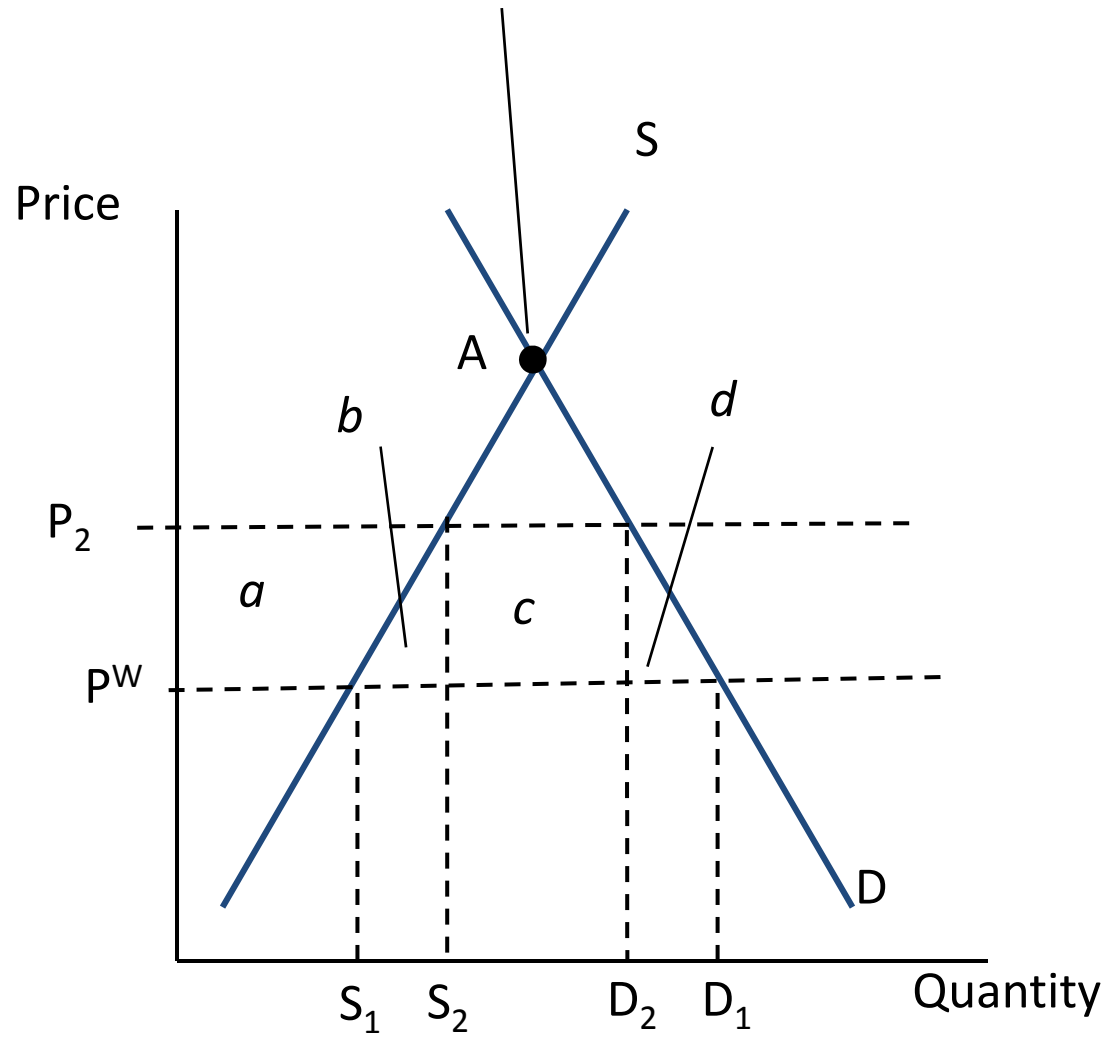


- **Case 3: Small country +Quota**
  - Example: "quantity of eggplants from Mexico, from April 1 to June 30 no more than 4,551,000 kg in 2001 and 4,687,000 in 2002"
- Popular since can be targeted very narrowly
- Also popular due to "rent-seeking"
  - By home importing firms
  - By foreign exporting firms

No-trade equilibrium



- D1-S1 = Free trade  
Quantity of Imports
  - D2-S2 = Quota quantity
  
  - Tariff-Quota Equivalence:  
Restriction on quantity  
analogous to rise in price
  
  - Consumers loses surplus of (a+b+c+d), producers gain (a).  
Welfare of Home depends on what happens to (c).
- Always have a deadweight loss of (b+d) like the tariff

