
A spiral-bound notebook with a light brown, textured cover. The spiral binding is on the left side. The text is centered on the page.

Comparative Advantage and Specialization

TRADE

 We have learned enough about production that we can now begin our explanation of trade.


TRADE

- Assumptions

- 📄 Let's assume there are two products (Food and computers).
- 📄 There are two countries: Europe, South America.

TRADE

the main question:


 To be self-sufficient and produce everything we need


OR

 To cooperate with the other country &

TRADE

TRADE

 Trade is beneficial if one can only produce food while the other can only produce computer.

 Trade is good if Europe is better in one while South America is better in the other.

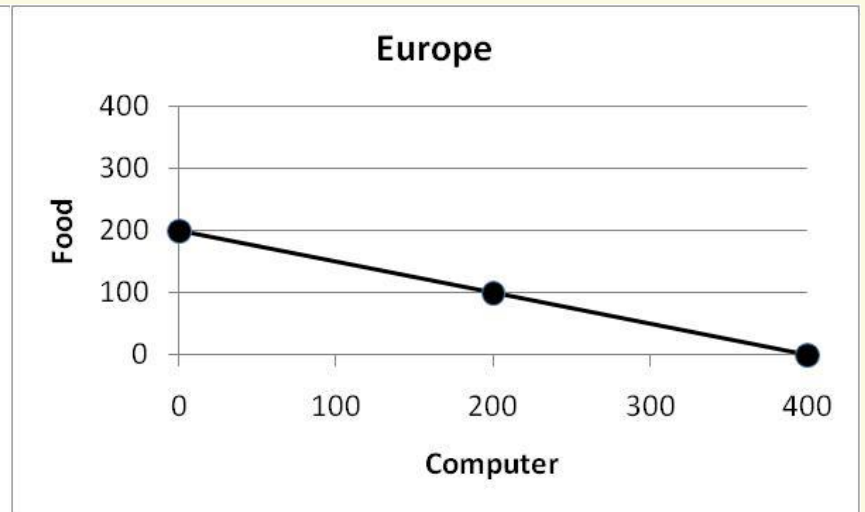
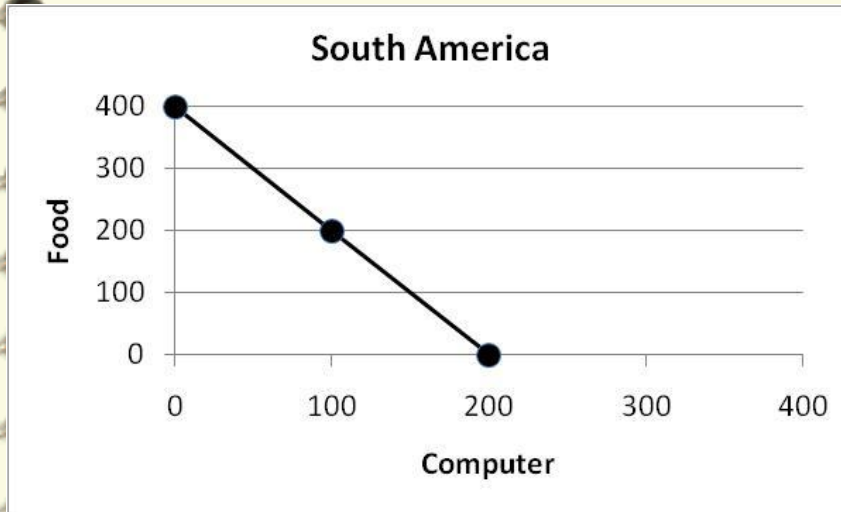
- They should **SPECIALIZE** and trade.

