



# 国际经济学

## 贸易政策的政治经济分析

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# 提纲

- 1 Motivation
- 2 支持自由贸易的观点
- 3 反对自由贸易的观点
- 4 贸易政策的政治经济模型
  - Median voter theorem
  - Collective action
- 5 综合案例：美国的糖配额



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## 1999 中国入世谈判的临门一脚



“龙永图，你不要再递条子了。”

面对中国 WTO 首席谈判代表龙永图递上来的一个又一个条子，朱镕基断喝。1999 年 11 月 15 日，中美谈判最后一天上午，这是中国加入 WTO 双边谈判最困难的时刻。

——摘自《那年入世谈判，我们经历了什么》，瞭望智库



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## 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



# 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

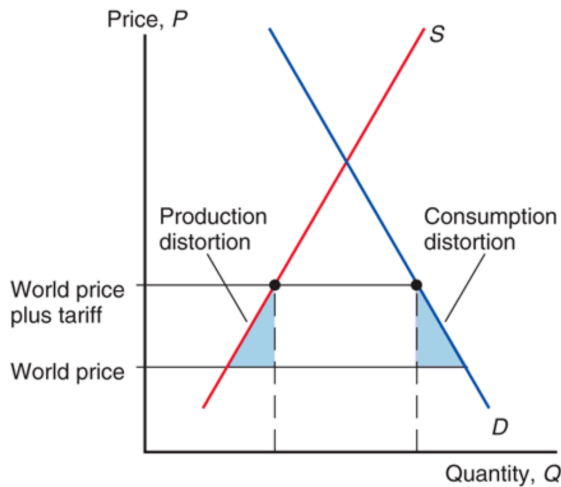


## Stuff we already mentioned

- 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 import 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



## Size of gains from free trade

- Tariffs are already low, further gains small

United States	0.57
European Union	0.61
Japan	0.85
Developing countries	1.4
World	0.93

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**Source:** William Cline, *Trade Policy and Global Poverty* (Washington, D.C.: Institute for International Economics, 2004), p. 180.



## Size of gains from trade

- Research frontier: Gains from trade too small!
  - We have arguments that countries gain from trade
  - Recently theory models have been estimable
- Important new paper: Gains from trade in most models are the same
  - Arkolakis, Costinot, Rodriguez, American Economic Review, 2012
  - United States going from autarchy to free trade welfare gains 0.7-1.4%
  - Compare this to estimates of gains from migration...

### 问题

So far, 我们已经学过三种 stuff 的跨国流动, 分别是什么? 基于哪种 stuff 的贸易自由化的边际收益最大?



# Gains from trade vs migration

**Table 1: Efficiency gain from elimination of international barriers (% of world GDP)**

*All policy barriers to merchandise trade*

1.8	Goldin, Knudsen and van der Mensbrugghe (1993)
4.1	Dessus, Fukasaku, and Safadi (1999) <sup>a</sup>
0.9	Anderson, Francois, Hertel, Hoekman and Martin (2000)
1.2	World Bank (2001)
2.8	World Bank (2001) <sup>a</sup>
0.7	Anderson and Martin (2005)
0.3	Hertel and Keeney (2006), Table 2.9

*All barriers to capital flows*

1.7	Gourinchas and Jeanne (2006) <sup>b</sup>
0.1	Caselli and Feyrer (2007)

*All barriers to labor mobility*

147.3	Hamilton and Whalley (1984); Table 4, row 2 <sup>c</sup>
96.5	Moses and Letnes (2004); Table 5, row 4 <sup>c</sup>
67	Iregui (2005); Table 10.3 <sup>c,d</sup>
122	Klein and Ventura (2007); Table 3 <sup>c</sup>

Source: Clemens, Michael, "Economics and Emigration: Trillion Dollar Bills on the Sidewalk?", Journal of Economic Perspectives, 2011



# 小结

- We have seen more arguments for free trade
  - Classical gains from trade
  - Trade policy causes rent seeking distortions
  - Trade policy is often captured by special interests
- **Now we will focus on arguments against free trade**
  - The optimum tariff
  - Domestic market failure and trade policy

