Pluses and Perils of Globalization for Large and Small Countries

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Lecture 1

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On the Perils of Trade

- We’ve always known, and taught, that there are costs partially offsetting the gains from trade.
- We’ve usually only acknowledged the adjustment costs of moving from less trade to more trade.
- I will look here at the costs within a trade equilibrium due to possible shocks.
Outline

• Lessons from basic trade theory
• Lessons from more general theories
• How globalization has mattered
• Limits on both pluses and perils
• The special case of banking
The Basic Ricardian Model

• The role of country size in the 2-good, 2-country model
  – If countries are of similar size
    • Both specialize
    • Both gain from trade
  – If one is small and the other large
    • Small country specializes and gains
    • Large country does neither
If countries are of similar size
  - Each can produce what the other needs of one good.
  - Both completely specialize.
  - Both gain from imports that are cheaper than they could have produced themselves.
Similar Size, Autarky

\[
\text{Production} = \text{Consumption}
\]
Similar Size, Free Trade
Similar Size, Free Trade

Production Specialization
Similar Size, Free Trade

Gain from Trade

Production Specialization
Similar Size, Free Trade

Gain from Trade

But note also the Adjustment Cost
• But if countries are very different in size
  – The small country cannot produce what the large country needs of any good.
  – Therefore the large country must produce both goods, while small country specializes
  – Small country gains from cheaper imports
  – Large country does not gain from trade, as it’s prices continue to equal its own costs.
Different Sizes, Free Trade
Different Sizes, Free Trade
Different Sizes, Free Trade

Production Diversified

No Gain from Trade

Gain from Trade

Production Specialization
The Basic Ricardian Model

• So the small country gains most from trade.
• That’s the “plus”
• What is the “peril”?
• Conditions may change
  – Internally
  – Externally
• **Internal shock**
  – Suppose your export industry becomes suddenly **less** productive
  • E.g.,
    – Crop failure
    – Labor strife
  • Then a small country loses more than if it had been diversified.
Small Country, Internal Shock (productivity change: fall in X sector)
Small Country, Internal Shock (productivity change: fall in X sector)

Also: For X-producers, loss is offset in autarky by rise in price. That doesn’t happen with free trade.
Large Country, Internal Shock (productivity change: fall in Y sector)

For Y-producers in large country, loss is offset both in autarky and free trade by rise in price.

Consumer loss is shared with small country.
• External shock – Small country
  – Suppose a small country’s export industry becomes suddenly less lucrative
  • E.g.,
    – Drop in world price
    – Increased competition from other countries
  • Then you lose.
  • And you would not have lost at all if you had not exported.
  • (But what you lose is only what you have gained from trade.)
Small Country, External Shock
(price change: fall in world price of X)

Note: Autarky would have insulated country from this loss, but only by depriving it of the gain from trade.
• External shock – Large country
  – A large country is too large to have an external shock
  – But that’s an extreme feature of this simple model.
The Basic Ricardian Model

• Thus for a small country:
  – The Plus of Globalization:
    • Gains from trade
  – The Peril of Globalization
    • Greater vulnerability to shocks
  – Both are largest for small countries
    • Globalization leads small countries to “put all of their eggs in one basket”

• For a large country, except for the mix of outputs, it’s the same as autarky
Lessons from More General and Modern Trade Theories

• Models of Comparative Advantage
  • Many-good Ricardian
  • Heckscher-Ohlin
  – Small countries specialize more (i.e., produce fewer goods) than large countries
  – They gain more from trade, because they shut down more weak industries
  – As in simple model, they are more vulnerable to shocks as a result
Lessons from More General and Modern Trade Theories

• New Trade Theory (Krugman, etc.)
  – In Autarky, small countries suffer from
    • Small scale in increasing-returns-to-scale (IRS) sectors
    • Few firms, hence imperfect competition
    • Little variety
  – Opening to trade, small countries can gain in each of these dimensions, which large countries already enjoyed
Lessons from More General and Modern Trade Theories

• New Trade Theory (Krugman, etc.)
  – Perils
    • To benefit from scale, they must specialize. Vulnerability is the same as in other models
    • With imperfect competition, larger countries are more likely to have market power, hurting small countries
How Globalization Matters