Some points on South America's PPF

Computers	Food
200	0
100	200
0	400

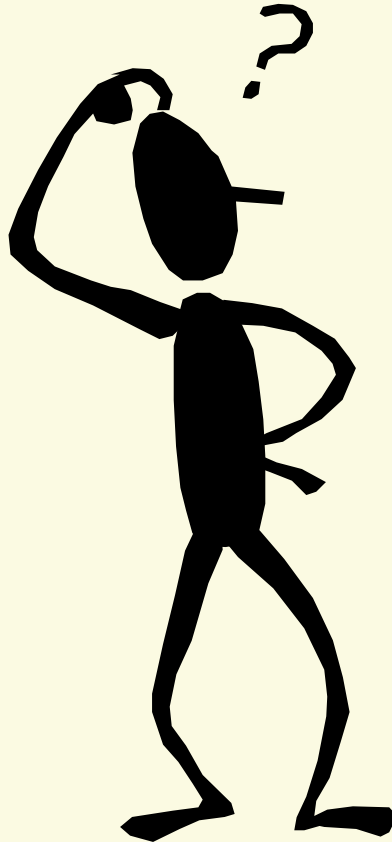
Some points on Europe's PPF

Computers	Food
400	0
200	100
0	200



TRADE

But what happens if one is much better in producing both computers and food?



A different example

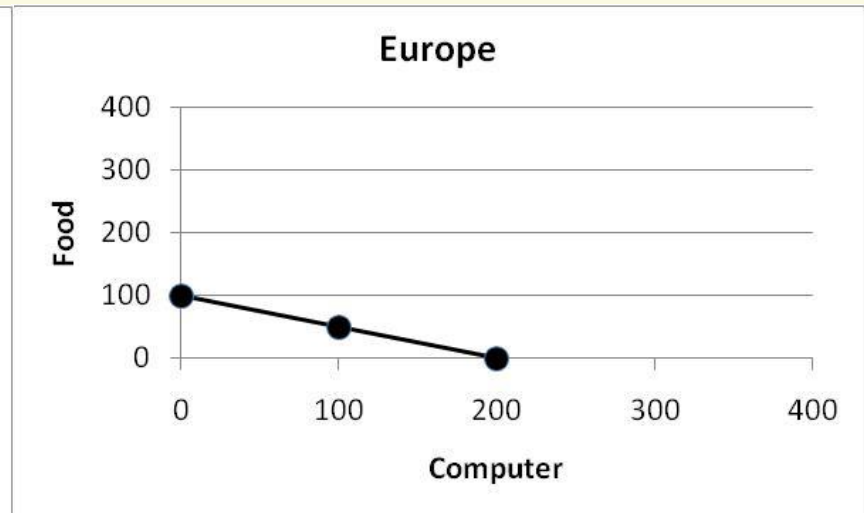
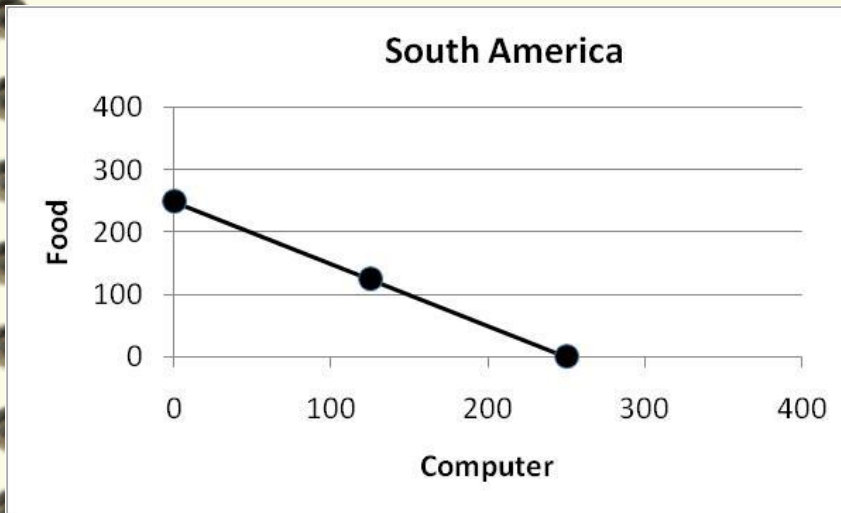
Some points on South America's PPF

