## PubPol/Econ 541

Classes 23, 24

#### Dumping and Anti-Dumping Policy by Alan V. Deardorff

University of Michigan 2020

#### Quiz

	Q7	Q8	Q9	Q10	Q11
Mean	8.61	7.42	7.17	8.05	8.75
Median	9	7.5	7.5	8	8.5
Max	10	10	10	9	10
Min	6.5	4	4	6.5	7.5
Standard deviation	1.14	1.77	1.59	0.86	0.62

#### Announcements

- We do have class this Thursday, Dec 9
- Course Evaluations
  - Please do them.



# **Pause for Discussion**

Class 23,24: Dumping and Anti-Dumping Policy

#### Questions on Jackson

- Under what circumstances are imports regarded as "dumped"?
- What is the "dumping margin"?

## **Dumping and Anti-Dumping**

- Dumping is defined as exporting for a price below a "fair price," defined as EITHER
  - What the exporter charges in its home market,
     OR
  - Cost
- Anti-dumping duties (ADD) are permitted by the GATT/WTO if set equal to (or below)
  - The dumping margin: the difference between fair price and the export price

#### Outline

- Why firms dump
  - Predation? No
  - Protected home market
  - Interface problem
  - Other reasons
- Procedures and data
- Effects of ADD

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#### Predation

Defined as selling at low price in order to

 Drive competitors out of business
 <u>AND</u> THEN

- Charge monopoly price

#### Predation

- Does predation happen?
  - Within economies yes. (e.g., Microsoft Explorer)
  - Internationally? Rarely if ever
    - Dumping is usually alleged against multiple firms and sometimes multiple countries
    - Later monopoly pricing is therefore very unlikely

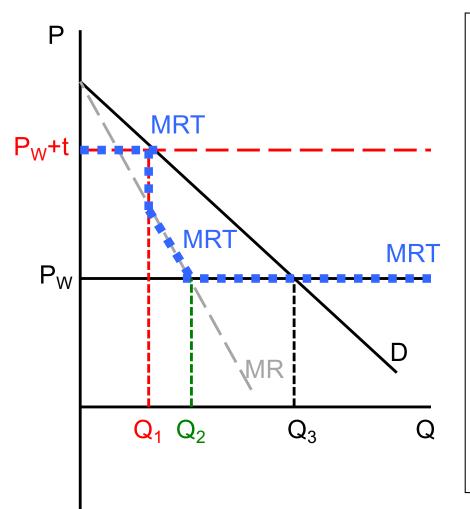
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#### **Protected Home Market**

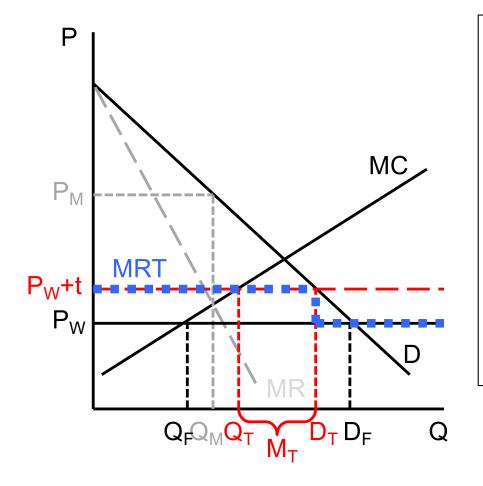
- Does a tariff cause dumping?
  - It raises the home price above the world price
  - If home firm exported at world price, then that would be dumping
  - But with perfect competition, no home firm would export, since it gets a higher price at home.
- So protected home market only causes dumping with imperfect competition
- We'll look at a case of a single home firm, thus a monopoly in the home market

