STRT 466
Session #11: Trade I

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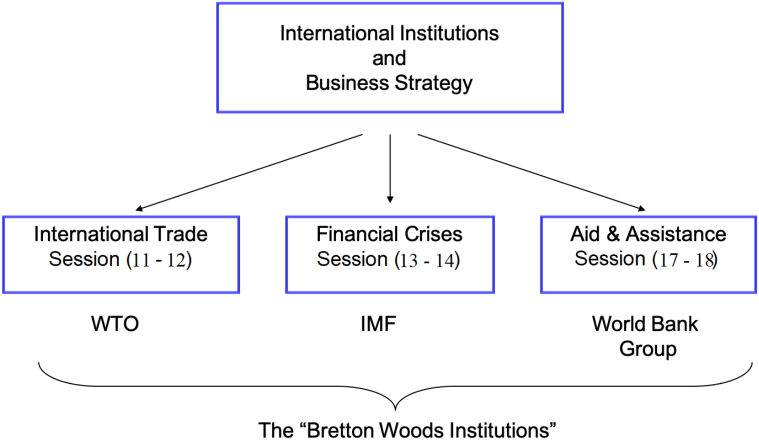
Winter 2023

Part 2: Sessions 11 – 19



Fragile and Conflict States: Session #15 and #16

Entrepreneurship: Session # 19

International Trade and the Non-Market Perspective

1. Why Trade is Good
2. Common Misconceptions About Trade
3. Real Reasons Trade might be Bad
4. National Trade Strategies
5. Globalization at a Crossroads

Why Trade is Good: A Canonical Model

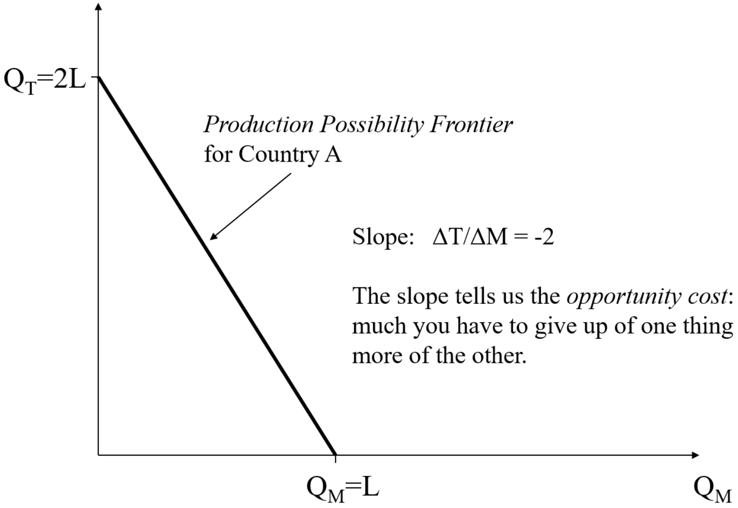
- Imagine a world with two goods:
  - Textiles (T)
  - Microprocessors (M)

- Labor is the only input in production

- Country A has a total labor supply of L who can produce textiles and/or microprocessors with the following technologies:
  - $Q_T = 2L_T$
  - $Q_M = L_M$

- Moving one unit of labor from microprocessors to textile production means 1 less microprocessor and 2 more textiles

The Production Possibility Frontier



Prices and Wages

- Competitive firms earn *zero* profits
  - Microprocessor firms:

$$\text{Profit}_M = P_M * Q_M - w * L_M = 0$$

$\Rightarrow$ revenue $\Rightarrow$ cost

- *Recall*: $Q_M = L_M$ in Country A

$$\Rightarrow w = P_m$$

- The wage equals the price of microprocessors in Country A

Prices and Wages

- Similarly for textile firms:

