

PubPol/Econ 541

Class 23

**Dumping and
Anti-Dumping Policy**

by

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Announcements

- Course Evaluations
 - Please do them
 - 6 of you had as of this morning
- Office Hour Monday Dec 5:
 - 4:00 PM, not 10:00 AM

- Quiz:

	Q8	Q9	Q10	Q11
Mean	7.50	6.30	7.04	8.81
Median	7	6.5	7.5	9
Max	10	10	9.5	10
Min	4.5	1	0.5	7
S.D.	1.76	2.39	2.43	1.09

Pause for News

Announcements

- Quiz: Not graded yet, as it was accepted until Monday midnight
- Last 2 quizzes also due Sunday midnight and accepted (with penalty) until Monday midnight
- Course Evaluations
 - Please do them
 - Six of you had as of yesterday afternoon

Pause for Discussion

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

AND 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

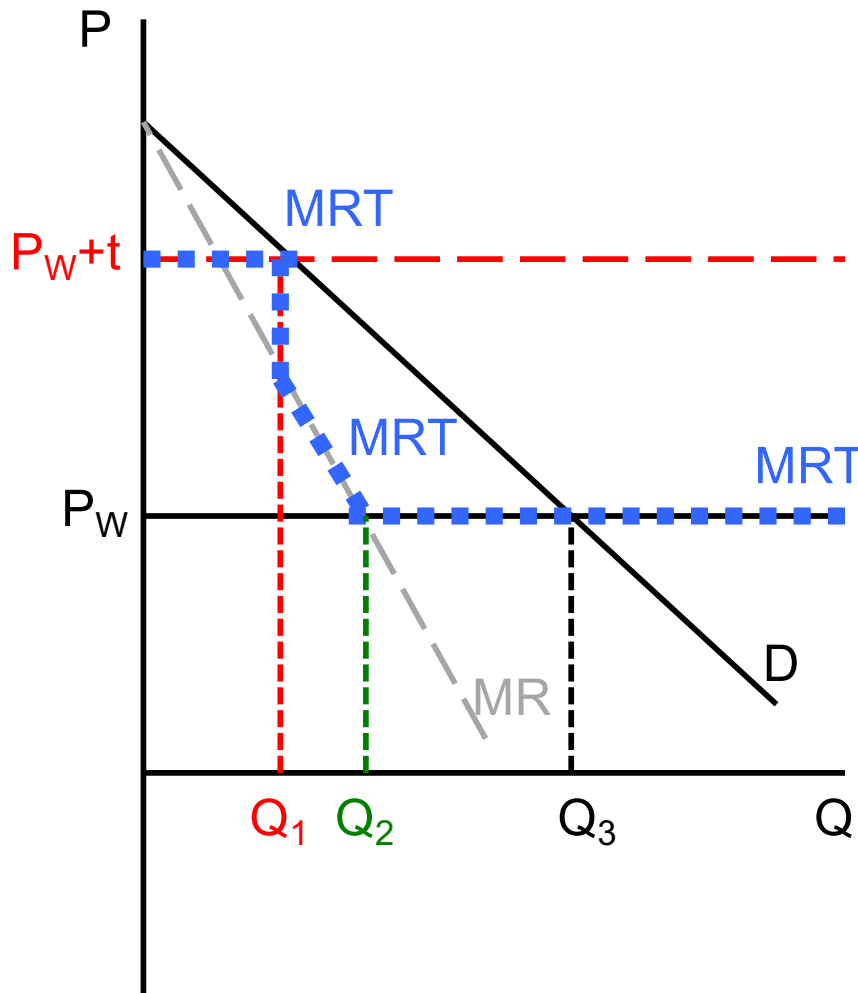
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Protected Home Market

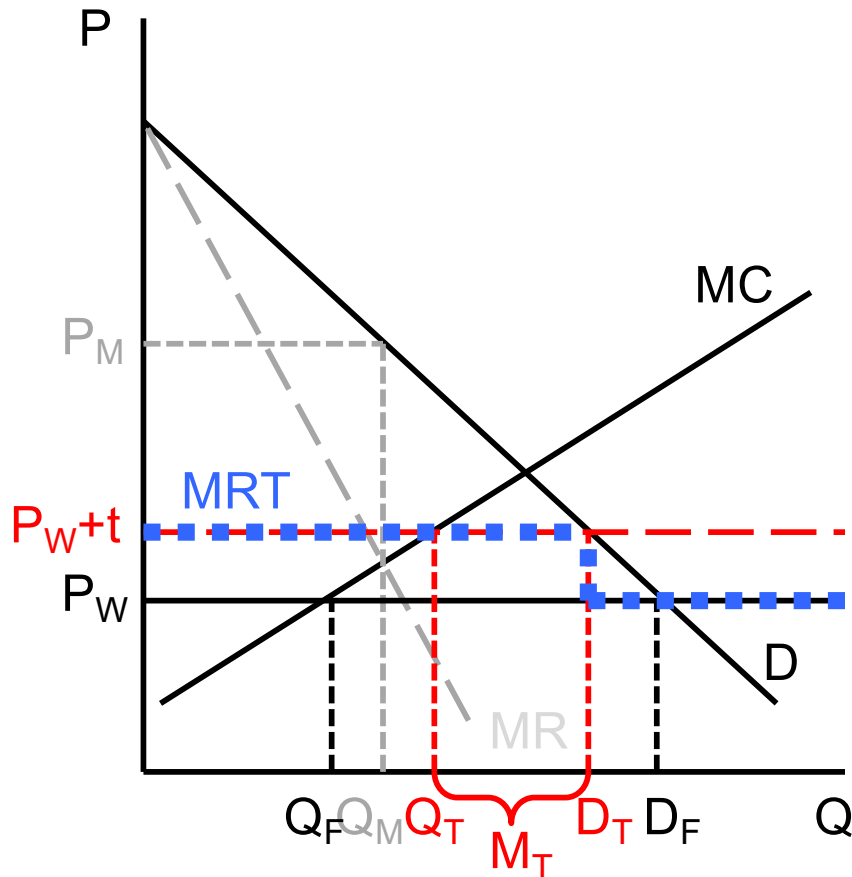
- Does a tariff cause dumping?
 - It raises the home price above the world price
 - If home firm exports at the world price, then that would be dumping
 - But with perfect competition, no home firm would export, since it gets a higher price at home.
- So protected home market only causes dumping with 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



