Classical Trade Theories: Part I

Adam Smith and
Comparative Advantage

Comparative Advantage

• By mid-18th century, mercantilism out

• Adam Smith
  – Nations should act like households/individuals
  – Specialization allows all trading parties to gain
  – Amount of Specialization – depends on market size (ex. General Motors)
  – Specialization based on differences in ability

Specialization and Trade

• We are still producing on each PPF, but now have the ability to CONSUME outside the PPF of each country.

• But, how are we able to get the goods that the other country produces?

• DEFINITION The terms of trade tell us the rate at which a country can trade domestic products for imported products.
Comparative Advantage Example

- 2 people: Robinson Crusoe (RC), Gilligan (G)
- Each works 5 hours/day
- RC: can catch 5 fish or collect 25 coconuts
- G: 10 fish or 30 coconuts

PPF and Absolute Advantage

<table>
<thead>
<tr>
<th>Fish</th>
<th>Coconuts</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>25</td>
</tr>
<tr>
<td>10</td>
<td>30</td>
</tr>
</tbody>
</table>

Gilligan has the **absolute advantage** in both goods since given the same resources, he can catch more fish and collect more coconuts than RC.

Opportunity Cost and Terms of Trade

- This is an opportunity cost chart for RC and G

<table>
<thead>
<tr>
<th>1 fish</th>
<th>1 coconut</th>
</tr>
</thead>
<tbody>
<tr>
<td>RC</td>
<td>5 coconuts</td>
</tr>
<tr>
<td>Gilligan</td>
<td>3 coconuts</td>
</tr>
</tbody>
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Terms of Trade

So what would be a good terms of trade (fish per coconut?)
Gains from Trade

Total Production is 10 fish and 25 coconuts
This is greater than either person could do themselves

Gains from Trade

In autarky, Gilligan’s opportunity cost is determined by the PPF
With trade, Gilligan’s opportunity cost is now this “trade” line
Note that this allows Gilligan to consume more than before

Terms of Trade

Another example:
• Japan - can produce 10 computers for every 1 tractor
• China - can produce 4 tractors for every 1 computer
Terms of Trade

Note:
1) There can be more than 1 terms of trade that will benefit both countries.
2) Even if you have an absolute advantage, there can still be gains from trade - trade is determined by specialization and comparative advantage, NOT absolute advantage.

More Examples
• Canada: Can produce 50 cars or 100 bushels of corn
• United States: 200 cars or 200 bushels of corn
1) Draw the PPFs for each country.
2) Determine the domestic opportunity costs for each country.
3) Determine who has the absolute and comparative advantages for each good.
4) Find a terms of trade (international opportunity cost) that allows both countries to benefit from trade.