

# Pluses and Perils of Globalization for Large and Small Countries

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Lecture 1

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February 29, 2016

# 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

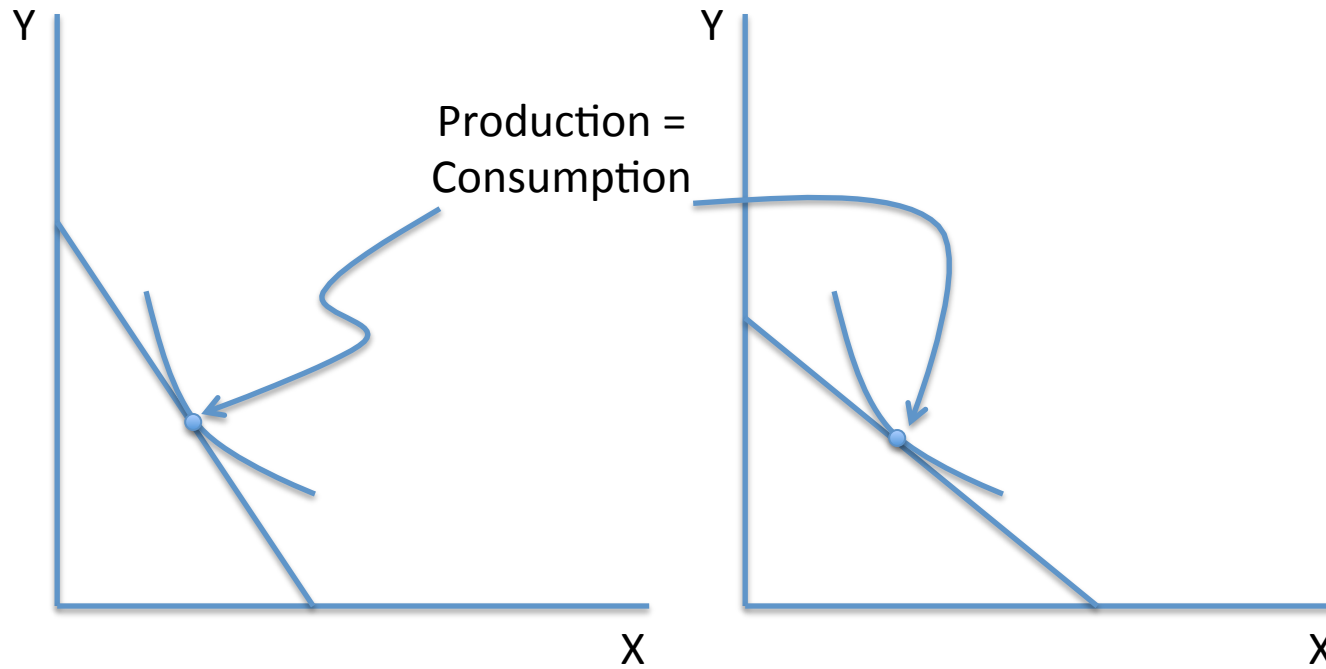
- Lessons from basic trade theory
- Lessons from more general theories
- How globalization has mattered
- Limits on both pluses and perils
- The special case of banking

# The Basic Ricardian Model

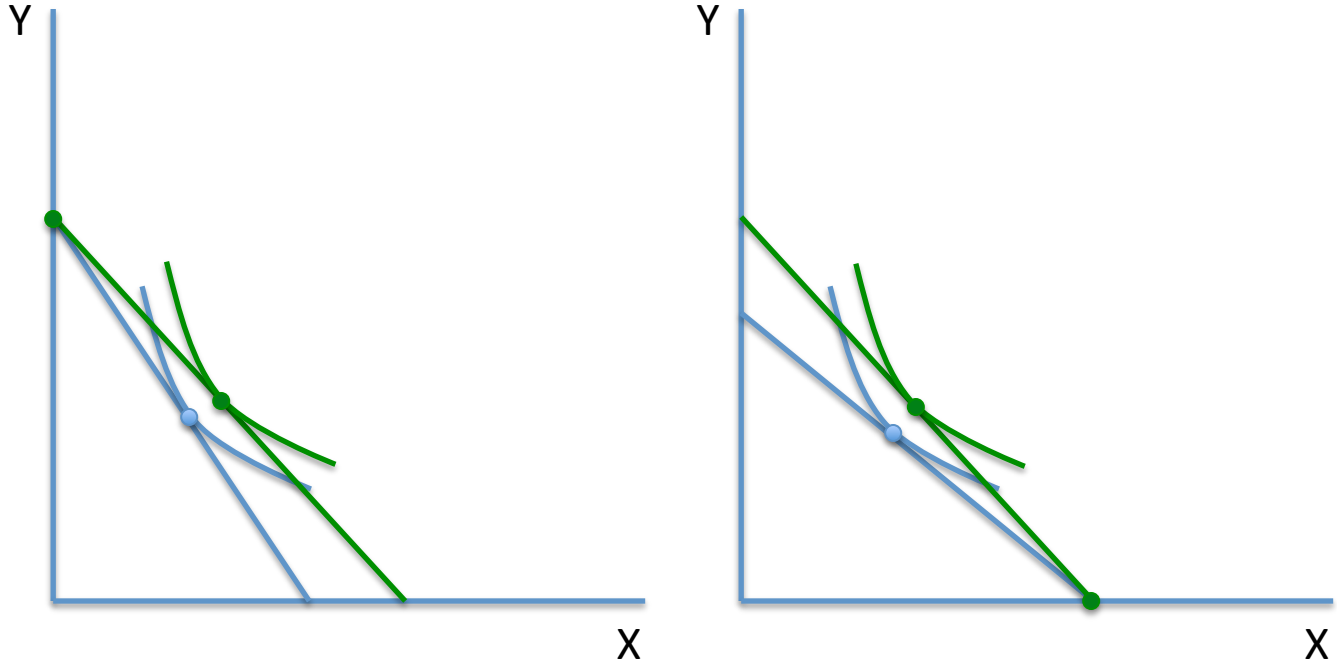
- The role of country size in the 2-good, 2-country model
  - If countries are of similar size
    - Both specialize
    - Both gain from trade
  - If one is small and the other large
    - Small country specializes and gains
    - Large country does neither

