

International Economics

Part 1

Topics to be covered

For today,

- Absolute and Comparative Advantages
- Balance of Payment

For next class,

- Fixed and Floating Exchange Rates
- Law of One Price
- Purchasing Power Parity

Absolute and Comparative Adv.

- This theory supports free trade, stating that all countries gain from free trade.
- This may not be the case in reality!!!
- Absolute Advantage was developed by Adam Smith. It is the same as "Specialization".
- Comparative Advantage was developed by David Ricardo. It is about the opportunity cost of production.

Absolute and Comparative Adv.

- **Absolute Advantage** is the advantage of one country when it uses fewer resources to produce a good than the other country does.
- **Comparative Advantage** is the advantage of one country when that it produces a good at a lower opportunity cost (in terms of other goods that must be forgone) than the other country does.

Absolute Advantage (AA)

- Suppose that **NZ** and **AUS** each have 5 acres of land.
- 1 acre can give either wheat or cotton as follows:

	New Zealand (NZ)	Australia (AUS)
Wheat	6 units	4 units
Cotton	4 units	6 units

- NZ has AA in wheat production: given 1 acre of land, NZ can produce 6 units of wheat (4 units for AUS).
- AUS has AA in cotton production: given 1 acre of land, AUS can produce 6 units of cotton (4 units for NZ).

Absolute Advantage (AA)

- To simplify the analysis, suppose that both countries want to consume wheat and cotton equally.
- **Without trade,**
 - NZ can allocate 2 acres for wheat and 3 acres for cotton to enjoy 12 units of wheat and 12 units of cotton.
 - AUS can allocate 3 acres for wheat and 2 acres for cotton to enjoy 12 units of wheat and 12 units of cotton.

Absolute Advantage (AA)

- A country should “specialize” in producing the good that it has absolute advantage.
- Two countries with different specialization can trade, and both countries will benefit.
- **With trade,**
 - NZ can allocate 5 acres for wheat to produce 30 units of wheat.
 - AUS can allocate 5 acre for cotton to produce 30 units of cotton.
 - NZ and AUS can trade. Each country can enjoy 15 units of wheat and 15 units of cotton.

Comparative Advantage (CA)

- Suppose that **NZ** and **AUS** each have 5 acres of land.
- 1 acre can give either wheat or cotton as follows:

	New Zealand (NZ)	Australia (AUS)
Wheat	6 units	4 units
Cotton	4 units	2 units

- NZ has AA in wheat and cotton production.
- **However, each country has different comparative advantage, and BOTH can still benefit from trade.**
- We need to look at the opportunity cost.

Comparative Advantage (CA)

	New Zealand (NZ)	Australia (AUS)
Wheat (wh)	6 units	4 units
Cotton (ct)	4 units	2 units

Opportunity Cost

- **NZ:** to produce 1 wh, $\frac{4}{6}$ ct must be sacrificed.
- **NZ:** to produce 1 ct, $\frac{6}{4}$ wh must be sacrificed.
- **AUS:** to produce 1 wh, $\frac{2}{4}$ ct must be sacrificed.
- **AUS:** to produce 1 ct, $\frac{4}{2}$ wh must be sacrificed.

Comparative Advantage (CA)

Opportunity Cost of Wheat

- NZ: to produce 1 wh, $4/6$ ct must be sacrificed.
- **AUS**: to produce 1 wh, $2/4$ ct must be sacrificed.

Opportunity Cost of Cotton

- **NZ**: to produce 1 ct, $6/4$ wh must be sacrificed.
- AUS: to produce 1 ct, $4/2$ wh must be sacrificed.
- **AUS** has lower opportunity cost in **wheat** production.
- **NZ** has lower opportunity cost in **cotton** production.

Comparative Advantage (CA)

- AUS has lower opportunity cost in wheat production.
- NZ has lower opportunity cost in cotton production.
- Theory of CA suggests that NZ should export cotton while AUS should export wheat.
- Both countries will gain from trade.

Balance of Payment (BoP)

- BoP: a statement of all transactions made between agents in one country and the rest of the world over a defined period of time, such as a quarter or a year
- $\text{BoP} = \text{current account} + \text{capital account}$
- Sometimes (e.g. IMF),
 $\text{BoP} = \text{current account} + (\text{capital account} + \text{financial account})$

Current Account (CA)

- Current Account is the sum of
 - the balance of trade (exports minus imports),
 - factor income (earnings on foreign investments minus payments made to foreign investors),
 - and unilateral transfers (scholarship from abroad, foreign aid, donation to abroad, etc.).
- Balance of trade constitutes a large proportion of the current account.
- $X > M$ \Rightarrow trade surplus \Rightarrow CA surplus
- $X < M$ \Rightarrow trade deficit \Rightarrow CA deficit

Capital Account (KA)

- The capital account reflects net change in ownership of national assets.
- A surplus in the capital account means money is flowing into the country, and the inbound flows effectively represent borrowings or sales of domestic assets.
- A deficit in the capital account means money is flowing out of the country, and it suggests the nation is increasing its ownership of foreign assets.

BoP Identity

- In theory, $BoP = CA + KA = 0$.
- That is, if we have CA deficit, we must have KA surplus.

For example,

- The US buys 100\$ cars from Germany (thus, we have $X < M$: trade and CA deficit).
- Since the payment is made in \$, and the Germans do not spend this money, they will have to keep this money as deposits in the US banks (thus, we have KA surplus).

BoP Identity

- In reality, the BoP Identity does not hold.
- The reason is mainly due to unilateral transfers.