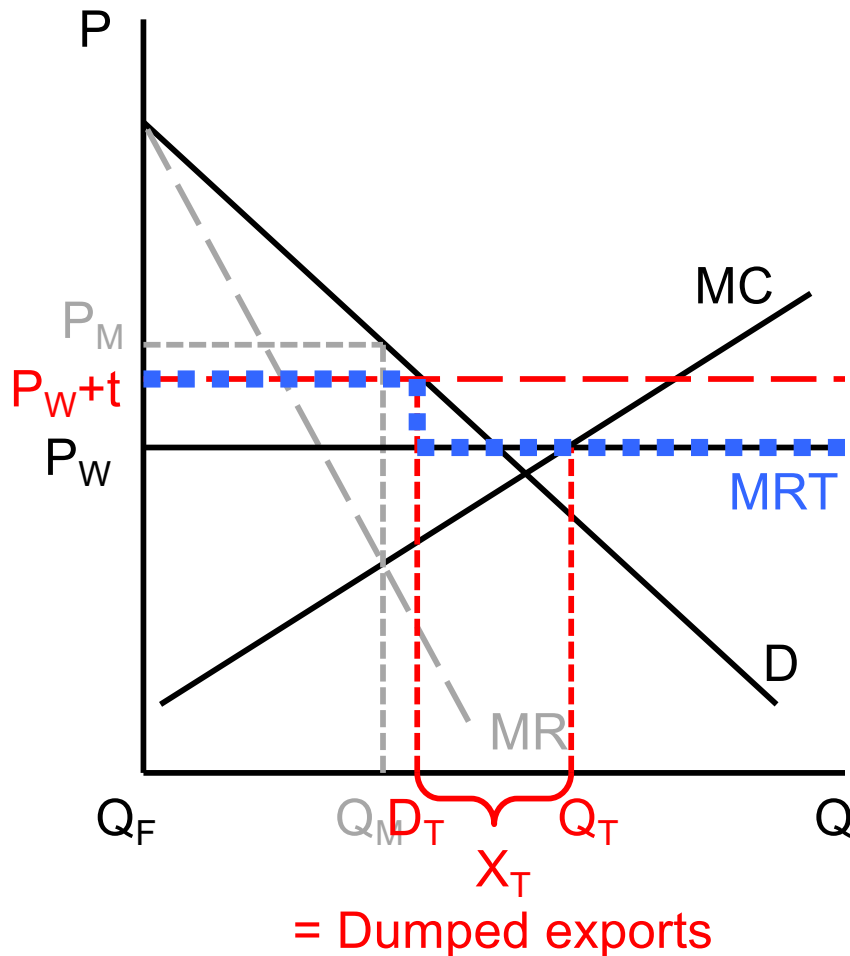
- The usual MR curve for a monopolist in a closed economy is mostly not relevant for a firm facing a world price P_W at which it can export and an upper limit $P_W + t$ on what it can charge in the home market.
- MRT (marginal revenue in presence of a tariff) is
 - $P_W + t$ for sales up to Q_1
 - MR 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



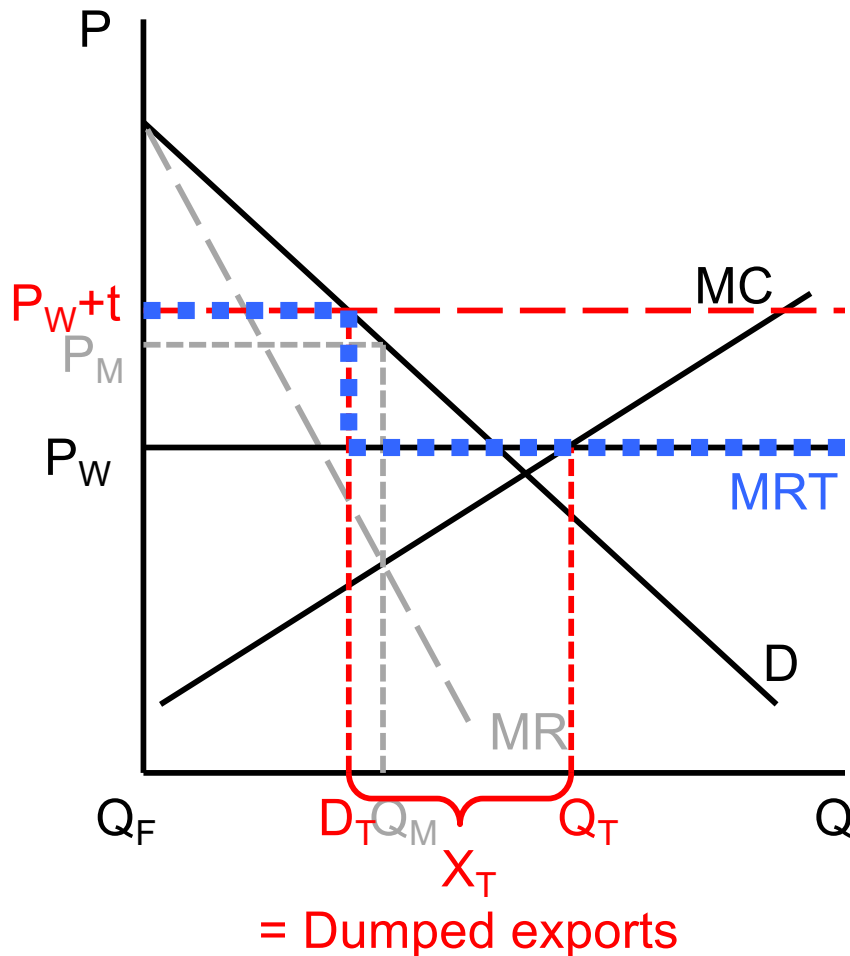
- Here the world price is low enough that the monopolist does not export.
- It can sell up to D_T at price $P_W + t$, so that is its marginal revenue. Equating that to MC, it produces only Q_T and demanders import the rest.
- It is not exporting, and therefore not dumping.

Monopoly with Small Tariff



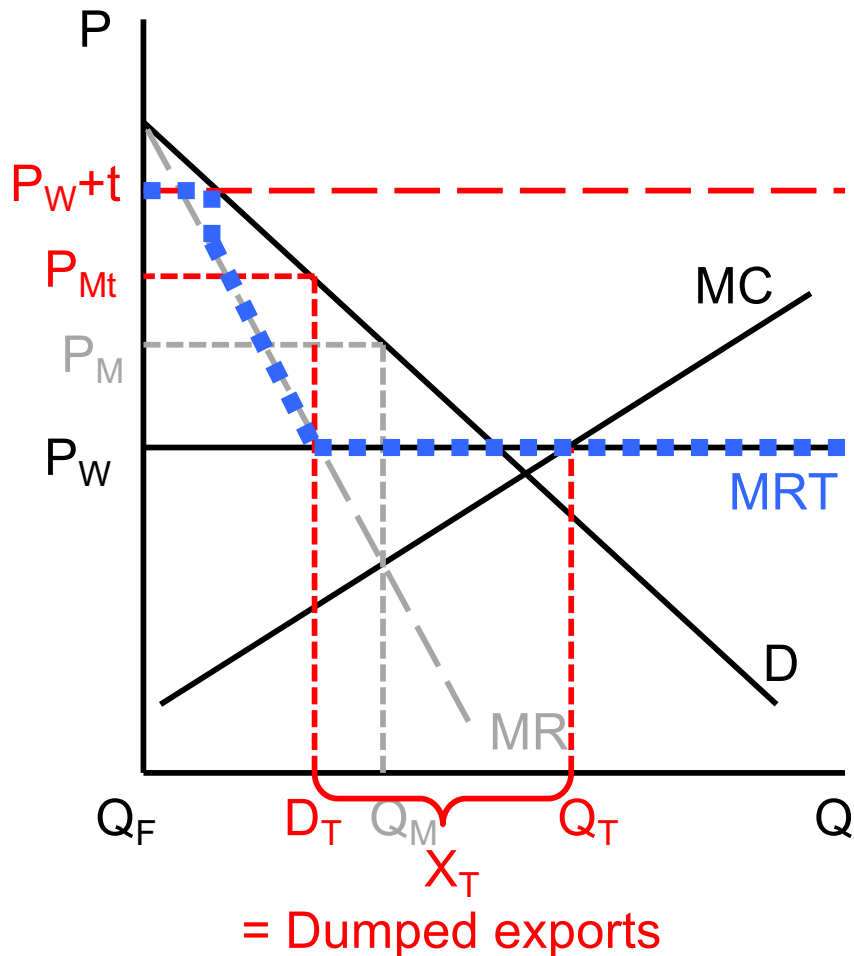
- But suppose P_W is higher
- Again the firm can sell up to D_T at price P_W+t ,
- But now it can also sell more at price P_W which is above its MC. Its marginal revenue from exporting is P_W , so it produces Q_T where $P_W=MC$
- It is charging P_W+t at home and P_W abroad, so it is dumping.

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 $P_W + t$ at home and P_W abroad, so it is dumping.
- Note that it is now selling domestically for more than the closed-economy monopoly price.