## Marginal Revenue of a Monopoly protected by a Tariff



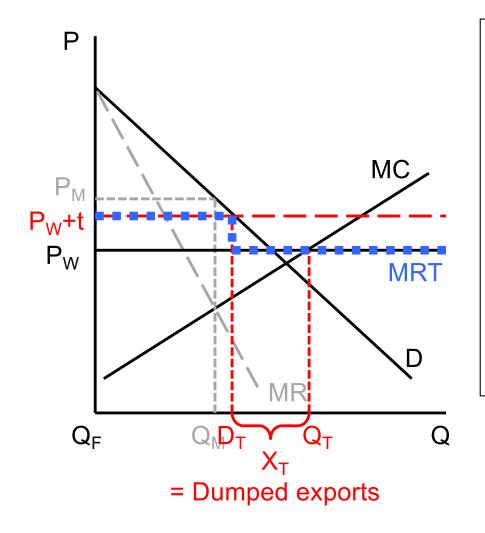
- The usual MR curve for a monopolist in a closed economy is is mostly not relevant for a firm facing a world price P<sub>W</sub> at which it can export and an upper limit P<sub>W</sub>+t on what it can charge in the home market.
- MRT (marginal revenue in presence of a tariff) is
  - P<sub>W</sub>+t for sales up to Q<sub>1</sub>
  - MR for sales between  $Q_1$  and  $Q_2$  (sales along demand curve)
  - $P_W$  for sales above  $Q_2$  (exports above  $Q_3$ )

#### **Recall Monopoly with Tariff**



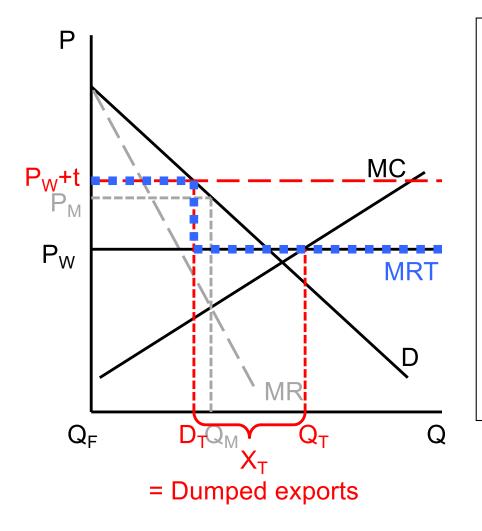
- Here the world price is low enough that the monopolist does not export.
- It can sell up to D<sub>T</sub> at price P<sub>W</sub>+t, so that is its marginal revenue. Equating that to MC, it produces only Q<sub>T</sub> and demanders import the rest.
- It is not exporting, and therefore <u>not</u> dumping.

## Monopoly with Small Tariff



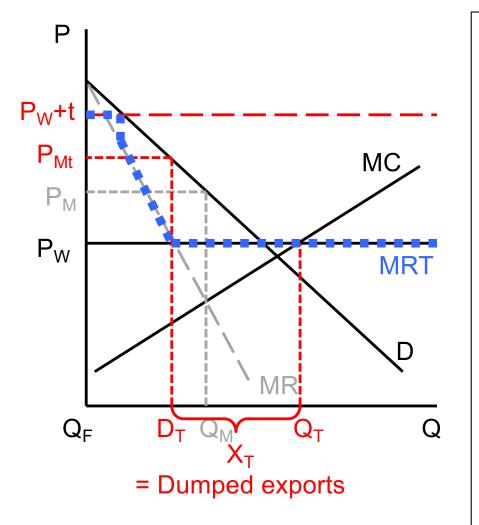
- But suppose  $P_W$  is higher
- Again the firm can sell up to D<sub>T</sub> at price P<sub>W</sub>+t,
- But now it can also sell more at price P<sub>W</sub> which is above its MC. Its marginal revenue from exporting is P<sub>W</sub>, so it produces Q<sub>T</sub> where P<sub>W</sub>=MC
- It is charging P<sub>W</sub>+t at home and P<sub>W</sub> abroad, <u>so it is dumping</u>.

## Monopoly with Medium Tariff



- With a somewhat higher tariff, the firm charges an even higher price at home, sells less there but exports more.
- Again it is charging P<sub>W</sub>+t at home and P<sub>W</sub> abroad, <u>so it is</u> <u>dumping</u>.
- Note that it is now selling domestically for <u>more</u> than the closed-economy monopoly price.

## Monopoly with High Tariff



- With an even higher tariff, the firm would lose profit if it charged P<sub>w</sub>+t at home.
- Instead it charges P<sub>Mt</sub> equating marginal revenue to marginal cost.
- But the relevant marginal cost for sales at home is not MC, but rather P<sub>W</sub>, since that is the opportunity cost of selling at home instead of exporting.
- Again it is charging P<sub>Mt</sub> at home and P<sub>W</sub> abroad, <u>so it is</u> <u>dumping</u>.