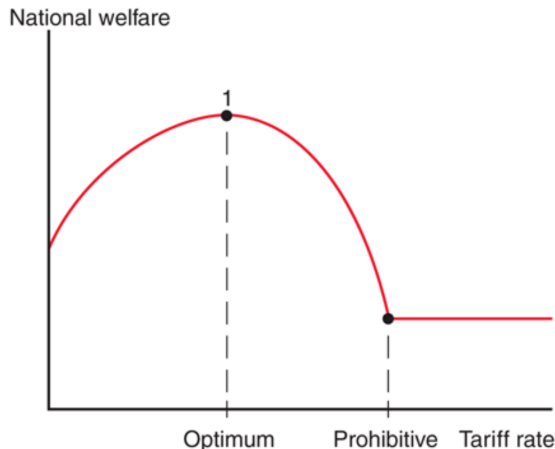


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# The optimum tariff

- We saw that optimum tariff levels are always positive
- Same argument can be used to justify optimum export tax!





# The optimum tariff

- Why do we rarely see export taxes?
- Why are tariff levels currently so low?
- Why don't large countries impose tariffs on small countries?



# The theory of the second best 次优理论

- Markets are great, but plenty of market failures
  - Traffic is one example of an externality
  - Pollution is another
  - Typically things worse in developing countries
- The best policy is usually to tax the externality
- But if that isn't possible, maybe trade policy can help
  - Suppose corruption makes it hard for new manufacturing firms to enter
  - Too little manufacturing
  - We could use trade policy to encourage entry into manufacturing
- On the other hand
  - It is hard to choose winners
  - Effects of second-best costly and hard to predict



# 小结

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- We have seen arguments against free trade
  - The optimum tariff
  - Domestic market failure and trade policy
- *Now we will talk about how trade policy is formed*



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# Political Models of Trade Policy

Models related to trade policy:

- 1 Median voter theorem 中点选民模型
- 2 Collective action 集体行动理论



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# Median Voter Theorem

Do you still remember the [Hotelling Model](#) in Microeconomics  
Electoral competition can be modeled as:

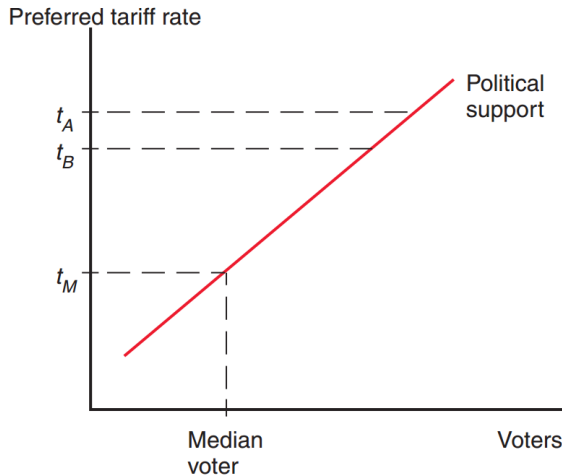
- Two parties
- Continuum of voters of size  $N$
- Line the voters up by their preferred tariff
- A voter chooses the party closest to her preferred tariff
- Parties take tariff positions to maximize support
- Suppose that voters have a uniform distribution over preferred tariffs between 0 and  $T$





# Median Voter Theorem

- Both parties choose the same, median voter supported trade policy
- What if there are three parties?
- Median voter theorem predictions contrast with trade policy
  - Typically trade policy helps one industry a lot
  - Typically trade policy hurts everyone else a little





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# Collective Action

- Trade policy is a *public good*
  - That is, it cannot be excluded
- Nearly everyone in China hurt by beef import tariffs(12%)
- Suppose I write a letter to my representative
  - The probability my letter is pivotal is small
  - The benefit I get from removing subsidies is (relatively) small
  - There is a small cost to sending a letter
  - I won't do it
- Suppose I am a Chinese farmer
  - The probability my letter is pivotal is larger (smaller group of potential writers)
  - The benefit I get from keeping tariff is much larger
  - There is a small cost to sending a letter
  - I do it
- Result: All the letters from farmers