Computers	Food
250	0
125	125
0	250

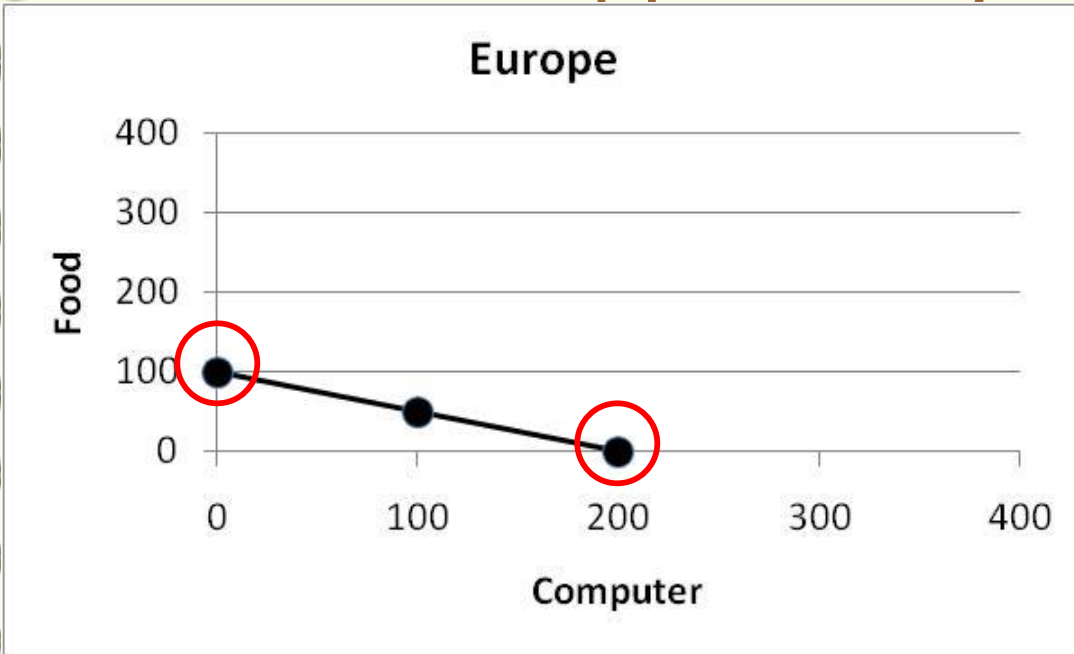
Some points on Europe's PPF

Computers	Food
200	0
100	50
0	100

They can still benefit from trade as long as opportunity costs are different.



Opportunity Costs



What is the opp. cost of 1 food in Europe?

Let's look at the extremes:

100

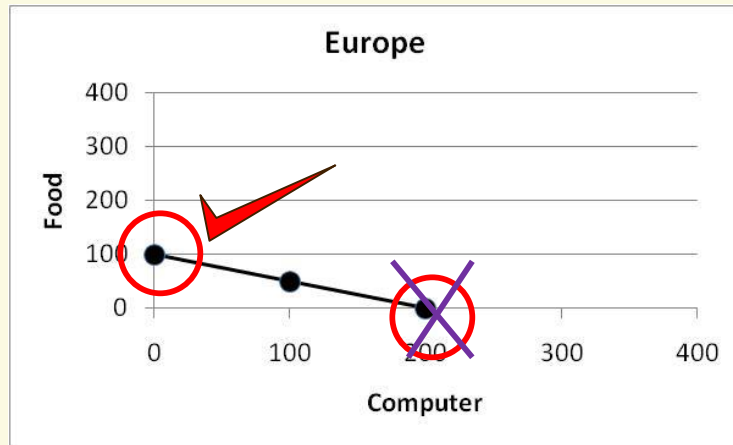


vs.

