

Lecture 8c:

Other trade policy instruments

Thibault FALLY

C181 – International Trade

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Other trade policy tools:

- Quotas
- Tariffs under imperfect competition
- Anti-dumping laws

4- Import quotas

Effect of Quotas

Definition

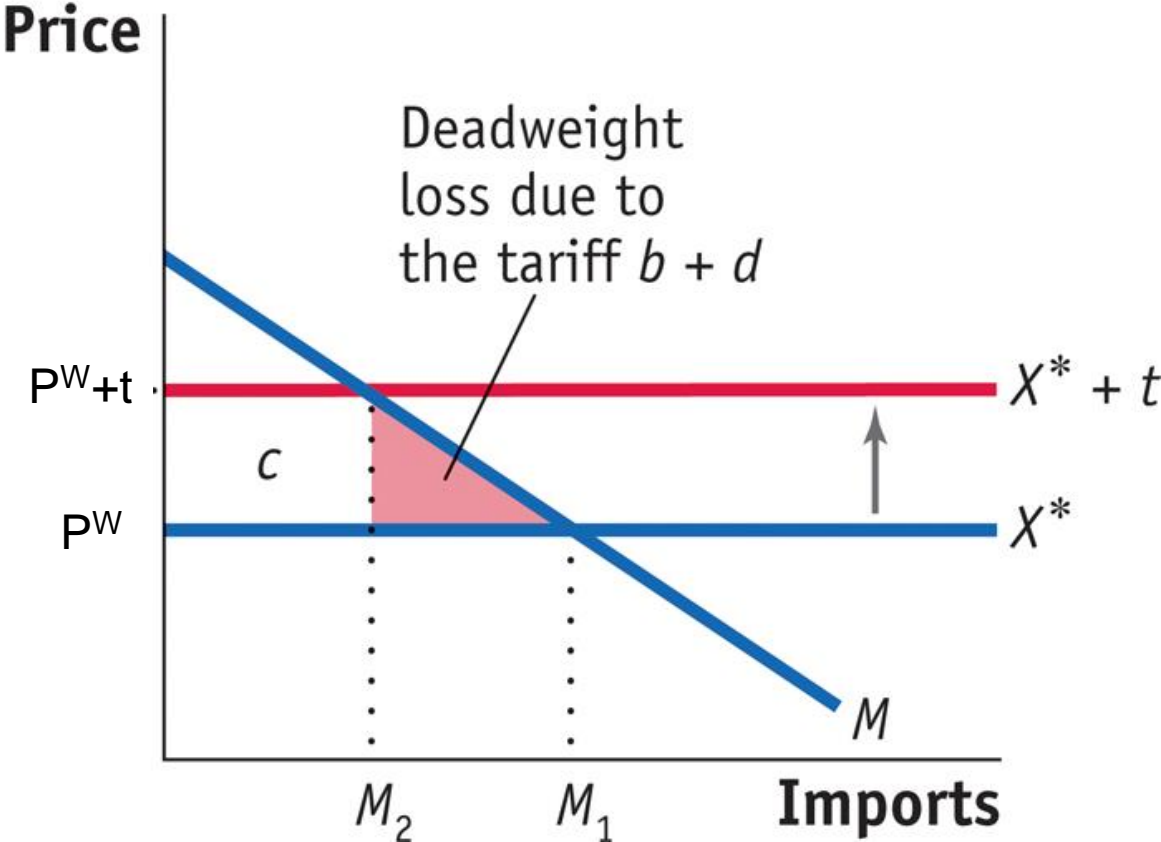
- Quotas: limit on the quantities of imported goods

Back to a small economy

- Taking world price as given and constant
- Two questions:
 - 1- Are there gains from having quotas?
 - 2- Losses: are losses worse than with tariffs?

Effect of tariffs on imports:

