

## LECTURE 16: ABSOLUTE AND COMPARATIVE ADVANTAGE

- I. Absolute Advantage
  - a. The nature of wealth
    - i. Jobs, gold, and money are not true wealth (though they are sometimes useful proxies).
    - ii. The key measurement is happiness.
  - b. Under free trade, the full benefits of specialization can be realized. In much the same way people divvy up their budgets to buy certain bundles of goods, agents use resources to produce certain bundles of products.
  - c. In some countries (or firms or factories), one product is cheaper to create than others. For example, consider five countries and their production possibilities for wine and chocolate.

<i>Country</i>	<i>Maximum Wine (barrels)</i>	<i>Maximum Chocolate (pounds)</i>
France	80	20
Germany	120	240
Switzerland	20	100
Spain	100	100
Italy	80	40

- d. Each of these numbers represents what a country could produce if it dedicated all of its resources to one particular product.
    - e. *Absolute advantage*—being able to produce more—is generally how people determine if someone should do something. Notice that Germany can produce more of either good: it has the absolute advantage in both. Does that mean it should do everything? Not necessarily. To understand why, we turn to comparative advantage.
- II. Comparative Advantage
  - a. Comparative advantage is based on the ever-present existence of opportunity costs.
    - i. It was first described by economist David Ricardo in *On the Principles of Political Economy and Taxation* in 1817.
  - b. The question then becomes: which nation sacrifices less? The nation with the lowest opportunity cost has a comparative advantage in producing that particular good.

- c. To find the comparative advantage, divide:

Opportunity cost of Product A

Product A

- i. Appreciate the math here. For every unit the country produces of A, it gives up such and such amount. By putting it in terms of each unit of Product A, the equation considers both how much the country can produce and what the country *could have* produced if it didn't make Product A.
- d. And so we find:

Product A	Country	Math	1 unit costs...
<i>Wine</i>	France	20/80	0.25 pounds of chocolate
	Germany	240/120	2.00 pounds of chocolate
	Switzerland	100/20	5.00 pounds of chocolate
	Spain	100/100	1.00 pound of chocolate
	Italy	40/80	0.50 pounds of chocolate
<i>Chocolate</i>	France	80/20	4.00 barrels of wine
	Germany	120/240	0.50 barrels of wine
	Switzerland	20/100	0.20 barrels of wine
	Spain	100/100	1.00 barrel of wine
	Italy	80/40	2.00 barrels of wine

- e. Because France's opportunity cost for making wine is lower (they sacrifice 0.25 pounds of chocolate, which is the cheapest wine that can be made among the five), France should specialize in wine.
- f. Who has the comparative advantage in chocolate?

III. Other applications

- a. Comparative advantage is one of the social science's most counter-intuitive ideas and it has many applications beyond international trade.
- b. *Work.* Good employees recognize the importance of comparative advantage, especially as a starting employee.
- i. Starting employees get assigned tasks. It's tempting to ask endless detailed questions about what exactly should be done. You want to do a good job, after all, and doesn't your boss know how she wants the task completed?

- ii. But even if your boss could complete the task faster than you and better than you, your boss has other thing to do that you can't or shouldn't. You have the comparative advantage in this task; by asking endless questions, you're likely to rob your boss of her valuable time. She'll get angry and annoyed with you; she wants you to handle it so she can focus on something else.
  - iii. This doesn't mean you should never ask questions but you should make sure you *have* to ask a question. It's best to try to figure out stuff on your own before you bother someone with more valuable time than you.
- c. *Firms*. New companies are best positioned when they minimize the number of tasks they do that's beyond their core business. Even if the founders are trained accountants or lawyers, it's better to pass that task off to someone else, sometimes another firm entirely, and focus on how the business brings in revenue.
- d. *Cities*. Just as countries should specialize, so should cities. It's no surprise that so many successful urban areas had a handful of industries they are known for. Specialization allows for a sizable pool of relevant talent and infrastructure; the city not only gets the comparative advantage but the absolute advantage, too.

#### IV. Limits

- a. Specialization is a wonderful but it can lead to problems. If you've taken macroeconomics with me, you should see a big one: a lack of diversification.
  - i. The Venezuelan government focused the country's economy on oil production. When the price of oil collapsed in 2014, they didn't have enough to money to buy all the things they import. As of 2017, the Venezuelan economy is still in shambles.
  - ii. Natural disasters, changing prices, and technological change are just some of the factors that can harm an overly-specialized economy.
- b. The extent of the market limits the effectiveness of specialization; there is only so much demand for any particular product. This is why large communities have a wider variety of products (ethnic grocery stores, masseurs, fertility clinics, kayaking clubs) while smaller communities don't have many services and other services are provided by the same person (e.g. the local doctor is also the county coroner).

- c. People who have specialized can also get bored; from a management perspective, it's not a bad idea to switch tasks around. What you lose in specialty gains, you can get in enthusiasm.