Monopoly with High Tariff



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

Pause for Discussion

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**
 - Predation? No
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 - **Interface problem**
 - Other reasons
- Procedures and data
- Effects of ADD

The Interface Problem

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

The Interface Problem

Costs		Japan		US	
		F	V	F	V

The Interface Problem

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

100 {

At prices $250 < P < 530$: Japan produces; US shuts down

To US, looks like $P < MC$

The Interface Problem

- 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 even in private firms
 - Others see subsidies where China sees national interest

Outline

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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

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

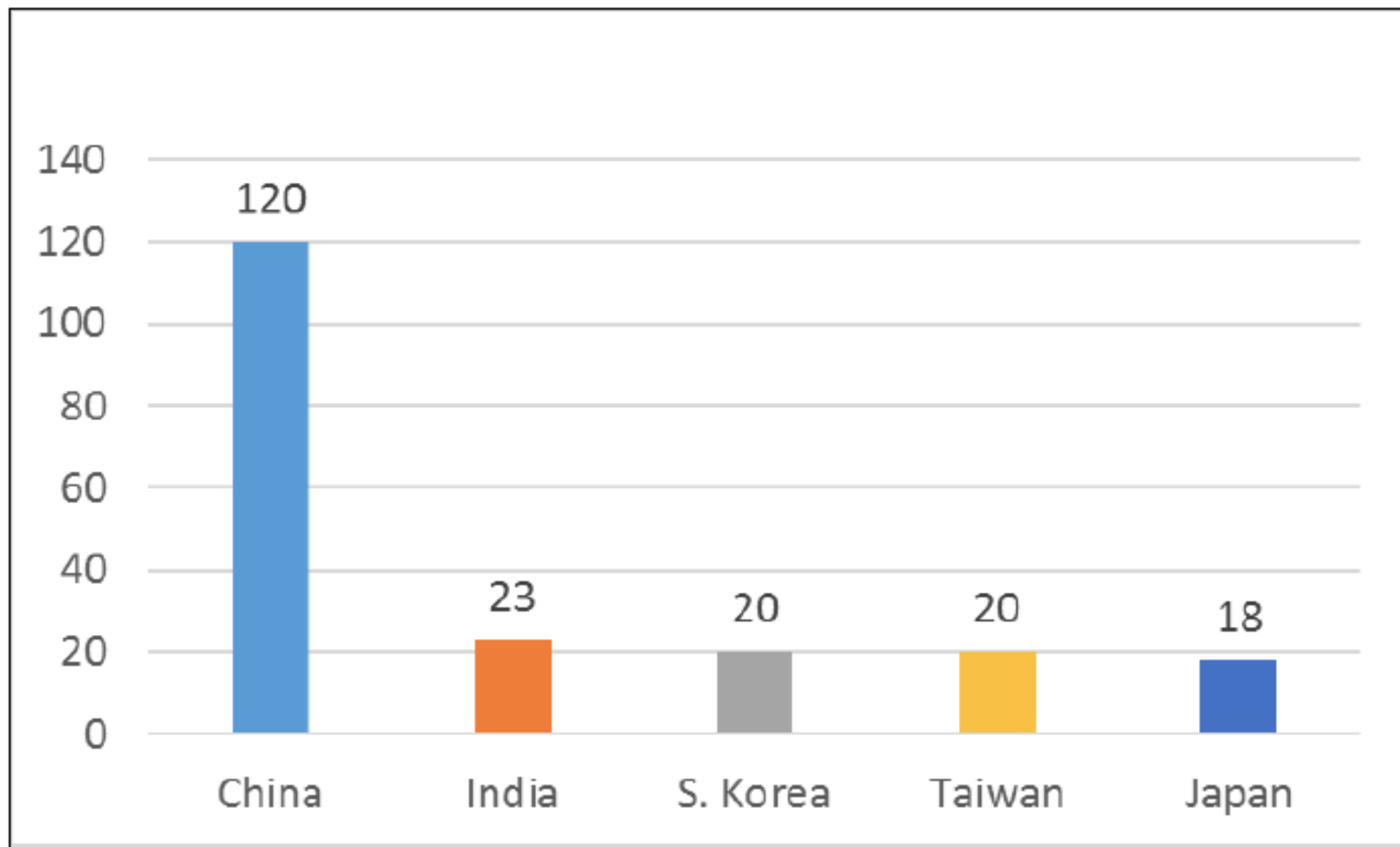
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- **Procedures and data**
- Effects of ADD

US Procedures for ADD

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

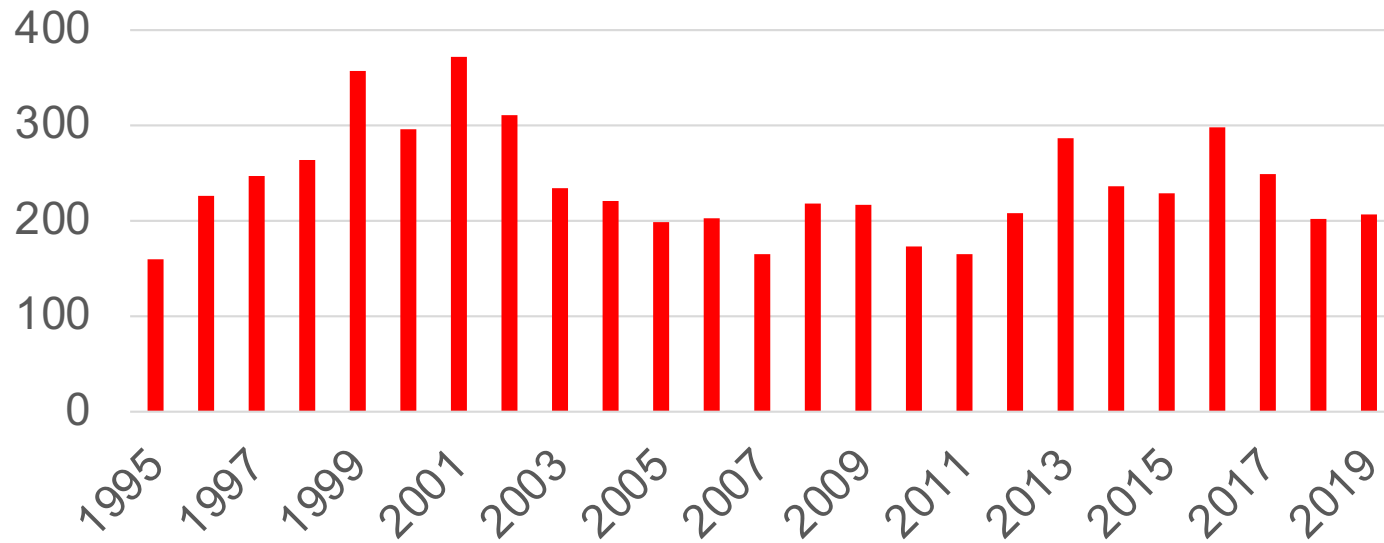
Throughout: Settlement possible!

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



Source: U.S. International Trade Commission.

