Absolute and Comparative Advantage

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The Terms

Actor: Firm, individual, nation, or other participant in the economy.

Opportunity Cost: The benefit that would have been received by taking the next best action instead of the action taken.

Absolute Advantage: The ability of an actor to produce more of a good or service than a competitor.

Comparative Advantage: The ability of an actor to produce a good or service for a lower opportunity cost than a competitor.

Autarky: A state of affairs in which countries do not trade, and only acquire goods or services from within.

Absolute Advantage within Businesses

Absolute advantage is easy to understand. It is producing more of a good or service for the input provided (money, labor hours, etc.)

Imagine you have $1000 to spend, and you want both DVDs of House M.D. and Star Wars Expanded Universe Novels. There are two stores in your area that sell them.

It becomes clear that Bookend Bookstore has an absolute advantage in selling both products, so you would only buy these products from Bookend.

Bookend Bookstore:

Star Wars Books: $25
House DVDs: $20

Mockbuster:
Star Wars Books: $10
House DVDs: $15

Absolute Advantage within Nations

Imagine you have two countries, California, and Mexico that make two goods, tequila, and wine. How much of each good a country can produce is listed off to the right.

You can see California can make more of everything and therefore has an absolute advantage in producing both goods.

Under Autarky, California might produce 50 bottles of wine and 25 bottles of tequila.

California:

100 bottles of Wine
OR
50 bottles of Tequila

Mexico:
20 bottles of Wine OR
40 bottles of Tequila

About Simplification

Quick Side Note: In the real world, stores sell more than two products, and countries produce more than two goods. We simplify these scenarios to two products to illustrate the concept. The concepts stay true as more goods are added.

Why Trade?

Some people make the mistaken assumption that since one actor has an absolute advantage over another actor in all goods, that the more productive actor can gain nothing from trading with the less productive actor.

This is incorrect. Let's look at our store scenario from earlier, some small changes.

Question: What is the most amount of DVDs and Books you can get if you have $500 at each store?

Bookend Books

Giftcard Amount: $500

Price of StarWars Book: $25

Price of House M.D. DVD: $20

MockBuster

Giftcard Amount: $500

Price of StarWars Book: $10

Price of House M.D. DVD: $15

Solution on the following slides

Answer to Corporate trade question Part 1

If you split your money down the middle and allocated half of each gift card to buying one product you get the following outcome.

Bookend Books:

Books = 250/25 = 10

DVDs = 250/20 = 12.5

MockBuster:

Books = 250/10 = 25

DVDs = 250/15 = 16.67

Books = 10 + 25 = 35
DVDs = 12.5 + 16.67 = 29.17

This is similar to a country without trade. We can, however, get more books and DVDs by following a different purchasing strategy.

Answer to Corporate Trade Question Part 2

If you buy more books at Mockbuster and more DVDs at Bookend Books, we can have more of both.

Bookend Books:

DVDs = 500/20 = 25

MockBuster:

Books = 410/10 = 41
DVDs = 90/15 = 6

Books = 41 + 0 = 41
DVDs = 25 + 6 = 31

Notice that by changing our purchasing strategy, we have more books and movies than otherwise? This works by taking advantage of the price differences in stores. A deeper understanding of the concept is on the next slide.

But Why does that work? AKA Comparative Advantage

It's all about opportunity cost.

At Bookend Books, the cost for DvDs is $20, and the cost for books is $25.

This makes the opportunity cost of a book 1.25 DvDs and the opportunity cost of a DvD 0.8 books.

At Mockbuster, the price of a DvD is $15 and the price of a book is $10.

This makes the opportunity cost of a book .67 DvDs and the opportunity cost of a DvD 1.5 books.

The opportunity cost for books is higher at Bookend books, so books should be bought at mockbuster. Meanwhile, opportunity cost for DvDs is higher at mockbuster, so DvDs should be bought at bookend books.

Question: What is the way to get the most wine and tequila from California and Mexico?

Obviously, California has an absolute advantage in both goods, but trade between them is still beneficial. To see how, let's calculate the comparative advantage between both countries.

California:

100 bottles of Wine OR
50 bottles of Tequila

Mexico:
20 bottles of Wine OR
40 bottles of Tequila

California:

Wine Costs .5 Tequila in opportunity cost
Tequila costs 2 Wine in opportunity cost

Mexico:
Wine costs 2 Tequila in opportunity cost
Tequila costs .5 Wine in opportunity cost

Autarky vs. Trade between Countries

In Autarky:

California makes 50 wine and 25 tequila.

Mexico makes 20 tequila and 10 wine.

In total, 60 wine and 35 tequila.

With Trade:

California makes 100 wine

Mexico makes 40 tequila

In total, 100 wine and 40 tequila.

Even though California has an absolute advantage in both goods, thanks to comparative advantage, both countries can have more of both goods when they specialize and trade.

Therefore, California should produce wine and export it to Mexico. Mexico should produce tequila and export it to California.

Further references

If you are still confused, here are more video resources.

Specialization and Trade: Crash Course Economics #2 YouTube Video

International Relations 101 (#27): Absolute Advantage and Trade YouTube Video

International Relations 101 (#28): Comparative Advantage and Trade YouTube Video