# **Pause for Discussion**

Class 23,24: Dumping and Anti-Dumping Policy

#### Questions (not asked before)

- Why will a tariff not cause dumping (by price definition) if markets are perfectly competitive?
- If dumping is due to a protected home market, to what extent is it harmful to the
  - Importing country?
  - Exporting country?

#### Outline

- Why firms dump
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  - Other reasons
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- Countries with different cultures and institutions may encounter frictions at the border as a result.
- Example from the Jackson text:
  - Japan: Worker tenure; debt financing
  - US: No worker tenure; equity financing
  - Leads to differences in fixed costs (F) and variable costs (V), even when total costs are same

Costs	Japan		US	
	F	V	F	V

Costs		Japan		US	
		F	V	F	V
	Plant	20		20	
	Debt service	90		50	
	Dividends		10		50
	Labor	240			240
	Materials		240		240
Total cost		600		600	
	Fixed	350		70	
	Variable		250		530

At prices 250<P<530: Japan produces; US shuts down To US, looks like P<MC Class 23,24: Dumping and Anti-Dumping Policy

- Japan-US
  - Differences in normal behavior lead naturally to conflict and misunderstanding
- China-Other
  - China's political system differs from the democracies of other major traders
    - Much greater use of state-owned firms
    - Communist Party plays a role in even private firms
  - Others see subsidies where China sees national interest Class 23,24: Dumping and Anti-Dumping Policy

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## Other Reasons for Dumping

- Below-average-cost dumping
  - Temporary weak demand (recession)
  - World excess supply
- Below-marginal-cost dumping
  - Producer learning
  - Consumer learning
- Other thoughts?

# **Pause for Discussion**

Class 23,24: Dumping and Anti-Dumping Policy

## Questions on Deardorff, ("Economic Perspectives...")

- Why might an exporter dump, based on the below-cost definition? Who is harmed in these cases (answer may depend on which of several reasons apply)?
- How common is "predatory dumping", and why?

#### Outline

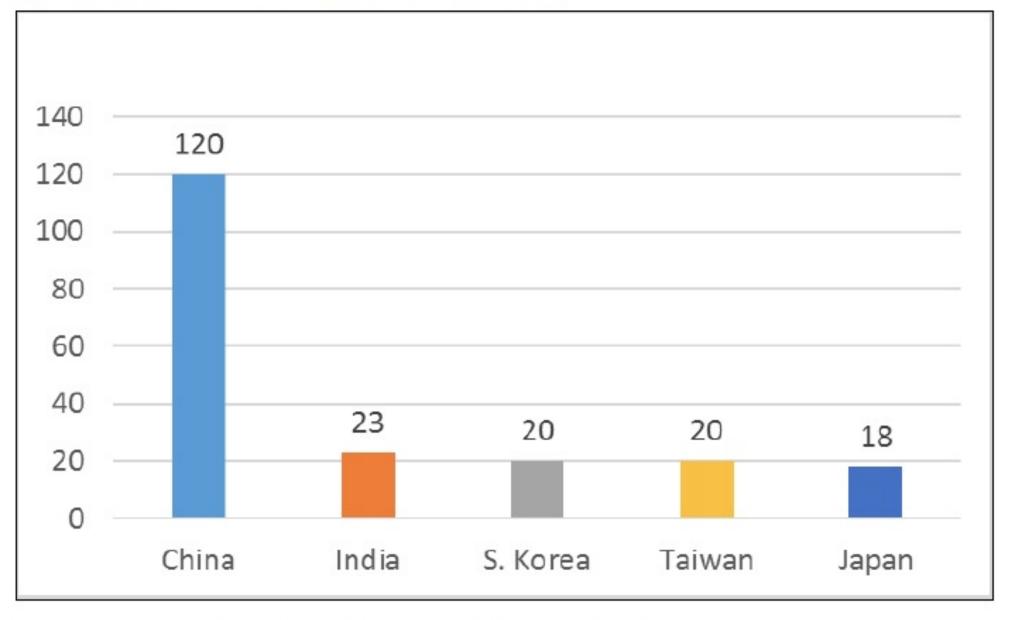
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#### US Procedures for ADD