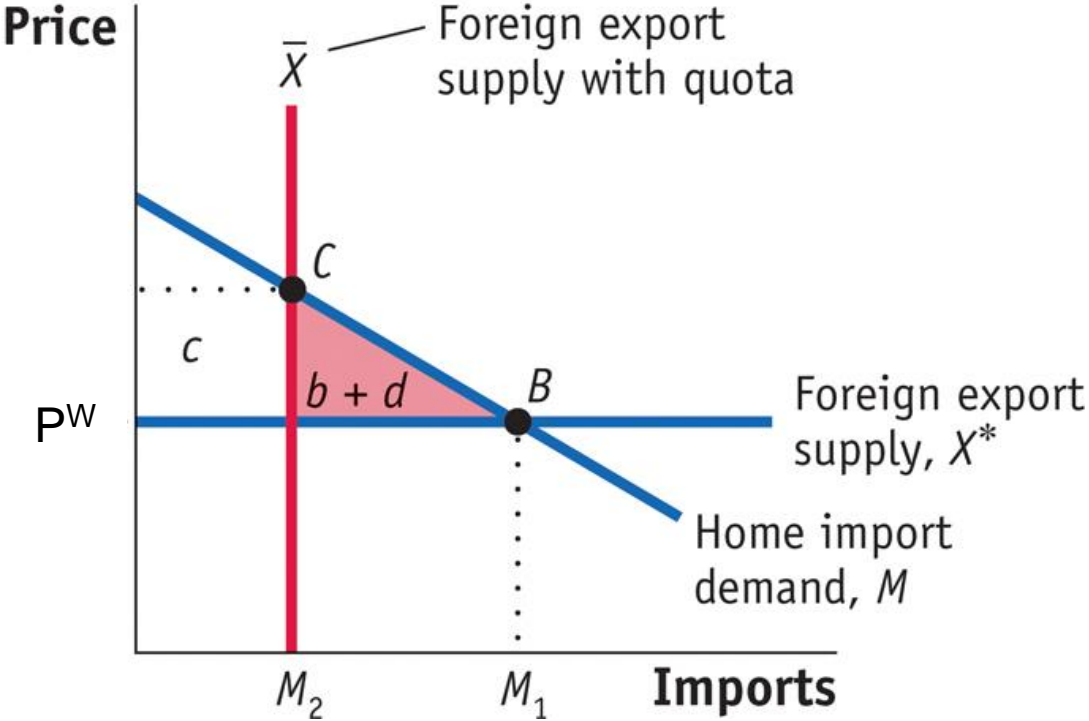
(b) Import Market



Effect of quotas on imports?

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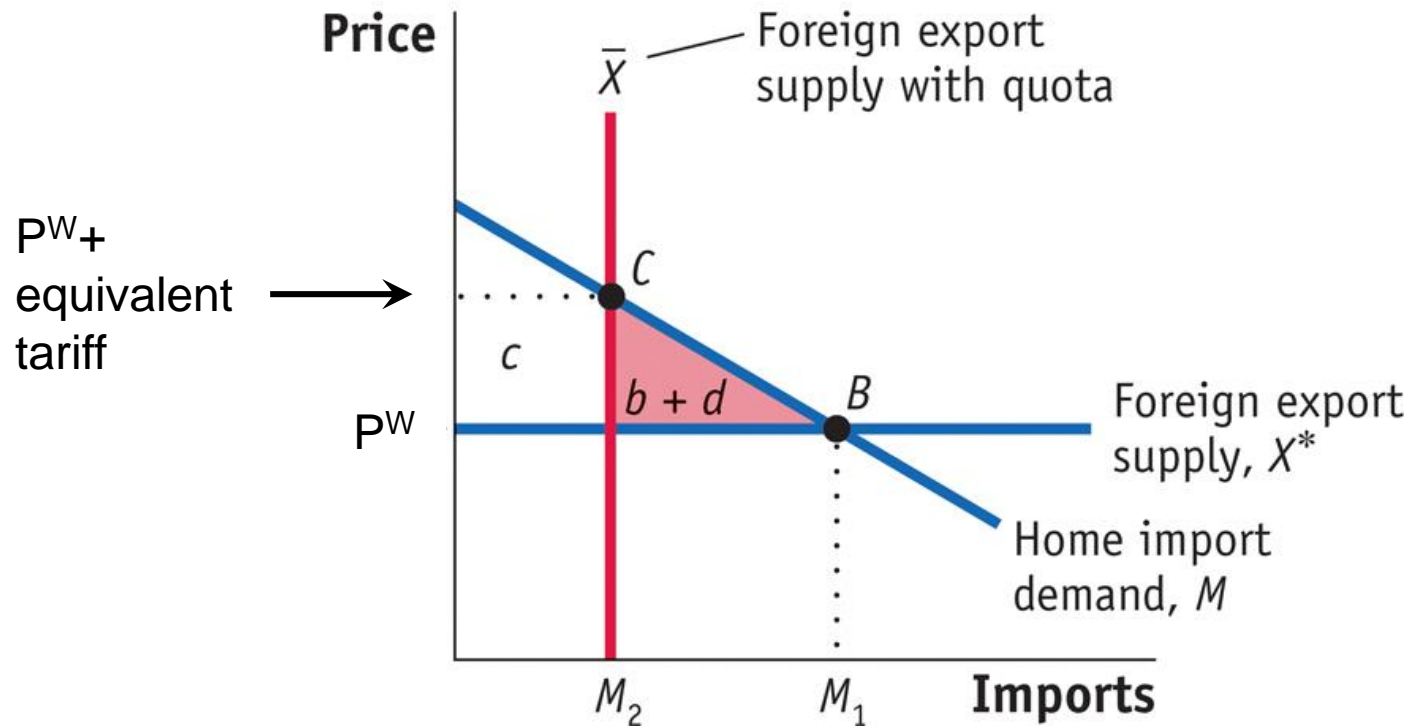
4- Import quotas

Theorem:

For every level of the import quota, there is an equivalent import tariff that would lead to the same Home price and quantity of imports.

Effect of quotas on imports?

(b) Import Market



4- Import quotas

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But are rents from quotas different?

4- Import quotas

Import Quota in a Small Country

1. **Giving the Quota to Home Firms** Quota licenses (i.e., permits to import the quantity allowed under the quota system) can be given to Home firms: With home firms earning the rents c , the net effect of the quota on Home welfare is

Fall in consumer surplus: $-(a + b + c + d)$

Rise in producer surplus: $+ a$

Quota rents earned at Home $+ c$

Net effect on Home welfare: $-(b + d)$

4- Import quotas

Import Quota in a Small Country

2. **Rent Seeking** BUT if licenses for the imported chemicals are allocated in proportion to each firm's production of batteries in the previous years,

→ Distortions: Home firms will likely produce more the year before, might engage in bribery or other lobbying activities, etc.

