

Week 5: Arguments for and against Protection (Ch.10)



1. The first best world (ideal) and the second best world

- In the ideal world $P=MB=MC=SMB=SMC$
- In the real world, distortions exist.
 - i.e. ongoing gaps between MB and MSB and or MC and MSC such as externalities
- The world that includes distortions is the second-best world
- One approach to solve the problem is through taxes or subsidies
- Could trade barriers (restrictions on imports) help cure distortions caused by externalities

Situation	Incentives at the Margin	Effects
First-best world	$P = MB = MC = SMB = SMC$	Exactly the right amount is supplied and demanded.
Distortions		
External costs	$SMC > P (= MB = MC = SMB)$	Too much is supplied because suppliers make and sell extra units for which the social costs exceed the price (which equals MC and MB and SMB). Example: production that pollutes air or water.
External benefits	$SMB > P (= MB = MC = SMC)$	Not enough is demanded because demanders receive only private benefits equal to the price, not the full social benefits. Example: training or education that brings extra gains in attitudes or team skills.
Monopoly power	$P > SMC$	Not enough is demanded because the monopoly sets the price too high.
Monopsony power (a case not developed in this textbook)	$P < SMB$	Not enough is supplied because the monopsony sets its buying price too low. Example: a single firm that dominates a labor market and uses its power to set a low wage.
Distorting tax	$P \text{ with tax} > SMC$	Not enough is demanded because the tax makes the price to buyers exceed the revenue per unit received by suppliers.
Distorting subsidy	$P \text{ with subsidy} < SMC$	Too much is demanded because the subsidy makes the price to buyers lower than the revenue per unit received by suppliers.
<p>P = Market price MB = Private marginal benefit of an activity (to those who demand it) MC = Private marginal cost of an activity (to those who supply it) SMB = Social marginal benefit of an activity (to everybody affected) SMC = Social marginal cost of an activity (to everybody affected)</p>		

2. Specificity Rule

- If an externality is present, government policy should intervene as directly as possible on the specific source of the externality, to most enhance national economic efficiency.
- If a country has some other objective, government policy should intervene as directly as possible on the specific objective, to minimize the national economic cost of achieving the other objective (that is, to minimize the amount of economic inefficiency created).
- Key: Identify the specific problem clearly, then use a policy to attack the problem directly.

3.Promoting domestic production or employment

- A barrier against imports can be better than doing nothing in a second best world
- Most second-best arguments for protection are based on the idea that there are extra social benefits to domestic production
- That is, local production benefits from spillovers such as production know-how or management techniques introduced by the firm

3.Promoting domestic production or employment

- Also, workers can carry new skills and attitudes to when they switch jobs to work for other firms and industries
- Costs might be high initially, but firms in the industry can find ways to lower their cost over time (i.e. learning by doing)

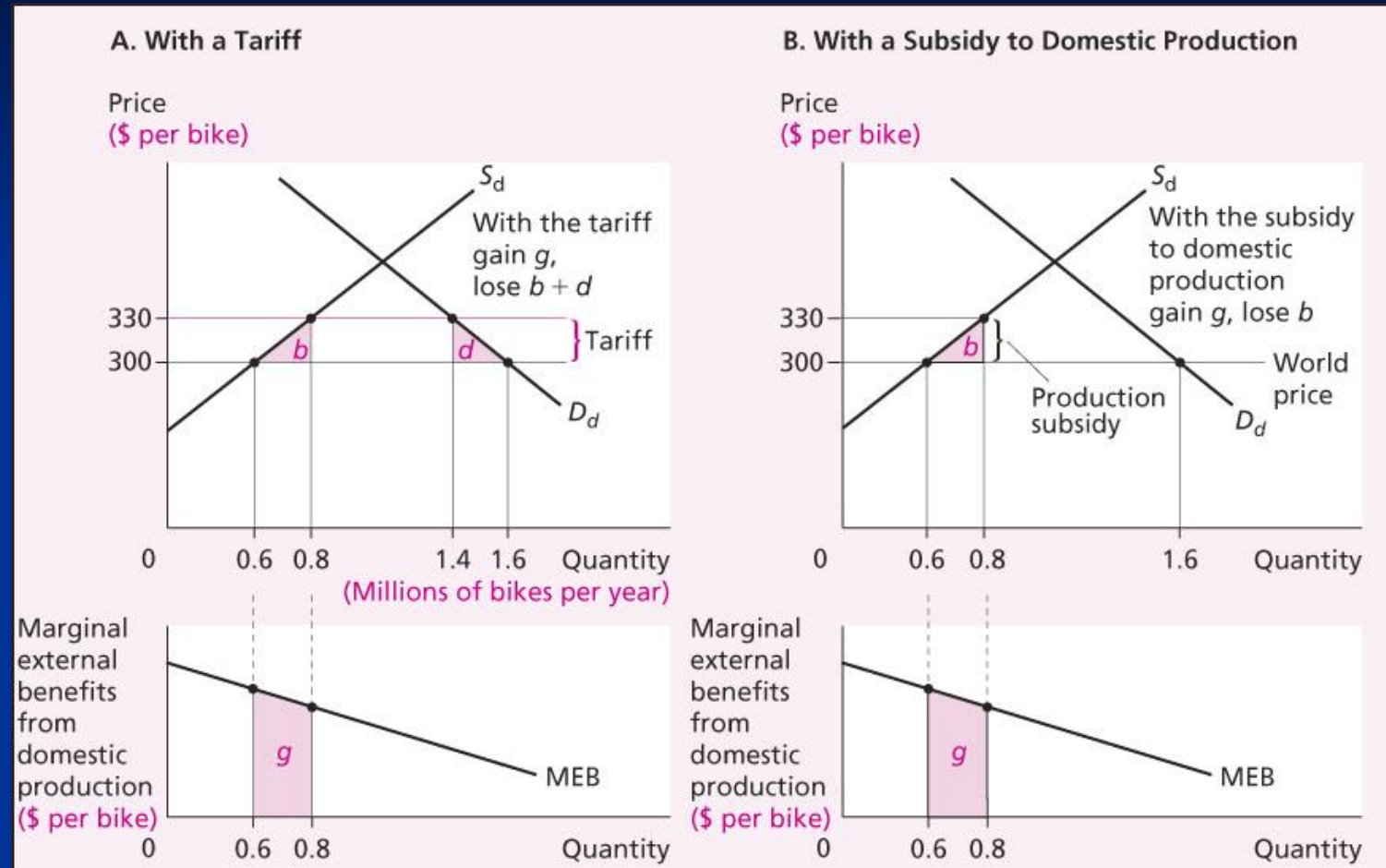
3. Promoting domestic production or employment