## Punchline: Collective action

- Policies with large aggregate loss but small individual loss are difficult to change
- Small groups with concentrated losses are more willing to pay effort fixed cost
- 会哭的孩子有奶吃



# Real Politics

- Politicians win elections partly because:
  - 1 they advocate popular policies (median voter theorem)
  - 2 they have funds to run campaigns (collective action)
- We indeed get the trade policy in well-organized groups with concentrated gains(能够克服集体行动困难)



# Which Industries are Protected?

- Agriculture
  - Small but politically vocal labor force in the US
  - Japan has 1000% tariff on rice imports!
- Textiles (USA, about 14 \$ billion)
  - Declining in importance thanks to WTO
  - Billions of dollars in US welfare loss due to protection:

	2002 Estimate	2015 Projected
Total	14.1	2.6
Textiles and apparel	11.8	0.5

**Source:** U.S. International Trade Commission.



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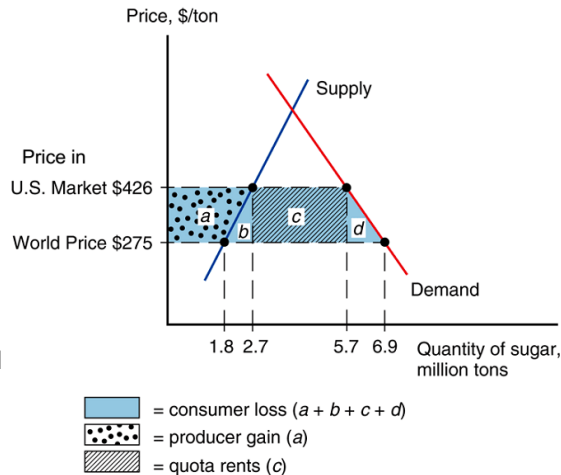
## Example: U.S. Sugar Quota

- U.S. guarantees sugar producers a “break even” price on sugar production
- The USDA will buy any amount of sugar at this price
- Even at this relatively high price, domestic demand exceeds domestic supply of sugar, so the US imports sugar
- In order to maintain this higher price, the US imposes a sugar quota and lets foreign governments administer the quota and retain the quota rents
- Over the past 25 years, this higher price has been on average twice the world market price of sugar



# Welfare Effects of U.S. Sugar Quota

- CS loss ( $a + b + c + d$ ): \$884M
- PS gain ( $a$ ): \$272M
- Distortion in:
  - Production ( $b$ ): \$68M
  - Consumption ( $d$ ): \$91M
- Quota rents ( $c$ ): \$453M
- Net surplus loss ( $b + c + d$ ): \$612M





# Winners and Losers

- US sugar industry employs 6,500 workers
  - PS gains represent \$42K per worker
- The quota does increase employment in the sugar industry: employment would be 32% lower without quota
  - This represents a cost to U.S. consumers of \$432K per job saved! Considering employment losses from the quota in sugarusing industries, then net employment effect of quota is negative and cost per job saved goes up to \$826K
- On average, each US consumer pays an extra \$3 (per year) from the higher US sugar price (\$11 per family)
- Who do you think benefits?



## Winners and Losers (cted.)

- The US sugar industry is very concentrated geographically (in Florida) and very well organized
- US sugar sales represent 1% of US farm receipts and 0.5% of US farm employment
- US sugar lobby contributions represent 17% of campaign contributions from agricultural sector
- The Fanjul brothers who own Flo-Sun (the biggest US sugar cane growing and refining company) gave \$1M in political contributions in each of the 2000 and 2004 election cycles



## Two Winners





# Political Economy of Sugar Quotas

- In 1996, a congressional amendment was introduced to phase out the US sugar quota (and price support program)
- The amendment was defeated by 217-209 in the house of representatives
- Five co-sponsors of the bill switched their support against their own amendment in the final vote
- Within days of the vote, each received an average of \$11,000 from the US sugar lobby



# 总结

- We have seen more arguments for free trade
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  - Trade policy causes rent seeking distortions
  - Trade policy is often captured by special interests
- We have seen arguments against free trade
  - The optimum tariff
  - Domestic market failure and trade policy
- We have talk about how trade policy is formed
  - Median voter
  - Collective action