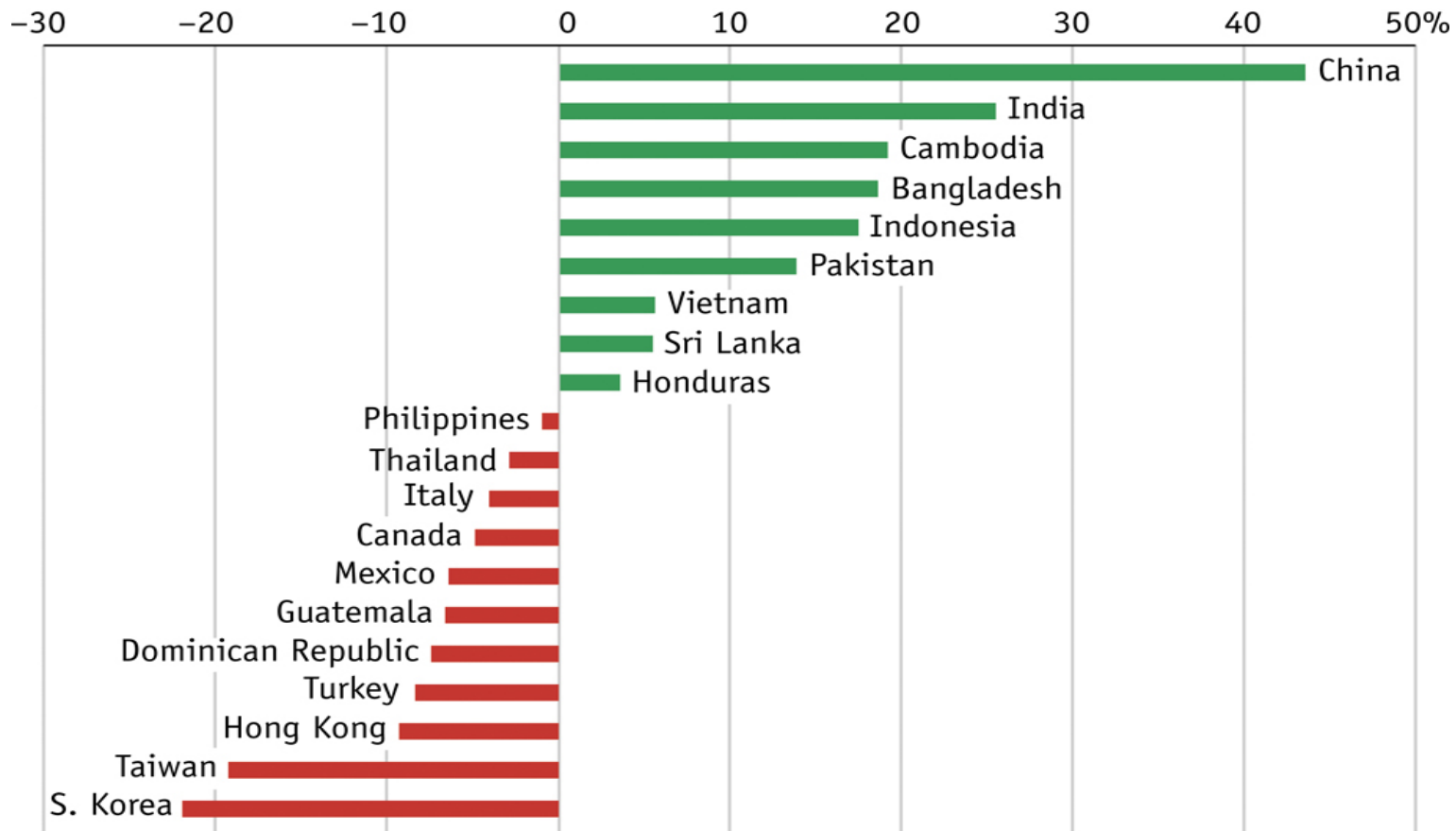
- What is *area (c)* ? ***Economic Rents*** from being allowed to import
  - You get to import quota quantity of eggplants from Mexico.
  - Price you pay in Mexico = \$ 1.5 per pound
  - Price you receive in US = \$  $1.5+t$  per pound
  - Would you sell for lesser?
- This means that firms that get licenses to import make “*extra*” profits – also called rents!
- Do these rents contribute to country’s welfare?