If rent seeking occurs, the welfare loss can be:

Fall in consumer surplus: $-(a + b + c + d)$

Rise in producer surplus: $+ a$

Net effect on Home welfare: $-(b + c + d)$

4- Import quotas

Import Quota in a Small Country

2. **Auctioning the Quota** A second possibility for allocating the rents that come from the quota is for the government of the importing country to auction off the quota licenses.

Fall in consumer surplus: $- (a + b + c + d)$

Rise in producer surplus: $+ a$

Auction revenue earned at Home $+ c$

Net effect on Home welfare: $- (b + d)$

4- Import quotas

Import Quota in a Small Country

4. “Voluntary” Export Restraint (VER): The final possibility for allocating quota rents is for the government of the importing country to give authority for implementing the quota to the government of the *exporting* country.

Example: In the 1980s: Japanese automobile imports.

In this case, the quota rents are earned by foreign producers, so the loss in Home welfare equals

Fall in consumer surplus: $-(a + b + c + d)$

Rise in producer surplus: $+ a$

Net effect on Home welfare: $-(b + c + d)$

4- Import quotas

Effects of Quotas

Effect on domestic welfare:

- 1- Giving rents to buyers at Home: same effect as tariffs
- 2- ...unless this induces “rent seeking”
- 3- Auctioning rents: same effect as tariffs
- 4- Giving rents to foreign firms (VER): worse than tariffs

4- Import quotas

Costs of Import Quotas in the United States

Annual Cost of U.S. Import Protection (\$ billions) Shown here are estimates of the dead weight losses and quota rents due to U.S. import quotas in the 1980s, for the years around 1985. Many of these quotas are no longer in place today.

	U.S. Deadweight Loss (area $b + d$)	Quota Rents (area c)
Automobiles	0.2–1.2	2.2–7.9
Dairy	1.4	0.25*
Steel	0.1–0.3	0.7–2.0
Sugar	0.1	0.4–1.3
Textiles and apparel	4.9–5.9	4.0–6.1
Import tariffs	1.2–3.4	0
Total	7.9–12.3	7.3–17.3

4- Import quotas

Other effect of Quotas?

Effect on trade

- Do quotas affect trade besides the volume of trade flows?

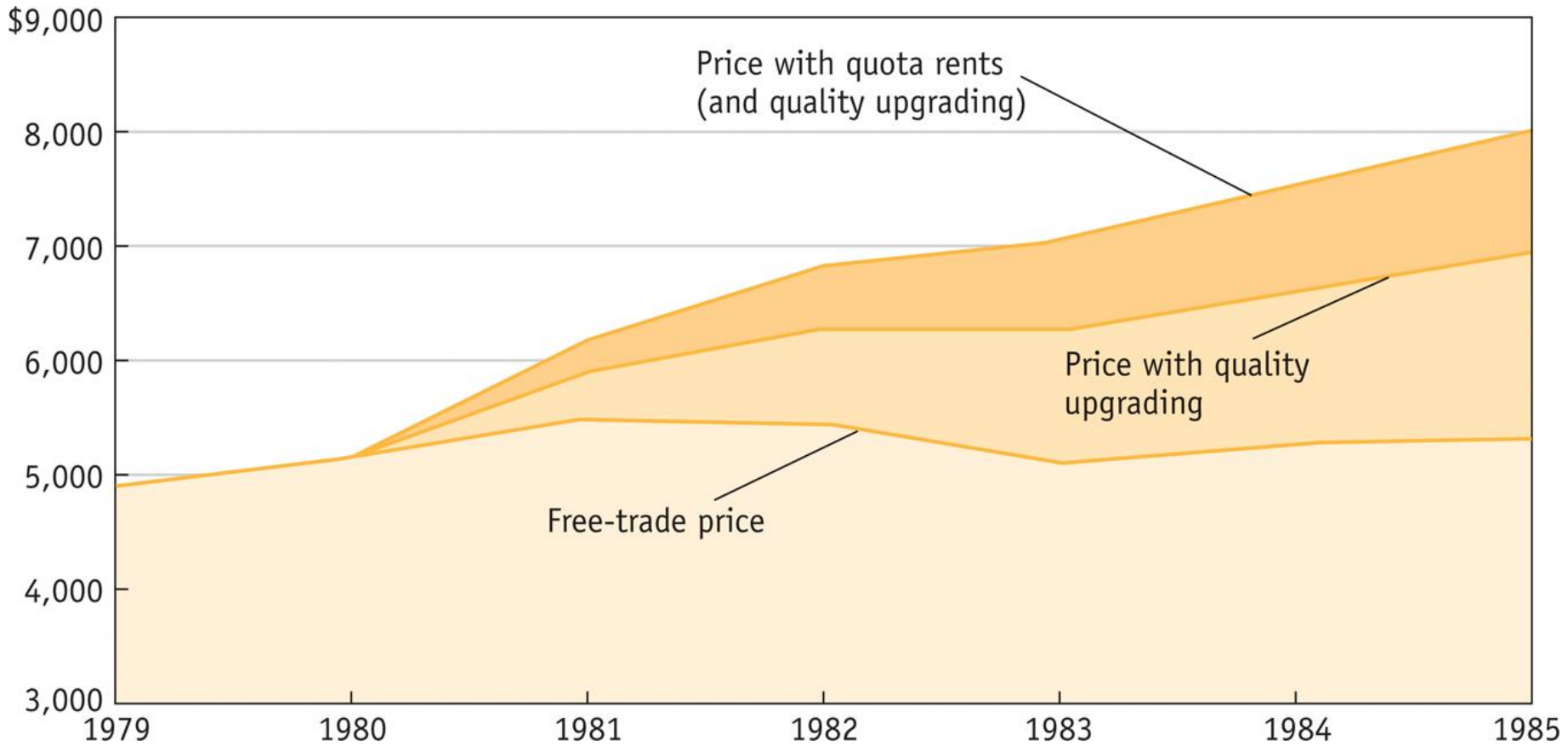
4- Import quotas

Other effect of Quotas?