- 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.

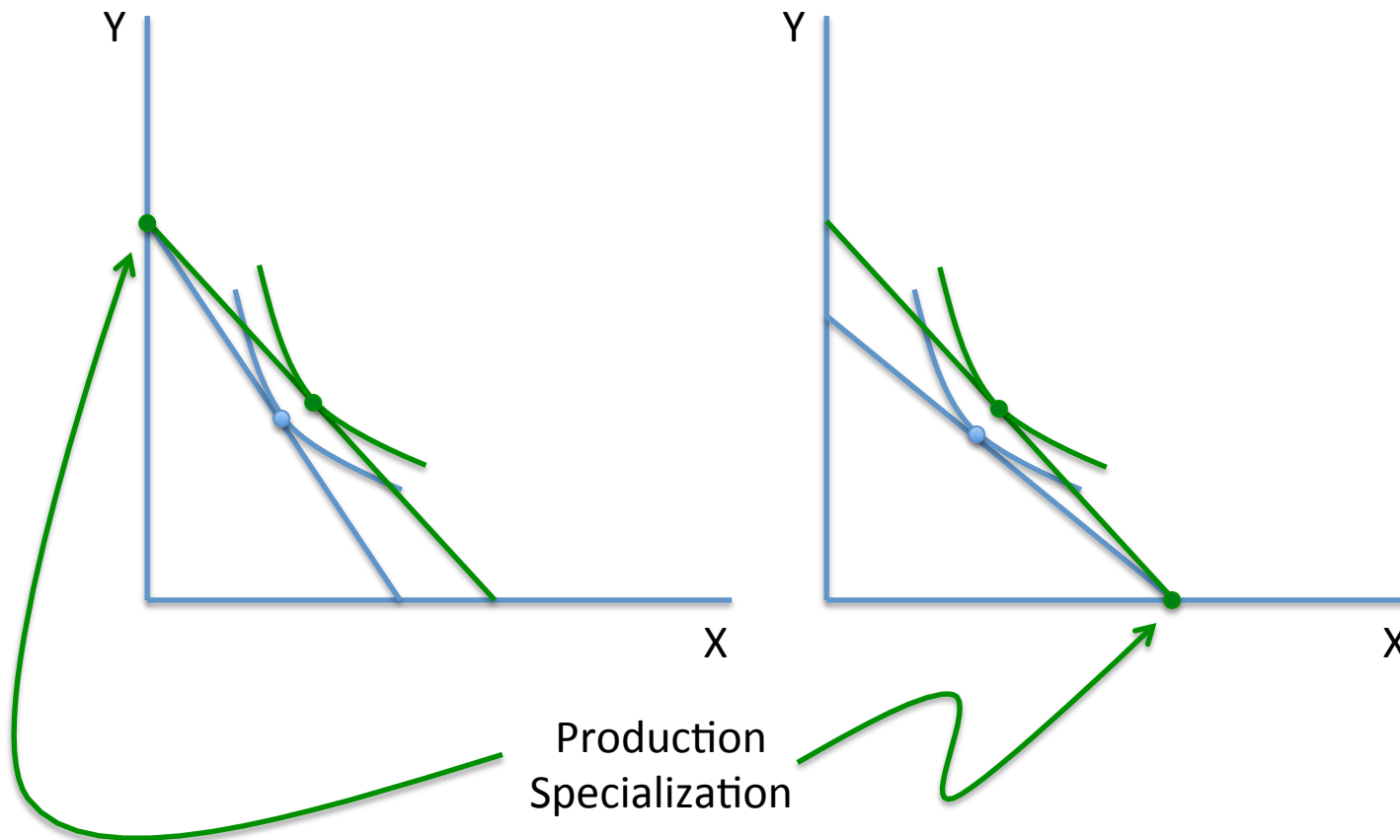
# Similar Size, Autarky