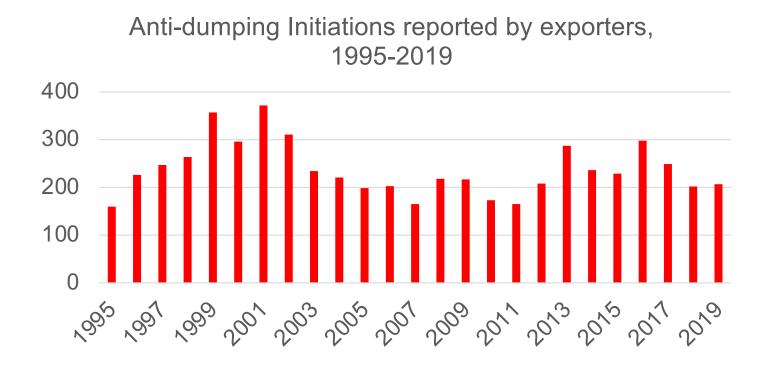
- 1. File in both Commerce (ITA) and USITC
- 2. < 45 days: Preliminary injury
- 3. < 160 days: Preliminary dumping margin (if yes, action at the border)</li>
- 4. < 235 days: Final injury and final margin

#### Throughout: Settlement possible!

#### Figure I. Major Targets of U.S. AD Orders (In place as of December 14, 2018)



Source: U.S. International Trade Commission.



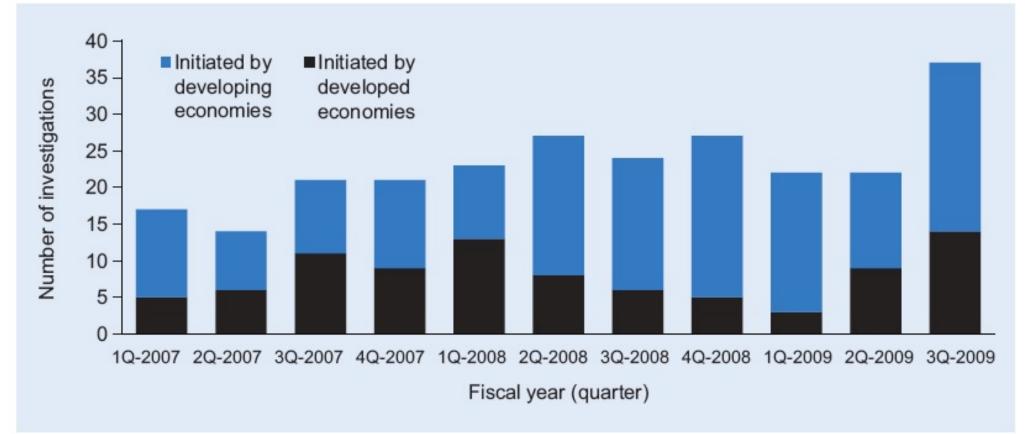
Source: WTO

## Top targets of anti-dumping investigations, 1995-2019

	Exporter	
1	China	1392
2	Korea, Republic of	447
3	Chinese Taipei	315
4	United States	298
5	India	241
6	Thailand	238
7	Japan	230
8	Indonesia	218
9	Russian Federation	173
10	Malaysia	165
11	Brazil	159
12	European Union	133
13	Germany	119
14	Turkey	103
15	Ukraine	94

Source: WTO

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



• Source: Global Antidumping Database.

Class 23,24: Dumping and Anti-Dumping Policy

#### Anti-Dumping Issues

- Cumulation
- Margins analysis

# **Pause for Discussion**

Class 23,24: Dumping and Anti-Dumping Policy

### Questions on Jackson

- Does "cumulation" make it more or less likely that a country whose exports are dumped will face an anti-dumping duty?
- Does "margins analysis" make it more or less likely that a country whose exports are dumped will face an anti-dumping duty?

### Anti-Dumping Issues

- Cumulation
- Margins analysis
- Lesser-Duty Rule

# **Pause for Discussion**

Class 23,24: Dumping and Anti-Dumping Policy

### Questions on Jackson

- What is the level of the injury test in dumping cases?
- If dumping and injury are both found, what determines the size of the anti-dumping duty? Must it then be applied? Are the rules any different in the EU than in the US?