Effect on trade

- Do quotas affect trade besides the volume of trade flows?
- Quotas affect traded quantities, not traded value:
→ incentives to import higher-quality goods!!

Price of imported Japanese cars following the VER



4- Import quotas

China and the Multifibre Arrangement

- One of the founding principles of GATT/WTO was that countries should not use quotas to restrict imports.

MFA: the most famous recent example of quotas:

- The Multifibre Arrangement (MFA), organized under the auspices of the GATT in 1974, was a major exception to that principle and allowed the industrial countries to restrict imports of textile and apparel products from the developing countries.

4- Import quotas

China and the Multifibre Arrangement

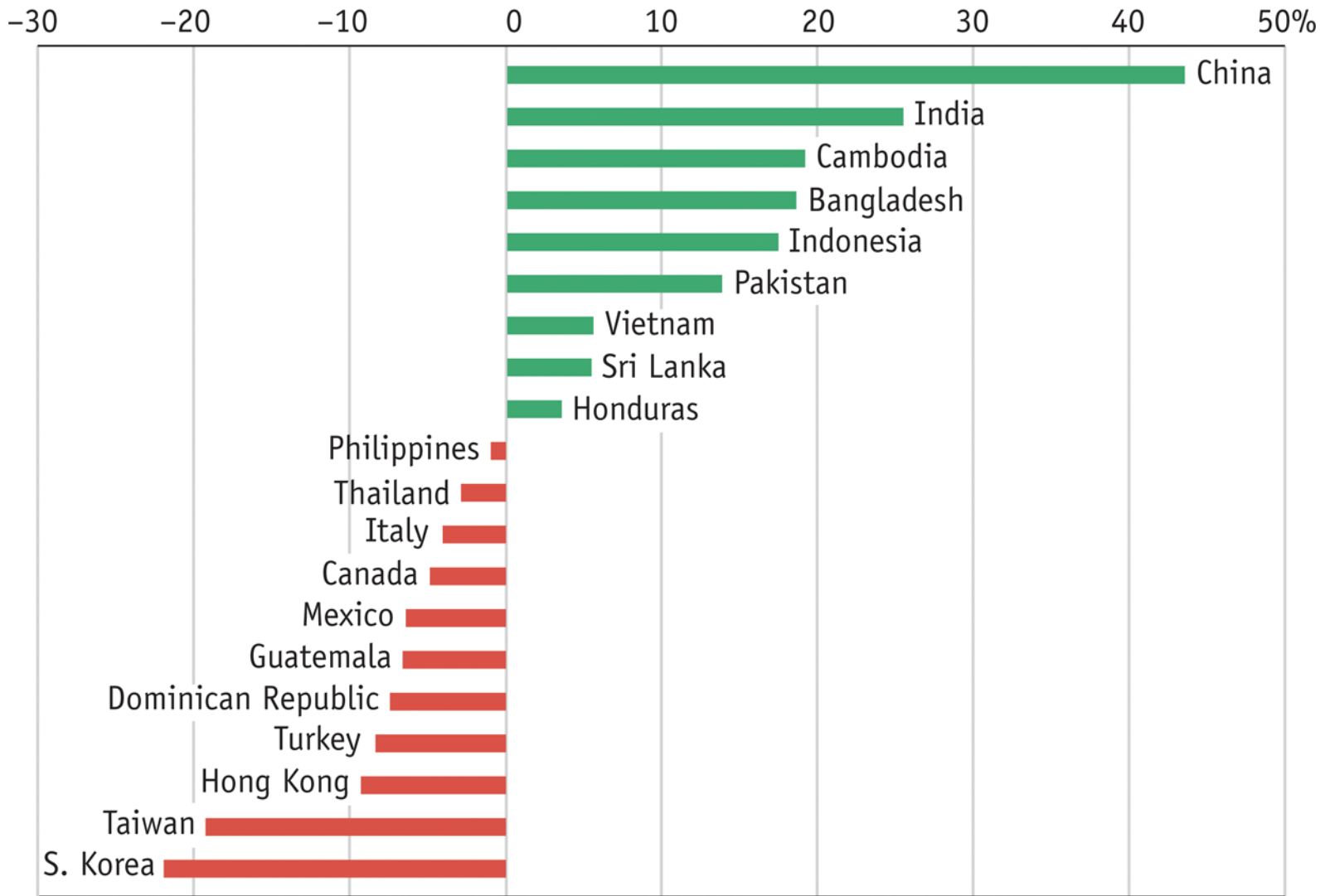
Growth in Exports from China

- The MFA expired on January 1, 2005.
- The biggest potential supplier of textile and apparel products was China. Immediately, exports of textiles and apparel from China grew rapidly.

