Trade Policy: Part Two

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[1] I wish to acknowledge Battista Severgnini for providing last year's slides to me. His generosity saved me much time, and these slides are partially based on his. Any errors are of course my own.

Last time

Chapter 8:

- Trade costs and Firm Behavior
- Dumping
- Multinationals

Chapter 9 :

- Tariffs
- Consumer & Producer Surplus
- Export Subsidies and other instruments

Plan for Today

- Chapter 10 : Politics and Trade Policy
  - Some additional arguments for Free Trade
  - Arguments Against Free Trade
    - National Welfare reasons
    - Income Distribution and Trade Policy
  - International Negotiations
    - Some theory
    - A short history of International Trade Agreements
    - Preferential Trade Arrangements
- Chapter 11 : Developing Countries and Trade Policy
  - Rise and Fall of Import Substitution
  - Export Oriented Industrialization
- Chapter 12: Trade Policy Controversy
  - Arguments for an Activist Trade Policy
  - Trade & Labor
  - Trade & the Environment

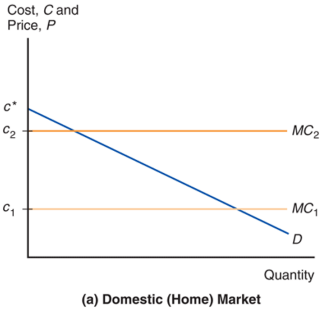
But first a Review

- Begin review

Trade Costs and Extensive Margin

- Suppose there is some cost to trade
- Equivalent to increasing marginal cost of production
- Recall firms with high marginal cost don't enter domestic market
- Even fewer firms will enter the export market
- *Extensive margin*: Number of firms exporting
- *Intensive margin*: How much each firms export
- Trade costs reduce both

Extensive Margin in a Picture

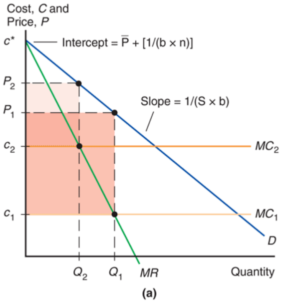


Dumping

- *Dumping* is when a firm sells a product too cheaply abroad
  1. Sometimes if foreign price below domestic price
  2. Sometimes if foreign price below domestic price plus tariff
  3. Sometimes if foreign price is below cost of production
- Considered an unfair trade practice, WTO allows 'antidumping duty' or tariff
- Monopolistic competitive firms naturally do No. 2 (but not No. 1 or No. 3)
- Why?
- Textbook: This is just natural firm behavior
- Me: Don't feel too bad – these firms are still monopolists!

Heterogenous firm equilibrium

- Firms still produce at point where marginal revenue equals marginal cost



Foreign Direct Investment

- Comes in two flavors
  1. *Vertical*: Do manufacturing where it is cheap
  2. *Horizontal*: Produce close to final market
- Vertical example: iPhones made in China, designed in California
- Horizontal example: Japanese cars produced in the United States

Motives for FDI

- Vertical FDI
  - ex: Take advantage of lower labor costs abroad
  - Capital can move: Factor price equalization all over again!
- Horizontal FDI
  - Proximity-Cost tradeoff
  - Language developed by my professor, Steven Yeaple (along with Melitz)
  - Low transport cost, export more
  - High transport cost, build factor abroad
  - Prediction consistent with data

Chapter 9: The Instruments of Trade Policy

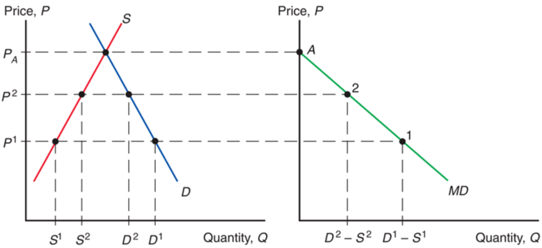
Import Demand Curve

- Import demand curve
  - Y-axis price
  - X-axis The difference between the quantity that domestic consumers demand and the quantity domestic producers supply

Export Supply Curve

- Export Supply Curve
  - Y-axis price
  - X-axis The difference between the quantity that foreign produce supply and the quantity foreign supply

Import Demand Curve



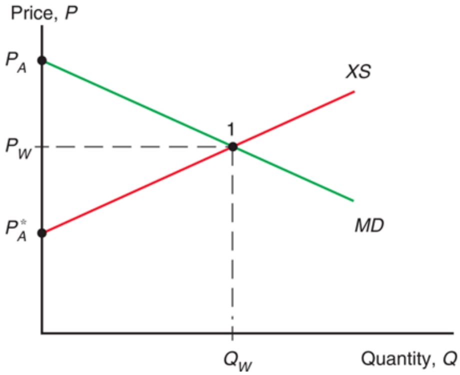
Export Supply Curve

World Market Equilibrium

Combine XS and MD curves: equilibrium price and quantity at the world market. In equilibrium