Anti-dumping Initiations reported by exporters, 1995-2019



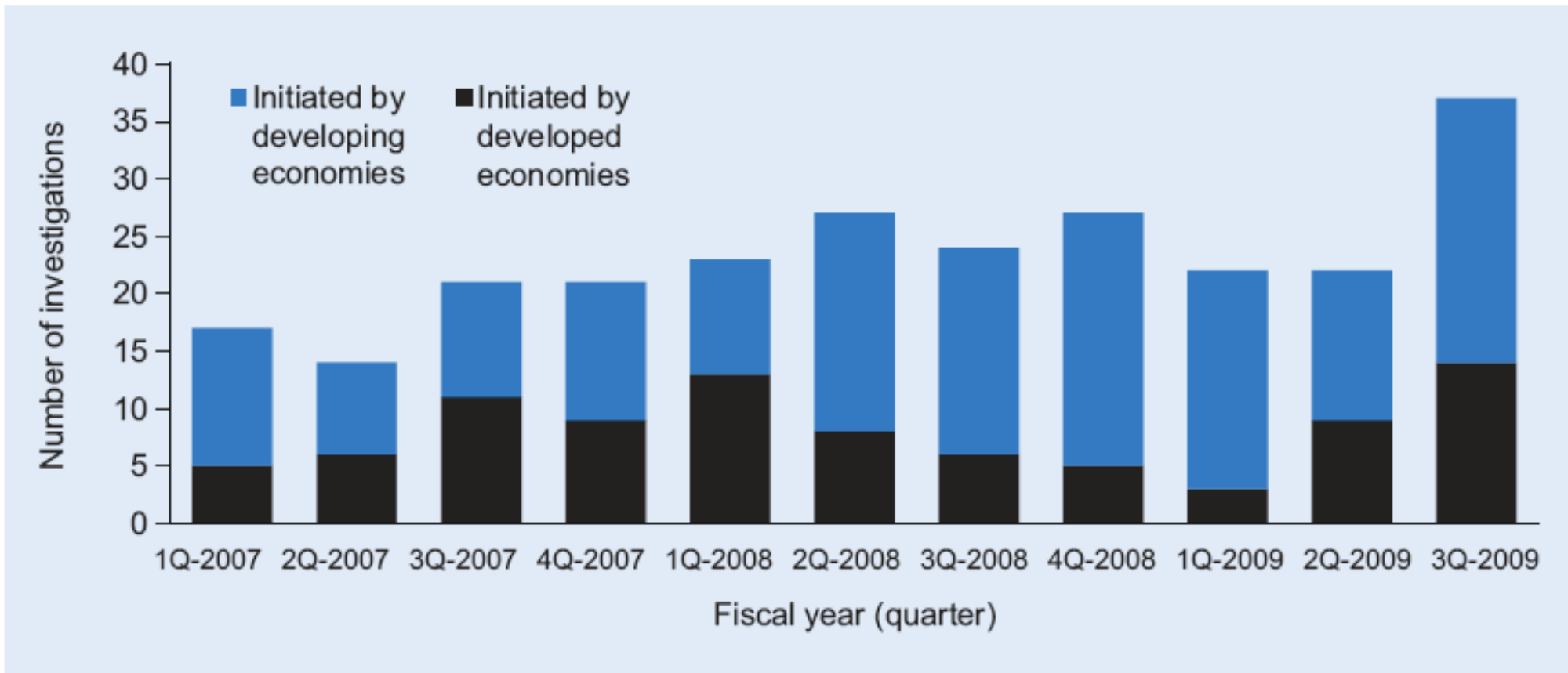
Source: WTO

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.*

Anti-Dumping Issues

- Cumulation
- Margins analysis

Pause for Discussion

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

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 Jakob, “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?

Outline

- Why firms dump
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- **Effects of ADD**
 - We'll skip the analysis this year and go right to summary of results

Effects of ADD

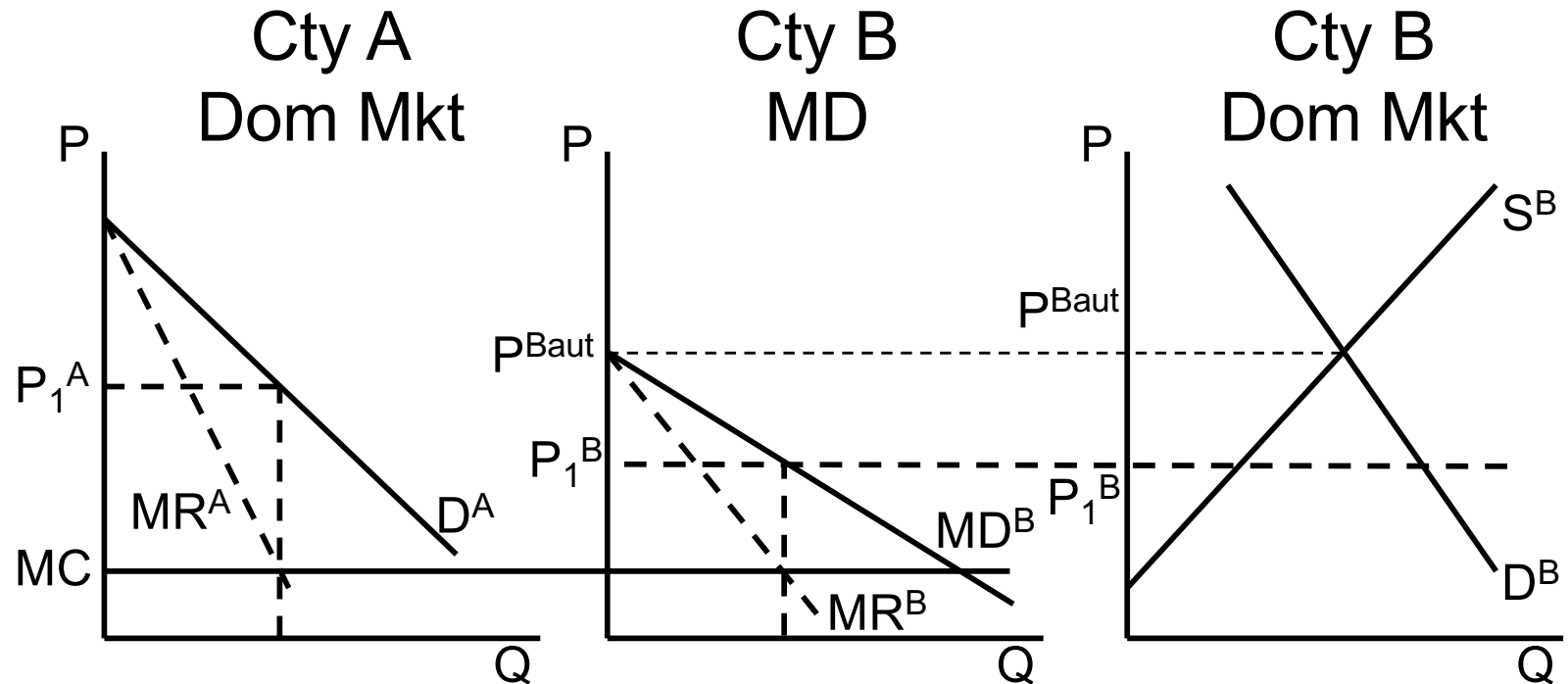
- Effects of an Anti-Dumping duty depend on how the dumping firm responds
 1. It may keep its exporting price unchanged
 2. It may readjust its prices in the presence of the duty
 3. It may not dump (perhaps to forestall the ADD): change its pricing policy to charge the same price in both markets

