Classical Theories of International Trade

Lecture 3

Lecture 3

Evolution of Trade Theories

- Mercantilism
- **Absolute Advantage**
- Comparative Advantage
- Factor proportion Trade
- International Product Cycle
- New Trade Theory
- National Competitive Advantage

Lecture 3

"If a foreign country can supply us with a commodity cheaper than we ourselves can make it, better buy it of them with some part of the product of our own industry, employed in a way in which we have some advantage"

Wealth of Nations, Adam Smith

Adam Smith and the Attack on Mercantilism and Economic Nationalism

- In 1776, **Adam Smith** published the first modern statement of economic theory, *An Inquiry into the Nature and Causes of the Wealth of Nations*
  - *The Wealth of Nations* attacked **mercantilism**—the system of which dominated economic thought in the 1700s
  - Smith proved wrong the belief that trade was a **zero sum game**—that the gain of one nation from trade was the loss of another
  - On the other hand… Voluntary exchange (trade) is a ***positive sum game*** —both nations can gain

Theory of absolute advantage

- Adam Smith ideas based on…
  - The capability of one country to produce <u>more</u> of a product <u>with the same amount of input</u> than another country
  - *(same thing)* The ability of a country to <u>produce a good using fewer resources</u> than another country (lower opportunity cost)

Theory of absolute advantage

- Adam Smith argued:
  - A country should produce only goods where it is most efficient …. and trade for those goods where it is not efficient
- Trade between countries is, therefore, beneficial

Theory of absolute advantage

- … destroys the mercantilist idea since there are gains to be had by **both** countries party to an exchange
- … questions the objective of national governments to acquire “wealth”: through restrictive trade policies
- … also measures a nation’s wealth by the living standards of its people

TRADE BASED ON ABSOLUTE ADVANTAGE

- Consider this “simple” example involving the EU and India
- Only two products are produced, machines and cloth
- **Labo**r is fixed, homogeneous within a country, the only factor of production, and is fully utilized
- Technology and production costs are **constant**
- Transportation costs are zero and the countries barter (trade) for goods

TRADE BASED ON ABSOLUTE ADVANTAGE

Country	One Person Per Day of Labor Produces	
	Machines	Cloth
EU	5 machines	10 yards of cloth
India	2 machines	15 yards of cloth

THE PRODUCTION POSSIBILITIES FRONTIER AND CONSTANT COSTS

- The ***Production Possibilities Frontier*** **(PPF)** is a curve showing the various combinations of two goods that a country can produce when all of a country's resources are fully employed and used in

	One Person Per Day of Labor Produces	
Country	**Machines**	**Cloth**
EU	**5 machines**	**10 yards of cloth**
India	**2 machines**	**15 yards of cloth**

	One Person Per Day of Labor Produces	
Country	**Machines**	**Cloth**
EU	**5 machines**	**10 yards of cloth**
India	**2 machines**	**15 yards of cloth**

Production Possibilities Curves for the United States and India

India

Cloth	Mach
15	0
7.5	1
0	2

EU

Cloth	Mach
10	0
8	1
6	2
4	3
2	4
0	5

"Opportunity Cost" also known as "Relative Price"