200



Opportunity Costs

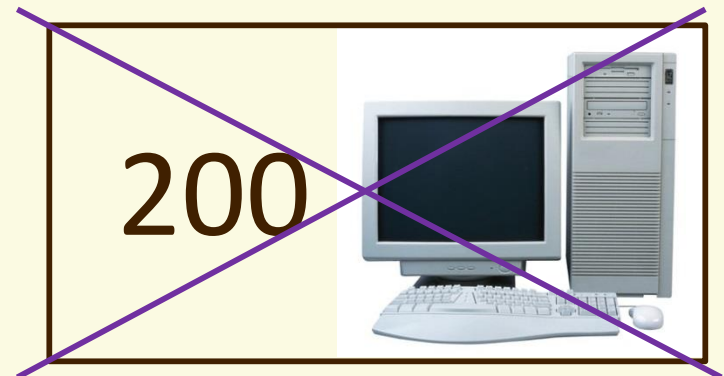


What is the opp. cost of 1 food in Europe?

📄 If you pick to produce 100 units of food ... you give up producing 200 computers.



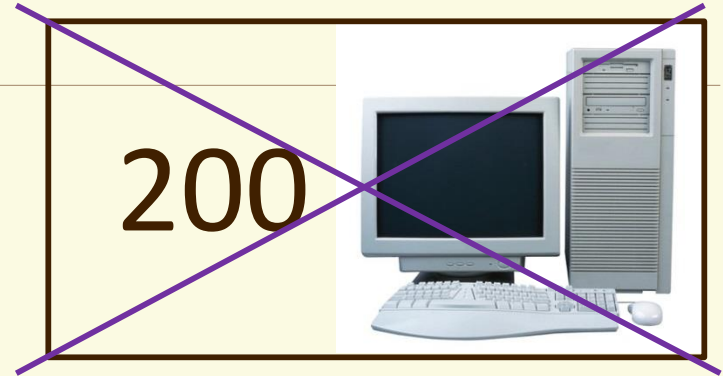
vs.



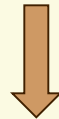
Opportunity Costs



vs.



So the opportunity cost of **100** units of food is **200** computers.



The opportunity cost of **1** unit of food, then is **2** computers.

Opportunity cost of a computer in Europe?

- Europe could produce a maximum of 200 computers. BUT to do so they have to give up 100 units of food.
- So, the cost of 200 computers is 100 units of food.
- Or, the opportunity cost of **1** computer is **0.5** of a unit of food.

So, what are opportunity costs in South America?


- 📄 South America could produce a maximum of 250 food units. BUT to do so they have to give up 250 units of computer.
- 📄 So, the cost of 250 units of food is 250 computers.
- 📄 Or, the opportunity cost of **1** food is **1** computer.

Opportunity cost of a computer in South America?

- 📄 South America could produce a maximum of 250 computers. BUT to do so they have to give up 250 units of food.
- 📄 So, the cost of 250 computers is 250 units of food.
- 📄 That means that the opportunity cost of each unit of **1** food is **1** computer.

So, what are opportunity costs?

	opportunity cost of 1 computer	opportunity cost of 1 unit of food
South America	1 Food	1 computer
Europe	0.5 Food	2 computers

 **Specialize in what your opportunity cost is lower!!!**

Absolute vs. Comparative Advantage

Absolute advantage The ability of an individual, firm, or country **to produce more** of a good or service than competitors **using the same** amount of **resources**.