Note that this may happen even without dumping ever being alleged

Effects of ADD

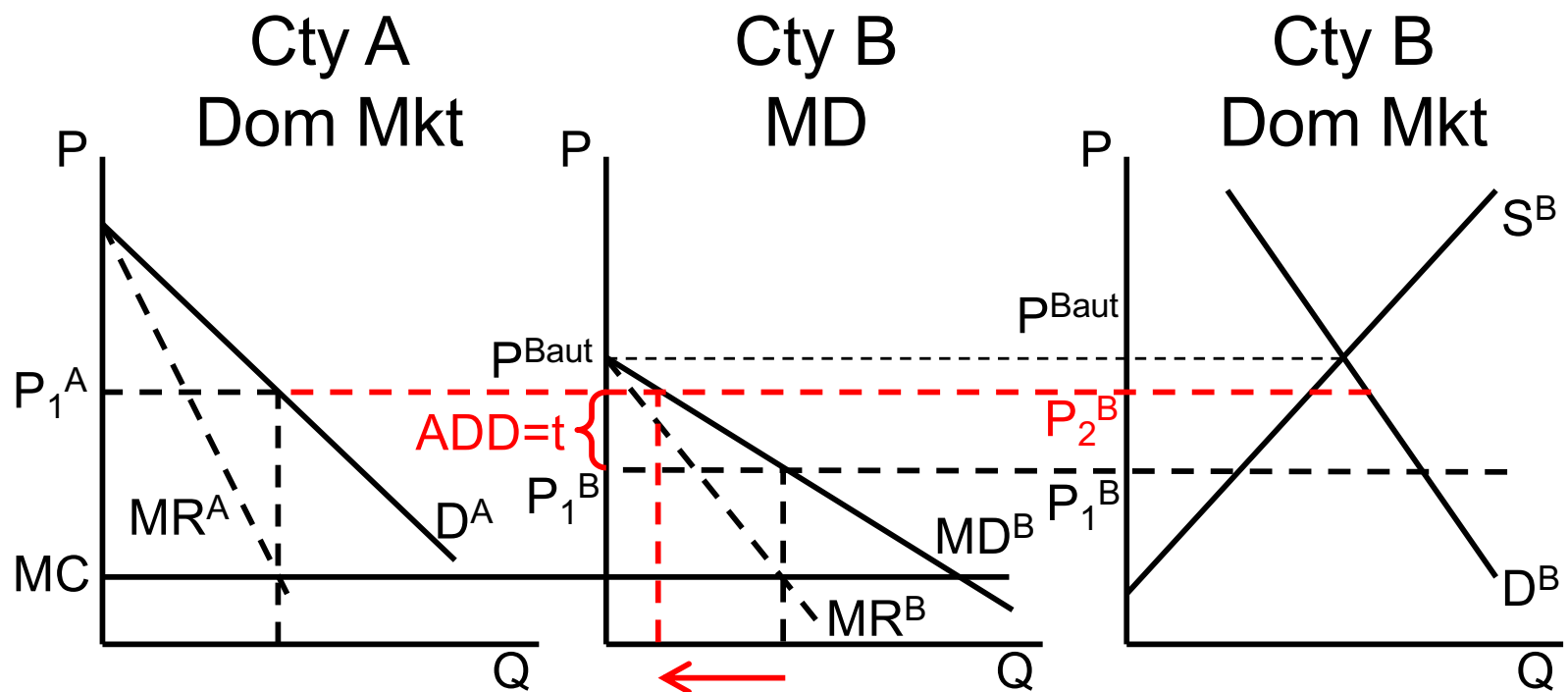
- Model
 - Single firm at home (thus monopoly in autarky)
 - Faces downward sloping demand from abroad
 - Protected by prohibitive tariff, so that it can charge a lower price for export than at home
 - Uses monopoly pricing ($MC=MR$) in both markets separately

Dumping Equilibrium



- 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^B 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

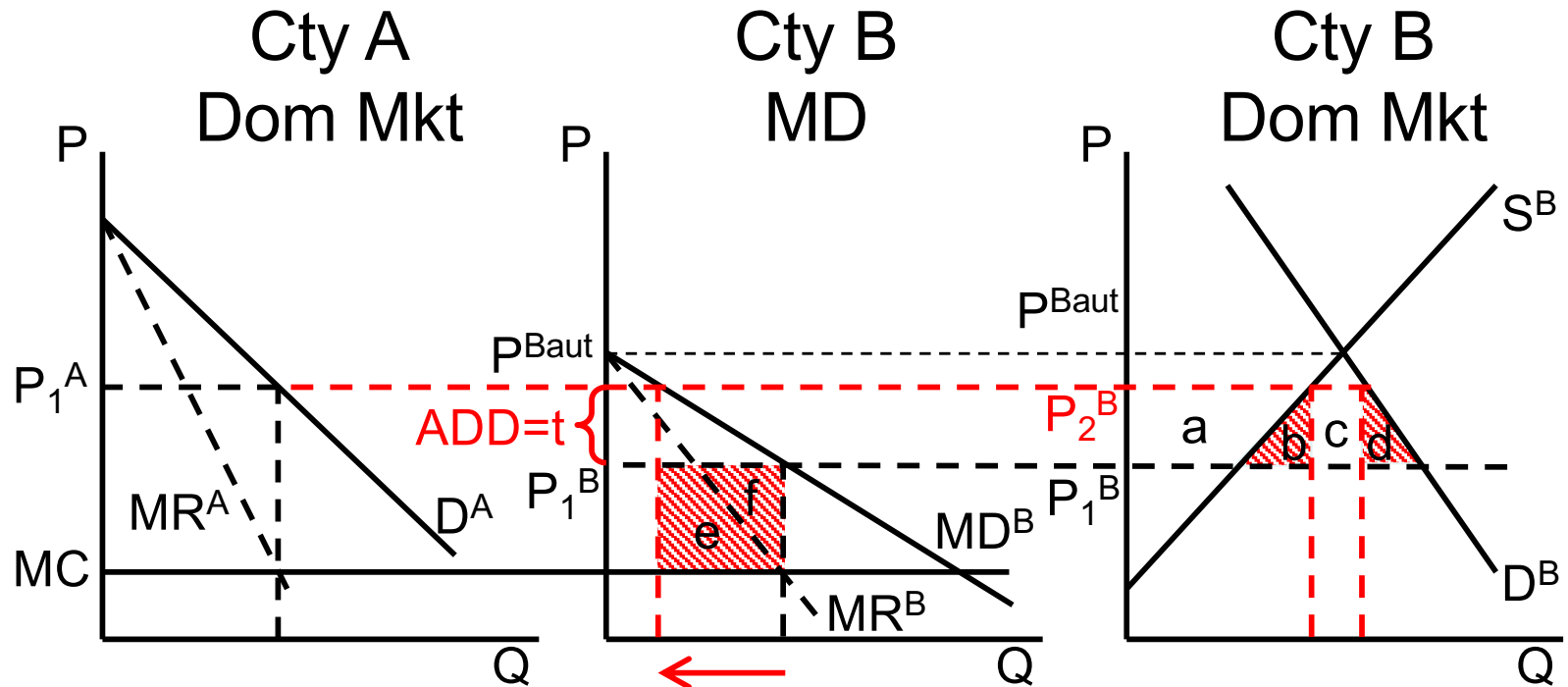
1. ADD Effects with unchanged export price



- With P_1^B fixed, ADD raises price to demanders like any other tariff, and imports fall