$$Profit_T = P_T * Q_T - w * L_T = 0$$

$$Recall\text{: } Q_T = 2L_T \text{ in Country A}$$

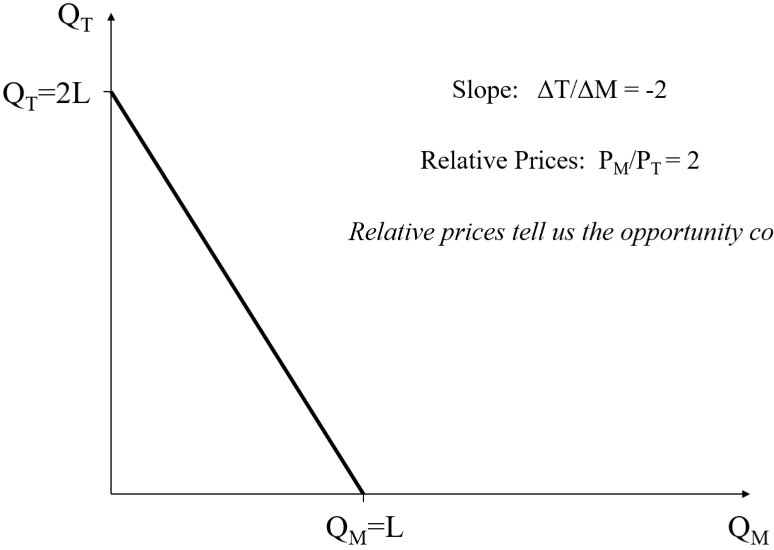
$$\Rightarrow w = 2P_T$$

- The wage is twice the price of textiles in Country A

- If workers can move freely between textile and microprocessor production, then wage in both sectors will be equal, so

$$w = 2P_T \quad \& \quad w = P_M \implies \frac{P_M}{P_T} = 2$$

The Production Possibility Frontier



Slope: $\Delta T/\Delta M = -2$

Relative Prices: $P_M/P_T = 2$

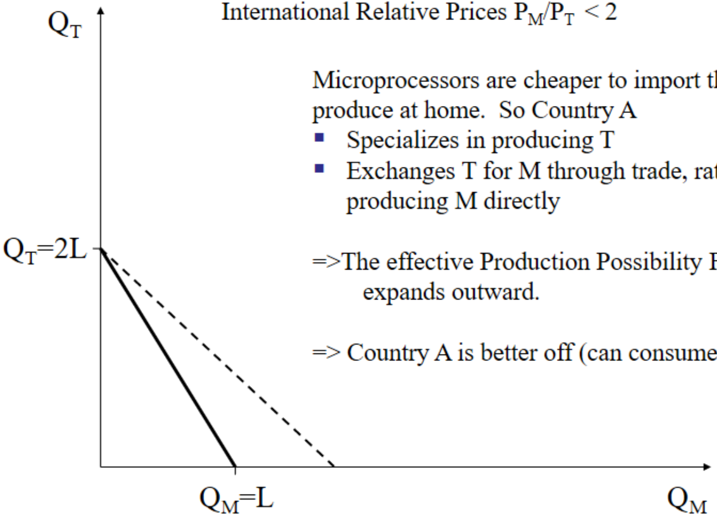
Relative prices tell us the opportunity cost

The Gains from Trade

- If Country A does not trade
  - Consumption is limited by domestic production
  - By reallocating its labor supply, it can produce more or less textiles (in exchange for microprocessors) to find its most preferred mix
  - The cost of this reallocation (the opportunity cost) is simply the relative prices of production domestically
- But if Country A does trade...