- import demand = export supply
- domestic demand - domestic supply =foreign supply - foreign demand $(D - S = S^* - D^*)$
- world demand = world supply $(D + D^* = S^* - S)$

World Equilibrium



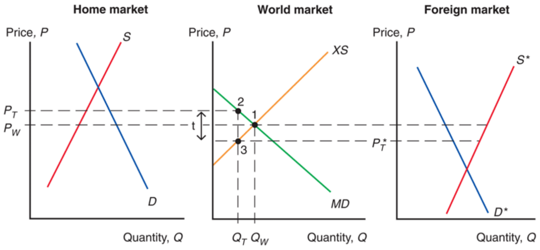
The Effects of a Tariff

- Sellers only sell abroad if the foreign price is greater than the domestic price plus the tariff. Why?
- Sellers only sell domestically if the foreign price is less than than the domestic price plus the tariff. Why?
- Equilibrium price difference is the tariff:

$$P_T - P_T^* = t$$

- Just after the tariff is set, there is excess demand at Home, and excess supply at Foreign
- Price adjusts up at Home, and down in Foreign
- Imports into Home and exports from Foreign are reduced
- Price changes depend on shape of import demand and export supply

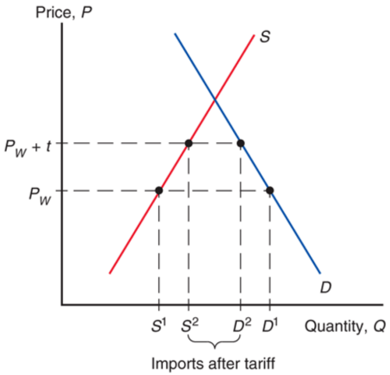
Tariff and Price



Price determination

- What would it mean if export supply were flatter?
  - Elastic supply or demand cause prices to move less
  - If Home is only a minor destination, supply and demand in Foreign very elastic
  - If Foreign drops price a small amount, a great deal more is demanded (relative to Home)
  - If Foreign drops price a small amount, a great less is supplied (relative to Home)
- If foreign supply perfectly elastic, Home prices rise the same amount as the tariff

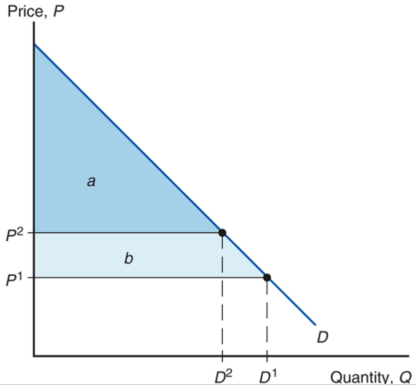
Small Home, Flat Export Supply



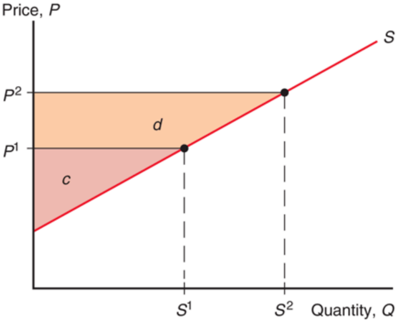
Evaluating the Costs and Benefits of Tariffs

- A tariff raises the price of a good at Home
- This hurts Home consumers and helps Home producers
- Home government also gets revenue

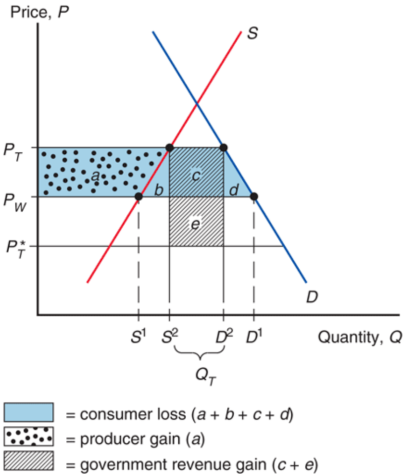
Consumer Surplus



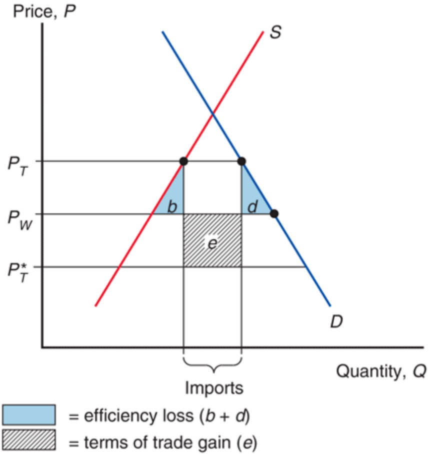
Producer Surplus



Costs and Benefits of a Tariff for the Importing Country



Net gains vs losses



Effect of tariff

- Punchline
  - Gains from government revenue
  - Losses from consumer surplus
- What happens if Home is small?