India - Opportunity Costs

Machine	=	7.5 cloth
Cloth	=	0.133 machine

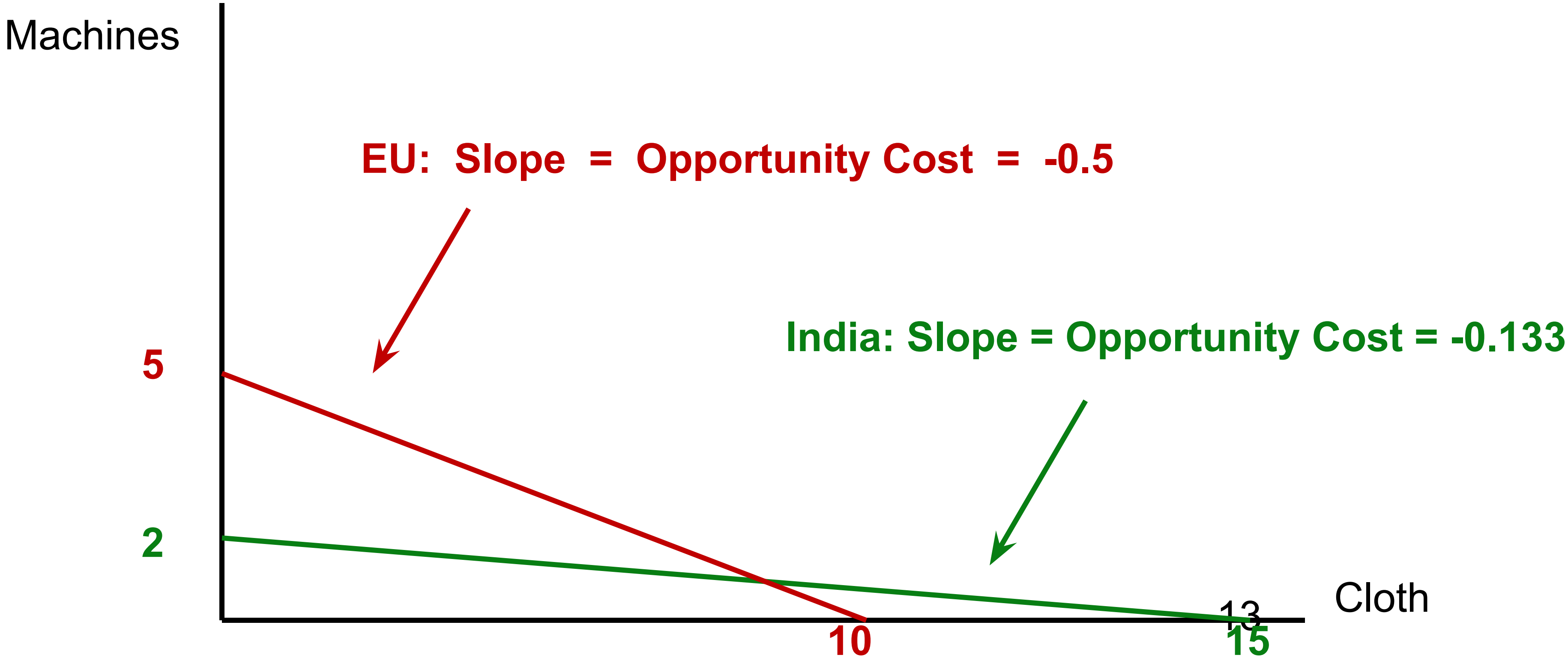
EU - Opportunity Costs

Machine	=	2 cloth
Cloth	=	0.5 machine

Same graph, drawn more to scale!

What Determines the Slope of the PPC?

Slope = ΔMachines/ΔCloth = Opportunity Cost of Machines



Absolute Advantage: Production Conditions When Each Country Is More Efficient in the Production of One Commodity

- EU workers are more productive in producing machines
- The EU has an **absolute advantage** in machine production

- Indian workers are more productive in producing cloth
- India has an **absolute advantage** in cloth production

TRADE BASED ON ABSOLUTE ADVANTAGE …

	One Person Per Day of Labor Produces	
Country	Machines	Cloth
EU	5 machines	10 yards of cloth
India	2 machines	15 yards of cloth

What does this mean?

What ???
Theory of absolute advantage

- Adam Smith: Wealth of Nations *(again)* argued:
  - A country should produce only goods where it is <u>most</u> efficient, and trade for those goods where it is not efficient

Assume TWO Persons per day, so that each product can be fully produced

	Two Persons Per Day of Labor Produces		
Country	**Machines**		**Cloth**
EU	**5 machines**	*(and)*	**10 yards of cloth**
India	**2 machines**	*(and)*	**15 yards of cloth**
World Output	**7 machines**	*(and)*	**25 yards of cloth**