- Annual Cost of US Quotas – 1980s
  - Figures in billions of \$

|                      | U.S. Deadweight Loss (\$)<br>(area <i>b</i> + <i>d</i> ) | Quota Rents (\$)<br>(area <i>c</i> ) |
|----------------------|--|--------------------------------------|
| 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                             |

- Changes in Clothing and Textiles Exports to the United States after the MFA, 2004–2005
  - Large gains for China
  - Losses for other, high-cost producers around the world

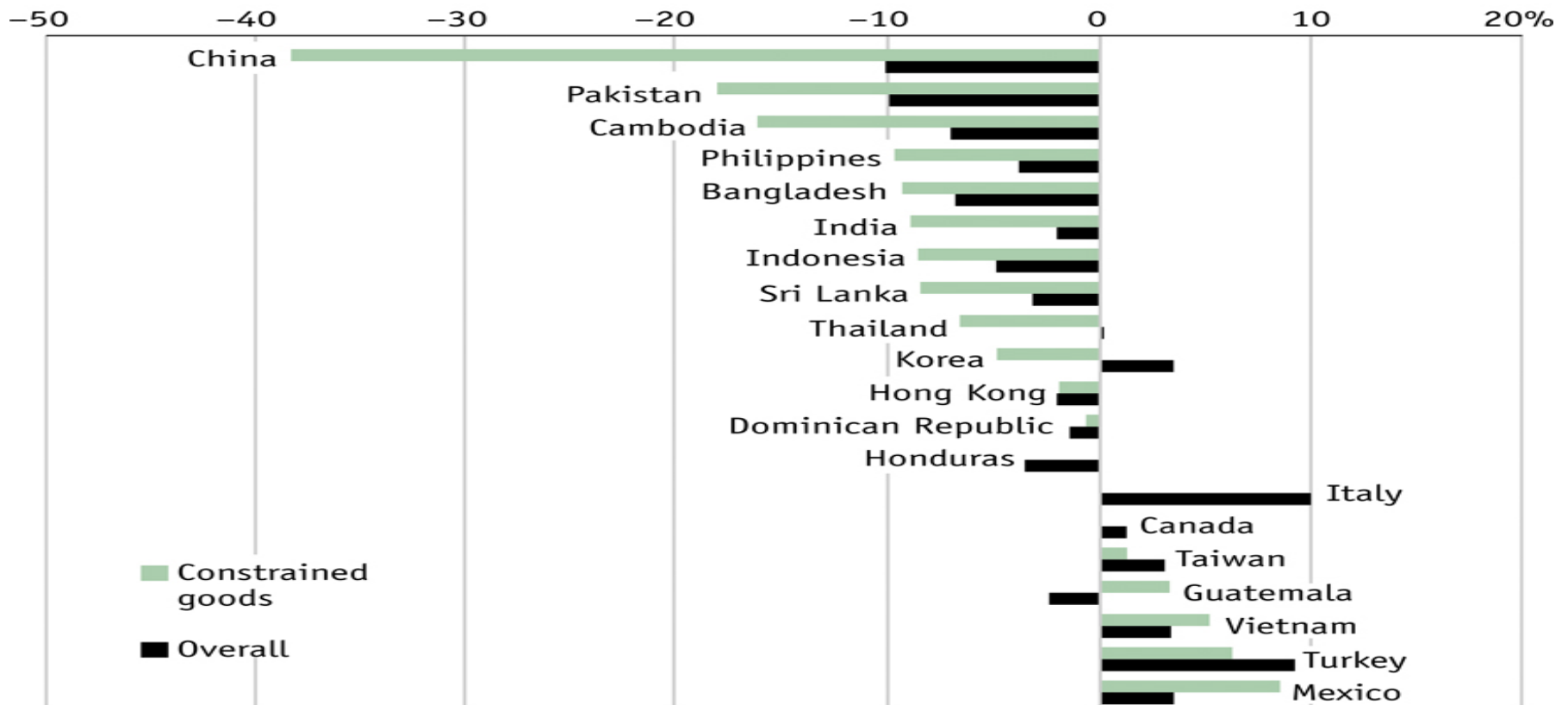
(a) Change in the Value of Exports



# • Change in Prices in exporting countries

- Large falls in prices. Why? Because they were pricing at levels of their competitors!
- Welfare gains from removal of MFA = \$100 per household or 7% of annual spending on apparel

(b) Change in the Price of Exports



- Conclusions:
  - Small country **always** loses from tariffs/quotas
  - Large country *could* gain from tariffs
    - Depends on nature of product, elasticities
    - Beggar-thy-neighbour....then who buys your exports?
    - Tariff wars
  - Quotas mean existence of rents (extra profits)
    - Beneficial to society to re-distribute income from consumers to importing firms?