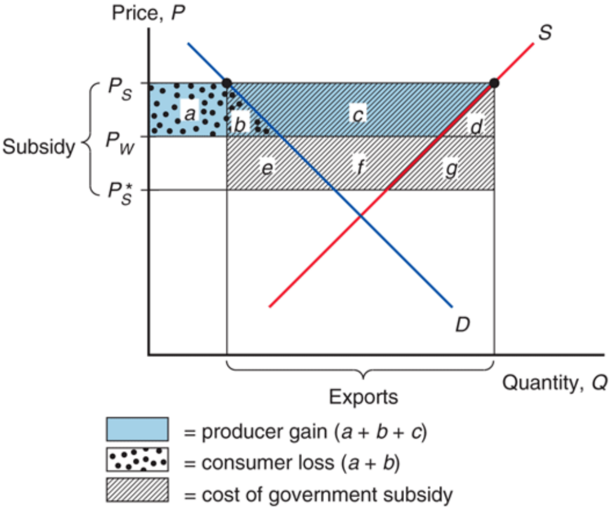
Pause

- We have seen that tariffs have costs and benefits
- Now we will analyze some other trade policy tools
    1. Export subsidies (agricultural policy)
    2. Import quotas
    3. Voluntary export restraint
- Preview: All worse than tariff
- Reason: Others get tariff government rents

Gains and Losses From Export Subsidy

- Government in Foreign
  - Loses tQ
- Consumers in Foreign
  - Lose are consumer surplus between world price and domestic price
- Producers in Foreign
  - gain producer surplus between world price and domestic price

Effects of an Export Subsidy



Import Quota

- Restriction on the quantity of a good that may be imported.
- Import quota raises price of imported good, just like a tariff
- Main difference: government doesn't get revenue!
- Whoever gets the import licenses gets revenue

Voluntary Export Restraint

- Typically imposed by exporter at request of importer under threat of tariffs
- Just like an import quota except...
- The rents go to whoever exporter wants

Summary

Policy	Tariff	Export Subsidy	Import Quota	Voluntary Export Restraint
Producer surplus	Increases	Increases	Increases	Increases
Consumer surplus	Falls	Falls	Falls	Falls
Government revenue	Increases	Falls (government spending rises)	No change (rents to license holders)	No change (rents to foreigners)
Overall national welfare	Ambiguous (falls for small country)	Falls	Ambiguous (falls for small country)	Falls

- End review!

Chapter 10 : Politics and Trade Policy

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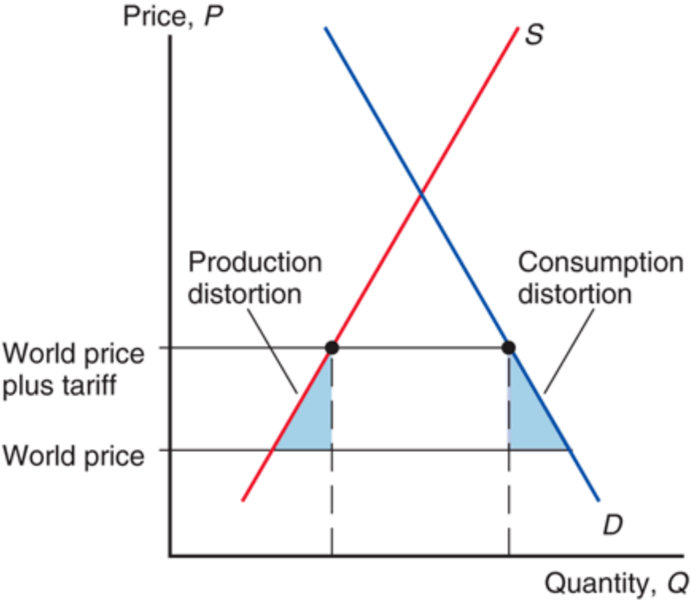
Some more arguments for Free Trade

- Chap. 1-8: gains from trade
- What else?
  - Stuff we sort of already talked about
  - The rent seeking distortions
  - Politics and corruption

Stuff we already mentioned

- Efficiency losses for small countries making tariffs
- Economies of scale, trade barriers reduce market size
- Innovation, hard to pick winners
- Gains from shifting production to more productive firms

Efficiency losses of tariff



Rent seeking distortions

- Suppose we have import quotas
- How to allocate?
- Allocation system distorts production
  - Example 1: India inport licenses based on capacity, build unneeded capacity
  - Example 2: US Tuna import licenses first come first serve, warehouse in December, big rush on Jan. 1st
- Side note: License Raj in India

Political Process and Corruption

- Trade policy good in theory
- Politics is messy
  - Even good intentioned policies likely to be captured by special interest groups
  - Might cause even bigger distortions
  - Here free trade is a second best
- Similar argument to why one should follow unjust laws