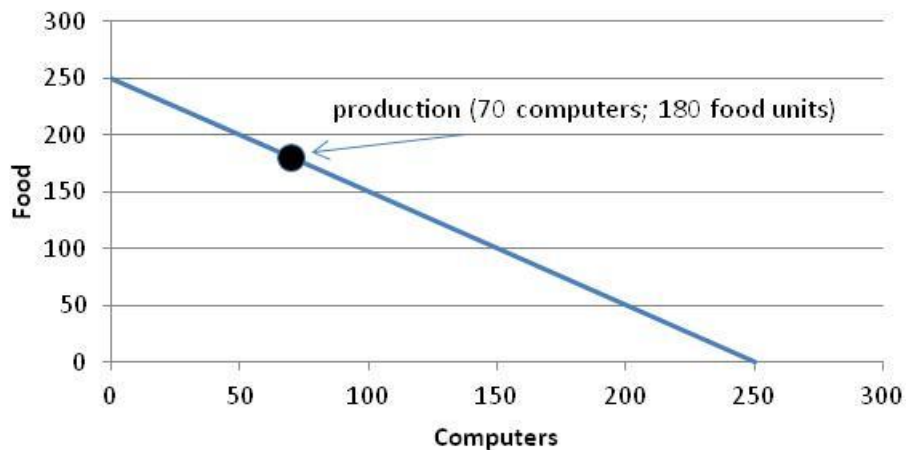
Comparative advantage The ability of an individual, firm, or country **to produce** a good or service **at a lower opportunity cost** than other producers.

TRADE

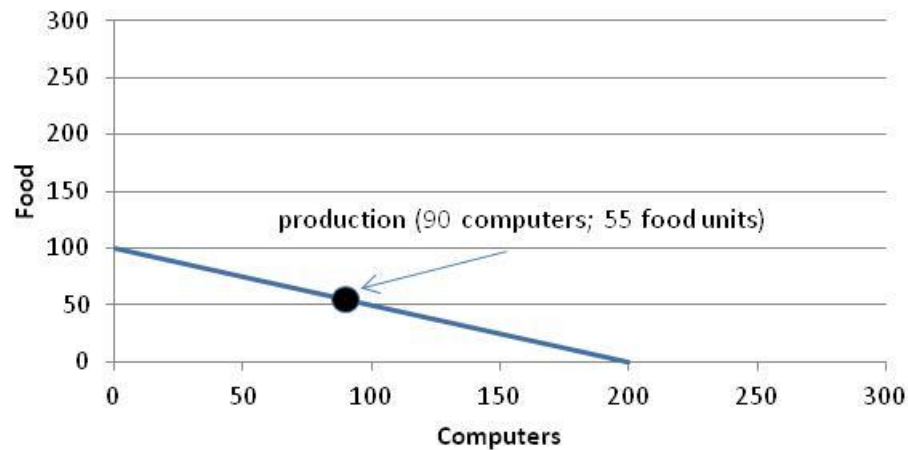
What if there is no trade?

		South America		Europe	
		Computer	Food	Computer	Food
NO Trade	Production	70	180	90	55
	Consumption	70	180	90	55

South America's PPC



Europe's PPC



TRADE

Let's introduce trade instead.

Specialize and trade 66 units of food for 99 computers.

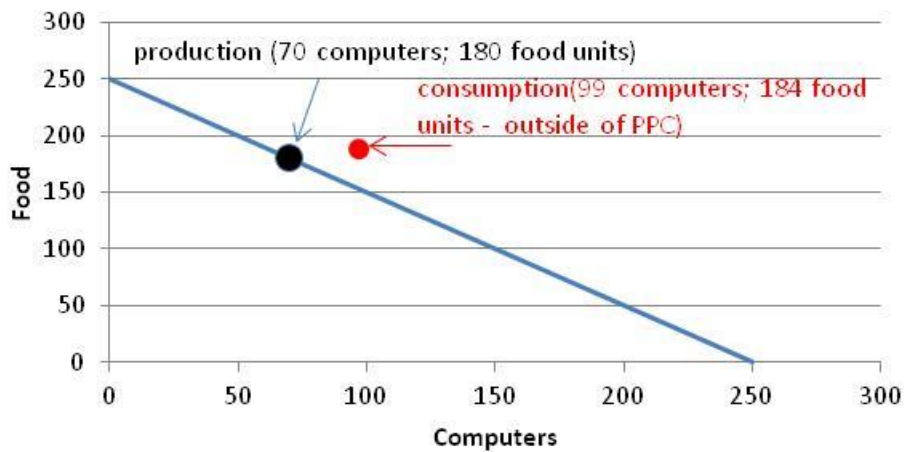
		South America		Europe	
		Computer	Food	Computer	Food
With Trade	Production	0	250	200	0
	Consumption	99	184	101	66