# Similar Size, Free Trade

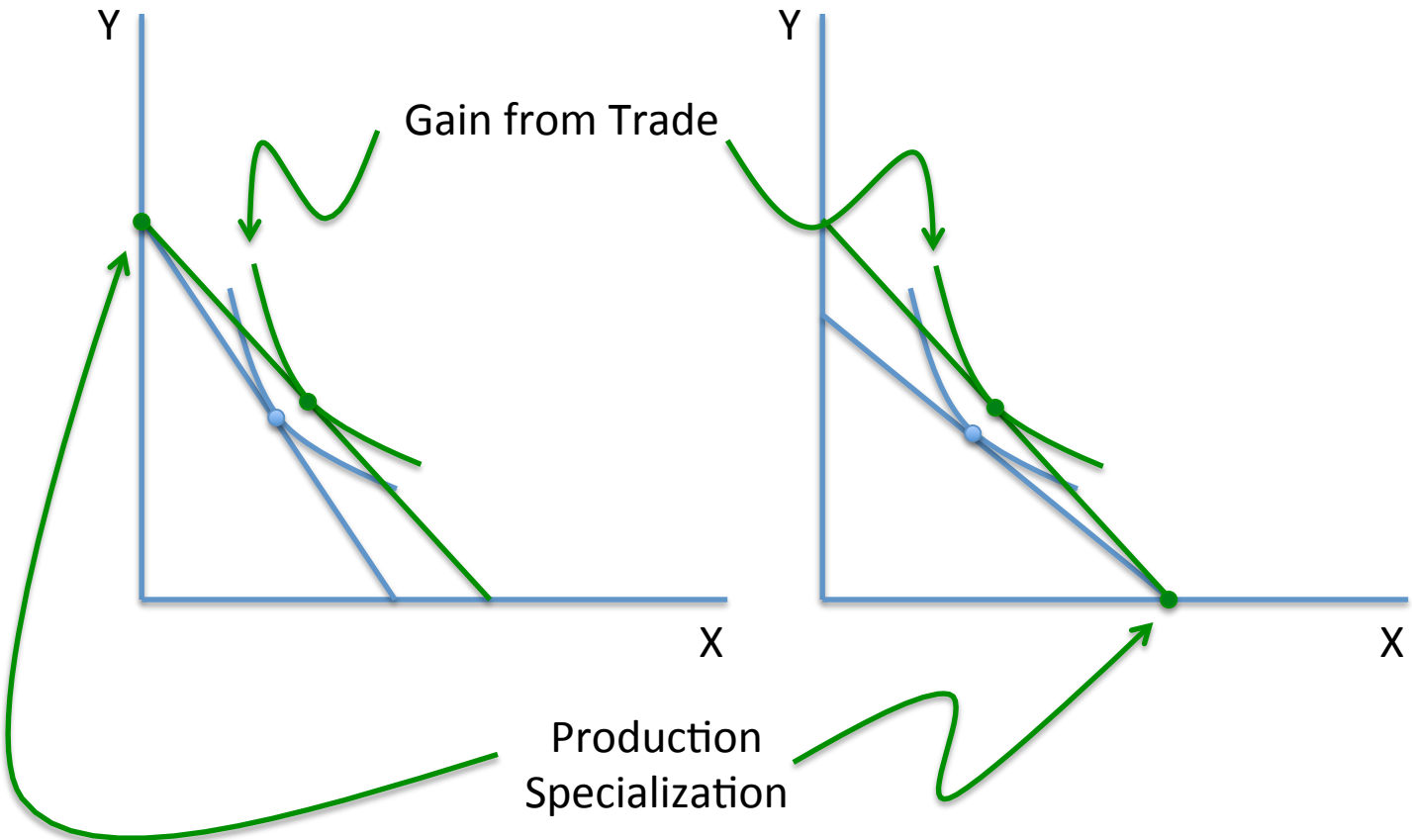


# Similar Size, Free Trade

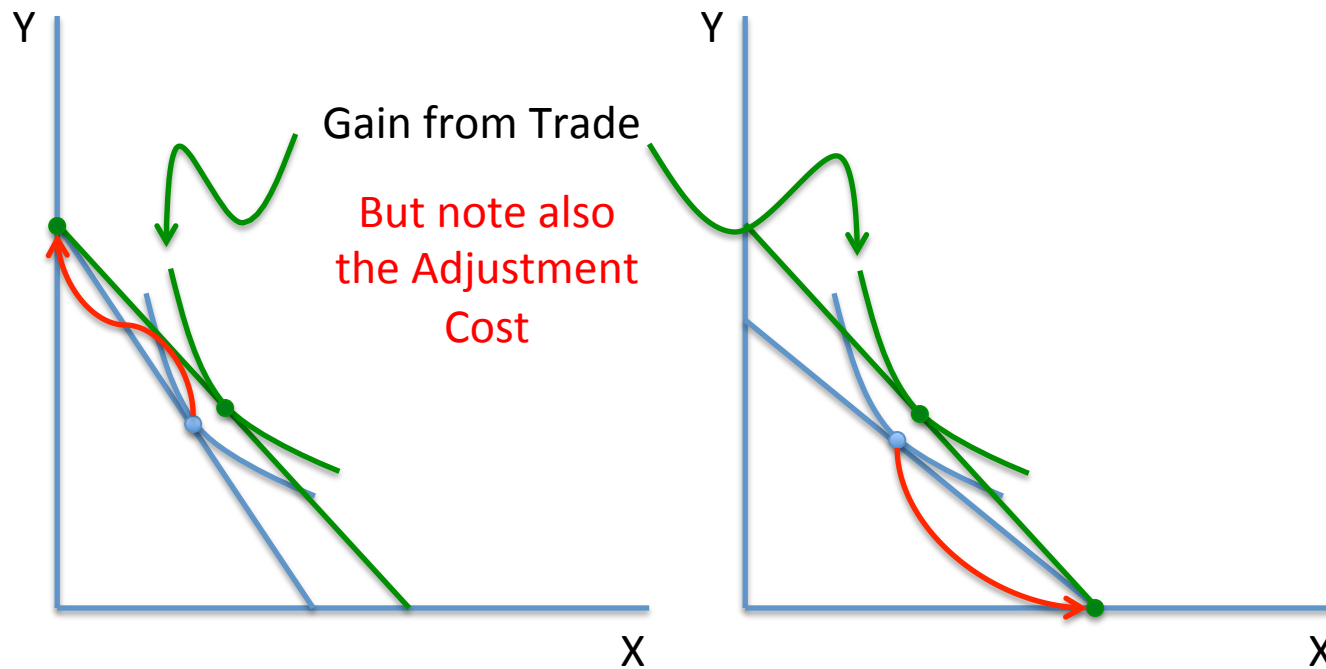