The Gains from Trade: Example #1

International Relative Prices $P_M/P_T < 2$



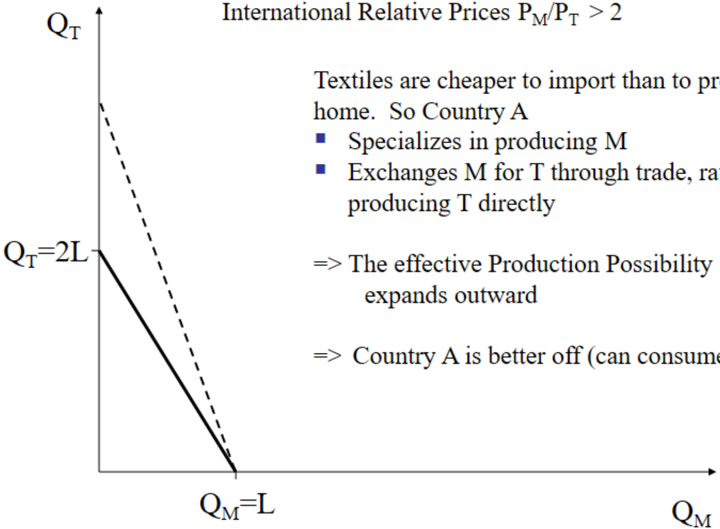
Microprocessors are cheaper to import than to produce at home. So Country A

- Specializes in producing T
- Exchanges T for M through trade, rather than producing M directly

=>The effective Production Possibility Frontier expands outward.

=> Country A is better off (can consume more)

The Gains from Trade: Example #2



International Relative Prices $P_M/P_T > 2$

Textiles are cheaper to import than to produce at home. So Country A

- Specializes in producing M
- Exchanges M for T through trade, rather than producing T directly

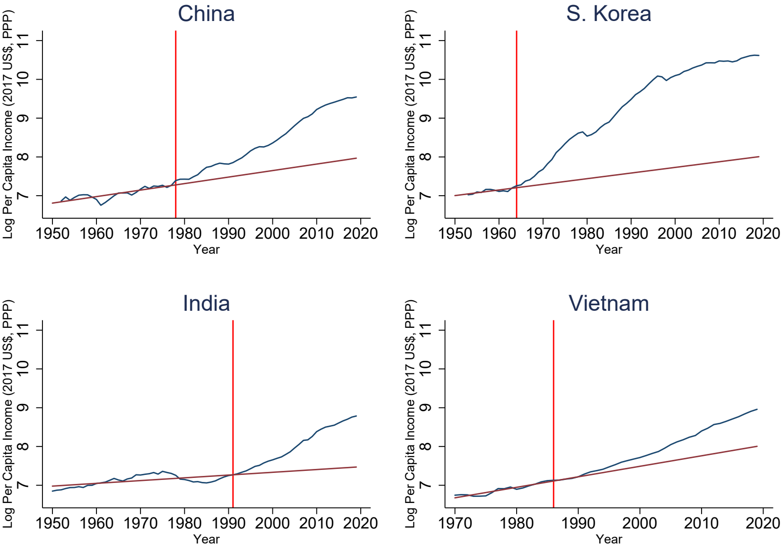
=> The effective Production Possibility Frontier expands outward

=> Country A is better off (can consume more)

The Gains from Trade

- Whatever the prices on the world market, a country's consumption possibilities expand through trade!
- Think of trade as a *substitute for having to produce it yourself*
  - By trading for some goods, you can specialize in the things you are relatively good at producing
- That's all there is to it!
- What is the evidence?

Evidence: Do Open Countries Grow Faster?



Blue line denotes log per-capita income (PPP) and purple line is trend projection using pre-reform period.

Evidence: Do Open Countries Grow Faster?

- Jones and Olken (2008) "The Anatomy of Start-Stop Growth"
  - Examine largest growth accelerations since *WWII*
  - Find that trade share of GDP $\uparrow$ by 25% on average (which is huge; e.g., U.S. trade share is currently $\approx$ 27%)
  - But causation here is unclear...