### Questions on Jackson (cont.)

- What is the "lesser-duty rule"? In what countries is it applied, and in what countries is it not applied?
- Suppose an anti-dumping duty will cause harm to some in an economy that is greater than the benefit to the protected industry.
  - Can authorities therefore choose not levy the duty?
  - For those who can decline to levy the duty, what must be true in order for them to do so?

### Questions on EC, DG-Trade

- Who decides on anti-dumping in the EU?
- Do the criteria for anti-dumping measures differ from those of the US?
- What forms do EU anti-dumping measures take, and for how long?
- What is the size of an anti-dumping duty in the EU?

### Questions on Jacob, "Lesser Duty Rule..."

- What does Jakob view as "fair competition"?
- What is the "lesser-duty rule"?
  - In what countries is it applied, and in what countries is it not applied?
  - In those that apply it, how often has the smaller injury margin been used?
- In what countries can an anti-dumping duty be denied based on other interests of the country?
  - What is the "proportionality test" for this?

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### Effects of ADD

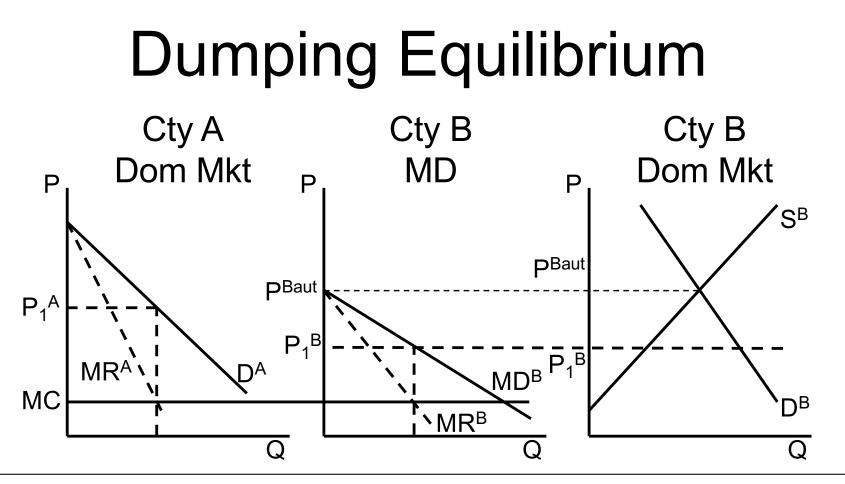
- Effects of an Anti-Dumping duty depend on how the dumping firm responds
  - 1. It may <u>keep</u> its exporting <u>price unchanged</u>
  - 2. It may <u>readjust its prices</u> in the presence of the duty
  - It may <u>not dump</u> (perhaps to forestall the ADD): change its pricing policy to charge the same price in both markets