# Similar Size, Free Trade

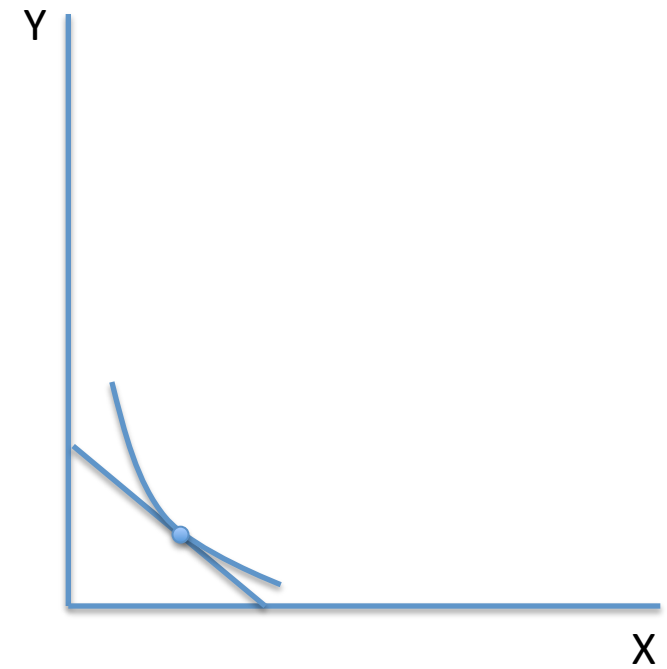
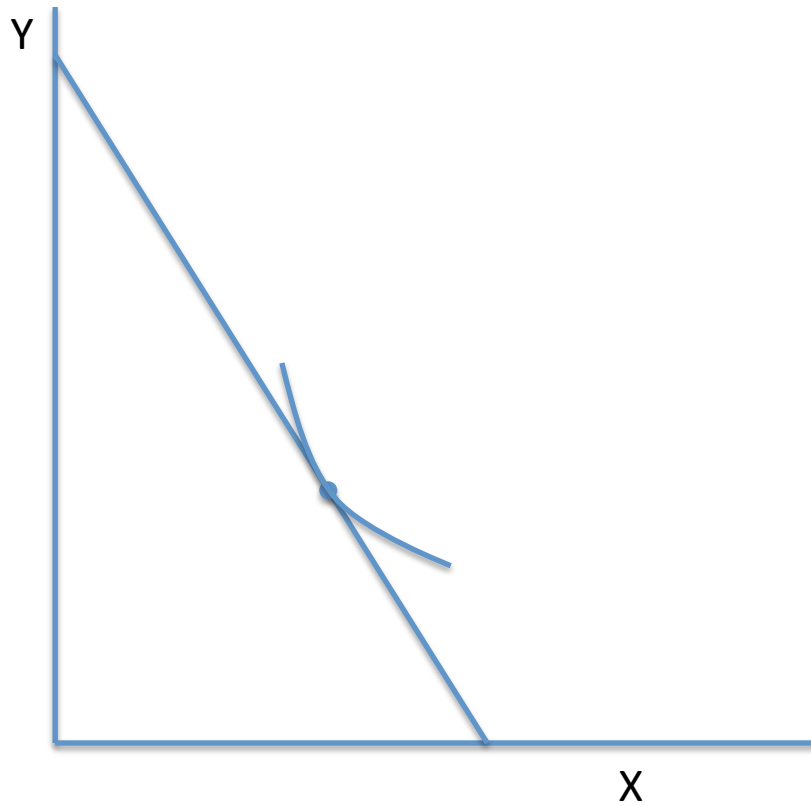