• Note welfare effects

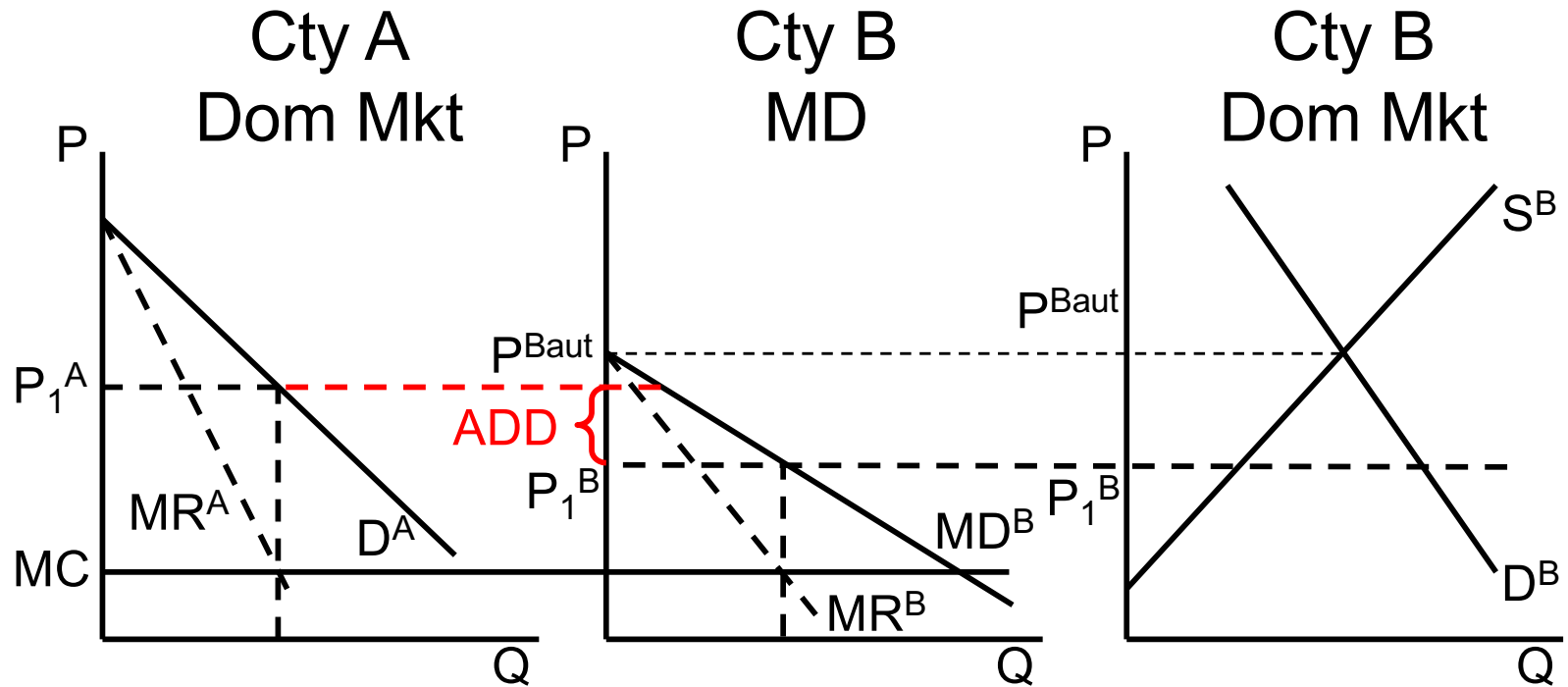
1. ADD Effects with unchanged export price



Welfare Effects of ADD in Dumping Country, A's firm:	
Lost profit	$-(e+f)$
Cty B	$-(e+f)$

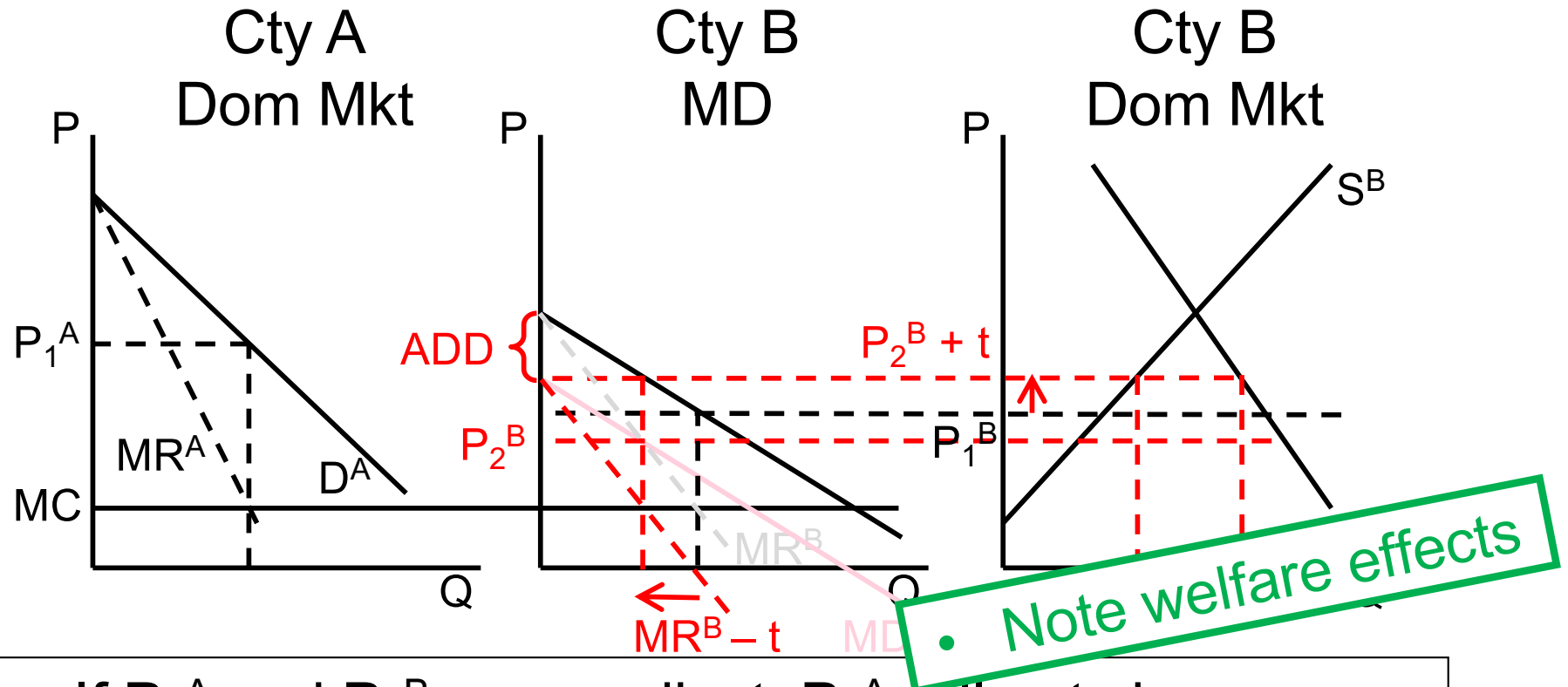
Welfare Effects of ADD in Importing Country, B:	
Suppliers gain	$+a$
Demanders lose	$-(a+b+c+d)$
A's gov't	$+c$
Cty A	$-(b+d)$

