

Principles of Economics (Spring 2024)

Lecture 15 ^{sum up:}International Trade - *Do something that you are best at doing*

Part I

something
Absolute Advantage – The ability of a nation to produce more units of an item than other nations with given amount of resources ;
 the ability of a nation to produce more one unit of an item with less resources required than other nations.

Example 1: Absolute advantage

Apple and Pear with the Same Price

Item (Ton)	Country	Apple	Pear
Production Possibilities	A	50	20
	B	20	50
Production before Trade	A	25	10
	B	10	25
Production after Trade	A	50	0
	B	0	50
Trade Half	A	25	25
	B	25	25

Maximum amount of output by putting all resources and technology to one product

suppose: split resource half to half

Part II

Comparative Advantage – The ability of a nation to produce an item with lower relative cost than other nations; the ability of a nation to produce an item at a lower opportunity cost than other nations.

Example 2: Comparative advantage

Apple and Pear with the Same Price

Item (Ton)	Country	Apple	Pear
Production Possibilities	A	60	40
	B	20	30
Production before Trade	A	30	20
	B	10	15
Production after Trade	A	60	0
	B	0	30
Trade 15 Tons	A	45	15
	B	15	15

Example 3

Nation A can produce 400 cameras or 40 computers per year. Nation B can produce 360 cameras or 10 computers per year

	Nation A	Nation B
Cameras per Year	400	360
Computers per Year	40	10

Given the resources of each nation, during a given year, Nation A can produce more cameras than Nation B. Nation A has a(an) absolute advantage over Nation B in the production of cameras.

Given the resources of each nation, during a given year, Nation A can produce more computers than Nation B. Nation A has a(an) absolute advantage over Nation B in the production of computers.

Nation A	Nation B
The opportunity cost of 1 computer is <u>10</u> cameras.	The opportunity cost of 1 computer is <u>36</u> cameras.
The opportunity cost of 1 camera is <u>1/10</u> computers.	The opportunity cost of 1 camera is <u>1/36</u> computers.

Nation A has a comparative advantage over Nation B in the production of computers, because it costs Nation B 36 cameras to make 1 computer, while it only costs Nation A 10 cameras.

Nation B has a comparative advantage over Nation A in the production of camera, because it costs Nation A 1/10 computers to make 1 camera, while it only costs Nation B 1/36 computers.

$$\text{opportunity cost} = \frac{\text{Production Possibilities of Alternative}}{\text{Production Possibilities of Choice}}$$

Suppose Nation A and Nation B each produce the item in which they have the comparative advantage, and trade with each other:

Nation A produces computers, get 40.

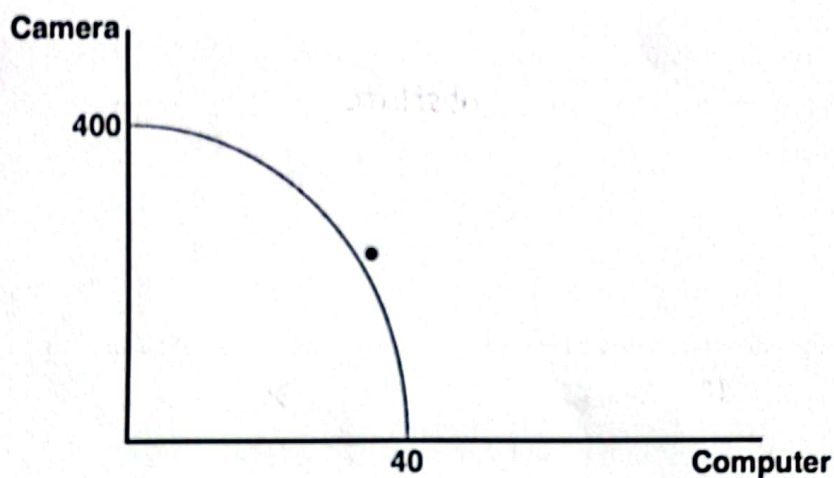
Nation B produces cameras, get 360.

⇒ Nation A trades 10 computers with 180 cameras from Nation B.

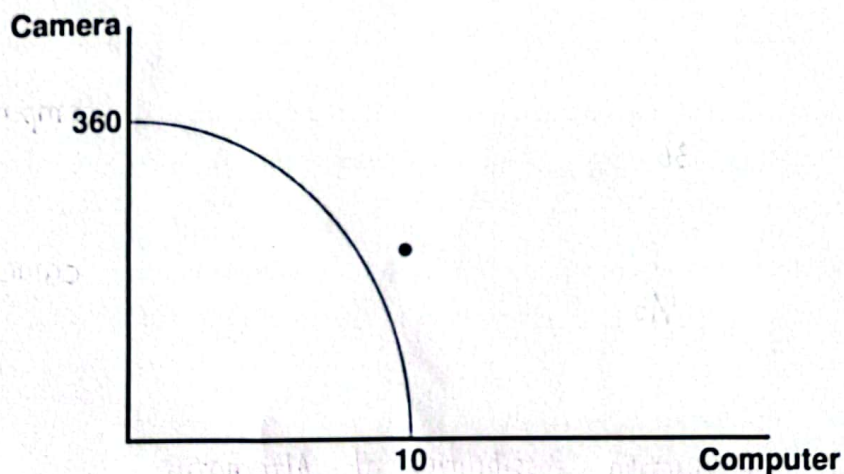
⇒ ▪ Nation A now has 30 computers and 180 cameras.

▪ Nation B now has 10 computers and 180 cameras.

Nation A



Nation B



• Conclusions

- A nation can gain from international trade even if it has absolute advantage in both goods.
- International trade between two countries can benefit both countries if each country exports the good in which it has a comparative advantage.
- International trade makes it possible to obtain items at a lower opportunity cost than domestic production, because resources and technologies in each country are (best suited) ^{used} to produce the item that is best suited.
- International trade improves living standard by allowing ~~consum~~ consumption possibilities to exceed production possibilities.

Example:

Wage	A	B
Doctor	\$100	\$50
Nurse	\$20	\$5

A will choose : Doctor !

Exercise 1

C If Country A specializes in the production of wheat and Country B specializes in the production of coal, and if both countries trade and benefit from trade, then it must be true that

- A. Country A has an absolute advantage in the production of wheat.
- B. Country B has an absolute advantage in the production of coal.
- C. Country A has a comparative advantage in wheat and Country B has a comparative advantage in coal.
- D. All of the above.