This is a condition under **Autarky**: *(The complete absence of trade)*

- Under Autarky all nations can only consume the goods they produce at home

Assume TWO Persons per day, so that each product can be fully produced

	Two Persons Per Day of Labor Produces		
Country	**Machines**		**Cloth**
EU	**5 machines**	*(and)*	**10 yards of cloth**
India	**2 machines**	*(and)*	**15 yards of cloth**
World Output	**7 machines**	*(and)*	**25 yards of cloth**

However, if each country produces to their absolute advantage …below…

	Two Persons Per Day of Labor Produces		
Country	**Machines**		**Cloth**
EU	**10 machines**		**0 yards of cloth**
India	**0 machines**		**30 yards of cloth**
World Output	**10 machines**	*(and)*	**30 yards of cloth**

TRADE BASED ON ABSOLUTE ADVANTAGE

So there has obviously been an increase in World Output!!

	Change in the Production of	
Country	**Machines**	**Cloth**
EU	**+5 machines**	**–10 yards of cloth**
India	**–2 machines**	**+15 yards of cloth**
Change in World Output	**+3 machines**	**+5 yards of cloth**

TRADE BASED ON ABSOLUTE ADVANTAGE

- **Both countries can benefit if trade occurs**
  - **EU produces machines and exports them to India**
  - **India produces cloth and exports it to the EU**

	Two Persons Per Day of Labor Produces		
Country	Machines		Cloth
EU	5 machines	*(and)*	10 yards of cloth
India	2 machines	*(and)*	15 yards of cloth
World Output	7 machines	*(and)*	25 yards of cloth

	Two Persons Per Day of Labor Produces		
Country	Machines		Cloth
EU	10 machines		0 yards of cloth
India	0 machines		30 yards of cloth
World Output	10 machines	*(and)*	30 yards of cloth

Now, suppose that the EU trades … 3 machines to India … for 12 yards of cloth?

Introduction: The Gains from Trade

- The improvement in national welfare (for both countries) is known as the **gains from trade**

One more quick example, just to be sure....
Output per Hour Worked

	Output/hour worked	
	EU	Canada
Bread	2 loaves	3 loaves
Steel	3 tons	1 ton

What are the EU's relative prices *(opp. cost)* … Bread? Steel?
What are Canada's relative prices *(opp. cost)* … Bread? Steel?

Who has absolute advantage in Bread?
Who has absolute advantage in Steel?

Given 2 working hours per country… what is the maximum world output?

Implications of Adam Smith's Theory

- Access to foreign markets helps create wealth
  - If no nation imports, every company will be limited by the size of its home country market
  - Imports enable a country to obtain goods that it cannot make itself or can make only at very high costs
  - **Trade barriers** decrease the size of the potential market, hampering the prospects of specialization, technological progress, mutually beneficial exchange, and, ultimately, wealth creation

Adam Smith and Trade Barriers

- Smith was highly critical of **trade barriers** *(Tariffs, Quotas, Subsidies…)*

- Trade barriers decrease
  - Specialization
  - Technological progress
  - Wealth creation

- The modern view of trade shares Smith’s dislike for trade barriers

TRADE BASED ON **ABSOLUTE ADVANTAGE**

- Labor Theory of Value
  - Assumes that labor is the only *relevant* factor of production
  - This implies that the pre-trade price of a good is determined by the amount of labor it took to produce it.

