Absolute & Comparative Advantage

Absolute & Comparative Advantage

- **Absolute advantage:** refers to the ability of a country to produce a good using fewer resources than another country

- **Comparative advantage:** arises when a country has a lower relative cost, or opportunity cost, in the production of a good than another country.

- **Theory of absolute advantage:** if countries specialize in and export the good in which they have an absolute advantage, the result is increased production and consumption in each country.

- **Theory of comparative advantage:** as long as opportunity costs in two or more countries differ, it is possible for all countries to gain from specialization and trade according to their comparative advantage.

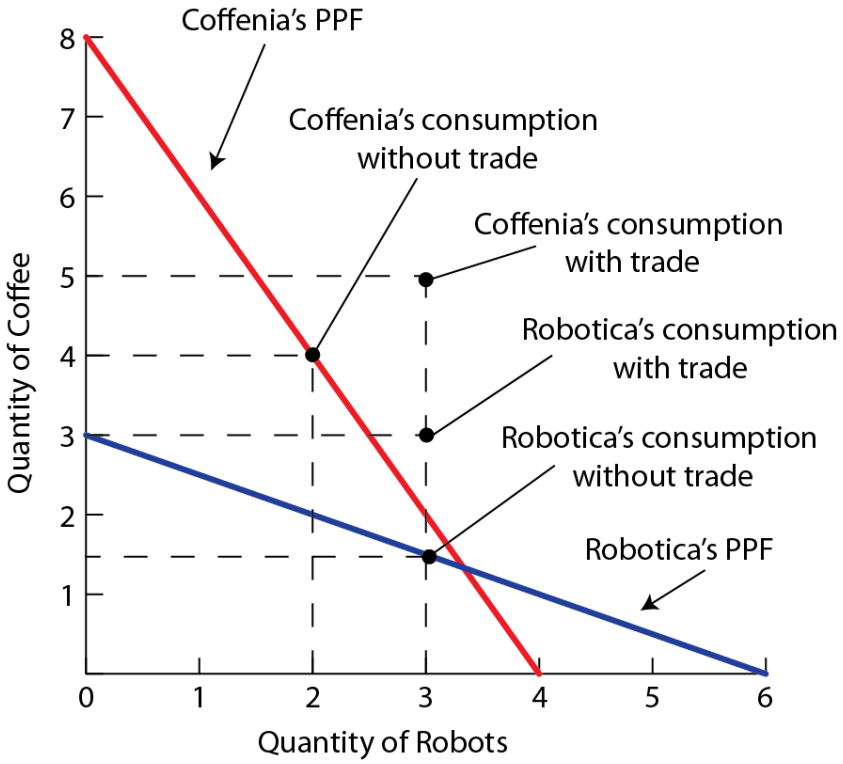
Law of Absolute Advantage

- **Example;** Consider a simple world economy of two countries Coffenia and Robotica, that produce coffee and robots
  - Under autarky, assume that each worker in Coffenia and Robotica allocate their time evenly between production of robots and coffee
  - Suppose that the countries would trade **1 coffee: 1 robot** and that 3 units are traded

	Coffee or Robots (Production)		**Autarky (Production)**		**Specialization (Production)**		**Specialization (Consumption)**	
	Coffee	Robots	Coffee	Robots	Coffee	Robots	Coffee	Robots
Coffenia	8	4	4	2	8	0	5	3
Robotica	3	6	1.5	3	0	6	3	3
Total	–	–	5.5	5	8	6	8	6

- Originally, both countries were producing on their PPF
  - Trade allows countries to consume at a point outside of their PPF
  - Specialization increases production by 2.5 units of coffee and 1 robot

- Specialization according to absolute advantage leads to a global reallocation of resources where production takes place by the most efficient producers



Law of Comparative Advantage

- **Example;** Consider a simple world economy of two countries Cottonia and Microchippia, producing cotton and microchips.

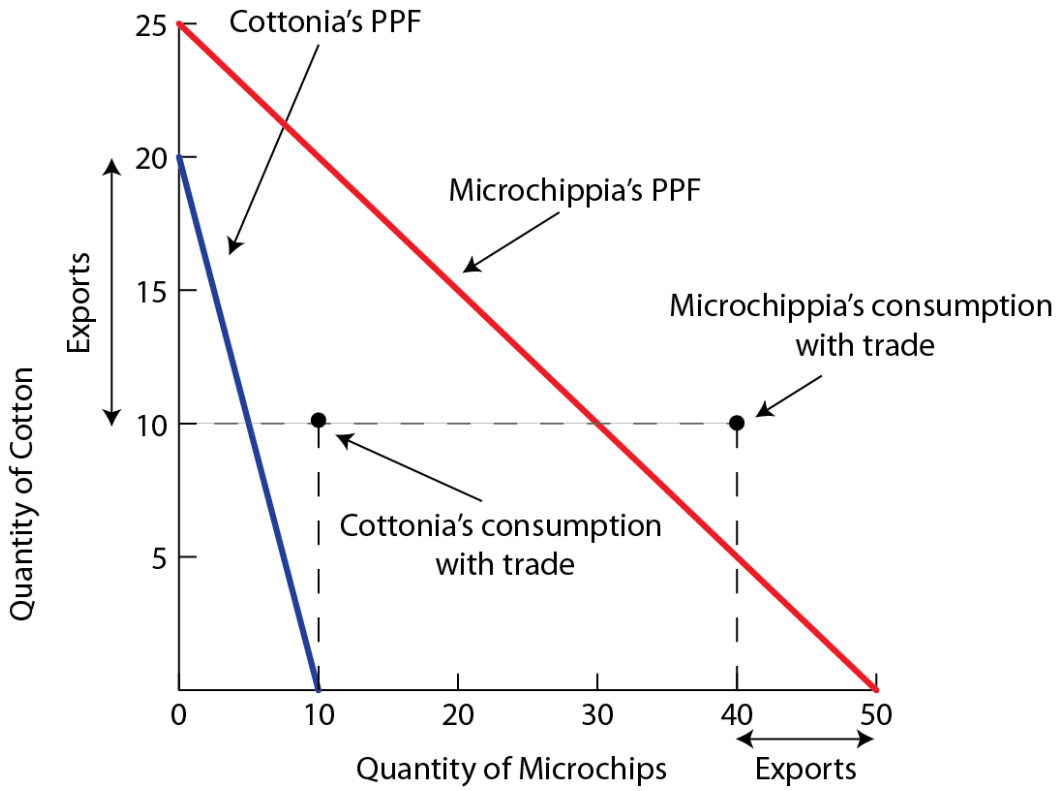
	Cotton or Microchips (Production)		Cotton (Opportunity Cost)	Microchips (Opportunity Cost)
	Cotton	Microchips		
Cottonia	20	10	$10 \div 20 = 0.5$	$20 \div 10 = 2$
Microchippia	25	50	$50 \div 25 = 2$	$25 \div 50 = 0.5$

- Suppose that the countries trade **1 cotton: 1 microchip** and that 10 units are traded

- Since Cottonia has a lower opportunity cost in the production of cotton the country would specialize in cotton production

  - Cottonia would export cotton and import microchips

- Microchippia has a lower opportunity cost in the production of microchips and would specialize in microchip production
    - Microchippia would export microchips and import cotton
- Trade allows both countries to consume at a point outside of their PPF



Summary

- The country that has the *flatter* PPF has a comparative advantage in the good measured on the horizontal axis
- The country that has the *steeper* PPF has a comparative advantage in the good measured on the vertical axis