- Consider a small country where there are positive spillovers in the production of bicycles
- The government could encourage the domestic production bicycles through levying a tariff.
- Whether the net national gain is positive or negative depends on whether area g is bigger or smaller than b and d .
 - $g > b + d$, tariff is better than doing nothing
 - $g < b + d$, tariff is worse than doing nothing

3. Promoting domestic production or employment

- Instead of a tariff, domestic production could be encouraged by rewarding firms directly by a subsidy.
- Either tool gets the firms to raise domestic production by the same amount, giving the society the same external benefits
- But the subsidy does it at a lower cost to the society (area b is lost rather than area $a+b$) as the subsidy does not discourage the total consumption of bicycles by raising its price.
- This is an advantage of the \$30 production subsidy over the \$30 tariff.
- Production subsidy is in conformity with the specificity rule: it is better to increase domestic production without also distorting domestic prices that consumers pay for the good

Figure 10.2: Two ways to promote import competition



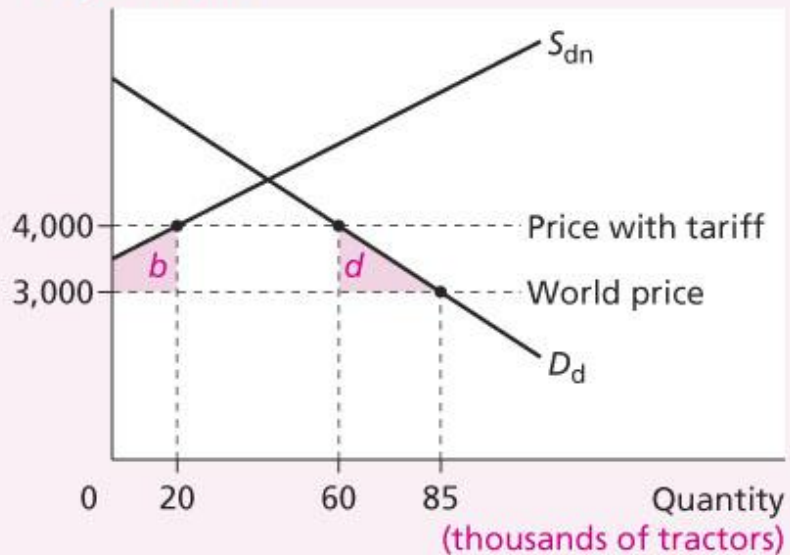
4. The infant industry argument

- Temporary tariff is justified because it cuts down on imports while the infant domestic industry learns how to produce at low enough costs.
- Eventually, the domestic industry will be able to compete without the help of a tariff