2. ADD Effects with changed export price



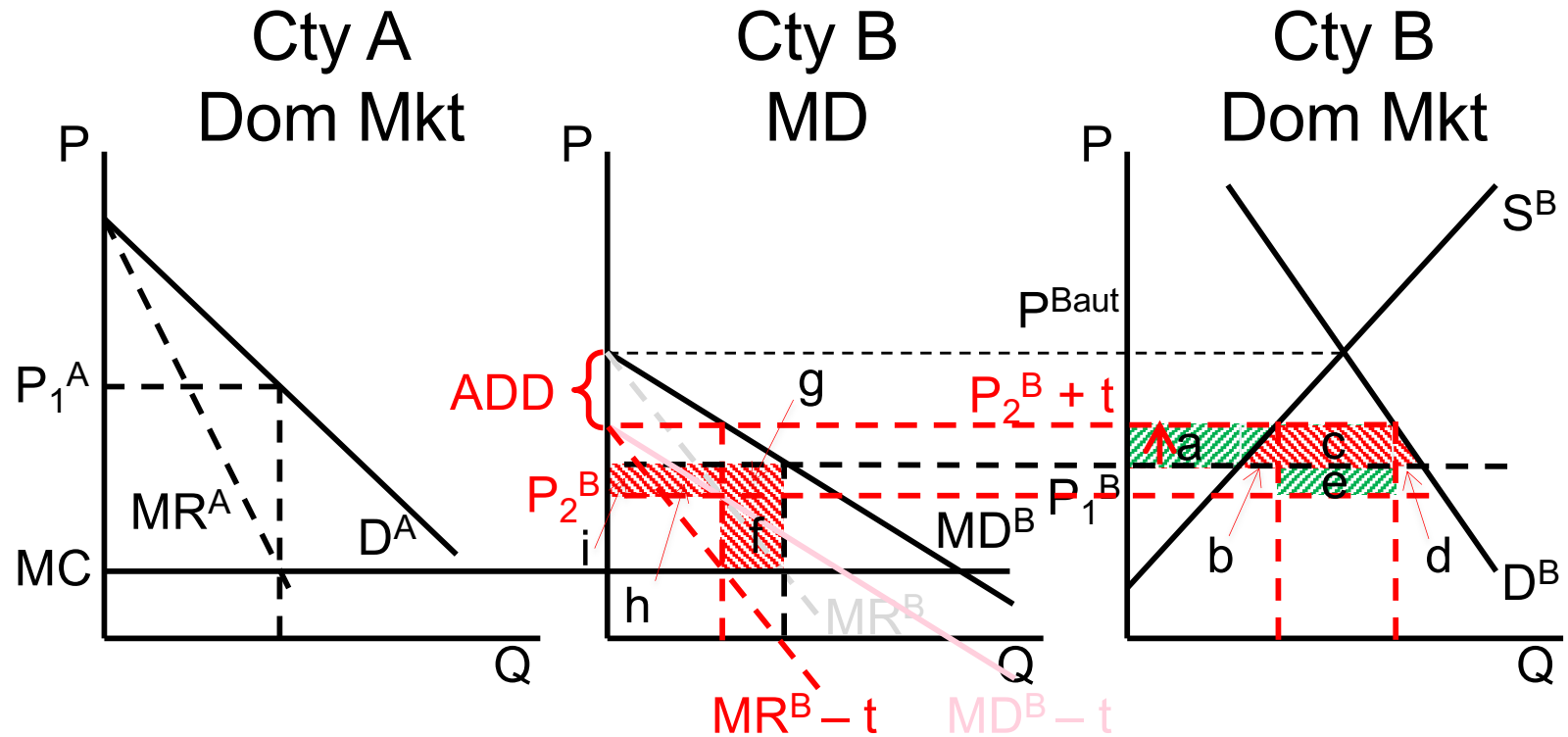
- If P_1^A and P_1^B can readjust, P_1^A will not change

2. ADD Effects with changed export price



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

2. ADD Effects with changed export price



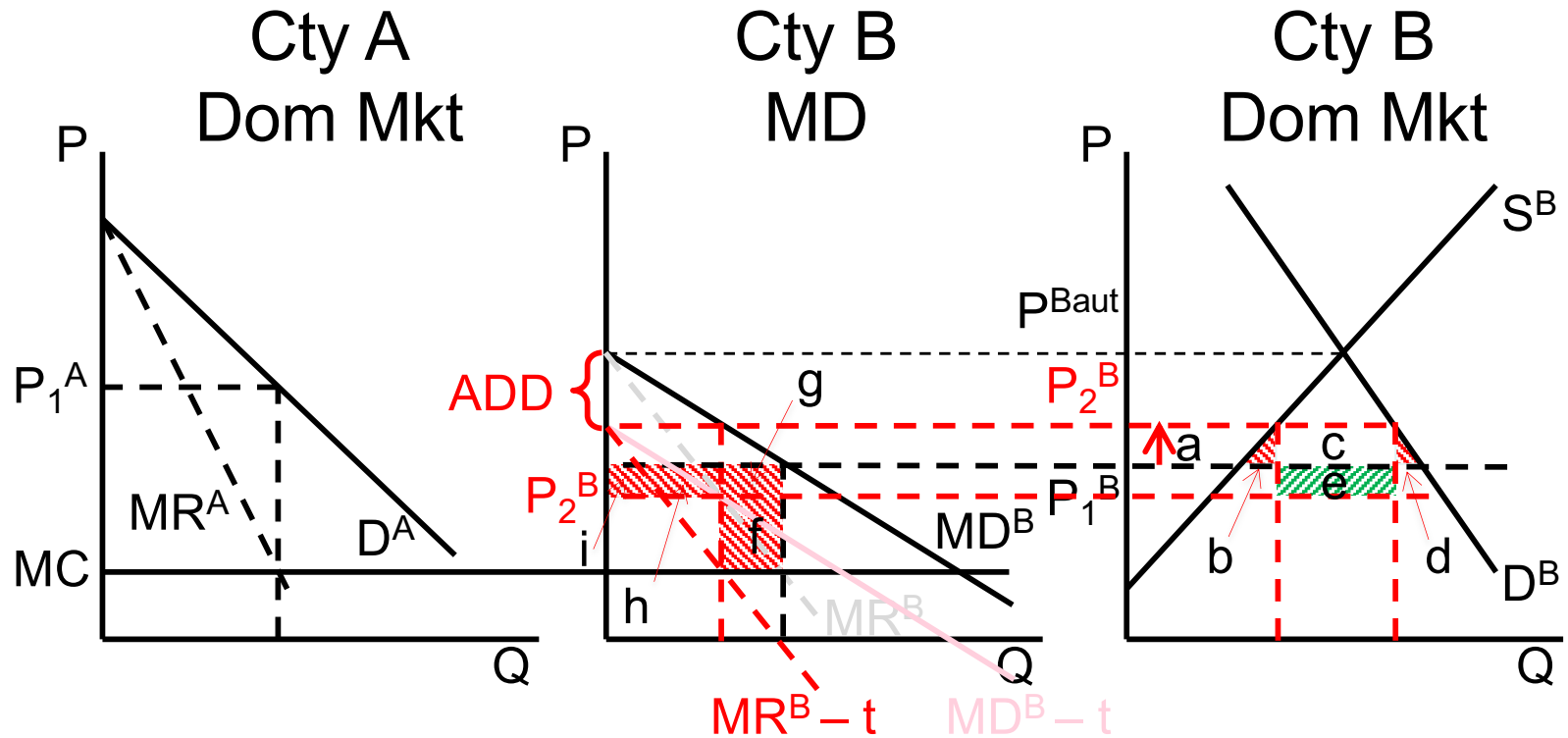
Welfare Effects of ADD in Dumping Country, A's firm:

Lost profit on lost sales	$-(f+g)$
Lost profit on kept sales	$-(h+i)$
Cty B (firm)	$-(f+g+h+i)$

Welfare Effects of ADD in Importing Country, B:

Suppliers gain	$+a$
Demanders lose	$-(a+b+c+d)$
A's gov't	$\frac{+(c+e)}{e-(b+d)}$
Cty A	$e-(b+d)$
Net <u>gain</u>	if $e > (b+d)$

2. ADD Effects with changed export price



Welfare Effects of ADD for world:
Note that $(h+i) = e$

So world loses $(f+g) + (b+d)$

Welfare Effects of ADD in Dumping
Country, A's firm:

Lost profit on lost sales $-(f+g)$

Lost profit on kept sales $-(h+i)$

Cty B (firm) $-(f+g+h+i)$

Welfare Effects of ADD in
Importing Country, B:

