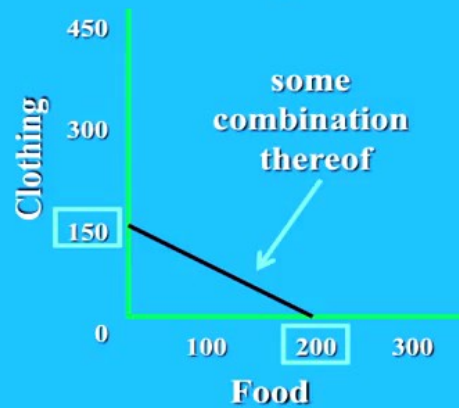
### Exercise

Draw PPFs for both America and Europe with clothing on the vertical axis and food on the horizontal axis.

### America's PPF



### Europe's PPF

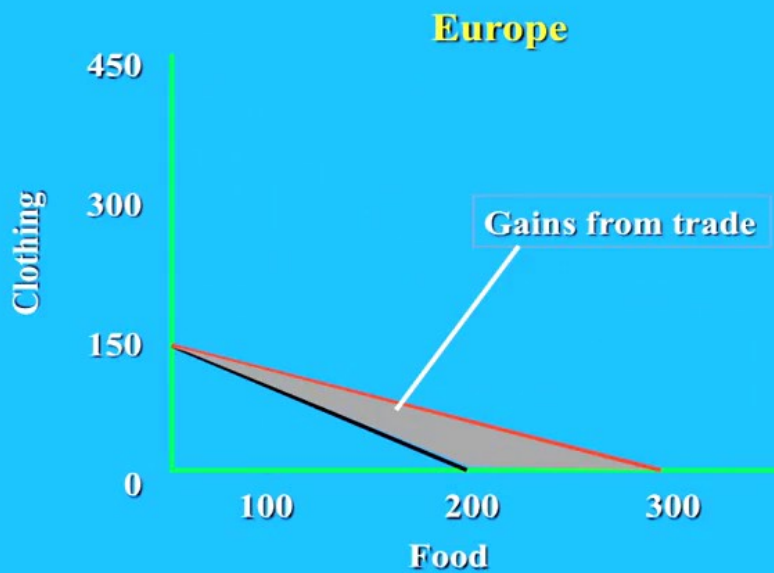


"Suppose I sent you to America with a 150 units of clothing. **How many units of food could you trade that for?**"



American and European Labor Requirements for Production		
Product	Necessary labor for production (labor-hours)	
	In America	In Europe
1 unit of food	1	3
1 unit of clothing	2	4

- John Strawman could trade Europe's clothing for as much as 300 units of American food.
- This is 100 units more than Europe could have produced in the absence of trade.



Would America be better off trading with Europe even though it can produce both food **and** clothing more efficiently than Europe?



# Does America Also Gain?

Suppose the American President sent a Trade Representative to Europe with 100 units of food and instructions to trade for as much clothing as possible.



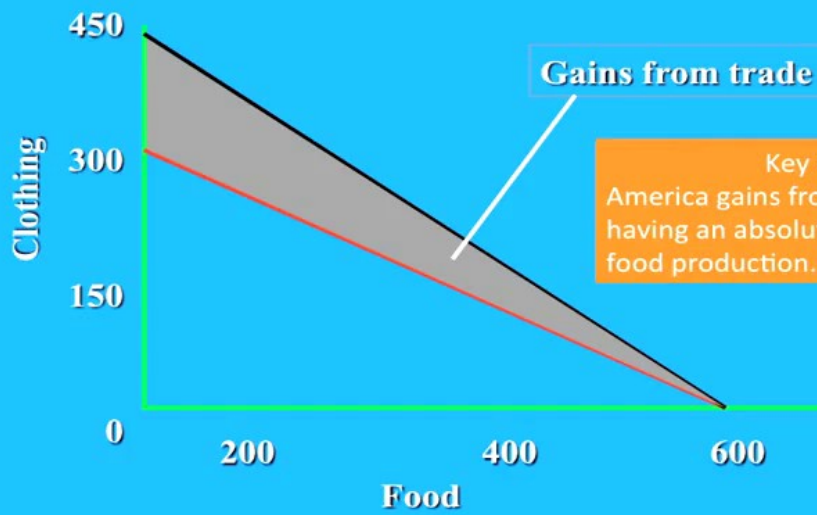
**Question**  
Would America also be better off from trading?

American and European Labor Requirements for Production		
Product	Necessary labor for production (labor-hours)	
	In America	In Europe
1 unit of food	1	3
1 unit of clothing	2	4

- **Trade:** 100 units of food for 75 units of clothing.
- **No trade:** America can only produce 50 units of clothing instead of 100 units of food.
- **American Gains From Trade:** 25 units of clothing



## America



### Key Point

America gains from trade **despite** having an absolute advantage in food production.

## The Broader Point

- The theory of comparative advantage is one of the deepest truths in all of economics.
- Nations that disregard the lessons of comparative advantage will pay a heavy price.