• Globalization means
  – Reduced barriers to trade
  – Fragmentation
  – Extension of trade to markets than goods:
    • Services
    • Finance
How Globalization Matters

• Reduced barriers to trade
  – This just moves us closer to the “free trade” analyzed above.
  – Thus it increases both
    • Pluses: gains from trade
    • Perils: vulnerability to shocks
How Globalization Matters

• Fragmentation
  – This is the ability to “fragment” the “value chain” – doing different parts of a production process in different countries. Many names (at least 20)
    • “Fragmentation”
    • “Offshoring”
    • “Trade in tasks”
How Globalization Matters

• Fragmentation
  – Expands
    • The number of things (goods, tasks, etc.) that can be traded, and thus
    • The scope for trade, gains from trade, and specialization
    • Both the Pluses and the Perils
How Globalization Matters

- Fragmentation illustration in Ricardian Model (See Deardorff *NAJEF* 1998)
  - Suppose that good X is made from several parts. Assume the parts
    - Can be traded
    - Some can be produced more cheaply abroad
  - Then trade in parts allows a given labor force to produce more X:
Extra Gain from Fragmentation

Fragmentation within the X industry permits country to produce more X by having part of its production done abroad.
How Globalization Matters

• Fragmentation
  – But note the added perils:
    • Country is even more specialized, doing only a part, not all, of a production process
    • Vulnerable to price changes for the other parts as well as that of the final good
    • Vulnerable to supply-chain disruptions
How Globalization Matters

• Fragmentation
  – Another benefit (due to my student, Rishi Sharma)
    • In many industries IRS arise from increasing the number of varieties of inputs that are available.
    • In such industries, small countries cannot be low-cost, as they cannot support many varieties
    • Globalization allows them to
      – Produce a few varieties for the world market
      – Access many varieties for their own production
      – Thus gain the advantages of IRS.
  • But here again they both specialize and are vulnerable to shocks from world markets
Limits

• There are limits to both the pluses and the perils
  – Country size (labor force in the Ricardian model) limits how much you can produce of the export good, and thus your vulnerability
  – In practice, more than half of any economy is non-traded, which limits the size of the export sector even further
Limits

- Thus with trade only in goods, the Perils are limited by the value of the factors (labor, etc.) employed in producing for export.
  - The worst that can happen is that the market disappears and all of those resources become unemployed.
  - That’s bad, of course, but it could be worse, as we’ll now see.
Banking

• In most industries, the value at risk is the value of what you produce.

• In banking, the value at risk can be much larger
  – Banking consists of simultaneous borrowing and lending
  – The labor required depends on the number of transactions, not on their monetary size
  – A given labor force engaged in banking will have assets and liabilities worth many times the value of the labor.
Banking

• What are the limits?
  – Not the labor force, as in the production of goods.
  – Banking is limited by the size of the market from which assets and liabilities can be drawn.
Banking

• In a small country
  – Without trade in financial services, the country’s market, and therefore its banks, are small.
  – With trade in financial services, banks in even a small country may be limited only by the size of the world market.
  – Thus banks can become much larger than their countries
    • The plus: When times are good, they make huge profits
Banking

• The Peril of banks in a small country
  – They become
    • Too big to fail
  But also
    • Too big (for their governments) to save
  – Result: The country fails
    • Iceland
    • Greece (?)
    • Cyprus
    • …
Conclusion

• Trade economists are accustomed to acknowledging that there are both winners and losers from trade.
• We routinely argue that the gains are larger than the losses, and therefore we opt for free trade, hoping (in vain) that losers will be compensated by winners.
Conclusion

• We need also to acknowledge that the gains from trade (the pluses) are accompanied by perils, when countries experience shocks.
• We have not done much to assess whether the pluses outweigh the perils. We should.
Conclusion

• I’m inclined to believe (without much basis, I admit)
  – That the pluses of trade in goods are large enough to justify our living with the perils
  – And that the same is true of trade in most services, including “trade in tasks”
Conclusion

• But I have doubts about the balance of pluses and perils when it comes to international banks, especially when based in small countries.