Absolute Advantage: Saudi Oil

Absolute Advantage: Brazilian Coffee Beans

Absolute Advantage: Canadian Timber

2-Country Scenario

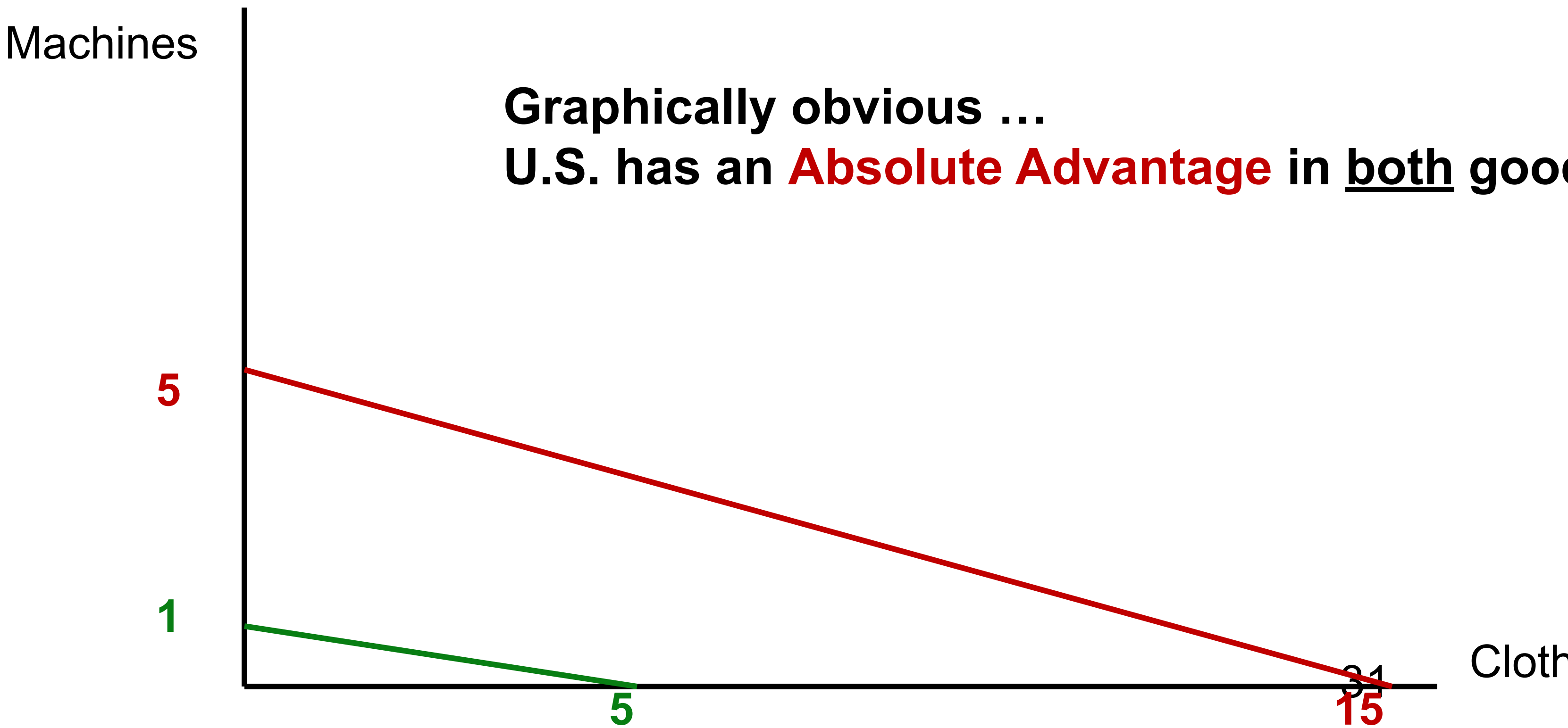
Country	One Person Per Day of Labor Produces	
	Machines	Cloth
U.S.	5 machines	15 yards of cloth
India	1 machine	5 yards of cloth

U.S. has an Absolute Advantage in both goods.

	One Person Per Day of Labor Produces	
Country	**Machines**	**Cloth**
U.S.	**5 machines**	**15 yards of cloth**
India	**1 machine**	**5 yards of cloth**

Production Possibilities Curves for the **United States** and **India**

Graphically obvious …
U.S. has an Absolute Advantage in <u>both</u> goods.



One country has Absolute Advantage in BOTH goods

	One Person Per Day of Labor Produces	
Country	**Machines**	**Cloth**
U.S.	**5 machines**	**15 yards of cloth**
India	**1 machine**	**5 yards of cloth**

- In this scenario, there is obviously no opportunity to trade… especially not for U.S.
- NO… No … No!!! This is not correct. We need to introduce the concept of:

  Comparative Advantage → Next lecture

Task

- Think of counties that have an absolute advantage in production of one particular good – the more the better
- Send me by email by Sep.22
- Tetyana.chernykh@gmail.com