- Feyrer (2009, 2019) uses clever "natural experiments" that change trade costs quasi-randomly between trading partners
  - e.g. Suez canal closure (1967) and opening (1975)
  - Finding:

a 1% increase in a country's trade volume
$\Rightarrow$ a 0.25% to 0.50% increase in per-capita income

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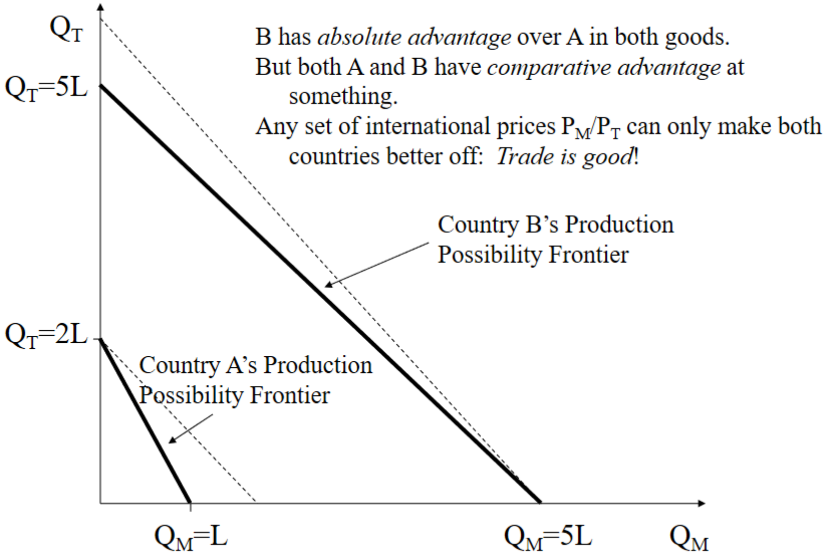
Comparative Advantage vs. Absolute Advantage

- You specialize in what you are relatively good at producing. What does it mean to be relatively good at something?
  - **Absolute advantage**: you are better at producing X than someone else is at producing X
  - **Comparative advantage**: your opportunity cost of producing X (rather than Y) is lower than others' opportunity cost of producing X (rather than Y)
- The pattern of trade is driven by comparative advantage

Comparative Advantage vs. Absolute Advantage



Absolute Advantage: Common Fallacies

1. "Trade is bad for rich countries, because workers in rich countries can't possibly compete with low-wage workers in poor countries."

2. "Trade is bad for poor countries, because firms in poor countries can't successfully compete with highly-productive firms in rich countries."

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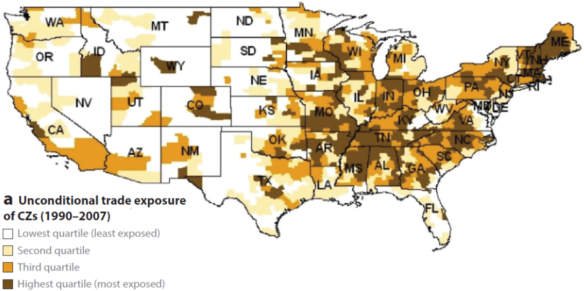
Reason #1: Winners and Losers **within** a Country

- Model assumed labor moves freely between sectors
  - Reality: short-term dislocations

    $\Rightarrow$ some people lose jobs
- General issue: *Specific Factors* some inputs to production can't be easily reassigned
  - e.g. specialized workers
  - e.g. farmland
- Bottom line:
  - net gain to society
  - but costly to some

Empirical evidence: Autor et al. (2015, 2021)

- US manufacturing workers exposure to China trade



Source: Autor, Dorn, Hanson, 2016 (Figure 6a).

- Regions most exposed to import competition experienced decade-long decline in employment, with out-migration (only) among younger workers (25-39) and foreign-born.

Reason #2: Good and Bad Industries for Growth

- **Learning-by-Doing**: some industries may provide better growth opportunities. Countries specializing in "simple" industries, may never improve their productivity much.

- Countries starting out with comparative advantage in farming, mining, etc., may be trapped in these industries forever.

- Evidence?