Note that this may happen even without dumping ever being alleged

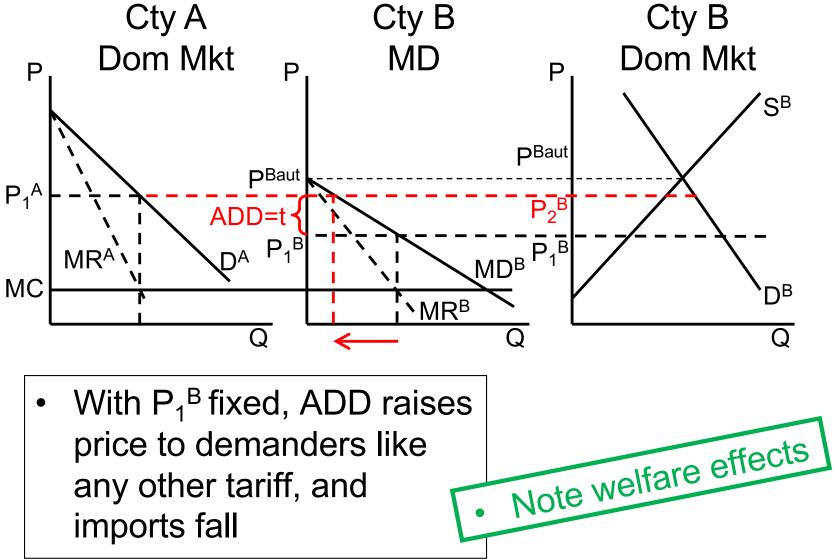


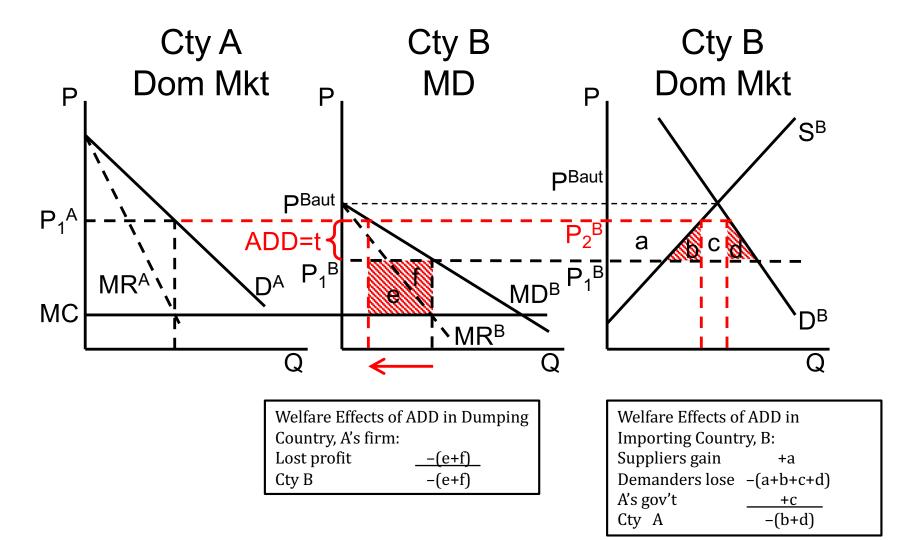
### Effects of ADD

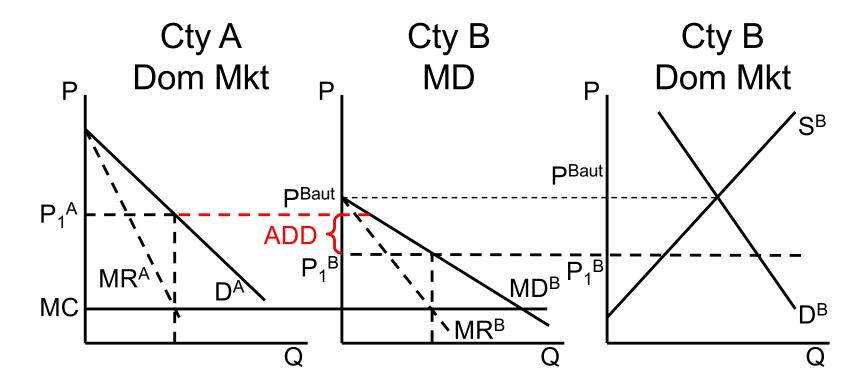
- Model
  - Single firm at home (thus monopoly in autarky)
  - Faces downward sloping demand from abroad
  - Protected by prohibitive tariff, so that it <u>can</u> charge a lower price for export than at home
  - Uses monopoly pricing (MC=MR) in both markets separately



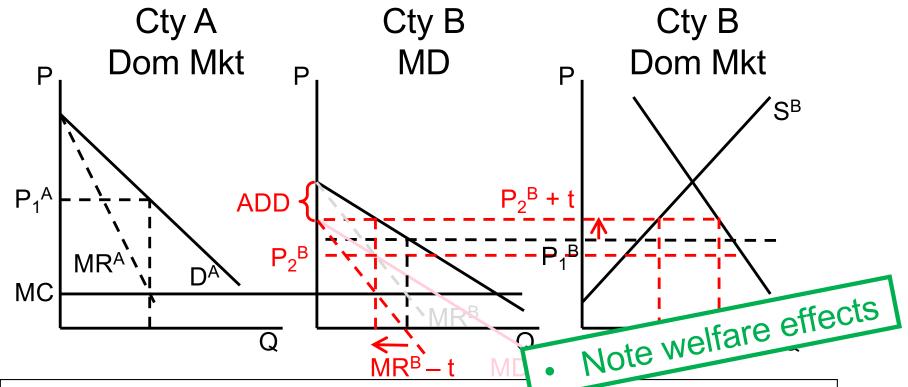
- Consider an equilibrium with a single firm at home (A) that can also export to a foreign market, B, whose home supply and demand lead to the import demand curve MD<sup>B</sup> shown
- Assume Country A's domestic market is protected by a prohibitive tariff
- As drawn,  $P_1^A > P_1^B$  so the firm is dumping