Figure 10.3; The Infant Industry argument

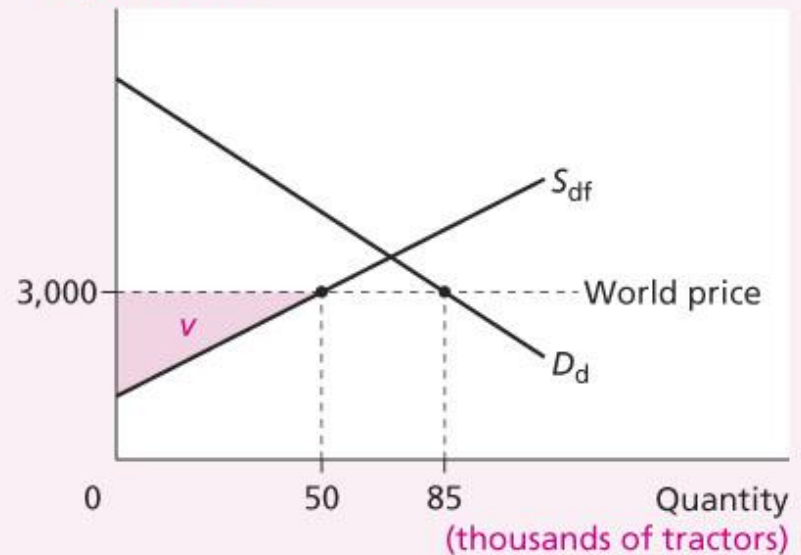
A. The Domestic Market, Now

Price
(\$ per tractor)



B. The Domestic Market in the Future, If There Is Domestic Production Now

Price
(\$ per tractor)



4. The infant industry argument

- Consider the following example (Figure 10.3.)
- Initially there is no domestic production of tractors
 - The country is not cost competitive by world standards. That is, the supply curve is everywhere above the world price of \$3000 per tractor
 - No domestic production occurs with free trade
- If the government imposes a tariff of 33 per cent
 - Domestic price rises to \$4000
 - Domestic firms produce 20 000 tractors

4. The infant industry argument

- As firms produce tractors, they find ways of lowering their costs, shifting the domestic industry's supply curve to the right
- Now, remove the tariff and the country produces 50 000 tractors per year at costs that are competitive with world standards
 - Generates producer surplus equal to v
 - Costs are deadweight losses b and d
- It is a valid argument if the present value of the stream of national benefits (v) exceed the present value of the stream of national costs ($b+d$)

4. The infant industry argument

- Why should the government get involved? Why not rely on the market? There are at least two reasons:
 - There are imperfections in the financial markets
 - There are positive spillovers or externalities: all the benefits from early investments do not accrue to the firms making the early investments

4. The infant industry argument

■ In conclusion:

- There can be a case for government intervention
- A tariff may or may not be good depending on costs and benefits
- A subsidy is better than a tariff
- It is hard to know which industries to support because future benefits are difficult to calculate

5. The dying industry argument

- Similar to the infant industry argument in that protection against imports might or might not be better than doing nothing depending on costs and benefits
 - Whether area g is greater than areas b and d in Figure 10.2
- And once again doing something else is better than tariffs or blocking imports
- The specificity rule directs us to look for the true source of the problem
 - If the problem is the cost of relocating to other geographic areas, then a subsidy for the cost of moving is better than import protection

5.The dying industry argument

- If the problem is a mismatch of worker skills and available jobs, then a subsidy for the costs of retraining is better
- If the social losses can be avoided only by maintaining current production and employment in the threatened industry, then subsidy to production is better

5.National Defense

- A country must have access to products to maintain the national defense, especially because imports may not be readily available during times of hostilities.
- Apply the specificity rule:
 - Some products can be kept in stockpiles. In this case, imports during peacetime can be used to build the stockpiles.
 - For some products, national production capabilities are needed. Best to use a subsidy to building or maintaining national production capabilities.

6. Other arguments for protection

- The developing country public revenue
- National pride
- Income redistribution

8. The minister for labor of the small nation of Pembangunan is eager to encourage domestic production of digital clocks. A small clock industry exists, but only a few producers can survive foreign competition without government help. The minister argues that helping the industry would create jobs and skills that will be carried over into other industries by workers trained in this one. He calls for a 10 percent tariff to take advantage of these benefits. At the same cabinet meeting, the minister for industry argues for a 10 percent subsidy to domestic clock production instead, stating that the same benefits to the nation can be achieved at less social cost.

a. Show the following diagrammatically:

- i.* The effects of the tariff on domestic clock output and consumption.
- ii.* The beneficial side effects of the tariff described by the minister for labor.
- iii.* The net gains or losses for the nation as a whole.
- iv.* All the same effects for the case of the production subsidy.
- v.* The differences in the effects of the two alternatives on the government's budget. Which policy would appeal more to a deficit-conscious minister for finance?

b. Can you describe a policy that captures the alleged benefits of worker training better than either the 10 percent tariff or the 10 percent production subsidy?