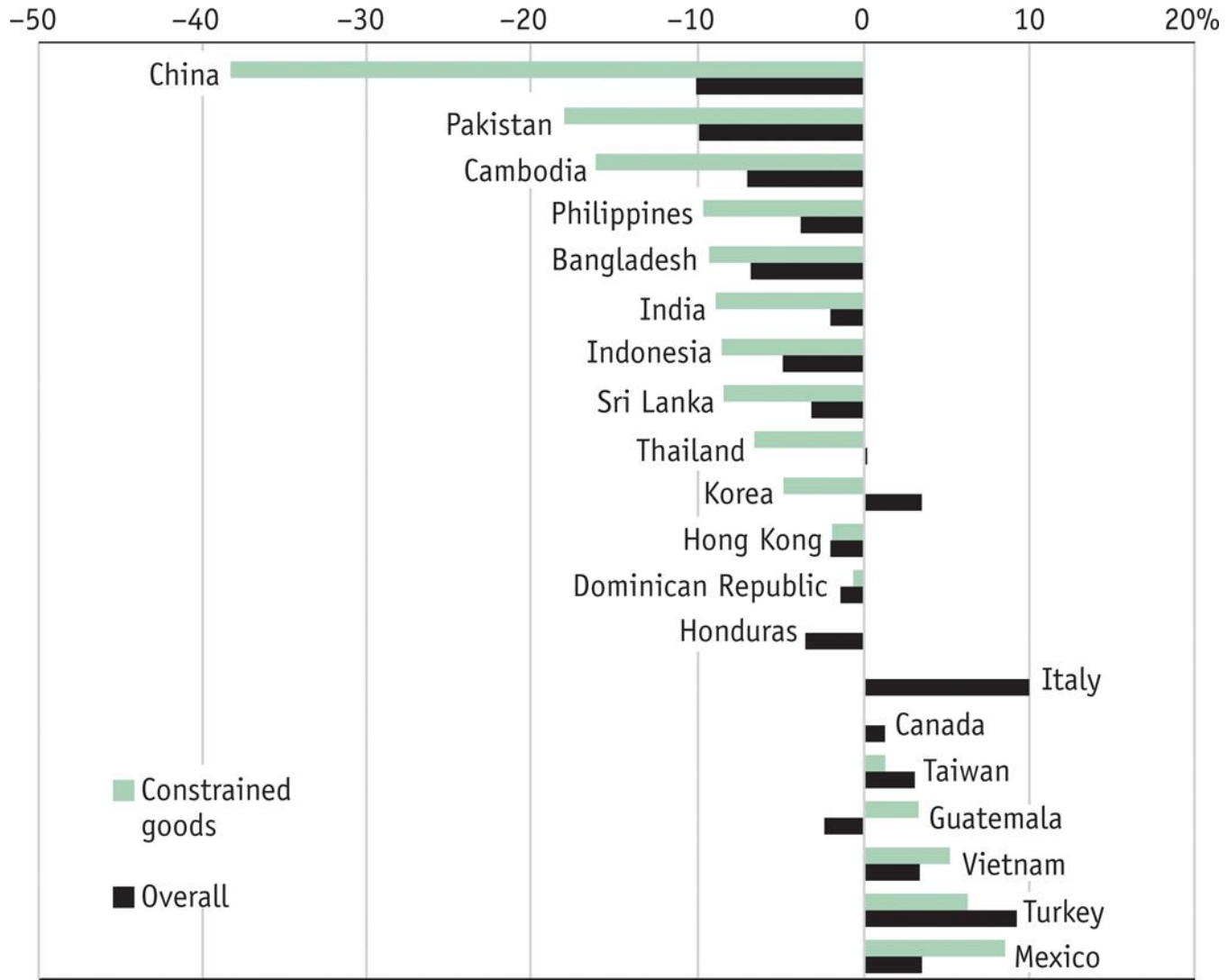
Welfare Cost of MFA

- The United States did not auction the quota licenses for textiles and apparel so the quota rents were earned by foreign exporting firms.
- That means the welfare loss for the United States due to the MFA is the area $(b + c + d)$.

(a) Change in the Value of Exports



(b) Change in the Price of Exports



4- Import quotas

China and the Multifibre Arrangement

Import Quality

- The prices of textile and apparel products dropped the most (in percentage terms) for the lower-priced items.
- So an inexpensive T-shirt coming from China and priced at \$1 had a price drop of more than 38% (more than 38¢), whereas a more expensive item priced at \$10 experienced a price drop of less than 38% (less than \$3.80).
- As a result, U.S. demand shifted toward the lower-priced items imported from China: there was “quality downgrading” in the exports from China.

5- Under imperfect competition

Trade policy under imperfect competition

Related to chapter 9 in the book.

Here I'll keep it brief:

- a) Effect of tariffs
- b) Effect of quotas
- c) Anti-dumping laws
- d) “Infant industry” argument

5- Under imperfect competition

Effect of tariffs

- Tariffs may force monopolists to reduce their markups and produce more, and thus may reduce distortions associated with imperfect competition and monopoly pricing
 - Overall effect depends on:
 - Short-term vs. long term with free entry
 - Type of competition (e.g. Cournot vs. Bertrand)
- *Difficult to obtain practical policy recommendations that account for imperfect competition!*

