Outline

International Trade
World Trading Patterns
Comparative Advantage
Sources of Comparative Advantage
## World Trading Patterns

We will discuss when we consider *Global Economic History*. 
Comparative Advantage

- Comparative advantage central to Global Economic History.
- Trade expands production possibility frontier.
- General Consensus: Gains from Trade $\Rightarrow$ both parties better off.
Notion is Intuitive

Key: Distinguish between absolute and relative advantage.

Relative or comparative advantage is the critical issue.

Nation always has a comparative advantage, may or may not have an absolute advantage.

Comparative advantage “simple and subtle at the same time.”
Naked and Afraid

Textbook basic example in terms of countries N(orth) and S(outh). Applies to individuals as well.

- Robinson Crusoe like.
- Two survivalists dropped off in remote, primitive location; survive 21 days.
- Example: Maldivian Island (265 mi. s.w. of India).
- Left naked and alone, find other survivalist of opposite sex.
Jonathan and Alison

Assume labor only input into production. (Reasonable)

Many skills required to survive:

▶ plant identification
▶ water sourcing
▶ hunting
▶ (spear) fishing
▶ Shelter building
▶ fire making and control

We will assume only two skills: fishing and hunting.
Production Technology

**Table:** Production Technologies Time Required to Produce a Meal

<table>
<thead>
<tr>
<th>Labor Required</th>
<th>Fishing</th>
<th>Hunting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alison</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Jonathon</td>
<td>8</td>
<td>6</td>
</tr>
</tbody>
</table>
Autarky means no trade. Each person eats what they kill.

(Relative) Price of Meat to fish:
  - Alison 4 to 3 or 1.33
  - Jonathan 6 to 8 or 0.75

Alison takes relatively more time to obtain meat than fish; hence relative price exceeds one. Opposite true for Jonathan.
Trading Between A & J

Key trade is voluntary. ⇒ Relative price of meat to fish must be between 1.33 and 0.75 (i.e., prices of Alison and Jonathan).

If price above 1.33 Alison will self produce no trade, while if price falls below 0.75, Jonathan will not trade.

Alison exports fish while Jonathan exports meat.
David Ricardo

This simple example is based on David Ricardo’s theory of comparative advantage. Ray: the Ricardian Model.

Important points:

- **Relative** effort determines pattern of exchange. Notice that Alison has an absolute advantage (she can produce more of each good fish, meat in less time than can Jonathan).

- **Gains from trade.**

Theory gives us a range price of meat to fish of (0.75, 1.33) for trade to occur. Without more information can not determine unique price.

Depends on preferences and bargaining power.
Sources of Comparative Advantage

- Technology
- Factor Endowments
- Increasing returns to scale
- Preferences
Technology

The example used only a single input (labor) and present two alternative technologies (his and hers).

Can think of technology as using more than one factor input, and there could be a continuum of technologies.

Comparative advantage can arise from more than just “know how.”
Endowments of factors differ across countries.

Heckscher–Ohlin: In model with two–goods: Export the good with the intensive factor, and import the good of the other good. US exports good with large component of high–skilled labor (human capital) and import goods intensive in low–skill labor.
Think of two goods: textiles (labor intensive) and tractors (capital intensive).

Have two countries, say US which has a large endowment of capital, and India which has a large endowment of labor.

Graph isoquants for US, India. Next step is to derive the production possibility frontier for each country.
Production Possibility: US
PPF: India

Symmetric, but proportions of LHS box change to reflect smaller endowment of capital and larger endowment of people. Production possibility frontier has higher slope.
Assume preferences are similar in US and India.

Production Possibility Frontier shows the physical tradeoff between textiles and tractors. (MRTS)

Indifference map: consumers’ willingness to tradeoff between textiles and tractors. (MRS)

Equilibrium: rates of exchange equal. $MRS=MRTS$
Equilibrium with Trade

Heckscher–Ohlin: In model with two–goods: Export the good with the intensive factor, and import the good of the other good. Figure 16.9: US export Tractors to India; India export textiles to US.
Heckscher–Ohlin model is a workhorse of International Trade Theory.

Unmodified: predicts large volume of trade between developed and developing countries, and lower volume of trade among developed countries.

Not exactly what we observe as current trade patterns: see large trade flows among developed countries.
Preferences

Trade also driven by systematically varying preferences.

Different environments.

Same technologies, factor endowment, different preferences opens possibilities of gain to trade.

Now US export textiles and imports tractors.
Example Contrived?

Not really. One critical difference: per capita incomes.
Age composition of populations may be different.
Not that we view people as different, but may be at different locations of preference map.
Demand for Varieties

Preference variation may **dampen** trade.

If rich countries prefer relatively more of the good in which have comp. adv. in production will dampen trade between rich and poor countries.

As country grows richer, increase in the demand for **varieties** of good. This makes trade is larger among **similar countries**.

Think of differences in preferences for tractors: John Deere, IH, Ford, etc.

Countries import and export given broad commodity (tractors, cars, wine, beer).
Economies of Scale

Read on your own.

Introduces a razor’s edge argument: two industries, each characterized by increasing returns to scale.

Even if technology the same to all countries, countries may specialize in the production of one good.

His example: Differentiated products Boeing 707 versus Airbus 380.

Gives rise to Interindustry trade.

Trade in similar products is likely to take place.