# Similar Size, Free Trade

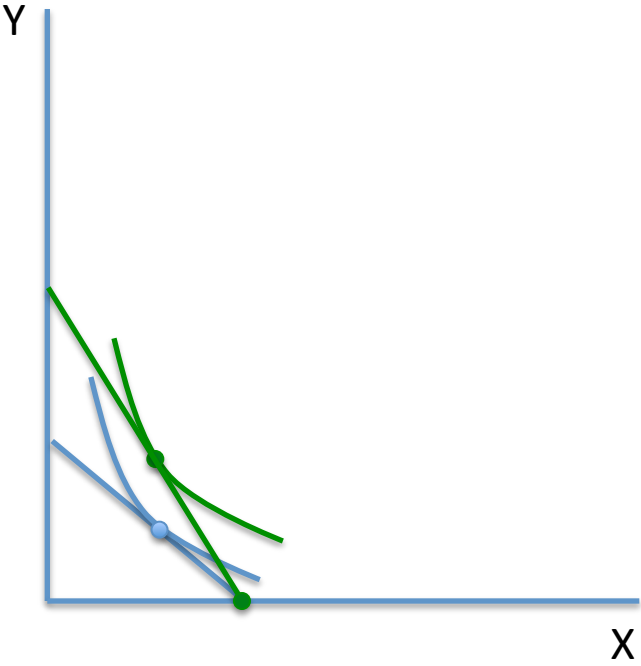
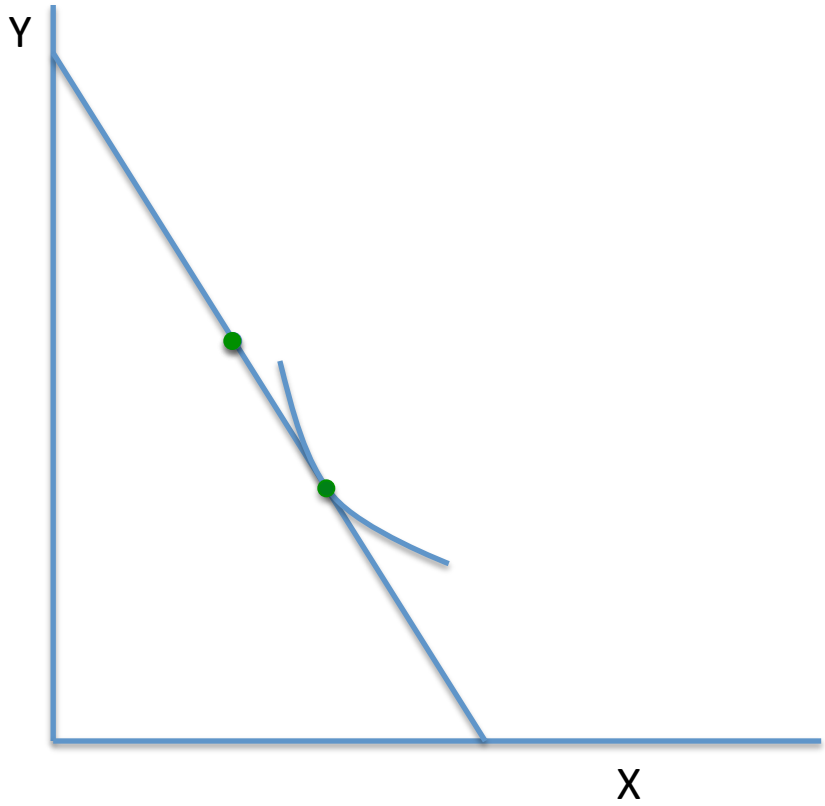


- But if countries are very different in size
  - The small country cannot produce what the large country needs of any good.
  - Therefore the large country must produce both goods, while small country specializes
  - Small country gains from cheaper imports
  - Large country does not gain from trade, as it's prices continue to equal its own costs.