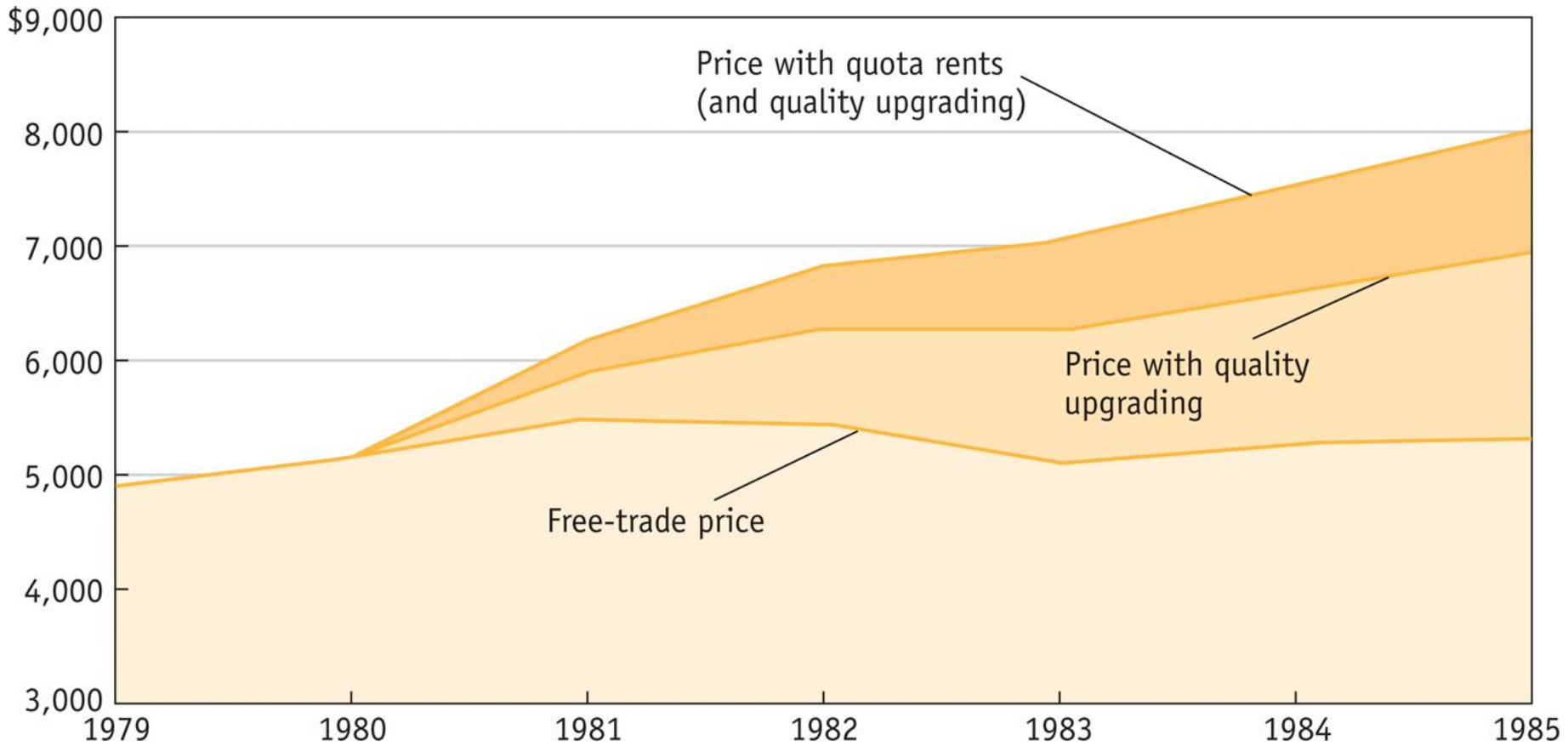
5- Under imperfect competition

Effect of quotas

- Generally worse than tariffs
- Quotas tend to increase the price of imported goods:
 - Quality upgrading as described before
 - *Magnify distortions* due to imperfect competition

under imperfect competition: firms produce too little
→ quotas only worsen these distortions.

Price of imported Japanese cars following the VER



5- Under imperfect competition

Anti-Dumping laws

- “Dumping”:
 - Charging a price in Foreign lower than at Home
 - Or: charging a price lower than cost of production
- Dumping commonly seen as a “predatory” behavior
- **Anti-dumping laws** put in place to avoid these behaviors

5- Under imperfect competition

Anti-Dumping laws

In practice:

- Firms have lower markups in foreign markets because of trade barriers (and “dark trade costs”) such as informational frictions, lower quality perception, etc.
- **Negative** net welfare gain from AD laws
- **Unfair**: It is very difficult to measure the marginal cost of production
 - difficult for foreign firms to justify its price and win an anti-dumping case.

5- Under imperfect competition

Anti-Dumping laws

- Initially initiated mostly by the US
 - Recent example: solar panels from China (Nov 2012)
- Multiplications of AD laws,
 - including developing countries
- GATT / WTO:
 - Initially allowed AD duties
 - Now tries to limit the number of cases
 - (most AD laws appear to be unfair)