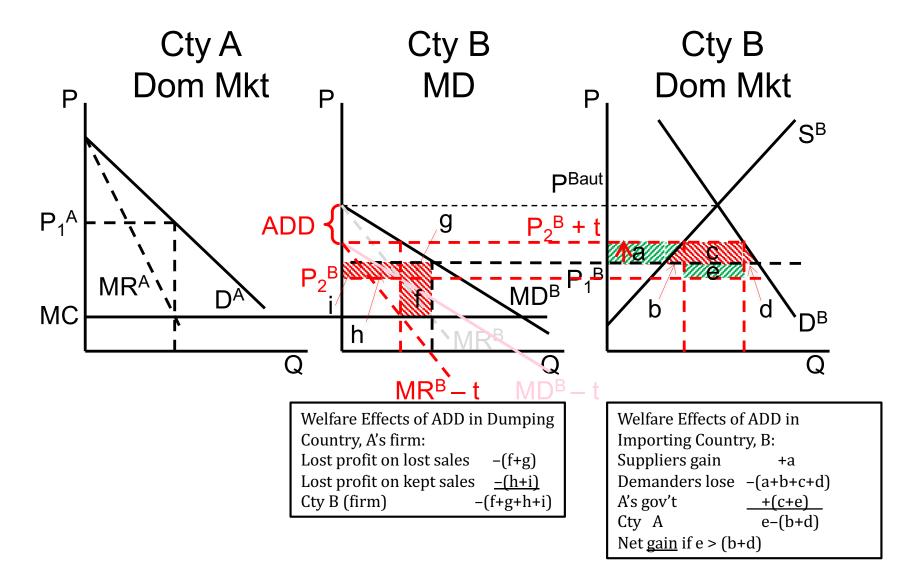


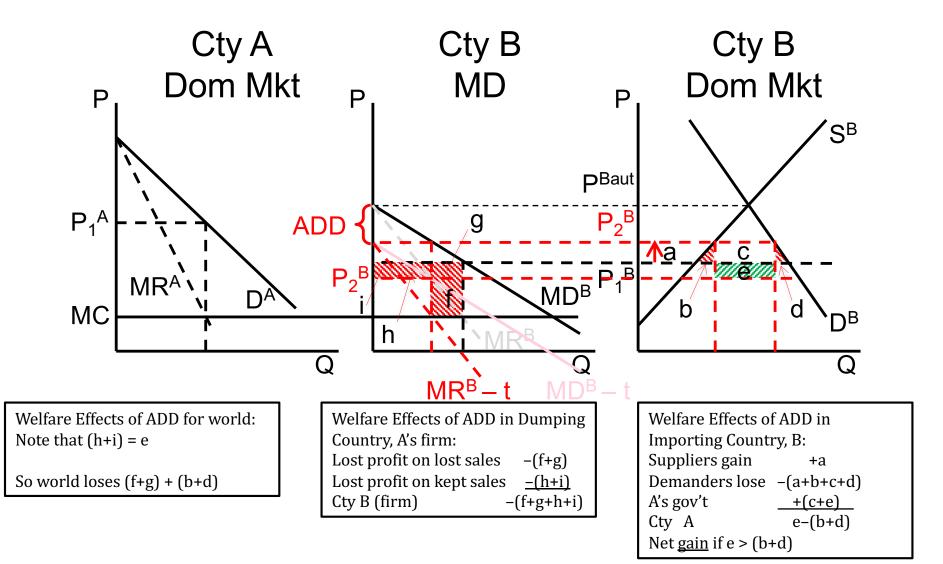


If P<sub>1</sub><sup>A</sup> and P<sub>1</sub><sup>B</sup> can readjust, P<sub>1</sub><sup>A</sup> will not change