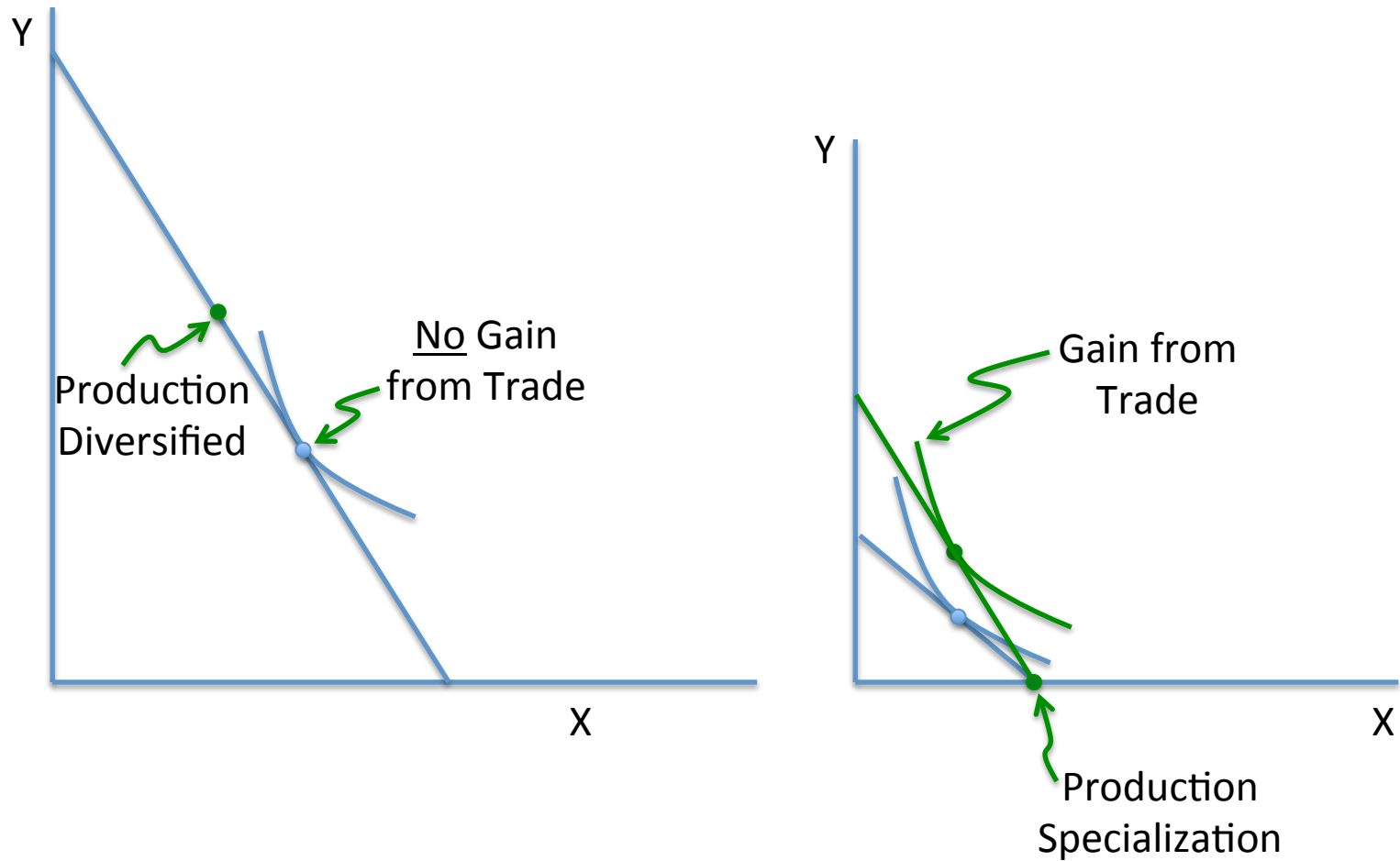
# Different Sizes, Free Trade



# Different Sizes, Free Trade



# Different Sizes, Free Trade



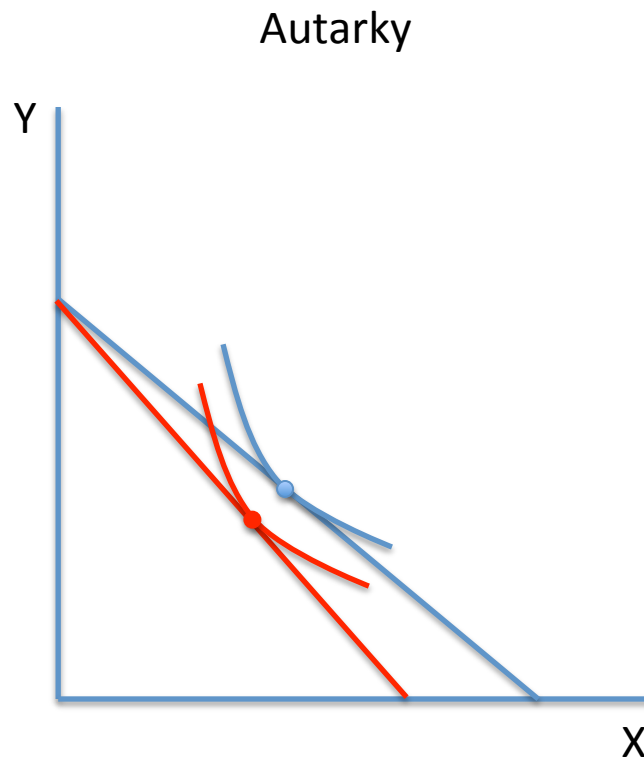
# The Basic Ricardian Model

- So the small country gains most from trade.
- That's the "plus"
- What is the "peril"?
- Conditions may change
  - Internally
  - Externally