AD laws proliferation

H. Vandenbussche, M. Zanardi / European Economic Review 54 (2010) 760–777

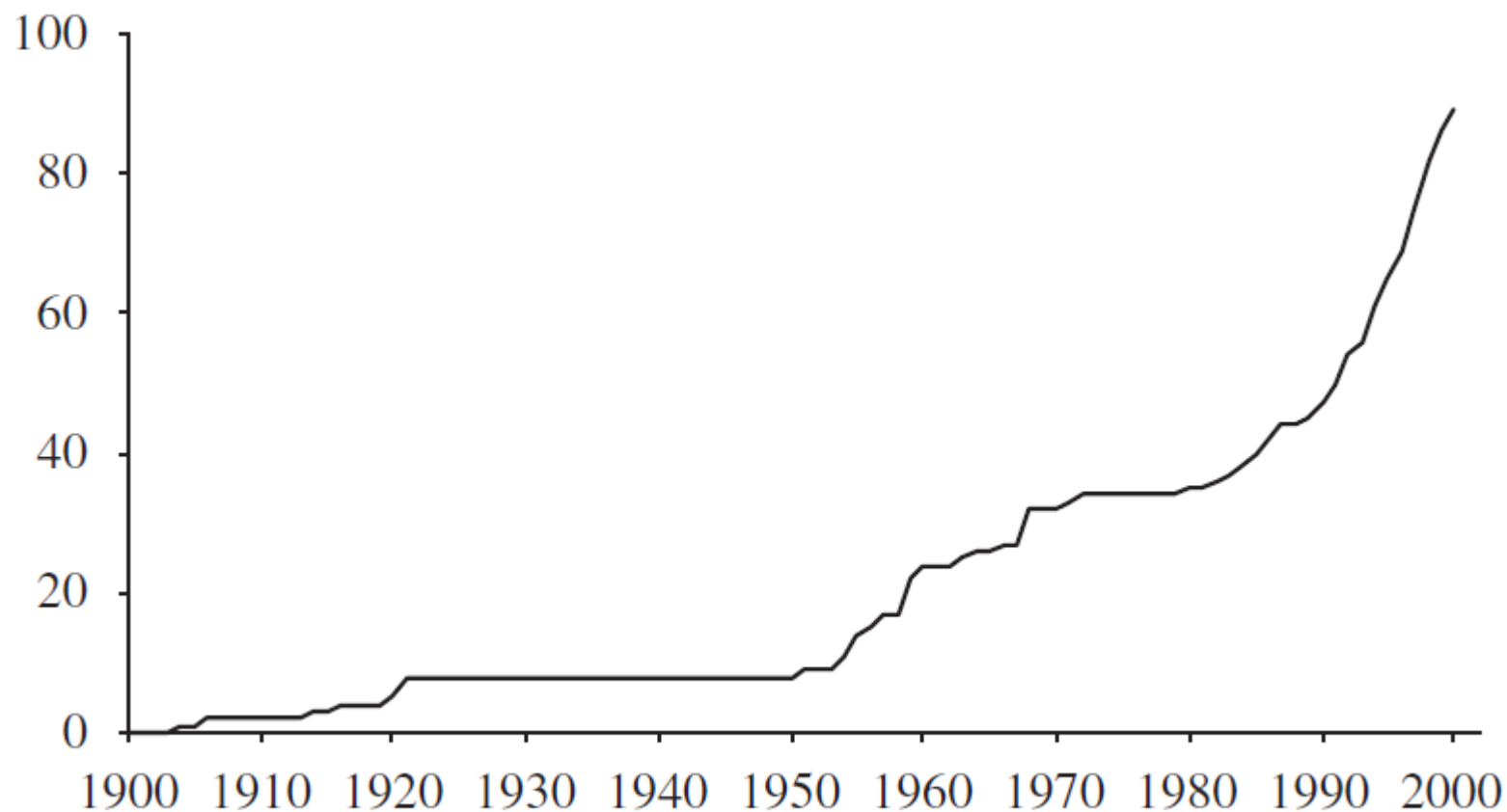
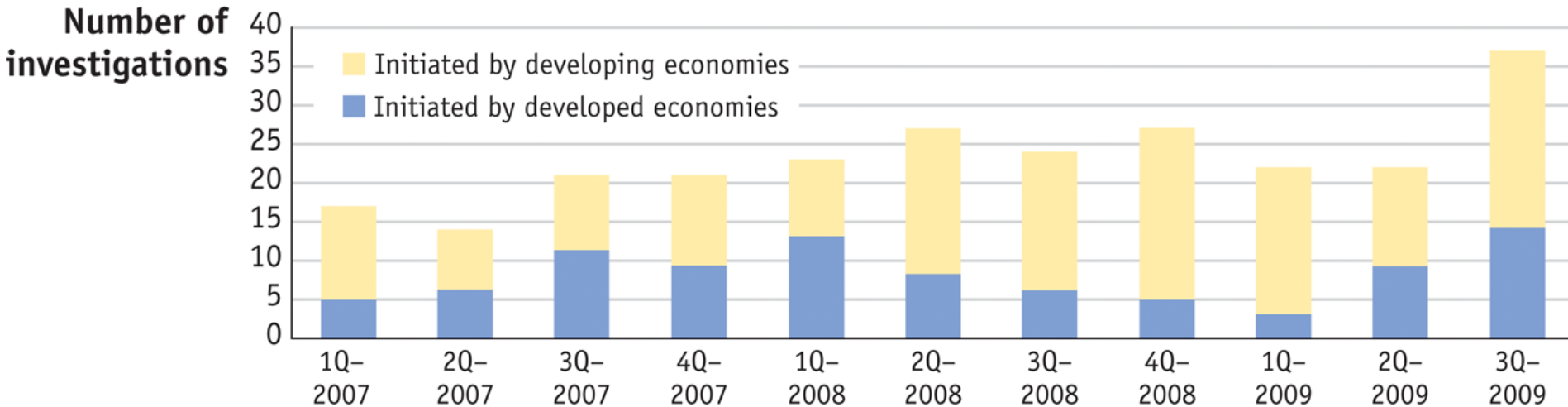


Fig. 1. Number of countries with antidumping laws. *Source:* authors' own calculations.