Suppliers gain $+a$

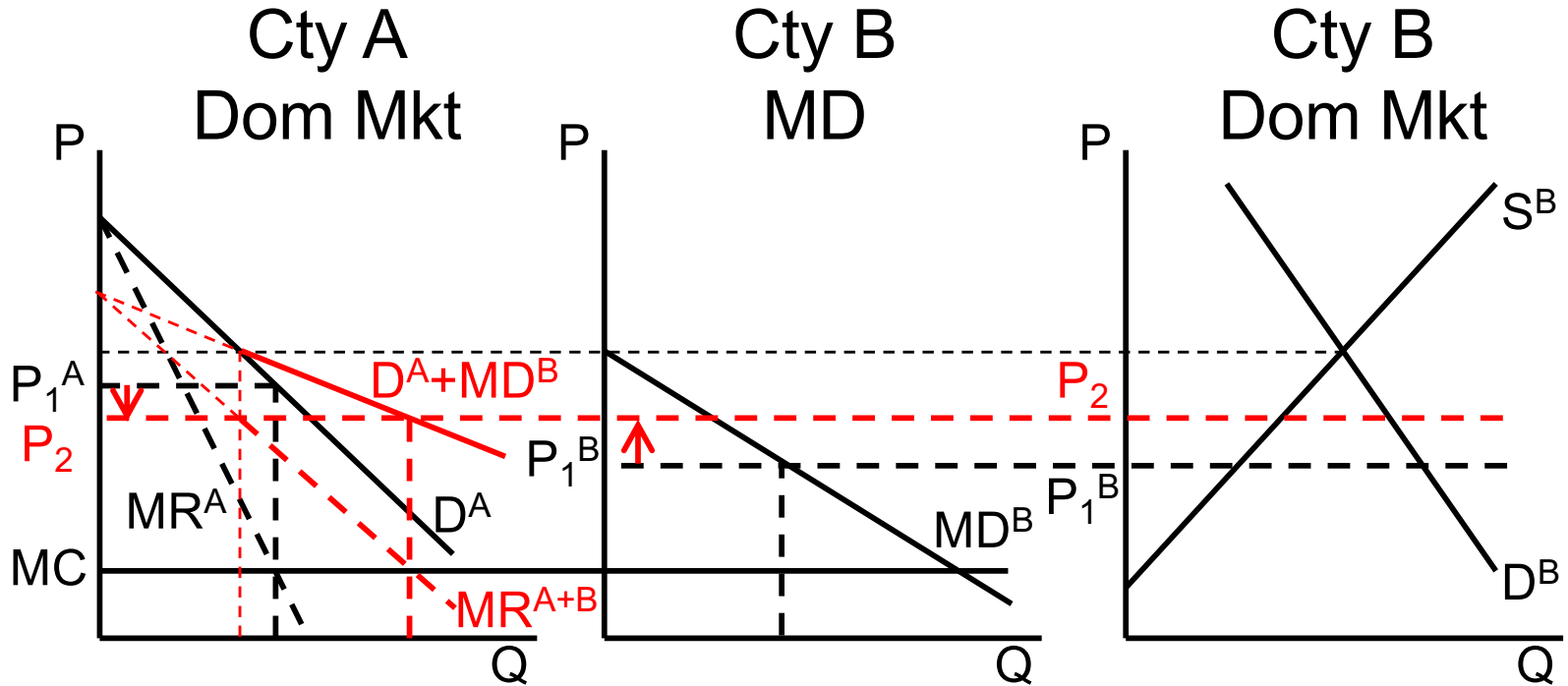
Demanders lose $-(a+b+c+d)$

A's gov't $\frac{+(c+e)}{e-(b+d)}$

Cty A $e-(b+d)$

Net gain if $e > (b+d)$

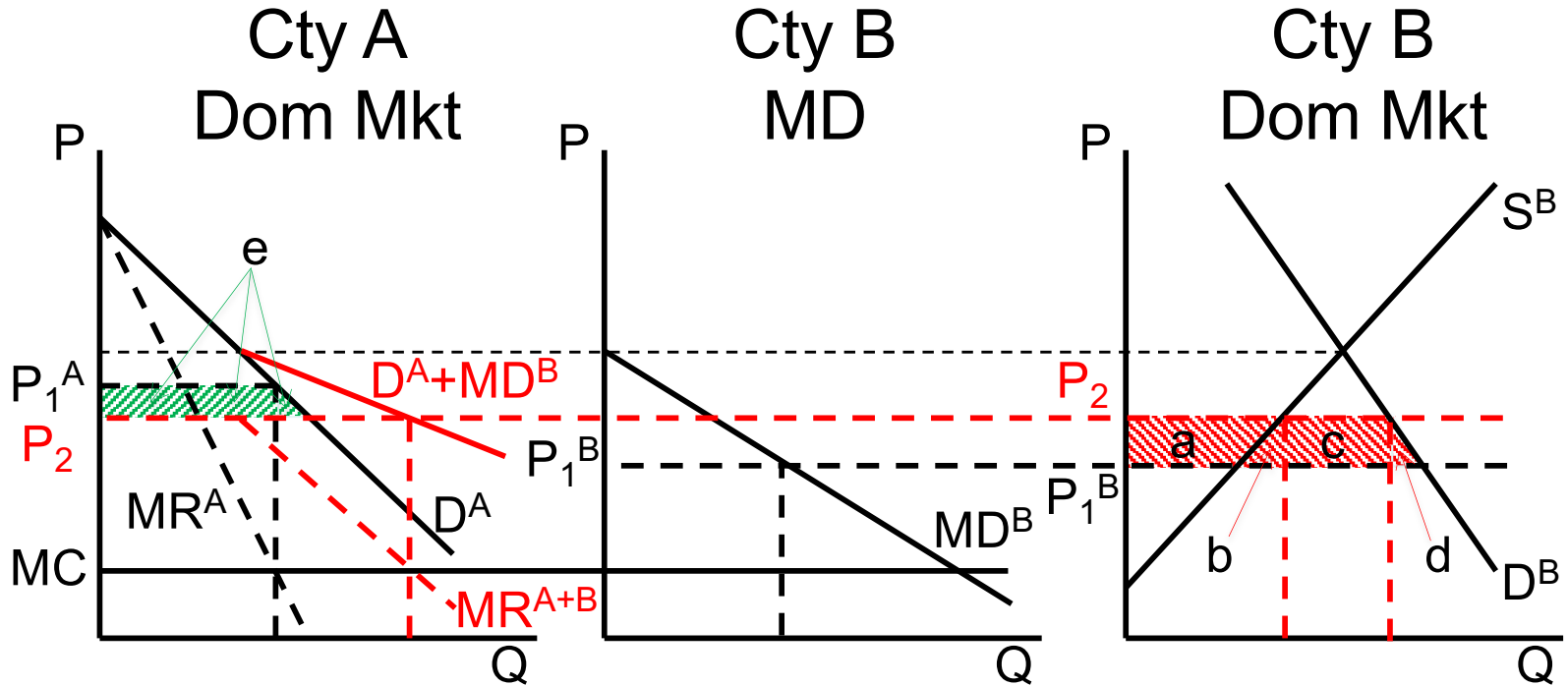
3. Not-Dumping Equilibrium



- Now firm combines the two markets, now facing single demand curve $D^A + MD^B$
- Corresponding MR curve, MR^{A+B} ,
- Determines price P_2 charged in both markets
- Result: Price falls at home and rises abroad

• Note welfare effects

3. Not-Dumping Equilibrium



Welfare Effects of No-Dumping in Exporting Country, A:	
Demanders gain	e
Firm loses	?
Cty A	?

Welfare Effects of No-Dumping in Importing Country, B:	
Suppliers gain	+a
Demanders lose	-(a+b+c+d)
Cty A	-(b+c+d)

Summary of ADD Effects

- If export price unchanged
 - Exporter sells less and loses profit
 - Importer has same effects as usual small-country 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 large-country tariff
 - Suppliers gain, demanders lose, government gains
 - Country may gain
 - Terms of trade improves

Summary of ADD Effects

- If exporter sets a single price for home and exporter (so as not 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

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?