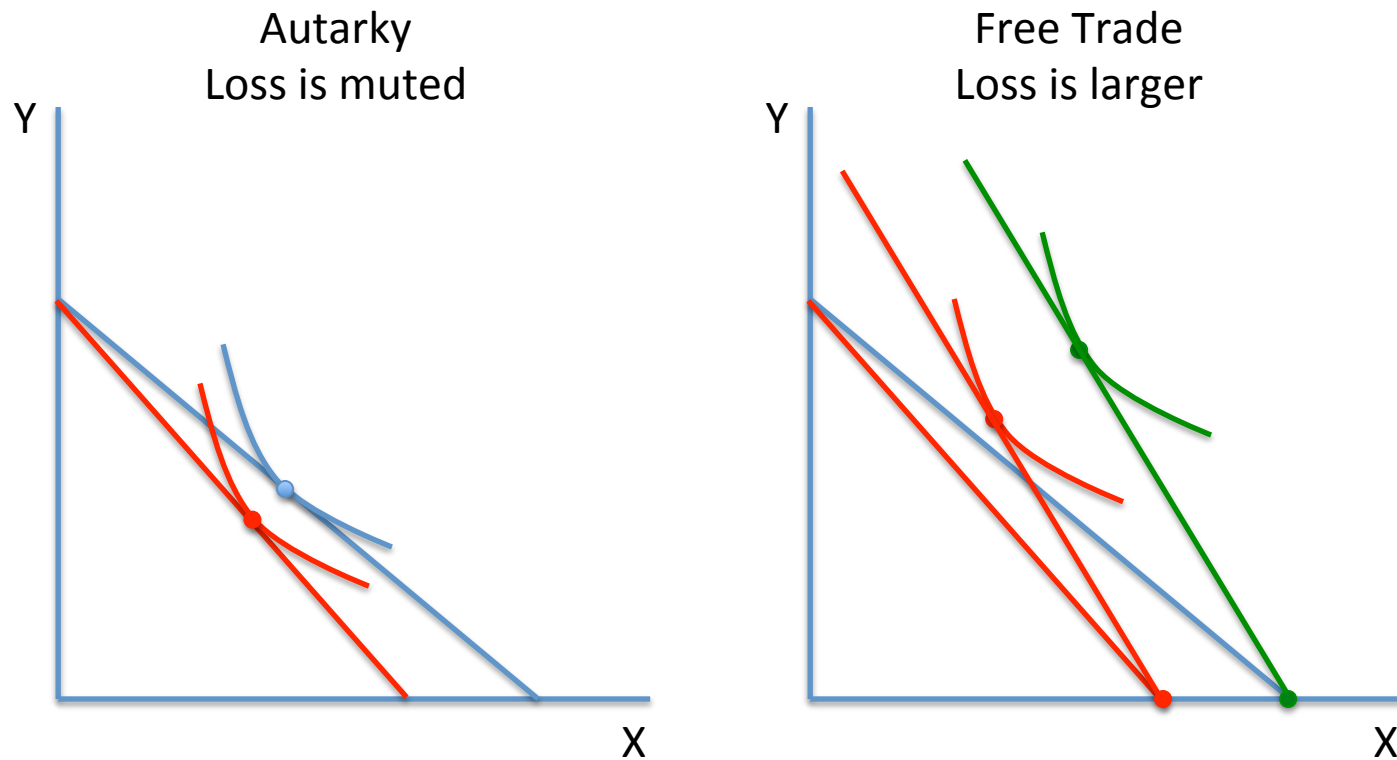
- Internal shock
  - Suppose your export industry becomes suddenly less productive
    - E.g.,
      - Crop failure
      - Labor strife
  - Then a small country loses more than if it had been diversified.