Gains from TRADE

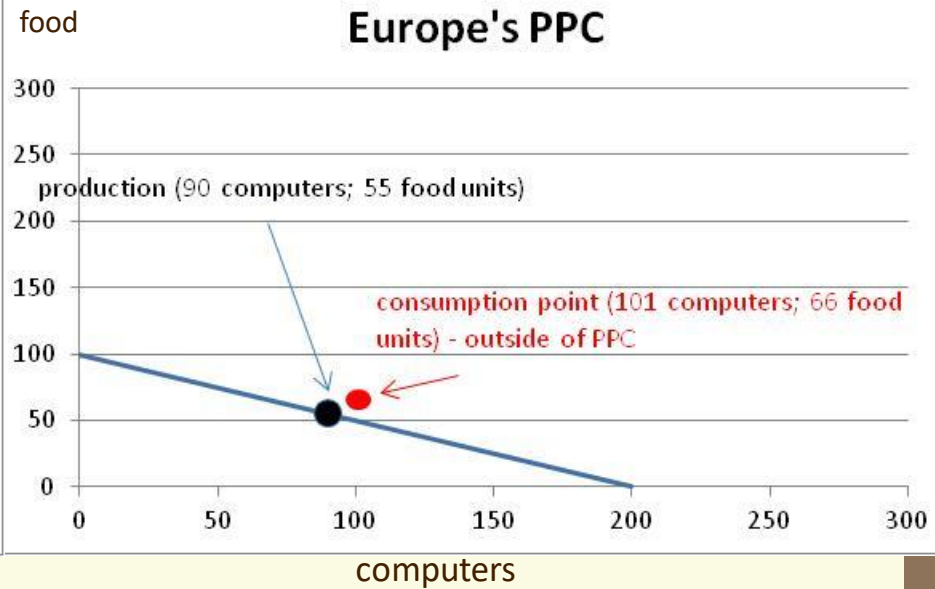
		South America		Europe	
		Computer	Food	Computer	Food
NO Trade	Production	70	180	90	55
	Consumption	70	180	90	55
		South America		Europe	
		Computer	Food	Computer	Food
With Trade	Production	0	250	200	0
	Consumption	99	184	101	66
Gain		29	4	11	11

Gains from TRADE with Graphs

South America's PPC



Europe's PPC



Trade

📄 You may now ask: “But where did you come up with that they should trade 66 food units for 99 computers?”

📄 Excellent question.

📄 66 Food units for 99 computers is equivalent to each 1 food for 1.5 computers, right? Right.

And that comes from the opportunity cost table.

	opportunity cost of 1 unit of food
South America	1 computer
Europe	2 computers

Trade will only make both countries better off if the ‘price’ in trade is between the two opp. costs.

Trade pattern

Items to be traded		
Food	for	Computers
1		1.5
2		3
3		4.5
...		...
10		15
20		30
30		45
...		...
66		99
100		150
133.33		200
150		225
170		255

The Principle of Comparative Advantage

- ◆ Comparative advantage and differences in opportunity costs are the basis for specialized production and trade.
- ◆ Whenever potential trading parties have **differences in opportunity costs**, they can each benefit from trade.

Should the United States trade with other countries?

- 📄 As we all know Americans enjoy a lot of goods produced by other countries.
- 📄 **Imports**: goods produced abroad and sold domestically.
- 📄 **Exports**: goods produced domestically and sold abroad.