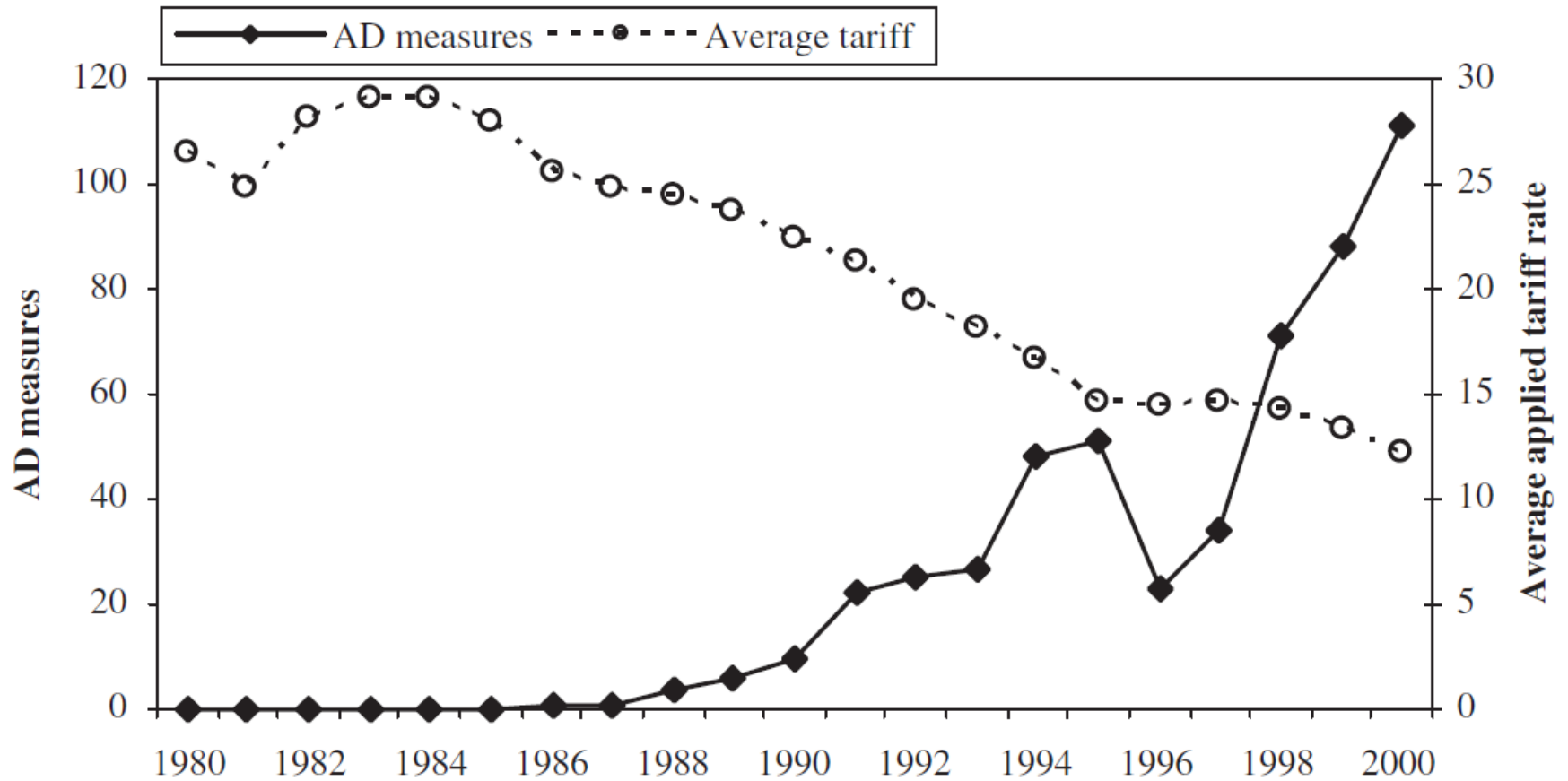
Newly initiated AD investigations

Newly Initiated Antidumping Investigations, 1Q 2007–3Q 2009



“Tough” users of AD laws: Brazil, India, Mexico, Taiwan and Turkey

AD laws proliferation vs. tariffs



5- Under imperfect competition

Infant industry protection

Idea:

- Protect an industry until it has become “sufficiently developed to face foreign competition”
- Assumes that firms do not fully internalize future profits
- Argument involves externalities or market failures

5- Under imperfect competition

Infant industry protection

Various examples...

- Solar panel industry in China and US (2012-)
- Harley Davidson in the 80's
- Computer industry in Brazil in the 80's
- Car industry in China until recently

... but hard to show that any of these cases was justified

Other remarks: Internal politics

Why having a tariffs when it hurts?

- **Majority vote:** majority of voters are laborers
 - majority would benefit from protecting labor-intensive industries
- **Lobbying:**
 - Organized industries more likely to be protected
- **Limited information (“Dracula effect”):**
 - Not easy for voters to identify effect of trade protection on welfare.

Dracula effect:

“Exposing evil to sunlight helps destroy it” (Bhagwati, ‘88)