## Small Country, Internal Shock (productivity change: fall in X sector)

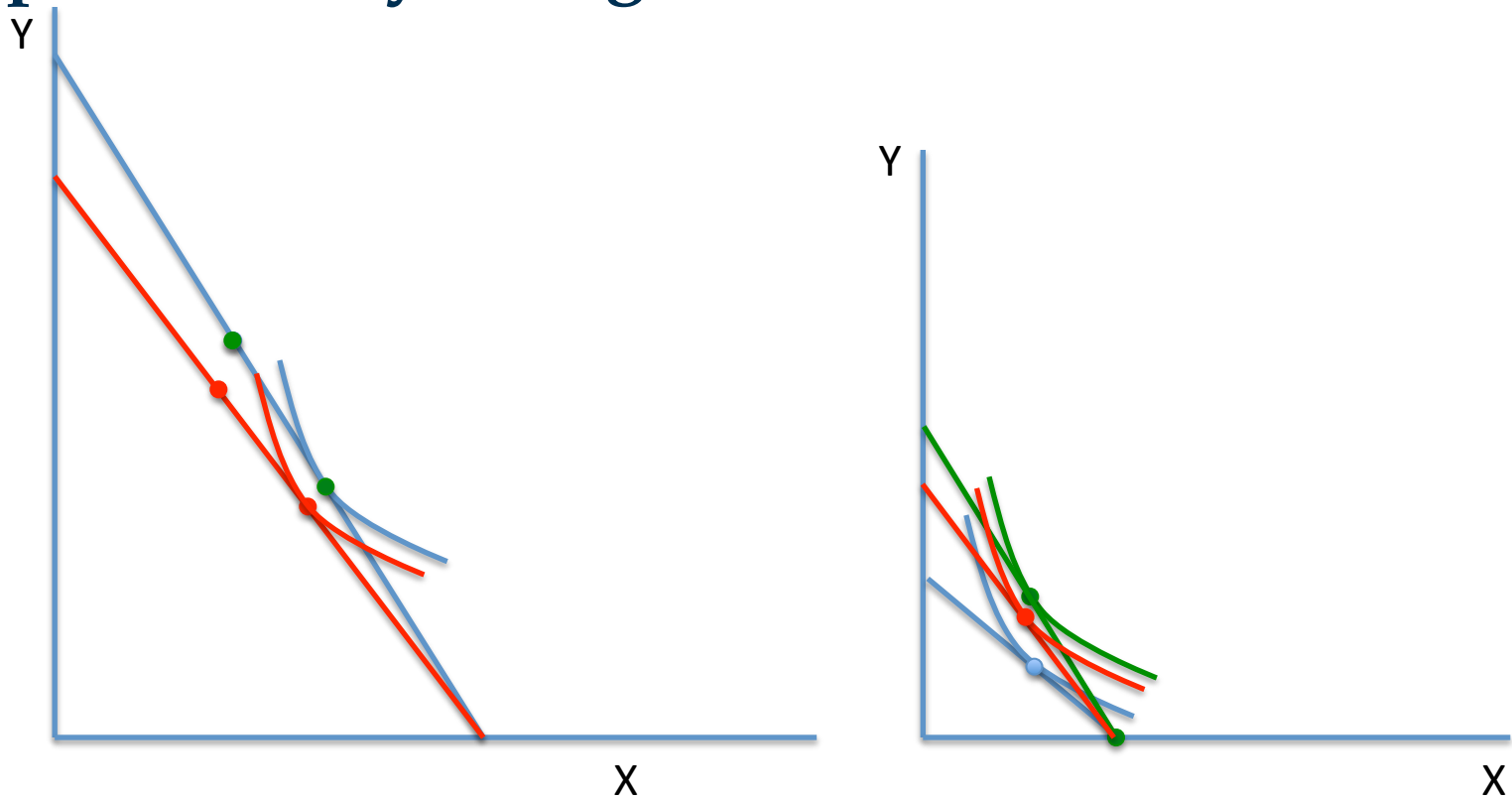


## Small Country, Internal Shock (productivity change: fall in X sector)



Also: For X-producers, loss is offset in autarky by rise in price.  
That doesn't happen with free trade.

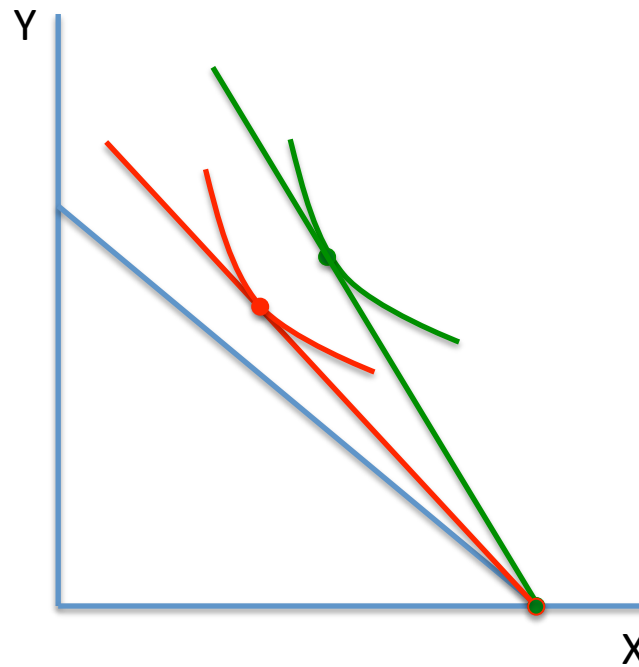
# Large Country, Internal Shock (productivity change: fall in Y sector)



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”

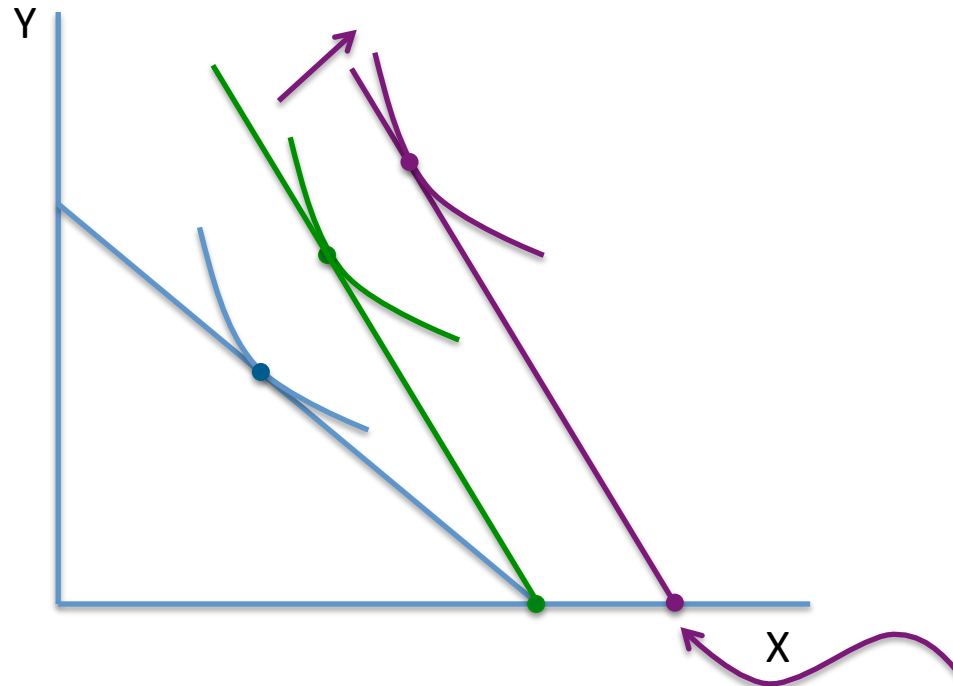
# How Globalization Matters

- 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.