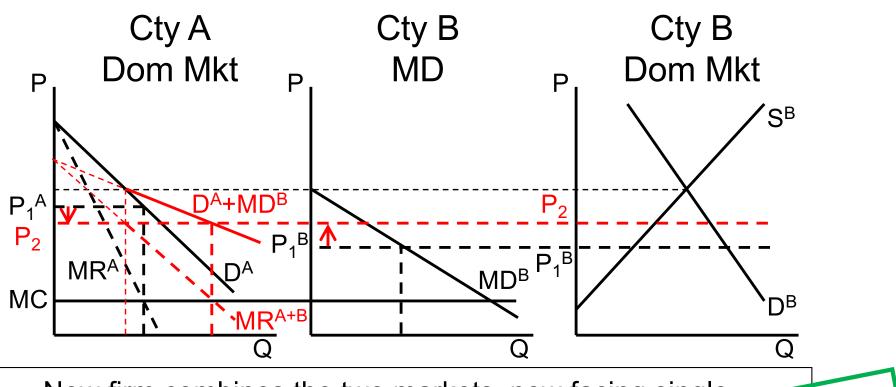


- If  $P_1^A$  and  $P_1^B$  can readjust,  $P_1^A$  will not change
- ADD, set equal to P<sub>1</sub><sup>A</sup> P<sub>1</sub><sup>B</sup>, acts as downward shift in demand (and MR) for the exporting firm
- Effect is to lower export price but by less than tariff



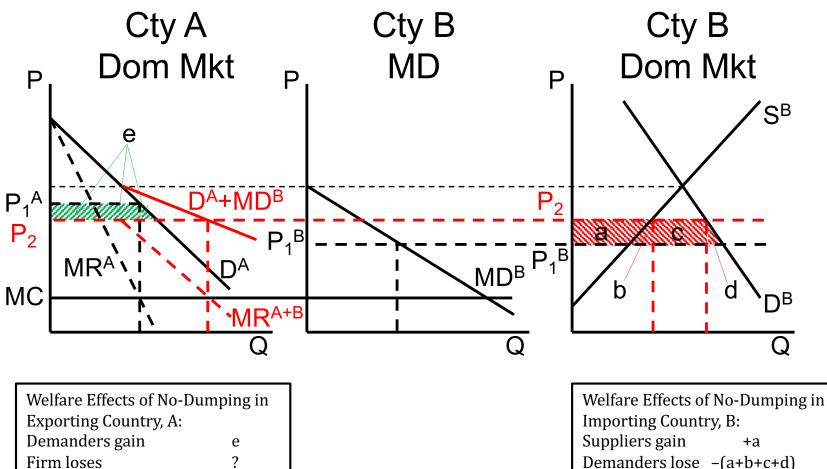


#### <u>Not</u>-Dumping Equilibrium 3.



- Note welfare effects Now firm combines the two markets, now facing single ۲ demand curve D<sup>A</sup>+MD<sup>B</sup>
- Corresponding MR curve, MR<sup>A+B</sup>,
- Determines price P<sub>2</sub> charged in both markets
- Result: Price falls at home and rises abroad

#### Not-Dumping Equilibrium 3.



Firm loses	
Cty A	

?

Demanders lose -(a+b+c+d)-(b+c+d)Cty A

## Summary of ADD Effects

- If export price unchanged
  - Exporter sells less and loses profit
  - Importer has same effects as usual smallcountry tariff
    - Suppliers gain
    - Demanders lose
    - Government gains
    - Dead-weight loss

## Summary of ADD Effects

- If exporter resets price to maximize profit (and ADD is unchanged)
  - Exporter lowers price, but by less than tariff
  - Exporter loses profit, but loses less than if price unchanged
  - Importer has same effects as usual largecountry tariff
    - Suppliers gain, demanders lose, government gains
    - Country <u>may</u> gain
    - Terms of trade improves

## Summary of ADD Effects

- If exporter sets a single price for home and exporter (so as <u>not</u> to dump)
  - Home price falls, export price rises
  - Exporter profit falls
  - Importing country does not use tariff (ADD)
  - Importing country welfare:
    - Suppliers gain
    - Demanders lose more
    - Government gains nothing
    - Terms of trade worsens

# **Pause for Discussion**

Class 23,24: Dumping and Anti-Dumping Policy

### Questions (Not asked before)

- Of the three cases considered here, which seems most likely to you?
  - No change in dumper's prices
  - Dumper's export price changes
  - Dumper changes both prices in order not to dump
- Might the dumper simply raise the export price to equal its home price?

Class 23,24: Dumping and Anti-Dumping Policy