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Protectionism I: Limit Pain for Those Who Lose

Protectionist policies

Tariffs, quotas, subsidies
+ subtler forms (e.g. product regulation, rules of origin)

- Alternative response #1: Compensation?
  - free trade leads to a net gain for a country as a whole, so should be able to compensate vested interests and still have everyone be better off
  - but compensation is tricky in practice
- Alternative response #2: Deeper institutional change
  - Reduce influence of vested interests over trade policy
    - Worldwide: World Trade Organization (WTO)

Protectionism II: Encourage Good Industries for Growth

1. "Import Substitution Industrialization" (ISI): hold foreign firms OUT
    - Idea: potential comparative advantage in an industry, but difficult for "infant industry" to compete internationally at first
    - Policy: protect infant industries until they "grow up"
2. Technology policy and FDI: invite foreign firms IN
    - Idea: High-tech investment from abroad may create local spillovers for domestic workers and firms
    - Policy: (1) subsidize multinational entry (e.g. tax breaks); (2) forced JVs

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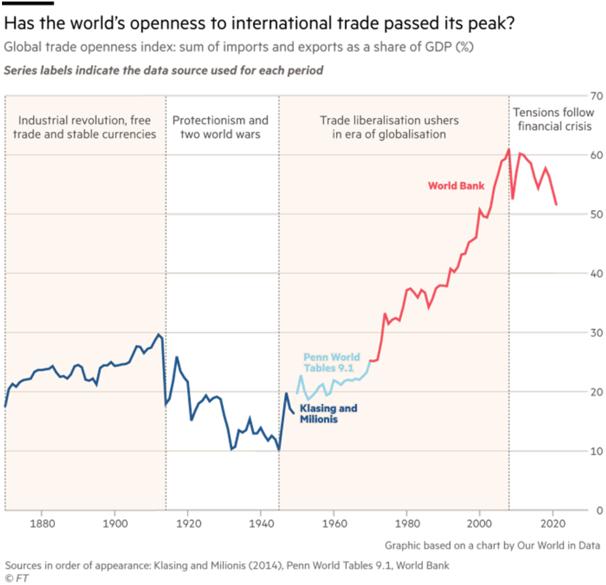
World Trade, World Wars, and Great Depression



Globalization & The Bretton Woods Institution

- At close of World War II, view that war partly caused by economic desperation of the Great Depression, which was exacerbated by terrible international economic coordination and trade disintegration through the 1930s.

- **Result**: A "three-legged stool" of international institutions negotiated in 1944 to support international economic prosperity
  - International Monetary Fund (IMF)
  - World Bank
  - International Trade Organization (ITO)

- ITO never ratified, but instead we got the General Agreement on Tariffs and Trade (GATT) and eventually the World Trade Organization (WTO) in 1995.

Other Benefits of International Trade?

- Arguments for trade go beyond net economic benefits

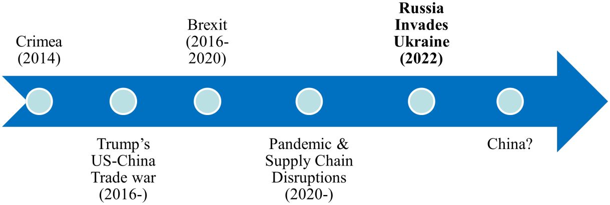
  1. Peace. Economic ties may help prevent war.
     - **Evidence.** Mixed. Bilateral trade preserves bilateral peace. But multilateral trade predicts more bilateral war (Martin et al., 2008).

  2. Democracy. Economic gains may promote democratization.
     - **Evidence.** Weak (Acemoglu et al., 2008).

- Yet these peace and democracy ideas are very influential. And with "end of history" in the early 1990s, globalization felt like a win on these other dimensions.

International Trade: Now What?

- WTO ascension for China (2001) and Russia (2012)
- But enormous stresses have been building...



- **Key questions now:**
  - What does Russia mean for China-US-EU relationships?
  - What path will China choose?

END